ANUARY 1961

SIY DOLLARS A VEAR ... ONE DOLLAR A COD

House Jome

S · APPRAISERS · BUILDERS · CONTRACTORS · DECORATORS · DEALERS · DISTRIBUTORS · FHA.VA · MANUFACTURERS · MORTGAGEES · PREFABRICATORS · REALTORS

THE INDUSTRIAL REVOLUTION IN HOUSING

PROGRESS REPORT

1961

Nulone Announces for 13







NuTone's #6000 Series Hoods are available in 30", 36" and 42" sizes . . . with Clear or Copper Anodized trim . . plus choice of 11 color insert panels

- SEE NEXT PAGE

NuTone Select-a-Matic_® 3000 Series Hood-Fan



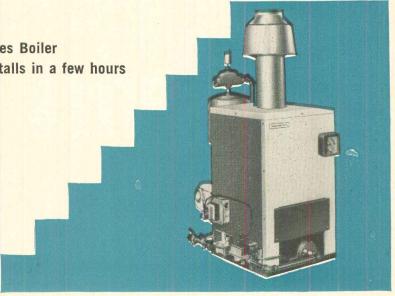
See Other Side

Write for Special Hood-Fan Literature
NUTONE, Inc. Dept. HF-1, Cincinnati 27, Ohio

National-U.S. expands its line with 2 great new gas-fired boilers

The compact, low-cost "O" Series Boiler fits in a corner—installs in a few hours

Find a place in a closet or under a stairway and there's room for the new National-U. S. "O" Series Boiler. The boiler occupies 20" x 24" to 32" of floor space. It's sized and priced to fit in small and medium homes, comes in 60,000, 80,000 and 100,000 Btuh AGA-approved output. Installs quickly because it's completely wired at the factory. The "O" Series Boiler features fast heat response . . . fills the need for quality hydronic heating on limited budgets. Available for immediate delivery.



Record CE

National-U. S. "101" Series Boiler

National-U. S. has had a quality image for years and it came from just such advances as the "101" Series Gas Boiler. It's modern, packaged and suited for either gravity or forced hot water heating systems or steam systems, new or old. It has an optional tankless hot water heater built in, plus all of the dependable design and quality construction features that belong in small to large residences of higher standards. There is a range of nine sizes—to 180,000 Btuh net I-B-R—and they meet all applicable requirements and standards of associations and codes. The "101" Series is ready now to help you with your profits.

Both new National-U. S. boilers are designed for use with baseboard distribution . . . and are ideally suited to the rapidly advancing trend in zone temperature control. Both are suited for compatible National-U. S. air conditioning installations. See your National-U. S. plumbing contractor for details and prices. See him soon.

See these two new and outstanding heating units and other National-U.S. quality products at the NAHB Convention, Booths 285-288.

National - U.S. Radiator

Johnstown, Penna.

A Division of Crane Co.





A HOT, NEW GAS-FURNACE LINE

The new 1961 GM-Delco upflow models for perimeter, basement or closet applications come in units up to 190,000 BTU input capacity. For homes without basements, the GM-Delco Counterflow Model is ideal. And for compact situations, you can't top the GM-Delco Slim, Horizontal Gas Furnace. They all have the stamp of GM Reliability—your assurance of better performance and fewer "call-backs,"

The brand name that identifies your homes with Quality

2 SOLID NATIONAL ADVERTISING THAT PRE-SELLS THE GM-DELCO NAME

Your prime home-buying prospects will be exposed to a broad schedule of national GM-Delco advertising, carefully designed to promote the GM-Delco brand name. This advertising makes the most of the inherent value in the General Motors name—and helps you sell homes. Buyers identify your GM-Delco installation in a model with quality.

3 A FLEXIBLE, LOCAL MERCHANDISING PACKAGE TO FIT YOUR MARKET

GM-Delco brings you a hot new merchandising package for maximum impact on your individual market. You can pick and choose from the best in billboard signs, local radio and TV scripts, 1000 and 500-line newspaper ads, brochures and tack-up signs for models. Pinpoint and apply features of this flexible GM-Delco program to your local sales objectives.

M Delco 365
CONDITIONAIR

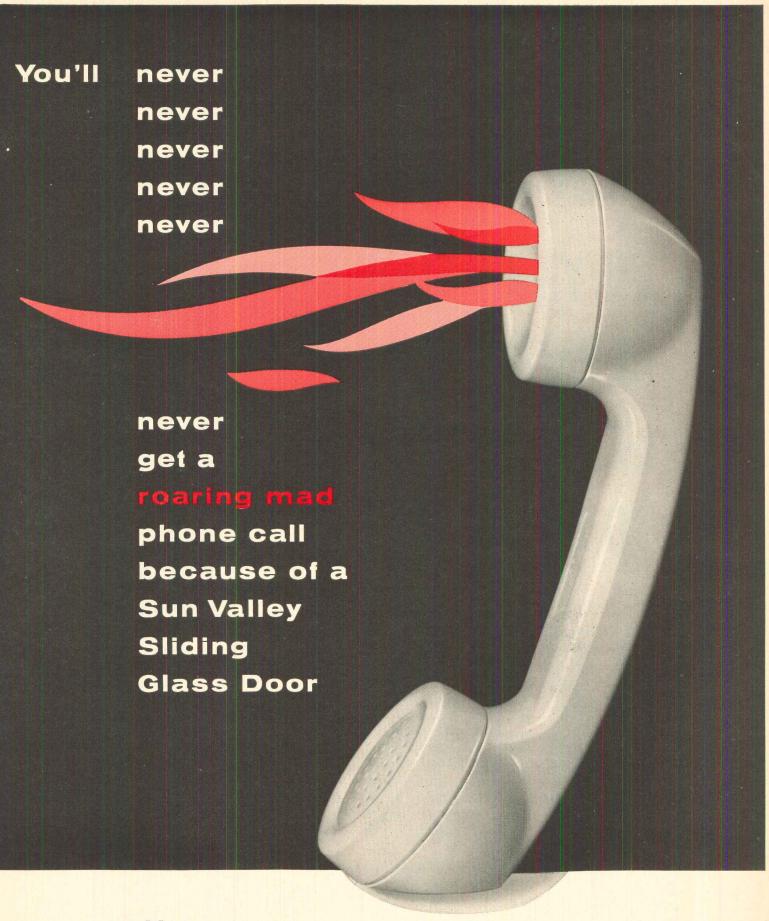
IN 1961 PUT A Flow IN YOUR KITCHENS

DON'T MISS FRIGIDAIRE BOOTHS 721 THRU 731 AT THE NAHB SHOW

NEW

ADVANCED APPLIANCES
DESIGNED WITH YOU IN MIND





You'd know we were bending the truth if we told you that people buy homes because they have Sun Valley Sliding Glass Doors. Sliding glass doors do help sell homes, but few people know ours from anyone else's.

However, this we *can* tell you. You'll never get a phone call from a roaring mad buyer, telling you that a Sun Valley door doesn't work. They're superbly engineered to work and keep on working.

The Sun Valley door was excellent to begin with; since the Kawneer Company is now manufacturing it, several improvements have been made. So when the Sun Valley man comes to call, remember, he's telling you about doors that will help you sleep... by preventing those angry midnight phone calls.



In Light Construction, Too...

ALUMINUM IS A BOON TO BUILDERS!

Yes, builders everywhere report it speeds home sales. But they're also finding that colorful, durable vinyl-coated aluminum appeals strongly to business and commercial customers and prospects for use on their stores, restaurants, apartments and other light construction.

Here are some of the selling points that can get you into this expanding market—a market that can bring you more business between home development projects or during seasonal cutbacks:—

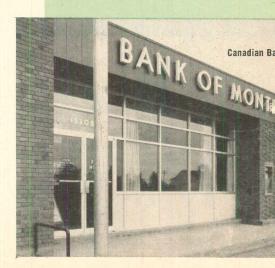
Tell your customers that vinyl-coated siding applied to a Milwaukee home 11 years ago has required no painting, looks like new today—proof of its low, low maintenance. That test panels in Florida have withstood sun and salt air for 15 years—longer than any other aluminum coating. That it is easily washed with a hose. That it comes in white and a variety of pastel colors and finishes, the last word in good looks.

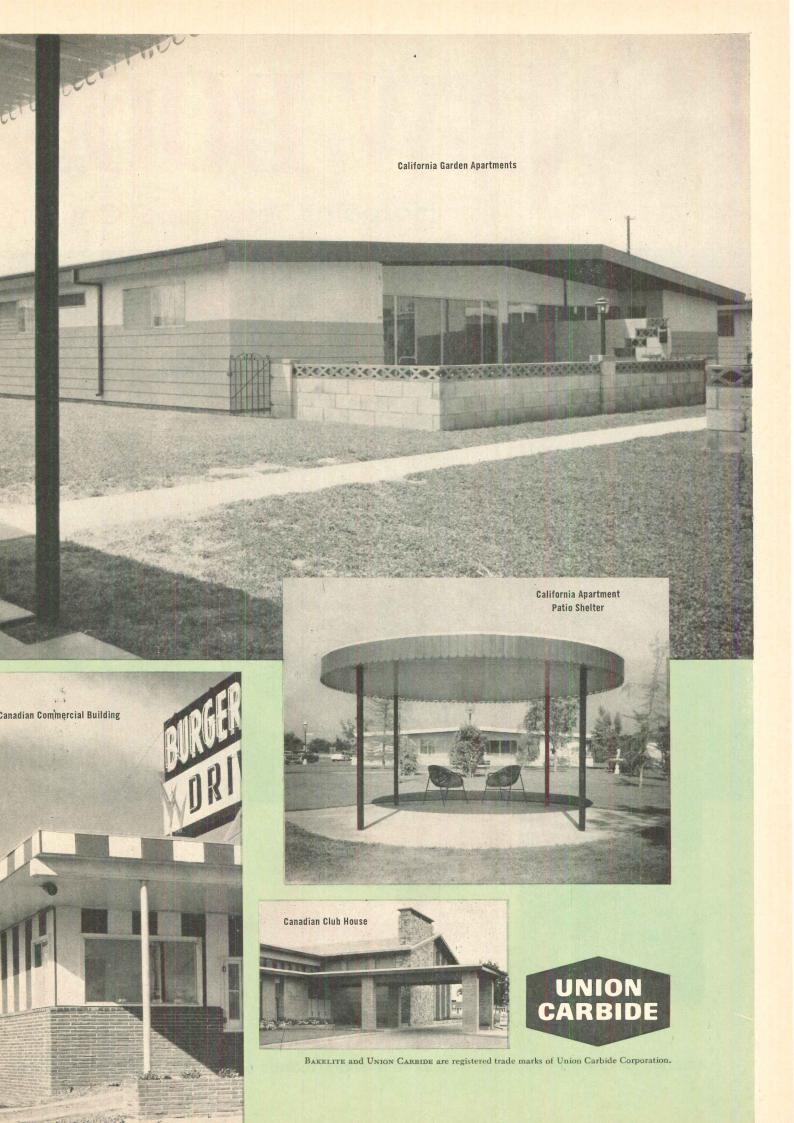
These selling points can help you. Use them. Be sure to recommend siding covered with Bakelite vinyl resin-based coating. We're helping promote consumer interest with vinyl-coated aluminum siding ads in the current New Home Idea Book and Home Idea Improvement Book, both published by Better Homes & Gardens. Your building supply dealer has the full story. See him, or write Union Carbide Plastics Company, Dept. HC-68, Division of Union Carbide Corporation, 270 Park Avenue, New York 17, N. Y.

In Canada: Union Carbide Canada Limited, Toronto 12.



Siding, roofing, awnings, trim, of Vinyl-Coat Aluminum, gave lasting beauty and durabilit to these commercial buildings and garder apartments in California and Canada. They are brought profitable business to the builded CALIFORNIA: Siding and awnings fabricated Hastings Aluminum Products Inc., usings. CANADIAN BUILDINGS: Siding by McCrea Products, Edmonton, using vinyl-based coating made by Roxalin of Canada under license from Stoner-Mudge Co., Division of American Maetta Co. This Company and the Kankakee Pla of American-Marietta, Chicago, sell many viny based coatings in the United States.





IW BOON

Hotpoint Town and Country



ELECTRIC RANGES · REFRIGERATORS · AUTOMATIC WASHERS · CLOTHES DRYERS · CUSTOMLINE® · DISHWASHERS

FOR BUILDERS

anges Give You That Luxury Look with...

LOW INSTALLATION COST

DELUXE SELLING FEATURES

Initial cost is low because no side panels are needed. Installation cost is low because this single compact unit slides in like a drawer... with just one electrical connection. And Town and Country Ranges give you deluxe selling features like . . .

- Twin Control Towers—easy to see and reach, yet away from "little fingers" and spatters.
- "Super 2600" Speed Unit—heats so swiftly you can boil a can of soup in just 65 seconds.
- Automatic Oven Timer—turns oven on and off with pre-set clock control.
- Removable Window Door—detaches for easy, reach-in oven cleaning.
- Seven Beautiful Finishes complete compatibility with any color scheme.

CONTACT YOUR HOTPOINT DISTRIBUTOR FOR COMPLETE DETAILS TODAY!

...And Hotpoint Offers the Most Complete Line of Built-Ins in America! The right model, the right price for every home from \$10,000 to \$100,000.

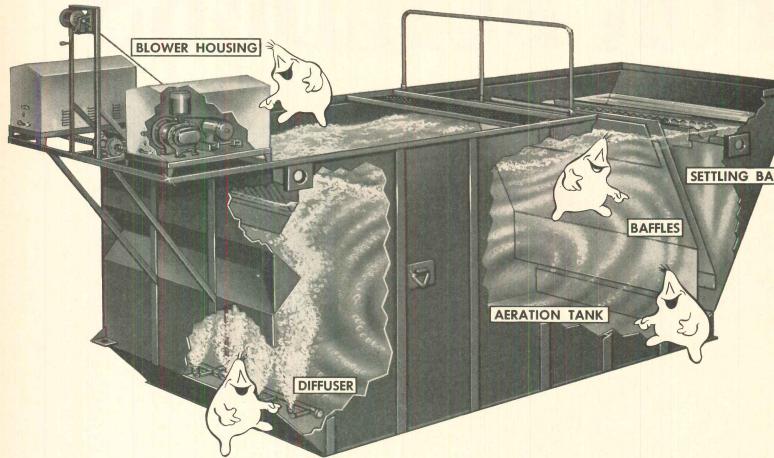
natter what kind of homes you're building, Hotpoint has a quality in range and surface unit that will fit your kitchens and your requirements. Specify Hotpoint...no other manufacturer offers so wide a choice.



A Division of General Electric Company, Chicago 44, Illinois

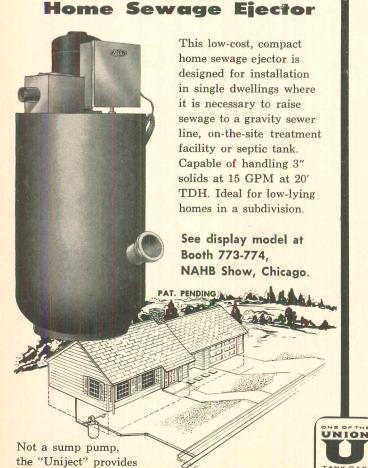
DISPOSALLS® · WATER HEATERS · FOOD FREEZERS · AIR CONDITIONERS · ELECTRIC BASEBOARD HEATING

For Small Subdivisions, Motels, Schools and Factorie



Smith & Loveless

"UNIJECT"



S&D L

Little Mike Microbe describes the operation of the Smith & Loveless "Oxigest" Sewage

Treatment Plant as "an ideal environment for the microscopic, living organisms in the sewage to live and thrive and multiply—and consume or digest the suspended solids in the aeration tank to provide a sparkling, stable effluent."

The Smith & Loveless "Oxigest" process is best described as a long-period aeration, activated-sludge aerobic-digestion system. It is available in single units to serve up to 100 homes—or can be installed in parallel to serve growing subdivisions.

The "Oxigest" is a low-cost, easy-to-maintain, complete sewage treatment plant — factory-built to provide efficient, dependable treatment. Built by the world's largest manufacturer of factory-built sewage lift stations, the Smith & Loveless "Oxigest" is delivered to the job site, ready to install economically in less than a day.

Smith & Loveless

To learn more about the Smith & Loveless "Oxigest" —and Mike Microbe—write to Department 70.

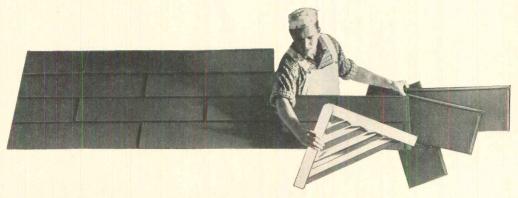


P. O. BOX 8884/KANSAS CITY 15, MISSOURI/PLANT: LENEXA, KANS

dependable two-stage lifting action.

Another new development using

B.F. Goodrich Chemical raw materials



Geon helps aluminum build the house of ease*



Now, nearly every exposed part of a house can be made of aluminum coated with Geon vinyl. Shingles, siding, soffits, gutters, downspouts and storm and screen doors are all providing homeowners a new kind of easy living.

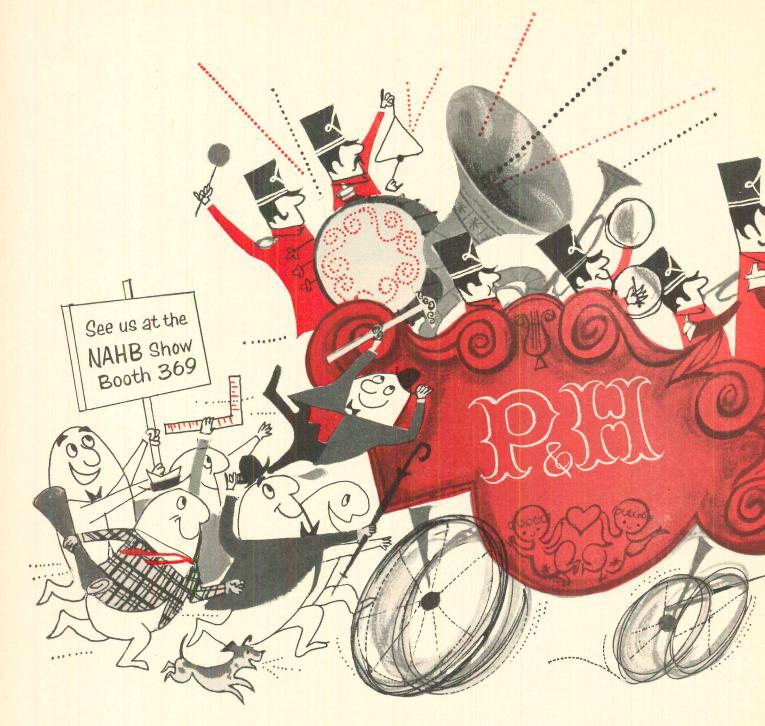
Because the enamel-like finish is made of Geon, colors will last far, far longer. There'll be no cracking, no crazing, no chipping—none of the worries that bother homeowners with maintenance problems. No rusting either.

The Geon coating is baked on the metal permanently—during manufacture. Even stamping, bending, forming or a mild draw will not harm this tough, elastic, abrasion-resistant finish. And, of course with Geon, you can get any color desired.

Here are several excellent examples of how manufacturers are taking advantage of the unusual properties of Geon vinyl on aluminum to open new markets and improve existing products. To learn more, write Dept. NE-1, B.F.Goodrich Chemical Company, 3135 Euclid Avenue, Cleveland 15, Ohio. In Canada: Kitchener, Ont. *A program of Reynolds Metals Co.



B.F.Goodrich Chemical Company a division of The B.F.Goodrich Company



GET ON TH

Profit from These Important Harnischfeger Services*



Construction Financing — We offer the most liberal plan in the industry. When you need construction money, it's there, ready for you through a nation-wide system of local disbursing agents.

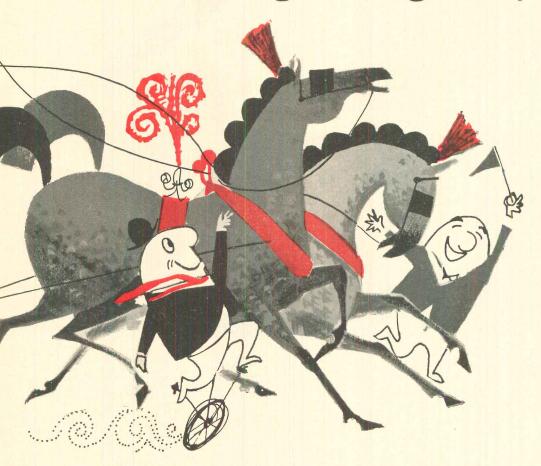
Promotion Advertising, Merchandising
— You get personal sales counsel;
budget-planning assistance; a liberal
co-op ad plan; customer-designed advertising, created for your land, your
homes, your market.

FHA and VA Processing Help — With our help, you spend less time on paperwork and more time on the job. Expert assistance saves you time and money ... speeds the flow of financing detail.

Mortgage Money — Harnischfeg vides convenient mortgage fin that gives you an important cotive edge. The availability of funds assures a successful com of your operations.

^{*}This is just a partial listing . . . there are many more services available to you as a Harnischfeger builder-dealer.

Start rolling toward greater profits...



ARNISCHFEGER BANDWAGON NOW!

Jot down Booth 369, tie a string around your finger, do anything—but don't miss getting the Harnischfeger story at NAHB. Harnischfeger is extending your BIG OPPORTUNITY for 1961! Harnischfeger has the houses — 24 new Quality Award homes, each carrying the powerful Parents' Magazine Seal of Commendation for quality.

Harnischfeger has the services, too! No one in the industry gives you more personal services than Harnischfeger. You benefit from new financing arrangements, custom-designed advertising material, overhead-control assistance. See us at Booth 369 at the NAHB Show. Or write today for information about Harnischfeger's 1961 line and personal service program.

HARNISCHFEGER HOMES, INC. Port Washington, Wisconsin





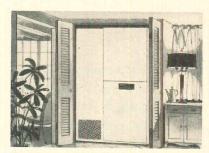
GO MODERN-GO GAS

COPR. AMERICAN GAS ASSOC.

TO TIE-IN WITH THIS PROGRAM SELECT FROM THIS LIST OF IMPORTANT SELLING FEATURES:



Built-In Gas Range. Costs you less to install, costs the buyer less to use. A range awarded the Gold Star has at least 28 advancements in performance, automation and design.



Gas Heating. With Gas heating, you can promise your prospects lower fuel costs and proven performance. And you won't have to supply storage space for fuel!



Water Heater. Most new home buyers insist on a Gas water heater: it's more economical, provides all the hot water needed with no waiting. Costs less to operate, too!

All over America people are saying Live modern.

SOLD The prestige of Blue Star omes to Buyers and Sellers.

SOLD A.G.A.'s Blue Star Home romotion Program to Builders.

SOLD Impulse-buying sales features f Gas appliances and systems to customers.

WAILABLE

e opportunity to participate in this rapidly owing nationally-known program...to bring three factors listed above into play for u . . . to help you build better, sell sooner d more profitably.

The "Blue Star" is the Gas industry's award given only to new homes having the quality features and advantages of modern Gas. The A.G.A. Blue Star Home program includes advertising—at both national and local levels—plus a complete promotion package of selling aids.

AMERICAN GAS ASSOCIATION



s Refrigerator. Gives you these big talkg points to help you sell potential buyers: st-free throughout, economical operation, lanced cooling, automatic ice maker.



Gas Lighting. An inexpensive "extra" that enhances the home with the soft radiance of outdoor Gas lighting. Gives customers another good reason to buy.

With this program you receive:

hard-hitting adsfor your local papers; scripts for local radio and TV broadcasts; spot advertising messages for radio and TV; plus— a wide variety of merchandising materials, all designed to sell, sell, sell! Get all the facts at your GAS company today!



Visit the Blue Star Home Exhibit, Booth 562

or less...with GAS

BREAKTHROUGH IN LOW COST HOUSING!

The value-packed

ECONOMY ANGUARD

by Inland Homes

Designed to sell for

INCLUDING \$2000 LOT

PACKAGE PRICE \$2052

Inland Homes—leader in low cost housing—now launches the new Economy Vanguard designed to sell for \$8,800 including a \$2,000 lot. Truly, it's the house any family man earning \$300 a month can afford. Only \$56.68 a month plus taxes and insurance. The Economy Vanguard exceeds FHA Minimum Standards for Low Cost Housing. Will make any Sec. 203 (i) or low cost 203 (b) program successful. Look at all you get for \$2,052:

- 6 well designed Colonial and Ranch exteriors
- 36'-4" x 24'-4" with 3 bedrooms
- Cedar shakes factory applied and double coursed
- Birch wood kitchen cabinets
- Closet closures on all bedroom closets
- 2" x 4" construction throughout
- Exterior wall sections with doors and windows installed, architectural trim, gables, roof trusses and sheathing, roofing, hardware, interior partitions, interior trim, interior passage door assemblies, ceiling insulation, and much more!

MODEL HOME FINANCING AT NO COST!

We will supply complete construction financing for a Model Home in your subdivision at no cost. Plus a complete Furniture Package on easy monthly terms. Ask about Inland's nationwide "End Of The Rainbow" Contest, designed to increase open house traffic. Write, wire, or phone (PR 3-7550) Neal B. Welch, Jr., Vice President-Sales, Department H-1, Piqua, Ohio.



INLAND HOMES CORPORATION

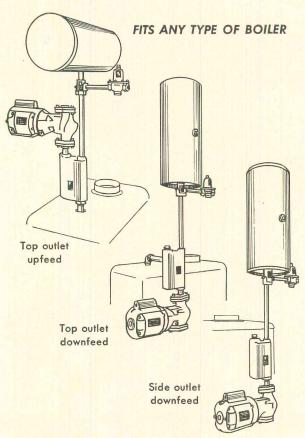
Executive Offices: Piqua, Ohio

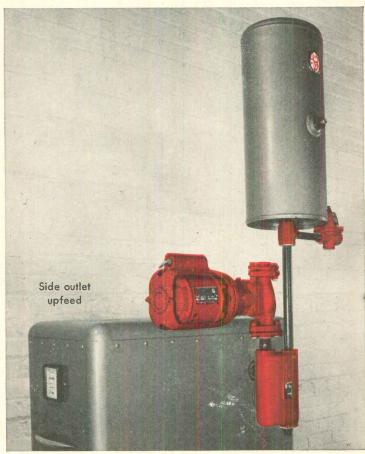
Plants in Piqua, Ohio; Hanover, Pa.; and Clinton, Iowa

SEE US AT THE NAHB SHOW-BOOTH 1000



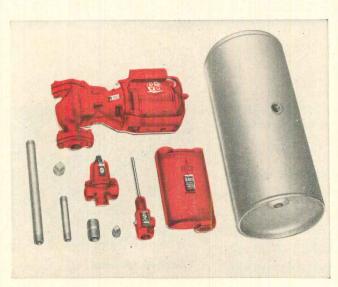
PRE-ENGINEERED FOR BUILDERS





B&G° Hydro-Flo PAK

cuts the cost of the most wanted kind of heating...saves space



The B&G Hydro-Flo Pak consists of a B&G Booster, famous for quiet operation...guaranteed B&G Airtrol System...choice of B&G Relief Valve or Flo-Control Valve or both...separately packed B&G Compression Tank. Pipe and fittings are also included, cut to exactly the proper lengths.

To homes built to sell competitively, B&G *Hydro-Flo* Heating adds distinction which gives them a strong selling edge over less adequately heated homes. Now the advantages of this forced hot water system are made easier to have by the new pre-planned, pre-engineered B&G *Hydro-Flo* Pak.

Here, neatly packaged, is all the auxiliary equipment needed for most residential hot water heating systems. The Pak permits a correct installation in an incredibly short time—cuts boiler piping time from hours to minutes. Savings in labor mean a substantial reduction in the total cost of the installation...compact design saves valuable living space.

The B&G Hydro-Flo Pak features the B&G Airtrol System—the only guaranteed method of removing air from a hot water system and keeping it out.

Write today for complete information on this moneysaving way of equipping your homes with hydronic heating.



Better homes for less money!

HASTINGS ALUMINUM HASTINGS SIDING



No one is more hard-headed about business than the men who build houses. It is especially significant, then, that the big construction news of the year is Hastings Aluminum Siding. Builders and contractors all over the country have discovered that one good way to build better homes for less money is to use Hastings Aluminum Siding. These are the facts that sold them — that have made Hastings the fastest-growing line of aluminum siding in the country.

ALUMINUM

PRODUCTS

- **Their houses are really better.** They're better-insulated, better-finished, longer-lasting, more attractive and desirable.
- Their houses really cost less to build. Hastings Aluminum Siding can

be put on in any kind of weather, by unskilled labor; it goes on faster, with less waste of both material and labor.

• Their customers are really impressed. Customers like the increased beauty Hastings adds to a house and they are sold on the way Hastings Aluminum Siding practically eliminates painting and maintenance, increases resale value and greatly cuts down depreciation.

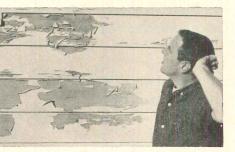
Now look at the facing page and read the facts that confirm these statements. Then, if you think that Hastings Aluminum Siding can help you build better homes for less money, fill out and mail the coupon. We'll rush you complete, detailed information. No cost or obligation to you, of course.



You save material. Hastings Aluminum Sing, in either hollow-back or insulated panels produced in lengths most convenient for had ling and most efficient to apply. Quality is unform and waste is held to a minimum. And, most parts of the country, Hastings Aluminum Siding is less expensive than good quality woo with three coats of paint.

You save time. Hastings Aluminum Siding with its baked-on, pure Vinyl finish, can be applied as quickly as wood siding — even with unskilled workmen. You save all the time in volved in painting — and unfavorable weather cannot delay you.





u never have this! You and your customer ve a ten-year warranty on the world's finest sh — pure Vinyl. Formulated especially for stings by Sherwin-Williams Co., the Vinyl is rally fused to the aluminum by the Hastings shing process. The Hastings Vinyl finish will crack, chip, peel, blister or craze. And, the sh is on both sides — a complete barrier to rosion.

mpare these features: • Elongated nail ts to overcome buckling • Pre-notched panel ls for smoothest, tightest joints . Concealed • Full 8" exposure • Positive interlocking feature keeps panels and corners in place permanently • Choice of white or six beautiful pastel colors • Hastings Aluminum Siding meets FHA requirements for new construction.

Hastings Aluminum Siding Is Completely Accepted!

Approved reliable product —Hastings Aluminum Products, Inc., is a member of the Aluminum Siding Association and has been awarded the Kaiser-Approved seal. The Hastings plant is modern in every detail, utilizes the latest equip-

ment with skill and craftsmanship born of pioneering in the industry. Hastings has been a manufacturer of topquality aluminum products since 1947.



Nationally advertised in such recognized publications as HOUSE & GARDEN'S BOOK OF BUILDING, Hastings has the acceptance of architects, builders and prospective home buyers - has earned the preference assigned to a "known" product.

Convenient distribution centers. Hastings Aluminum Siding is available to dealers and builders from quick-service supply points coastto-coast.

ALUMINUM PRODUCTS.

Hastings, Michigan

CHICAGO PLAN	RESIDENCE DE L'ANNE DE L'A	THE RESERVE OF THE PERSON NAMED IN	BANKS I DE	STATE OF THE PERSON NAMED IN	
For	complete	information	mail	thic	coupon
IUI	complete	IIII UI III atiuli	IIIaII	rilla	Coupon

Hastings Aluminum Products, Inc., Hastings 9A, Mich. Please rush me complete information on Hastings Aluminum Siding. No cost or obligation.

NAME					 	
COMPANY	NAME				 	
ADDRESS.					 	
A1714				7011		

In the past 12 months, Kingsberry sales have hit a record high despite a slump in housing starts. Moneymaking builders of Kingsberry Homes are breaking sales records right and left in depressed markets...

WHAT'S BEHIND THIS BIG SWING TO KINGSBERRY

We believe builders profit because of the tremendous advantages of our *exclusive* Market-Buster Plan

THE 1961 KINGSBERRY MARKET-BUSTER PLAN

- 1. We sell the South's fastest selling manufactured homes. Builders report far faster turnover with the Kingsberry line. Exclusive designs, many variations in size, materials and plans, give builders the best selection of homes between 700 and 2,000 square feet.
- 2. The South's strongest promotion. Today Kingsberry offers the industry's most generous cash contribution to your local advertising plan PLUS new "News-Maker" advertising service, "Sales-Maker" merchandising aids, national advertising in big-name magazines.
- 3. Top-profit potential. Now the Kingsberry System can cut on-site labor costs as much as 62%... a sizeable profit-building saving. With the Kingsberry System job-site material waste goes way down too.
- 4. Construction money available. Kingsberry offers 4 distinct types of financial aid to fit individual builders' construction financing requirements. Be sure to ask your Kingsberry Representative to explain the advantages of each.
- 5. The Kingsberry representative... your profit is his goal. Your Kingsberry Man is picked for his sound business knowledge. He's up to date on all the fine points of home construction, financing, marketing... an extra expert on your staff, at your service whenever you need him.

white

KINGSBERRY HOMES

Manufacturers of the FORT PAYNE, ALABAMA

South's Finest Homes
PHONE: FORT PAYNE 610



nce I started building agsberry Homes I've reased my annual net of the 400%,'' says bert C. Fox, Oliver rings, Tenn., "and in 10 alone my housing arts are up 25% over tyear. Kingsberry uses go up easily and shout fast, giving mere time to expand my agram. Switching to alone my housing to expand my agram. Switching to a best thing that has er happened to my alding operation."

Here's how hundreds of Southern Builders have proved you can increase ales . . . production . . . boost profits . . . with the Kingsberry System

a year ago Kingsberry announced a pletely unique Market-Buster Plan that achieved, in a short time, far greater less than we ever thought possible. In with "tight" money, plus a drop-off pusing starts, Kingsberry has posted a lible sales increase for 1960—(solid proof Kingsberry program is helping Southbuilders increase sales and profits).

nd now, faced with the brightest buildprospects in years, Kingsberry has ed important news to this profit-proved eket-Buster Plan.

y research engineers have achieved rekable "firsts" in design, purchasing, packaging. Result? You'll cut building and shave job-site labor costs.

lew designs. Handsome new ranch

models, popular new split-levels make the '61 Kingsberry line broadest in our history. With so many floor plans, such variety in trim and custom options, you could build over 2,000 houses and not have identical twins!

New promotion. Kingsberry will invest up to \$3,000 in advance advertising money for your kick-off opening weekend. Newsmaker advertising aids have been revamped to give your local advertising a bright new look, more "sell." And Kingsberry Market-Busting promotion includes "Sales-Maker" merchandising program to "Turn Traffic to Sales"... generous cash contributions to your local advertising ... plus Kingsberry-paid local advertising (in 4-color where available).

Construction money for every need. Name it and chances are your Kingsberry

City.

Man can arrange it; construction money for model houses, presales, operative builder commitments, speculative houses.

Protect your profit, turn your capital faster. The Kingsberry System offers pre-finished floors, pre-hung doors, prime painted siding and trim, many other pre-finished parts to save you time and expense. Sign one check for 60% of your total house cost. Turn your money over faster than by stick-by-stick, old-fashioned building methods.

Today Kingsberry offers the South's finest profit opportunity for the enterprising builder with land ready to go. For full information on how you can increase your production and profits with the Kingsberry System mail the coupon below today or better yet, call us direct.

State.

Start a building boom in your market today!

MAIL THIS

ALBERT HILDEBRANDT, KINGSBERRY HOMES, Dept. H-2, Fort Payne, Alabama
Please have your representative call with full information about the 1961 KINGSBERRY
MARKET-BUSTER PROGRAM - and show me how it fits into my present operation.
(Please check your interest and fill in number.)
I havelots ready to build on. I havelots being developed.
I am interested in construction financing

☐ I am interested in model home furnishing financing.

Your name______

Firm name_____

Street______

selling remodeling ... or selling homes

it's as easy as







FIRE-CHEX

the finest composition roofing shingle made. The first to be granted U/L Class "A" Fire Safety Rating. The only roofing shingle in the industry fully guaranteed by bond for 25 years.





CERAMO

all the color and beauty of traditional siding with none of the headaches. Fire-proof. Termiteproof. Won't rot, can't fade. Never needs painting. Dirt simply washes away. In wood-grain shingles, smooth or randomstriated clapboard.





MIAMI-CAREY

mirrors, cabinets, bath accessories that glorify the American bathroom. Coverange hoods and ventilating fans that modernize and freshen any home. Handsome, melodious Troubadoor chimes . . . all-new for '61.

with CAREY

building products

See these and other fine Carey products, including at the 1961 NAHB Convention and Exhibition in Chicago. BOOTH 230.

National Association
HOME BUILDERS

D.

Jon. 29-Feb. 2
1961

M

THE PHILIP CAREY MFG. COMPANY • CINCINNATI 15, OHIO

Look what Gas is building-in for you!



Your houses will sell faster when women see this Gold Star!

Built-in Selling Advantages... Ranges built to Gold Star standards have the features women want: automatic roast controls, automatic burner controls, even automatic rotisseries! These features will help sell houses. Gold Star quality pays off in building your reputation, too—most women judge your whole house by details like this!

Built-in Acceptance... Both the manufacturers and local Gas companies, through the American Gas Association, are pre-selling Gold Star award-winning ranges to millions of TV viewers, to millions more who see page after page of beautiful 4-color ads in top national magazines. Local advertising and promotion too. A total of \$30,000,000 support.

Built-in Cost Advantages . . . Lower installation costs of Gas built-ins save you money. Lower use and upkeep costs with Gas appliances, make important savings for your home-owner-to-be . . . a big selling advantage. Call your local Gas Company for free help in planning better kitchens.

AMERICAN GAS ASSOCIATION

Look for these famous names:

BROWN FEATURAMIC • CALORIC • CROWN
DETROIT JEWEL • DIXIE • EAGLE
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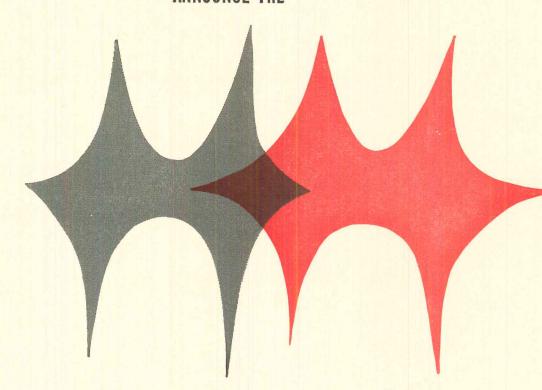
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- Builder must be an accepted entrant in his local NAHB National Home Week activities.
- Builder must agree to meet specific concrete usage requirements in the design and construction of his model home.
- Sale price of the model home (excluding land and furnishings) is not to exceed a total of \$20,000.
- Builder must agree to abide by rules of Horizon Homes Program.

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SEPTEMBER, 1961 . . . Homes to be completed, furnished and ready for showing during National Home Week.

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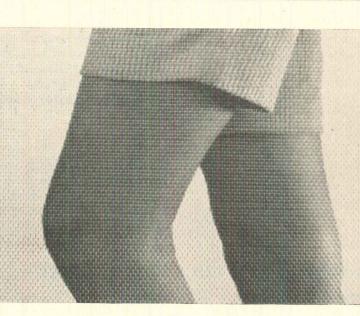
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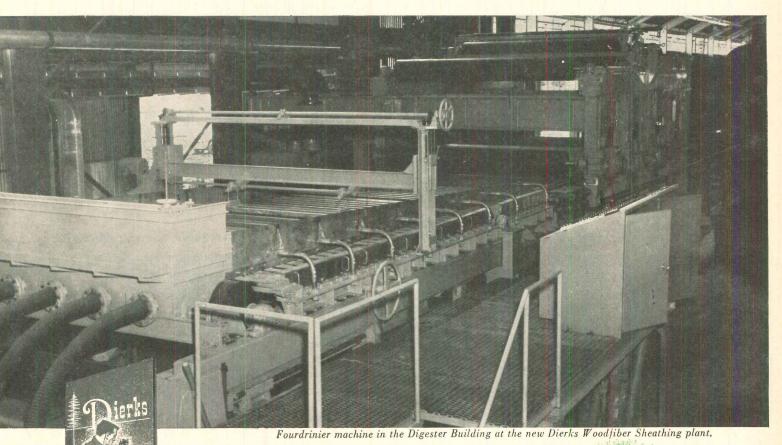
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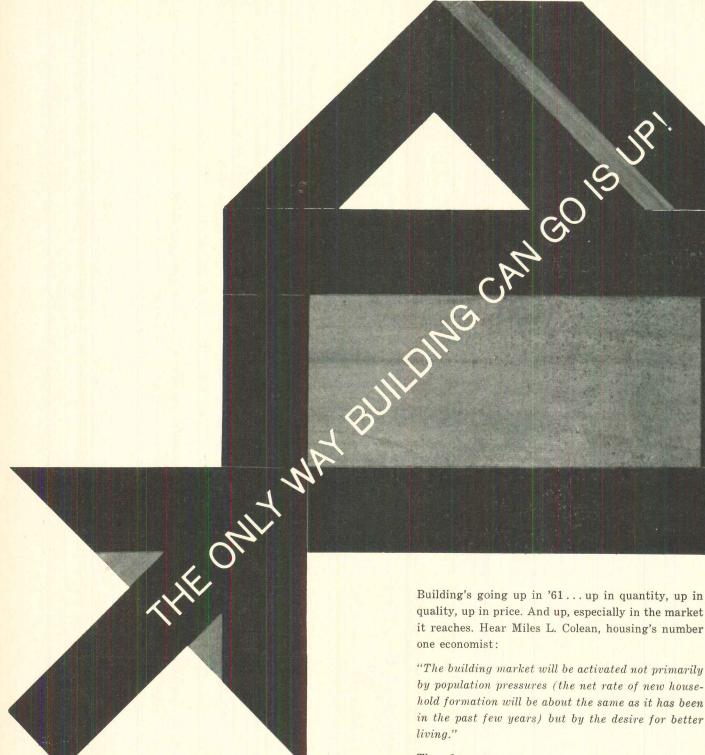




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Building's going up in '61... up in quantity, up in quality, up in price. And up, especially in the market it reaches. Hear Miles L. Colean, housing's number

by population pressures (the net rate of new household formation will be about the same as it has been in the past few years) but by the desire for better

Therefore:

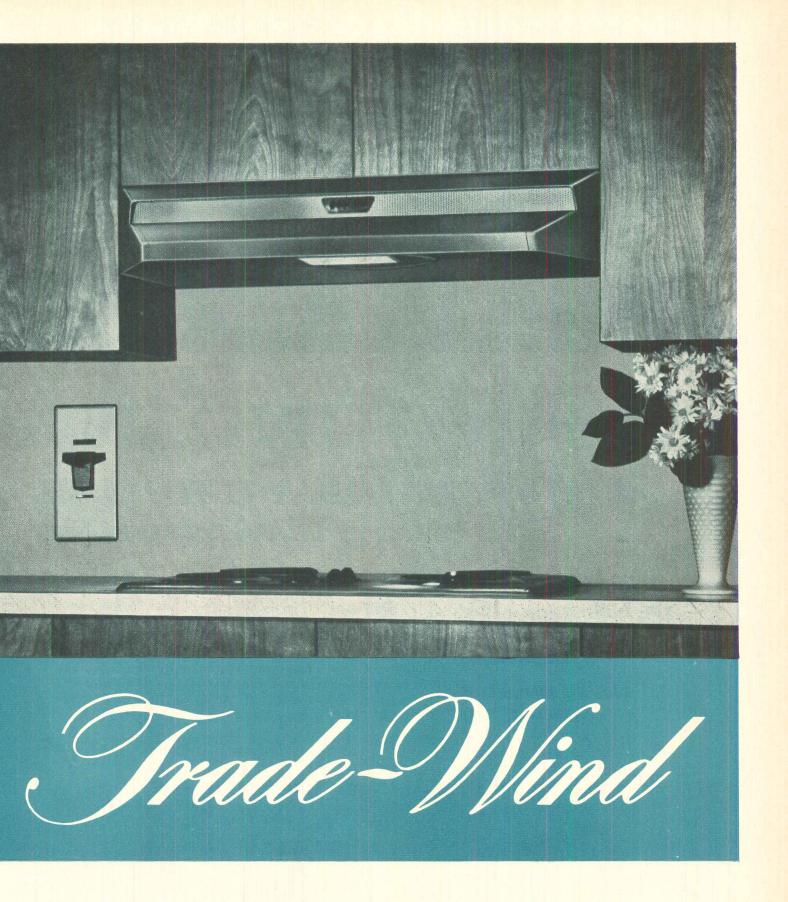
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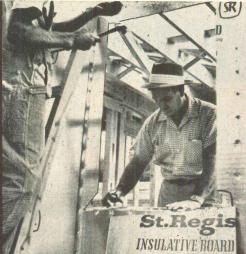
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New St. Regis Insulative Board provides a unique combination of sheathing plus insulation with advantages not found in any similar material. It is made of wood fiberboard, faced on both sides with perforated, reflective aluminum foil. This new, cost-saving, lightweight product has unusual rigidity with bracing strength greater than horizontally applied wood sheathing. For complete data, application instructions, U values, etc., write American Sisalkraft, Attleboro, Mass. for 8-page folder "How to Slash Sheathing and Insulation Costs."



This product offers an option on method of applying either with nailing in the conventional manner or through the use of a stapling device.

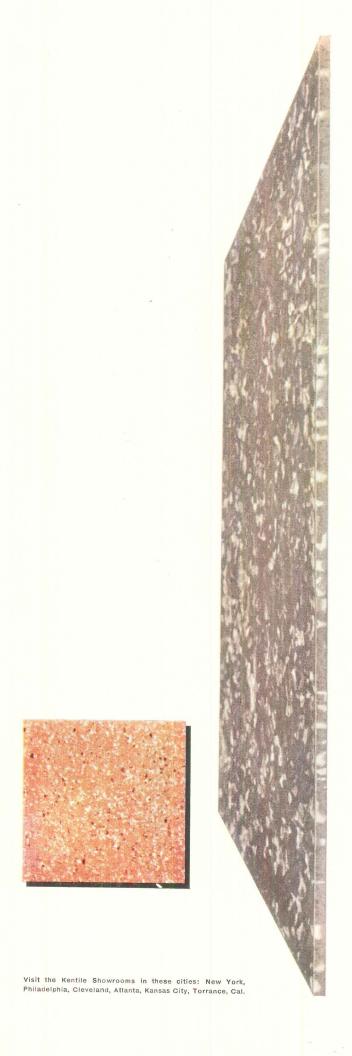


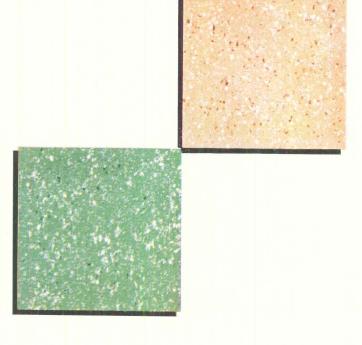
Door and window openings can be cut out after applying to studs. Cut can be made several inches from the framing, bending resulting flange back to provide additional flashing between framing and sash.



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For extra-heavy traffic areas . . . for extra wearability . . . at no extra cost.

SPECIFICATIONS: Size: $9'' \times 9''$; thicknesses: 1/8'' and 3/32''; colors: thirteen.

another distinctive style in



Roundup:

Where will cabinet rank for urban affairs leave housing?

It's now official. President-elect Kennedy says he will ask Congress to create a cabinet-level department of urban affairs. Note the title carefully. It isn't "housing & urban affairs." Just "urban affairs." HHFA will be the core of the department, but the emphasis will be less and less on housing (especially private housing) and more and more on unsolved metropolitan area problems like traffic, transit, air and perhaps water pollution, and most significantly of all: metropolitan planning.

Some housing trade groups aren't going to like this part of the new frontier. Realtors oppose the whole idea. Organized builders, who favor a cabinet post for housing, may take another look when they realize the shape the new department is

almost certain to take. Most other trade groups are fence-sitting.

Actually, what the industry wants may make little difference. The Kennedy Administration is committed to using the federal government to help cities solve problems state legislatures have too long ignored. And Democrats apparently have the votes in Congress to put the program through. This is especially true if Kennedy does it the easy way. This would be to ask Congress to re-enact the lapsed Reorganization Act, under which Eisenhower created the Health-Education-Welfare Dept. By this route, Kennedy could change HHFA to cabinet rank, and shift any other agencies into it he wants—subject only to a congressional veto if either House musters a constitutional majority against the reorganization within 60 days.

President-elect names task forces to study housing

Two task forces have been digging into housing problems for President-elect John Kennedy. Their reports were to be in his hands by early this year to guide the new Administration on what new housing legislation to seek from Congress. One group, headed by Joseph McMurray, former staff director of the Senate housing subcommittee, is pondering long-range housing problems—probably including how to convert HHFA into a cabinet-rank urban affairs department. Other members: Senior Vice President Harry Held of Bowery Savings Bank, Executive Vice President Charles Wellman of Glendale (Calif.) Federal S&L, Prof Robert Wood of MIT, and John Barriere, staff director of the House housing subcommittee. The other group, under chairmanship of Prof Paul Samuelson of MIT, is delving into economic policy (including whether housing needs another "emergency bill" this year).

Should FHA be split up to speed renewal?

It hasn't come out publicly yet, but it probably will—soon. More and more top housing people are growling over the record of non-accomplishment FHA has rung up in its welfare-tinged programs—notably Sec 220 and 221 for urban renewal.

Outgoing Urban Renewal Commissioner Dave Walker tells friends he plans to blast away at FHA before he leaves office this month, and probably will urge that 220 and 221 (and perhaps some other sections) be split off from FHA and given to a new mortgage insuring agency. Even HHFAdministrator Norman Mason concedes FHA doesn't have the habits of mind that urban renewal requires (see p 45).

Such a move—apart from technical difficulties—might not be too unpopular. FHA itself never wanted most of the welfare-tinged programs Congress has thrust upon it. Many industry groups have long contended FHA should be renamed something like the Federal Mortgage Insuring Agency, and confined to its main programs, Sec 203 for single-family homes and Sec 207 for rental property.

Census delay of key housing study stirs industry protests

Building trade groups are up in arms over a decision by Census to postpone its tabulation of components of change in the 1960 census. This would provide the industry with a much-needed breakdown on what has happened to housing since the 1956 inventory—ie, what has been added or taken off the market and information on rents and values in metropolitan areas.

President Karl Falk of the Natl Assn of Housing & Redevelopment Officials has made an official protest. The data is needed, urged Falk, to ascertain unmet needs—if any—for middle income housing, locality by locality. Other groups also are

preparing complaints.

Census officials concede that the components of change study has been given a low priority, probably won't be available until late 1962. Reason: higher priority has been given to other studies such as an evaluation of overall figures on housing units in the nation (the 1960 census is expected to show 58.3 million units, but bureau officials want to see how many the tally missed). Also, top bureau officials feel the components study isn't really part of the decennial census, anyway.

Also delayed: a special tabulation of substandard housing and rents which several hundred cities paid the bureau to make. Scheduled for early this year, release

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Outlook for starts: no boom but better than last year

Starts way down, houses hard to sell. For builders and real estate men that was the glum story of 1960. Private starts for the year are expected to total 1,250,000—16.4% below 1959's 1,494,600 (November starts dragged 7.6% behind the same 1959 month—see graph below). The big question: what will happen in 1961?

Forecasters agree that there will be *some* pickup in private nonfarm residential construction this year. How much? Guesses range from 2% to 6% over 1960. F. W. Dodge Corp. sees starts improving only a little, to around 1,325,000. Economist Miles Colean, House & Home consultant, predicts 1,360,000 (*see p 151*). The Commerce Dept looks for 1,350,000. American-Standard expects between 1,350,000 and 1,400,000. Prudential Insurance Co anticipates around 1,400,000. Armstrong Cork Co expects only a 5% increase over 1960, Armstrong's A. G. Matamoros adds: "Small as this gain may seem, it represents a substantial turn-around from 1960's big drop."

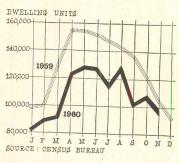
Economists also agree on some other items: 1) we are in a recession—mild, but still a recession; 2) business activity is not likely to pick up before midyear (and the biggest upsurge in housing will probably come in the last six months); 3) inflation cannot become a threat this year; 4) housing is no longer acting as a counter-cylical force to swing the US economy out of its doldrums. Upshot: the buyer's market that set in last year will continue through 1961.

Savvy Charles Wellman, executive vice president of Glendale (Calif.) Federal S&L, warns that it is a mistake to analyze housing demand now with previous years. There is now no backlog of unsatisfied demand. Result, says Wellman: "We cannot expect housing to provide leadership out of our present slump as in 1954-1955 and 1958-1959." Moreover, adds Wellman, cheaper, more plentiful mortgage money will not spur sales as it has.

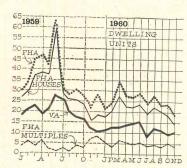
The slump is stirring up a ferment of ideas on how to lick housing's biggest problems: the spiraling cost of land and construction. Says Wellman: "It is a lamentable fact that the price of housing has risen twice as high as has the general price level in the past 70 years. Each year we postpone a direct frontal attack as a counter-cyclical force to swing the US economy out of its our responsibility as an important sector in the economy."

Some Wellman suggestions: speed up partnership between government and industry, develop different methods of land utilization and different types of products, offer a wider variety of housing, set up test markets to find out what homebuyers really want, develop loan guaranty programs.

"In essence," says Wellman, "it involves the restoration of innovation and imagination to the whole housing industry."



HOUSING STARTS declined seasonally in November, but the annual rate for private starts inched up 0.3% from October to 1,221,000. The rate was still 8.1% below 1959. Total starts were 96,300 (94,700 private, 1,600 public)—11.6% behind October and 7.6% below November 1959. Private starts were 10.7% below October, 7.7% under November 1959.



FHA APPLICATIONS on new units fell 19.5% from October to November. The total, 18,867, was 12.2% behind 1959. New home applications, at 14,771, were off 19.5%; project applications, at 4,096, were off 19.4%.

VA appraisal requests on new and proposed units gained 3.6% from October (to 10,312) but remained 15.5% lower than a year earlier.

MARKET BRIEFS

California antitrust suit hits real estate boards

The 32,500 member California Real Estate Board and 17 Southern California local boards have been accused of price fixing by the state of California.

An antitrust suit, filed under the little used 1907 Cartwright Act, contends CREA's minimum commission (upped from 5% to 6% last January) amounts to a conspiracy in restraint of trade which has boosted the cost of selling housing in California by \$10 million a year. NAREB is named a co-conspirator, but not a defendant.

Realtors are accused of enforcin, the minimum commission—in violation of state law—by using standard contract forms and denying multiple listing services to uncooperative brokers. The state se an injunction against price fixi asks that the defendants be orde to notify their members in writ that there is "no set, fixed or of tomary real estate commission."

Realtors deny the recommend 6% is a compulsory fee. Executivice President Daniel Klein of San Francisco board says recommendations in his area call for the first \$50,000 of sales profession of the next \$50,000 and 2½ of the balance. But, he content "Nothing prevents sales at 5% 4% or for no commission at a

VA eases closing rule

VA has lifted its prohibit against builders paying clos costs for veteran home buyers. The easing applies to all loans clos on or after Nov. 11. Still in fois the VA ban against include closing costs in the mortgage lo

LOCAL MARKETS:

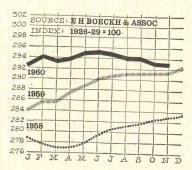
Why sales slump in San Jose

San Jose, which for several years has been one of the US' hottest new housing markets, is now suffering through the other phase of the business cycle.

In the popular local view, this burgeoning industrial area at the south end of San Francisco Bay now has more unsold new tract houses per capita than any city in the West, except possibly Sacramento. Best local estimates put the unsold overhang at 3,500. And that is an improvement from April's peak of 4,000 unsold. Today, San Jose "is overstocked with houses in all price ranges," says Vice President J. Robert Mitsch of Pioneer Investors S&L.

What caused such a glut in an area which continues, even now, to show rapid rise in population? Items:

1. Many builders did not heed the warnings of a sharp drop in sales late in 1959, kept building at full speed. As is so often true,



RESIDENTIAL CONSTRUCTION COSTS declined 0.1 point on Boeckh's index in November to 293.1. Costs would have fallen even more, says Col E. H. Boeckh, except for labor rate increases in Minneapolis and St Louis. Biggest price drops involved plumbing and heating equipment (copper, zinc) and structural work (steel). "Lumber is still weak," says the colonel.

some builders felt they could afford to stop because their prowere tied up in land options, revocable financing arrangement or half-built subdivisions.

- 2. Some yield-hungry S&Ls sign builders to deals which prode the latter to ignore slipping sa and keep building. What kind deals? Deals requiring the build to pay interest on the entamount of his construction to for the entire duration of the lowhether or not he actually drathe whole amount out in cash once or not.
- **3.** Rising land and labor copushed the price of new homes faster than the incomes of the market of people moving into area. Land that sold for \$5,00 acre 2½ years ago has skyrocket to \$10,000 or \$12,000, moans obuilder. He estimates wage boolast spring added some \$600 to the price of a cheap house.

In 1956, the cheapest new how was selling for about \$8,300 San Jose. Today, the floor \$11,500. But this is a two-bedrood slab unit that is hard to sell. It ports House & Home's San Jocorrespondent: "The consensus that you can't sell houses thave: only two bedrooms, only single garage or carport, slab floor instead of hardwood, no built appliances. Lawns and other of tras are coming to be expected this buyer's market." The cheapegood seller today is a three-bedroom, two-bath model at \$16,95

As in many other cities, sor subdivisions still sell well whothers nearby offering what seen like a comparable house supportly. One of the worst hit A. L. Branden's huge Tropical Village (\$12,500 to \$14,500)

continued on p

IHFA moves to coordinate city aid with road building

its lame duck days, the Eisenhower Administration has taken a significant first step that could ow into the keystone of the new cabinet-level Dept of Urban Affairs that President-elect ennedy is pledged to create.

HHFA and the Dept of Commerce have moved to coordinate highway, urban renewal, and etropolitan area planning. The lack of such coordination is under increasing attack from thoughtmen of many groups—architects, planners, educators, civic officials (see below).

From now on, planning funds Commerce's Bureau of Public ads and HHFA's Sec 701 proum may be pooled "for a cooptative and comprehensive appach to metropolitan area development," announced Robert E. erriam, deputy assistant to Presint Eisenhower.

How will this work? A joint ering committee from HHFA d Commerce will encourage tes and localities "to establish ordinated planning that will emace both highway and general ban plans, such as land-use conols, community facilities, housing, d other growth," says an HHFA nouncement. "Either state or cal agencies may initiate a prosal for a jointly financed planng project, but the project must jointly sponsored by a state, etropolitan or regional planning ency eligible for urban planning ants [from HHFA] and a state ghway department [eligible for R money]."

ore leverage. on a combined sis, tangled metropolitan areas

would have access to far more planning money than ever before. HHFA's Sec 701 planning program has some \$2.7 million left, but federal highway legislation lets 1½% of the giant appropriation for federal highways go for planning and research. Currently, this means close to \$9 million a year for programs like land use studies, say HHFA sources. And the law does not restrict highway research funds just to where roads should go. The money can be used for much broader inquiries into the same problems that urban renewal tries to solve.

HHFAides see this kind of well-financed planning approach as a logical No. 1 activity for any cabinet-level urban affairs department. "This can be the cutting edge of real change in our cities," says one.

An even bigger co-ordinating idea is still being worked out by the outgoing Administration, and apparently may not get put into effect before Jan 20. This would involve expanding the urban renewal requirement that localities have a "workable program" to fight

blight before they can qualify for federal grants for slum clearance and public housing projects.

In urban renewal, the workable program has spurred cities to put their own houses in better order by adopting housing codes (and enforcing them), bringing zoning laws up to date, making plans for future growth instead of planless sprawl.

Why not make such a demonstration of local responsibility prerequisite to federal aid for all kinds of physical improvement of urban areas, argue proponents of the new idea? This could well take in such programs as highways, pollution control (now under the Health-Education-Welfare Dept), airports, hospitals, and others.

"The aim," says HHFAdministrator Norman Mason, "is to try to get more push back of the workable program idea without being really arbitrary about it." He points out that he cannot recall a case during his two years as housing chief in which a locality has lost a federally subsidized project because of a poor performance in fighting

slums with its own tools. "Things don't move that fast," says Mason. "Six months doesn't make that much difference." (Sometimes HHFA has held up reapproval of a city's workable program until it improved its performance.

Who runs the show? HHFA technicians see formidable obstacles to carrying out the second scheme. The biggest is this: if HHFA continues to exercise sole sayso over whether a city's program is indeed workable (as the law now specfically provides it must), the housing agency would gain leverage over most other federal programs to aid cities. If the approvals are diffused among a welter of federal bureaus and departments, there would be administrative chaos.

The White House's Merriam, who is chairman of a committee delving into the plan, has suggested that no matter how you organize it, the President will have to call such shots as these. "Only one man can determine national policy relating to urban areas," he wrote the American Municipal Assn, "and that man, under any Administration, will not be an agency head or a cabinet officer. It will be the President." Locally, Merriam asserted, the "major urban prob-lem of the sixties" is creating "workable planning machinery" to shape area-wide plans with federal

Why road planning is the key to untangle the urban mess

ne \$13-billion federal highway ogram "should be the centerpiece the planning of every metropolin area in the United States."

So says Dean Harlan Cleveland Syracuse University's Maxwell raduate School. The program, lling for 41,000 miles of highay linking every city in the land, "the largest public works effort history," Cleveland noted. And alf of the expenditure will be in ban areas. "The program is now e largest and most dynamic ban activity," says Cleveland. "It ould be used to bring some order to metropolitan area planning." But the program isn't working t that way, Cleveland adds. He notes the Wall Street Journal's escription—"a vast program rown together, imperfectly coneived and grossly mismanaged, nd in due course becoming a critable playground for extravaence, waste and corruption"nd then pinpoints what he thinks as gone wrong:

"There is literally no provision or planning complementary facilies like commuter railroads and class transit, or for tying the highay arterials to plans for urban enewal. The program cannot be aid to have developed any real endership, direction or purpose building fragments of magnificent highway here and there all over the country."

Needed: co-ordination. Cleveland, former publisher of *The Reporter* magazine, calls for a government department "to co-ordinate the federal government's powerful but incredibly scatterbrained efforts

Harry Zalmanoff



DEAN CLEVELAND New Rx for renewal

in metropolitan development." The department, he says, should embrace not only housing but also "the urban half of the interstate highway program."

The highway program's lack of co-ordination and imbalance with other forms of urban investment,

thy (D, Minn.) that 'soon you'll be able to drive 80 miles an hour along superhighways from one polluted stream to another, from one urban slum to another, from one rundown college campus to another'."

Who's broke? Cleveland presented these ideas to a sophisticated audience in New York City: the 37th annual convention of the American Municipal Assn, which drew some 2,000 top city officials from all 50 states. From the rustle in the audience, from the line of delegates that trooped to the press room for copies, from corridor comments, you could tell the Syracuse dean had given the mayors something new to think about. This was nowhere more apparent than when he delved into municipal finances. Said Cleveland:

- "Local governments aren't broke, they just think they are. They are like a rich man who can't remember where he stashed his riches." The bankruptcy of cities and suburbs is not in resources but in "imagination, organization, leadership, and will."
- "The federal government's task in these circumstances is not primarily to put up the money the local governments can't find, but to

Where can municipalities find more money? Answered Cleveland: by getting tougher about boosting real estate assessments and by turning to income and sales taxes which too many municipalities avoid for fear of losing taxpayers and industries to lowertaxing communities. "In the typical metropolitan area we have the competitive existence of too many cities, towns and villages, not to mention districts for sewage disposal, pollution control, water supply, schools, parks, transportation.' Result: "a booby-prize race to see which unit of government can collect the least money from its citizens."

Cabinet post. The tone of the AMA meeting, for the most part, was that of men who spoke as if they had the ear of the next President and a key to the US Treasury. Senator Kennedy, said Mayor Richard Lee of New Haven, "is more than anything else the President of the cities, for it was the city vote which elected him."

In resolutions, the AMA called for "the early creation of a Department of Urban Development and Housing headed by an official of cabinet rank." It urged Kennedy to call a White House conference on urban affairs. And it

ANL IUU A

CARPENTER OR A BUILDER?

A carpenter knows how to build houses. But a builder knows how to build them so they'll sell quickly at a good profit. He knows which features to include to make his sale the easiest—and to make his house the best value for the prospect.

He knows, for instance, that nearly everyone would like to live in an air-conditioned home.

He knows he can now include central air conditioning in the homes he builds without pricing his product out of the market. Two important changes in FHA mortgage appraisal regulations make this possible:

Air conditioning can now be included in the appraisal of the house. Its entire cost no longer has to be added to the down payment. The importance to your prospect is this: Experts agree that air conditioning installed as original equipment costs only about half as much as when it's added later. This makes a startling difference in your prospect's monthly payments. For example, if the air conditioning system adds \$750 to a 25-year, 53/4 % FHA mortgage, it adds only \$4.75 to the prospect's monthly payment. If the same system were installed later under the same local building conditions, it would cost your prospect \$31.17 a month under a current 5-year FHA Title I loan.

Only \$4.75 instead of \$31.17! What prospect can resist a bargain like this? Especially since he already wants air conditioning?

The inclusion of residential air conditioning in a new home costing over \$15,000 no longer requires a higher monthly income to qualify for FHA financing. It was required of prospects in the past because of artificially high estimates of operating costs. However, it has been clearly established that the savings air conditioning makes in cleaning, laundry, home maintenance and medical expenses will more than offset the cost of operating the system during the season.

The FHA, realizing the inequity of its earlier position, has notified all regional offices of the new policy... thus making it as easy and inexpensive as possible for home-buyers to have year round residential air conditioning installed during construction.

What does this mean to you? Precisely this: you can now give your houses the added sales appeal of residential air conditioning ... without in any way penalizing yourself by making the sale harder. You are now free to cash in on the many ways air conditioning helps you make your sale:

- 1) Air conditioning heats, cocleans, and dehumidifies the ho
- 2) The clean, filtered air of ar conditioned house means for colds and less sickness for the cupants; less pollen, hay for smoke and impurities in the air
- 3) An air conditioned house n less housework: less dusting, laundering, less-frequent clea of clothes, less cleaning of rugs curtains.

The facts are in, and the ac values of air conditioning are disputable, both to you and to prospect. Include it—and sell it every unit you build. And inc the best—Chrysler Air Condit ing. It's yours at an attractive by er's price. It gives you nation advertised selling power, and you stop worrying about call-ba And it's backed up by an attrac new Model Home Kit that helps sell your homes. This kit doe cost a cent, and it's a hard-se silent salesman on duty twentyhours a day. See your local Chry Air Conditioning Dealer for o plete information.

Quality never lets you down. Climate by Chrysler delivers quatwenty-four hours a day. Caston it. Now.



Airtemp Division, Chrysler Corporation, Dept. CT-11, 1600 Webster Avenue, Dayton 4, Ohio ed him to set up an advisory mittee of mayors and municirepresentatives to "study and mmend a national workable gram to eliminate slums and

ities had better get set to make d use of the expanded federal grams they expect the Kennedy ninistration to deliver, said noter David Lawrence, gover of Pennsylvania and former for of Pittsburgh. "A federal gram, federal aid, even a feddepartment (of urban affairs) give us only the tools. It is the official and the people of the who must do the job. If shington provides all the dolthat are needed for urban ewal and it does not produce

More important, Congress could be expected to maintain the gram at a high level of annual norizations if it becomes evident communities are not capable taking full advantage of federal stance . . . I hope we are to the test."

natic and effective results, we

the communities will have no

e to hide.

IA acts to spur new ethods, products

A has just made a subtle change its underwriting rules which mises to speed up the agency's eptance of new products and ding methods.

The problem has plagued housfor years. FHA underwriters courage builders from using new terials and methods until, as y say, "their marketability can demonstrated." This often leads a chicken-and-egg dilemma, in ch improvements and cost cuttinnovations aren't used bese they haven't been used. The bolic is the big loser.

Now, FHA has told its field ces (in Letter No. 1828 dated v 8) to encourage builders to er new equipment as an optional ra or alternate until FHA can tout by experience how well

public likes it.

The order cites electric heat as example. Says FHA: "This item, h its features of cleanliness, ety, individual room temperate control and certain reduced tallation costs is providing a rket attraction worth analysis." FHA also cites home fallout elters as a good bet for testing at the public wants under the w rules. The optional-feature becedure is limited to products at already have FHA technical proval.

ir rights okayed

IA l.as agreed to insure apartents built on air rights with 99ar leases.

The precedent-breaking decision volves a proposed \$250 million artment hotel in downtown Chigo, on the Chicago River. Jerrold exler of George S. Lurie & Cosecking FHA insurance on a \$25 tillion loan for a 31-story apartment first phase of the development.

Outgoing housing chief sums up

Is FHA too rigid to cope with urban renewal? Public housing 'isn't doing the job it ought to.' But Norman Mason sees progress toward acceptance of planning, 'workable program.'

Norman P. (for Peirce) Mason, the former North Chelmsford, Mass. lumberman who took charge of FHA at its darkest hour in 1954's windfall scandals and rebuilt it in only three years into a going concern, seems likely to go into the records as the man of the Eisenhower Administration

House Home who left the most persistent imprint on housing. Two years ago, he stepped up to become HHFAdministrator, and last fall he took on the job of FHA commissioner again (as an extra duty) when Julian Zimmerman resigned to head up a lumbermen's mortgage company.

What does Norm Mason consider his regime's successes—and failures—in housing? What are the problems still unsolved after seven years which have seen more housing built than in any similar period in US history?

Shortly after Thanksgiving, Mason sat down with two editors of House &

Home in his walnut paneled Washington office on the sixth floor of the Normandy Building and philosophized about his work for an hour and a half.

What is a housing administrator's biggest problem?

"One of the large problems is how to get the job of co-ordination done," says Mason. "You think people understand. And then you come up suddenly with the realization they don't."

"If we get a commissioner—as we sometimes do—who wants to go his own sweet way, you don't have the weapons you need" in HHFA to bring him into line. This is obviously a jab at Julian Zimmerman, who battled with Mason behind-the-scenes. But Mason puts it as a philosophical observation rather than a barbed attack.

So many government agencies and departments have a finger in housing that there exists in Washington a little known body called the National Housing Council chaired by Mason and composed of HHFA's commissioners, the HLBB's chairman, VAadministrator, secretaries of Commerce, Labor, Defense, and Health-Education-Welfare, advisor to Federal Reserve Board, Federal Highway administrator, chairman of the council of economic advisors, and a representative from the General Services Administration.

"The cabinet officers never attend," says Mason, "but send their boys." Mason says he realized one day that sitting around the table at the National Housing Council meetings, "every department there except the Council of Economic Advisors had activities HHFA could work with."

One of our major problems is co-ordination with federal roads," says Mason. Up to now, part of the problem has been that the Bureau of Public Roads, under the Commerce Dept, works with state governments whereas HHFA works with cities. Now, joint renewal-roads planning is being tried (see p 43).

What should be done to let HHFA

being in favor of boosting it to cabinet status, says: "It's not a question of cracking the whip—just a question of things working better.

"The classic case is FHA Sec 220 for urban renewal. This is partly FHA's job, partly URA's job. And the age-old situation is that the two agencies are in conflict instead of working together."

Why is FHA so ineffective at 220?

Says Mason: "The program requires a willingness to take a chance. FHA's whole background

H&H staff



HHFA'S MASON
Reflections on seven years

is built on getting the facts and making large percentage loans based on the facts." So, Mason explains, the agency has little experience projecting itself into a situation where the facts don't exist when the mortgage is committed. "In the 220 program there are few facts. Who knows if southwest Washington will develop into a delightful housing area that will support rents of \$200 a month or only into an area where low income families will live? This is compounded by the fact that in urban renewal we have not found an answer to land values in cities. We're approaching the problem on a bid-basis of what somebody will down to get" renewal housing at the prices we need it. "We need not just high income people. We need a spread. But FHA feels this is a gamble. There are no facts."

What does Mason consider his No. 1 and No. 2 achievements?

"One of the outstanding ones was getting FHA back on the track so it was rendering a service to the American public," says Mason. It was under Mason's guidance, that FHA shucked off its longstanding attitude: "We don't guarantee anything to the public; we just insure lenders." He espoused the concept that since the government assumes a contingent liability for all FHA mortgages (by its unconditional guarantee of the debentures with which FHA pays off defaults), the government has a legitimate interest in seeing that the right kind of houses are built in the right places. "FHA's chief mission should be to help the average man get a good house to live in," he has said.

Mason singles out as another "plus" the Eisenhower Administration's "emphasis on getting urban renewal away from clearance and on to building." He explains: "This meant encouraging cities and towns to tackle projects of an economic size they could actually do" as distinguished from projects too big for cities' resources.

To the often aired complaint that HHFA has administered the workable program requirement of the 1954 Housing Act as a feather duster instead of a club to make cities do what they ought to do anyway, Mason offers two cases in refutation while conceding that "in general, the critics are right." In April, Mason refused to recertify St. Paul's workable program because, as he puts it, the city was "doing nothing about code enforcement." The news broke amidst a mayoralty campaign, and Mason received with a smile that "they are received."



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xperts predict continued easing in discounts, loan rates

ortgage discounts and interest rates are giving ground grudg-

Despite a rising supply of money and a shortage of mortgage per, investors are still resisting a further cut in prices. Why? r one thing, yields in top quality corporate bonds are comratively good. For another, S&Ls are saddled with high divinds. But mortgage men agree that discounts and interest rates

> should continue to shrink for the next couple of months. There is substantial—but not unanimous—opinion that FHA prices may reach par in most areas of the nation.

> Predicts Economist Saul Klaman of the Natl Assn of Mutual Savings Banks: "The drop in mortgage rates will continue even if other long term rates stabilize or turn up slightly."

Says Executive Vice President Robert Morgan of the Colwell o, Los Angeles: "Prices will keep moving up [and hence disunts down]. I wouldn't be surprised to see FHAs reach par. ot generally perhaps, but in spots here and there." The key to e situation, as Morgan sees it: what will the mutual banks do? they reinvest heavily in mortgages, par is a possibility in the ext couple of months, he adds.

Says Vice-President Lawrence Stabler of Philadelphia's W. A. arke Mortgage Co: "There is more money available than ever. ompetition for loans is the stiffest I can recall." Stabler predicts HAs may go to par soon—"if the FHA interest rate doesn't ange." Government circles have been talking for at least two onths about whether the rate on FHA Sec 203 ought to be it from 534% to 51/2%, but the consensus—up to midecember—was: "not yet."

How can builders, mortgage bankers and investors hedge commitments against a reduction in the FHA rate?

Mortgage Broker J. Maxwell Pringle of New York proposes at lenders include in nine-to-12-month commitments a clause coviding for a two-point discount for each 1/4 % drop in the HA rate. Adds Pringle: "The lender should also require evience in writing that the originating mortgagee has the same greement in writing with the builder." Draper & Kramer Inc, f Chicago says it is writing in such an automatic two-point disount in commitments. And at least one mutual bank has told s correspondents it likes the idea.

But many mortgage bankers are dubious. They contend that clause in commitments providing that the contract is only good t 53/4 % is enough protection. If the interest rate is cut, then

the contract can be renegotiated. Says one mortgage man: "The [Pringle] idea has some merit, but our builders wouldn't stand for it. Besides, if a contract had to be negotiated we might not have to give the two points." Adds another mortgage banker: "Builders would be stupid to lock themselves in like that."

FHA prices for immediates and futures gained a half point in six cities in House & Home's monthly 17-city survey.

FHA minimum down immediates: in Atlanta, from 97-98 to 97½-98; in Los Angeles, from 97 to 97-97½; in Oklahoma City, from 97 to 97-97½; in St Louis, from 95-971/2 to 95-98.

FHA minimum down futures: in Atlanta, from 97-98 to 971/2-98; in Chicago, from 96-97½ to 96-98; in Detroit, from 97 to 97½; in Los

Angeles, from 961/2 to 97; in Oklahome City, from 961/2-97 to 97; in St Louis, from 95-97 to 95-97½.

FHA 10% down immediates: in

Philadelphia, from 991/2 to 991/2-par. VA no-down immediates: in Atlanta, from 93-94 to 931/2-94; in Detroit, from 93-931/2 to 931/2-94; in

New York, from 94 to 94-941/2.

Familiar symptoms are cropping up which normally portend cheaper mortgage money ahead. Items:

- FNMA secondary market purchases in October were the lowest since June 1959. They totalled only \$58.8 million, down \$4.2 million from September's \$63 million. At the same time, sales from FNMA's portfolio (at par prices for FHA 53/4 %) are on the upswing. (And FNMA stock prices have been moving up—at midmonth, to 673/4 bid—indicating that investors feel the market value of the agency's mortgage holdings will continue increasing in value.)
- Lenders now will take spot loans on existing houses that they have been shunning. Mortgage bankers indicate there is no stampede by lenders to ease property requirements in order to get their money out, but lenders are becoming more liberal. Higher-ratio loans are more common in many areas. Conventional rates have "give" if the loan is desirable.

How much competition for the savings dollar is enough?

Both S&Ls and commercial bankers are opposing the proposed creation of federal mutual savings banks because they don't want more competition. Now it appears that some S&Ls feel there are too many S&Ls.

The Federal Savings & Loan Council of Illinois has asked the Federal S&L Insurance Corp to slow down insuring more S&Ls in the state. Warning that the lull in homebuilding may last several years, the council says that the "normal expansion of existing facilities appears adequate to meet expected home credit requirements." FSLIC has been insuring an average of 15 new S&Ls a year in Illinois. The council wants this cut back to three a year-"perhaps until 1970."

NORTGAGE BRIEFS

&L deal stymied

he Federal Home Loan Bank oard has blocked an attempt by ne California Financial Corp, a an Jose savings & loan holding ompany, to duck through a loopole in the law banning expansion f holding companies.

Under the law passed last year News, Sept), companies were orbidden to acquire control of nore than one insured S&L or to equire control of an insured S&L when it holds control of any other nsured S&L. The law defines "conrol" as ownership of 10% of the stock of an S&L.

companies chafing under the ban, California Financial disclosed that it would buy the \$8 million assets and liabilities of the Vallejo (Calif.) S&L, a stock institution. The angle: California Financial would get control of Vallejo without acquiring any stock, would leave the S&L as a corporate shell which would no longer be covered by the FSLIC and hence no longer under the expansion ban. With unusual speed, the Home

its first big test. In a maneuver

watched closely by other holding

Loan Bank Board thwarted the deal. The board affirmed an opinion issued by General Counsel Thomas H. Creighton Jr in answer to a query by General Manager William H. Husband of FSLIC.

Creighton held it is not limited to that. Congress clearly intended to stop "the phenomenal rate of growth of assets controlled by holding companies," he said. So allowing expansion through mergers or purchases of assets would 'produce a logical absurdity."

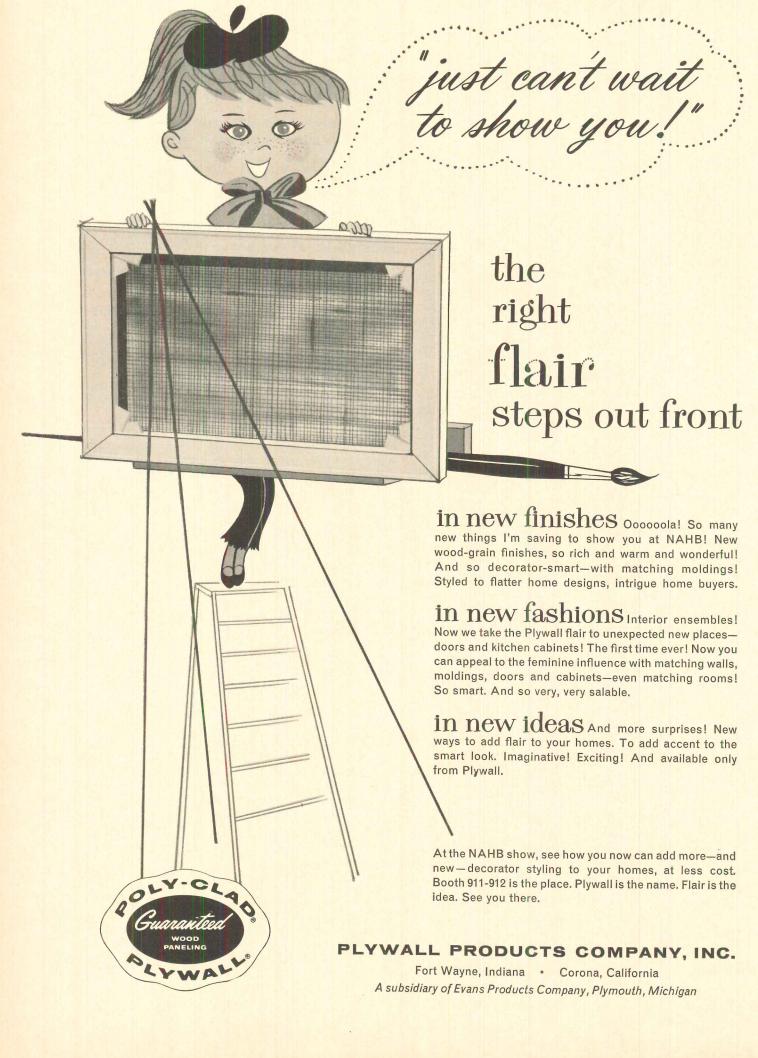
Maryland S&Ls (con't)

To savings & loan men, Maryland is a sore subject.

Reason: it has no laws regulating S&Ls, so the state has turned into a headquarters for shady operators (News, Aug). Operating out of rented rooms under a \$30 charter that can be had just for the asking, fast-buck S&L promoters have been pushing nationwide savehave been indicted for fraud.

S&L men fear that an eruption of scandals in Maryland will give the entire industry an unwarranted black eye. The Natl League of Insured Savings Assns has "urgently" requested that Maryland enact laws supervising its state S&Ls.

Despite prodding by reputable Maryland S&L operators, Gov J. Millard Tawes vetoed a bill passed by the last legislature to clamp at least stop-gap controls on state institutions. But he did appoint a special comission headed by Lawyer Richard W. Case of Baltimore, to study the problem. The commission has just recommended that the state create a department to supervise S&Ls, establish rules for their operations. Hearings began



SEC is victor in 10%'er suit

alifornia's second mortgage boom being cooled off by the courts. Moving to curb what a governent attorney has called the na-

on's worst spree in reckless secndary home financing (News, ay et seq), federal and state ofcials have gone after so-called en Percenters, concerns dealing second trust deeds, and have ored these victories:

A US Court of Appeals upheld e contention of the Securities & xchange Commission that Ten ercenters are trafficking in securies and hence are subject to SEC gulation.

Four major Ten Percenter comanies have been placed in receivrship and a fifth has been enpined from doing business. Others ce similar crackdowns.

Ten Percenters buy second trust eeds at big discounts, resell them investors at smaller discounts o that, with the interest, the yield 10%. They have grown into a \$150-million-a-year business. But their operations have alarmed not only federal and state officials and legislators, but also responsible lenders, builders, and second trust deed brokers. Investors poured so much money into the Ten Percenters' coffers that the companies couldn't buy up deeds fast enough to meet the demand. The result, officials charge, is that some companies turned to inflated appraisals and risky loans and-in some cases -deeds on non-existent property.

The SEC victory—the commission's first in an appellate court in such a case—climaxes a 32-month legal battle with the Los Angeles Trust Deed & Mortgage Exchange, first and one of the largest of the Ten Percenters. Gist of the SEC case: LA TD&M was selling unregistered securities through fraudulent methods and had failed to register as a broker-dealer under the Securities Exchange Act of 1933.

LA TD&M has been placed in receivership, as has Pacific Trust Deed Assn of Los Angeles, and Guardian Trust Deed Corp of San Jose. As a consequence of state probes, a trustee (similar to a receiver) has been appointed for Pickman Trust Deed Corp of Palo Alto, and an injunction has been obtained against Porter Trust Deed Investment Corp of San Jose.

Still confronting authorities is the monumental task of unravelling the books of the five companies. "The accounts are in a chaotic condition," says a California official grimly. Deputy Corporations Commissioner Marshall S. Mayer estimates that four of the companies (excluding Guardian) have investments totalling \$55 million and a shortage totalling "conservatively" some \$2.4 million. A state attorney adds glumly that when the returns of all probes come in, investors' money in jeopardy may total \$100 million.

Second-loan firm broke

A Washington, D.C. Ten Percenter mortgage investment company has gone bankrupt.

The Mason Mortgage & Investment Corp has petitioned to reorganize itself and three subsidiaries: Mason Acceptance Corp, Washington; Southern Mortgage Co, North Miami, Fla., and Mason Mortgage Fund of Florida Inc. Los Angeles.

The company bought 8% (at discounts averaging 35%) second mortgages from builders in Florida, Texas and California (among other places) and resold them to investors with a promise of a 10% return. It listed assets of \$12,496,-555 and liabilities of \$11,300,559. But the company also listed contingent liabilities, under warranties and repurchase agreements, totaling \$7,795,799.

Mason's petition admitted its financial problems were complicated by an employe's theft of \$300,000. Edward Mason is president of the six-year-old corporation.

A US District Court appointed Robert Winn, former SEC employe, as trustee. SEC has filed a notice of appearance to help the court untangle the books.

NEWS continued on p 51

MORTGAGE MARKET QUOTATIONS

Sale by originating mortgagee who retains servicing.) As reported to House & Home the week ending Dec. 9, '60.

FHA S	53/ ₄ s Sec	203 (b)					VA 51/	⁄ ₄ s				Conven		
FNMA Scdry Vikt×y		lew Constr n Down*	10% or r 20-25 year	nore down ar	Existing ² Min Down 25 year Immed		FNMA Scdry Mkt×y	No down 30 year	New Constr Fut		nore down ar	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Construction loans w Interest + fee
97	971/2-98	97½-98	98	98	97-98	Atlanta	93	931/2-94	931/2-94	8.	8	53/4-6	6-61/4	6-61/2+21/2
98	par-101	par-101	par-101	par-101	par-101	Boston local	94	98	98	98	98	51/2-53/4	5½-6	5½-6
_	97-971/2	97-971/2	97-971/2	97-971/2		out-of-st.	_	93-931/2	93-931/2	93-931/2	93-931/2	X X	_	<u> </u>
97	97-98	96-98	971/2-98	961/2-98	97-98	Chicago	93	911/2-921/2	911/2-921/2	911/2-93	911/2-921/2	5½-6	51/2-61/4	$\frac{5\frac{3}{4}-6\frac{1}{4}+1\frac{1}{2}-2\frac{1}{2}}{2}$
97	971/2	971/2	98	97½	971/2-98	Cleveland	93	93	921/2	93	921/2	53/4-6	6-61/4	6+1-11/2
961/2	961/2-98	96-971/2	97-981/2	97-981/2	961/2-98	Denver	921/2	92-931/2	92-931/2	92-94	92-94	6-61/2	6-63/4	$6-6\frac{1}{2}+1-2\frac{1}{2}$
961/2	97-971/2	97½	971/2-98	97½	96½-97	Detroit	921/2	931/2-94	931/2	94-941/2	94	5¾-6	53/4-6	6+1/2
961/2	961/2	961/2	97	97	961/2-97	Honolulu	921/2	92½ь	8	8	a	61/2-71/2	61/2-71/2	61/2+11/2
97	971/2-98	971/2-98	981/2-99	981/2-99	98	Houston	93	931/2-94	931/2-94	8	8	6 c f	6	6-61/2+1-11/2
97	97	961/2-97	971/2-981/2	971/2-98	96-98½ d	Jacksonville	93	93	92½-93	93ъ	В	6	53/4-6	6-61/2+11/2
961/2	97-971/2	97	98-981/2	97½ ь	961/2-97	Los Angeles	921/2	93	92½-93	a	8	6-61/4	$6\frac{1}{2}$ -7.2	6+1½ 0
971/2	981/2	98	99	98	981/2	Newark	931/2	93ъ	8	94ъ	8	53/4-6	53/4-6	6+1
98	98	98	98	98	98	New York	94	94-941/2	94-941/2	94-941/2	94-941/2	6	6	6+1
961/2	97-971/2	97	97½-98b	8	961/2-971/2	Okla. City	921/2	921/2-93	921/2-93	8.	8	6-61/4	6-61/2	6-61/2+1-2
971/2	991/2	991/2	99½-par	991/2	99	Philadelphia	931/2	94-96ь	94-96ь	94-96ь	94-96ь	53/4-6	53/4-6h	6+1
961/2	971/2	97-971/2	98g	97	96	San. Fran.	921/2	93½	93-931/2	в	8	6-61/4	6½-7	6-61/2+11/2-3
97	95-98	95-971/2	95-98	94½-98	95½-98	St. Louis	93	8	8	а	8	534-61/2	53/4-6.6	6-61/2+1-2
97½	98	98	98½	98	98	Wash., D.C.	931/2	94	94	94½	94	6 f	6 f	53/4-6+11/2

* 3% down of first \$13,500; 10% of next \$4,500; 30% of balance.

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc: Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wolbach, Jr, vice pres, Draper & Kramer Inc: Cleveland, David O'Neill, vice pres, Jay F. Zook Inc; Denver, C. A. Bacon, vice pres, Mortgage Investment Co; Detroit, Stanley M. Earp, pres, Citizens Mortgage Corp; Honolulu, David L. Austin, vice pres, Bank of Hawaii; Houston, Donald McGregor, exec vice pres, T. J. Bettes Co; Jacksonville, Brown L. Whatley, chmn, Stockton, Whatley, Davin & Co: Los Angeles, Robert E. Morgan, exec vice pres, The Colwell Co; Newark, William F. Haas, vice pres, Franklin Capital Corp; New York, John Halperin, pres, J. Halperin & Co; Oklahoma City, B. B. Bass, pres, American Mortgage & Investment Co; Philadelphia, Laurence J. Stabler, vice pres, W. A. Clarke Mortgage Co; St Louis, Sidnev L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington D.C., Hector Hollister, exec vice pres, Frederick W. Berens Inc.

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

Footnotes: a—no activity. b—very limited activity. c—commercial banks do very little mortgage lending in Texas. d—higher price is for high equity loans in preferred locations. e—S&Ls charging 6-7 plus 2½-4 point fees. f—occasional loans available at 5¾%. g—great deal of bank activity on 10%, 25-year loans. h—some banks making 5½% loans with 50% down payments. w—six-month construction loans unless otherwise noted. x—FNMA pavs ½ point more for loans with 10% or more down, y—FNMA net price after ½ point purchase and marketing fee plus 2% stock purchase figured at sale for 50¢ on the \$1. z—on houses no more than 30 years old of average quality in a good neighborhood.

NEW YORK WHOLESALE MORTGAGE MARKET

Futures: 93-931/2

Immediates: 93-931/2

FHA 53/45

Immediates: 97-971/2 Futures: 97

VA 51/4S

FHA 53/4 spot loans

(On homes of varying age and condition)
Immediates: 94-97

FNMA STOCK

Month's Month's Nov 15 Dec 13 low Bid 651/2 673/4 651/2 69* Asked 671/2 693/4 671/2 71 * Highest price since FNMA stock issued.

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Send for free literature and color portfolio of Suburban Idea Kitchens complete with blueprint plans. Samuel Stamping & Enameling Co., Dept. HH, Chattanooga 1, Tennessee.

EC crackdown

Realty syndicators warned by chairman not to duck registration of offerings

e Securities & Exchange Comsion has eased its rules for ortgage men but it has warned all estate syndicators to beware not registering their syndications securities' offerings.

SEC says that sale of FHA ortgages to individuals will not quire registration under the Serities Act of 1933. Nor will such es mean that mortgage indenses must qualify under the Trust denture Act of 1939.

But the exemption has pitfalls. the mortgages may be sold in actions but not as participations

Associated Press



C's GADSBY

ndicators beware

a portfolio. Moreover, if mortge men advertise FHA mortges as an investment program, EC warns that it may indeed recire them to register as brokeralers. Here are pertinent excerpts om an SEC letter to one mortge banker outlining the condions for sidestepping SEC red

". . . It is our understanding that rvices to be provided by the sponr [ie mortgage banker] will not inude any implied or expressed guarinty against loss or of any specified eld or return; that the sponsors are of required to provide a market for e underlying mortgage; that they e not required to provide for adincement of funds to protect the fety of the investment; that the consor is not required to accept hall amounts for accumulation to
rovide for subsequent investment in
HA-insured mortgages or to continilly re-invest proceeds of such mortinges . . .

"In light of the frequency and by ason of the policy expressed by ongress in Sec 304 (a) 5 of the rust Indenture Act of 1939, . . . the ommission would not take any action

FHA-insured mortgages (or fraconal interests in a single mortgage, s distinguished from a pool of mortages) were sold without registration nder the Securities Act of 1933 or ualification of the mortgage indentre under the Trust Indenture Act

f 1939.

"However, if the sponsoring mortagee represents that it will do more ann is required under FHA regula-

Too many syndicators have been skipping SEC registration of their offerings on the basis that they are confined to a single state, and thus exempt, warns SEC Chairman Edward N. Gadsby.

This exemption, contained in Sec 3 (a) 11 of the 1933 Securities Act, is "extremely restricted in scope," Gadsby cautions. Biggest pitfall is that if a syndicate participant resells his share to a buyer from another state, SEC considers the intra-state loophole breached. Warns Gadsby: "The issuer distributes securities at his own peril, and he may well find that a devious minded purchaser has destroyed the issuer's exemption and subjected him to a heavy liability by quickly disposing of the securities to non-resident investors."

Moreover, warns Gadsby, SEC takes the view that both the syndicate's principal office and the property syndicated must lie inside a single state to qualify for the much used intra-state registration exemption. He says: "We recently had a case where a limited partnership had been organized under New York law but had its principal asset in Arizona. It proposed to offer limited partnership interests in New York to New York residents without benefit of registration. In defense of its position, the syndicate

pointed out that all business was conducted in New York, including receipt of rental payments from Arizona." SEC refused the exemption, Gadsby notes, adding: "We took the same view in 1957 in the case of a California corporation which was to buy a hotel in Nevada, and were upheld in court."

How soon will SEC crack down on evasions by syndicators? Answers the SEC chairman: "We have not to date been inclined to deploy our limited enforcement manpower against real estate syndicates, thinking it more fruitful to center upon the boiler rooms and other dispensers of fraudulent securities. [But] the commission cannot be expected to continue to countenance evasions of the statute and may be expected eventually to pay a great deal more attention to the syndicate promoter who edges across the narrow margin of Sec 3 (a) (11).

Among new housing stock issues:

Mortgage Guaranty Insurance Corp of Milwaukee, only competitor of FHA, is seeking to sell 155,000 more shares of common stock to boost its capital and surplus. This would bring its total outstanding to 1,420,118 shares. MGIC reports that its stock has jumped from a range of 8.7-10.87 in July to 17.39-23.37 in September. Earnings were \$.099 a share for the first nine months of 1960 compared to \$.019 for the same '59 period.

Despite dipping home sales, the corporation wrote \$112.8 million in insurance in the first nine months of this year, compared to \$83.5 million in all of 1959.

Shell house stocks jump 20% in month

Wall Street is voting that shell housing is the industry's hottest item.

Shell house stocks jumped 19.5% last month, in House & Home's monthly tabulation of housing industry stocks traded enough to create a recognizable market. At mid-month, shell houses averaged 25.63—up more than 4 points from mid-November's 21.44. Leading the pack was Jim Walter, shell housing's giant from Florida (News Oct '59), which was quoted at 4734 bid, a gain of almost 10 points in four months.

The spectacular shell house gains reflect the growing market for cheap vacation cabins and do-it-yourself homes.

Shell house gains lifted House & Home's index to 11.46, up 6.5% from November's 10.76. In contrast, the Dow-Jones industrials' average edged up only 1.2% (from 604.80 to 611.94) and Natl Quotation Bureau's industrial average moved up 3.5% (from 99 to 102.45).

Stock savings & loan associations (expected to register an increase of 20% in earnings this year, according to Kidder, Peabody & Co) boosted the financial stock average to 17.38 from November's 16.32, a gain of 6.5%. Realty stocks went up 2.7%, from 8.06 to 8.28.

Not all housing stocks fared as well. Building stocks slid 5.8% (from 5.07 to 4.78), land development stocks, 5.3% (6.06 to 5.74) and prefabs, 8.3% (7.59 to 6.96).

NEWS continued on p 51

HOUSING'S STOCK PRICES

	-	, ,	- 0	VIL	6. 8	110			
(1 S) (1 D) (1)								Dec	
Company	Price	Bid	Ask	Bid	Ask	Bid	Ask	Bid	Ask
BUILDING									
Eichler Homes First Natl Rlty	. е &	6 %	6 3/4	5%	61/8	51/2	5 1/8	5 3/4	61/4
Const (pfd) First Natl Rlty	&	81/4	8 3/4	9	91/2	8 7/8	91/4	9	91/2
Const (com) General Bldrs .	. е		4 3/4	4	41/4	3 7/81)		
Hawaiian Pac Ind Kavanagh-Smith	. 5	a 7	71/2	61/2	63/4	5 3/4	61/8	12 1/4 6 1/2	7
US Home & Dev Wenwood	.10	5 2 3/4	5 % 3 1/4	4 5/8	5 31/4	4 % 1 %	4 ¾ 2 ½	4 3/4 2 1/2	5¼ 3¼
Wenwood Wise Homes	. e	1134	3 12½	2 ¾ 10 ¾	3 1/8 10 7/8	2 11½	2½ 12	1 % 10 ½	1¾ 11
LAND DEVELOP	MENT								
All-State Prop		6 3/8 b		5b		47/81	b	4 1/2 b	
Arvida		81/2	8 1/8	10 %	103/4	10 %	11	91/4	93/4
Cons Dev (Fla)		51/4	6	5 1/2	6	5 1/2	6	6	6 1/2
Coral Ridge Prop								11/2	
Fla Palm-Aire.								15%	
Forest City Ent.	.10					111/2			
Garden Land									
Gen Dev						121/8			
Grt Southwest .								101/2	
Laguna Niguel	. е	2.3/	11 1/4 b	9 7/8	10 1/8	9 %	101/4 h	91/2	10
Major Plty	. 0	9	91/.	2 78	91/	1.54	17/	1.5/	1.8/
Pag Cat Prop	10	7 3/4	2 1/4	714	8	7	7 1/4	6	614
Realsite Inc	е.	2	21/2	2	21/0	1 3/4	2.1/4	15%	176
Lefcourt Major Rity Pac Cst Prop . Realsite Inc United Imp & I	nv e	5 5/8	b	4 3/4	b - /2	51/4	b /±	51/6	b
FINANCE									
Calif Fin	. е	20	201/2	21	211/2	21	211/2	221/4	23
Emp Fin	. е	10	10%	8 3/4	91/4	10 %	111/8	101/2	11
Fin Fed	. е	54 1/2	56	51	521/2	481/2		53 1/2	
First Chrtr Fi	n. e	25%	2	23 1/8	c	25 1/8	С	283/4	c
First Fin West									
Gibraltar Fin					22 3/4		211/2		
Ort Weten Fin	0	295/	2	9.7 c		2.7c		2.95%	c

Mdwstrn Fin 8 3/4	7	7 3/8	7	7 3/8	8	8 %	10 1/8	10%
Palomar Mtg e	7 1/4	75/8	7	71/4	65%	71/8	7	7 1/2
San Diego Imp. e	7 7/8 c		7 7/8 c		81/2 c		7 3/8	
Trans Cst Inv .15	13 %	14	13 %	13 3/4	12	121/2	11	111/2
Trans World Fin. 85%								
Union Fin15	13 %	141/8	131/4	14	13	14	121/2	131/4
United Fin of								
Cal10	191/4	20	191/4	193/4	181/2	19	191/4	201/4
Wesco Fin e	22	22%	191/8	191/2	20	201/2	211/4	213/4
REALTY INVESTMENT	i .							
Gt Amer Rlty e	7/8	11/1	6 3/4	1	5/8	7/8	1/2	7/8
Kratter A e	21 3/4 b		211/8b		20%)	201/81)
Rity Equities . 5 1/4	47/6	51/4	51/4 b		5b		4 3/4 1	0
Wallace Prop 6	71/4	81/4	7 1/2	81/2	61/4	71/4	7 3/4	81/4
PREFABRICATION								
Admiral Homes . e	2 3/8	23/4	2 3/8	2 1/8	21/2	3	2	21/2
Crawford13			91/4					
Harnischfeger e	24 1/2 b		23b		22 7/8	D	191/4	b
Inland Homes e	83/4	914	87%	93%	91/1)	91/2	10
Natl Homes A e	101/4	103/4	10	101/2	10	101/2	9	91/2
Natl Homes B e	93/4	101/4	91/2	10	9 1/8	10%	81/2	9
Richmond Homes. e	1 5/8	2	11/8	1 %	1	11/2	11/4	1 1/8
Scholz Homes e								
Techbilt Homes e								20¢

Bevis d 3¼ 35% 3 3% 33% 35% 3½ 4
Jim Walter . . . e 38½ 39¼ 37½ 38¼ 39½ 40¼ 47¾ 48¾
a stock not yet marketed

SHELL HOMES

b closing price (American) c closing price (New York)

d issued in units, each consisting of five 50¢ par common shares, one \$8 par 9% subordinated sinking fund debenture, due Feb 1, 1985, and warrants for purchase of one common share and one \$8 debenture at \$9.50 per unit, expiring Dec 31, 1962 and 1964, respectively, at \$15.50 per unit. Prices quoted are

for common stock.

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No irritation

Root-Proof and Perforated Pipe



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*KLEAN-KOTE IS A TRADE-MARK, U. S. PATENT APPLIED FOR. SILVER-GRAY BAND REG. U. S. PAT. OFF.

lason: looking back on seven years

tinued from p 45

ed us of throwing the election." e result, in any case, was ouster the incumbent mayor.

Mason delayed four months in ertifying San Francisco's worke program earlier this year and, usual, there were loud squawks.

at hasn't worked out so well?

Asson immediately cites public ising—"housing people of very income properly." He adds: ne program, as it currently ex-, is very controversial—and as esult it isn't doing the job it tht to do." Few would disagree, in his two years as HHFA ministrator, Mason has tried come up with alternatives. His gest effort was to have Prof est Fisher of Columbia Unisity, one of the nation's leading erts on land economics, make omprehensive report on public sing. Mason published the ret, then pigeonholed it.

On the other hand, Mason cones, "one of my major acplishments is getting a public sing commissioner who apaches public housing on a pathetic basis instead of just ng to do nothing." In his six rs in office, PHA Commissioner arles Slusser battled with his f, with public housers and othwound up as unpopular as housing official in the Eisenver Administration. But he did this was Eisenhower's aimp public housing from growing bigger, and came up with ny a plausible reason why this not PHA's fault but the fault ocalities who couldn't agree on because public housing is so vily Negro-occupied. Bruce Savin his nine months in office, managed to ingratiate himself fully with most public housers they would be perfectly hapto see him stay on in the nedy Administration (which likely).

at about land prices?

One problem is it takes a lot noney to be a land developer. naps the federal government ht embark on programs to help ders finance land development, naps by extending FHA insurin this direction. The point o create competition for the l," says Mason. "The problem of to have it get out of hand." s could well happen if FHA res land development loans so lily that builders begin bidding the price of acreage in a rush ake advantage of the new tool. t FHA, says Mason, local ofare increasingly recognizing eholds. "My feeling is that we ald resist this because individought to own the land they on, not landlords. But now have cities who want to lease an renewal land (to cut the

great world problem is that individuals ought to own land, but don't."

Leaseholds have been common in Baltimore for generations, and FHA has always gone along with them. The situation is similar in Hawaii, where the Big Five own so much of Oahu Island. And, Mason reports, FHA has until recently agreed to insure mortgages on leasehold lands only under restrictive conditions which eliminate the price advantage builders get from leasehold land. Recently, FHA "went back to giving a better leasehold mortgage than a fee mortgage—to get better leaseholds written." Mason adds: "In Baltimore you do not get a bigger mortgage with a leasehold than without one."

What about the slump in housing?

Mason predicts "a pickup sooner than a lot of people think." He has several theories for the slump. One is that builders have been "overbuilding the market pricewise"-and he thinks it is the Administrator's duty "to call this to the industry's attention." Another is that we are facing a situation for the first time since the war where we have "shelter enough."

FHA's mortgage insurance authority will last until well into the new year, he predicts.

Awards set for model interiors

Furnished model houses and apartments can win national recognition in a new program sponsored by House & Home, Life, NAHB's National Housing Center, and the National Design Center.

The contest is intended to encourage homebuilders to use professional interior designers. Any furnished model house or apartment held open to the public, decorated by a professional decorator or designer, is eligible.

Houses will be judged in three groups according to price (under \$18,000, \$18,000 to \$30,000, and over \$30,000). A fourth category will be devoted to model apartments, rental or co-op sale. Judges will be housing industry leaders, top interior designers, and the editors of House & Home and Life. All submissions must be made in standard 8½" x 11" loose - leaf binders, with photos, drawings and descriptive materials in clear plastic envelopes. Black and white photos should be 8" x 10", but color photos and slides may be any

There is no fee for submissions. Builders or decorators may enter as many separate interiors as they wish. Entries must be postmarked by Mar 13. Winners will be published in House & Home later this year. For more information, write Interiors Awards Program

c/o House & Home Time-Life Building

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Scattered site projects spread to West Coast

Negro neighborhood, fearful of the idea, finds things are better than expected

In a suburb of Sacramento, Calif., a housewife peered through her front window at a small new house across the street. Said Mrs Isaac Holmes: "It's too early to have any definite opinions. But the house *is* nice. And the new people haven't caused any

trouble." She paused and added: "Maybe

things will be all right after all."

Mrs. Holmes' cautious appraisal of the new house and her new neighbors has more than local neighborhood significance. The house across the street is public housing—one of 50 single-family houses and duplexes on 44 sites dotted through a 36-block area in

Del Paso Heights. For public housing and redevelopment officials, the reaction of people like Mrs Holmes furnishes a gauge of the success of the West Coast's first experiment in scattered site public housing.

Scattered site housing first gained attention when Cedartown, Ga. put up 20 prefab units in 1958 (News, Mar '58). It has since been spreading. Reason: scattering small units lets public housers sidestep two curses of public housing: 1) the bleak, institutional look of most big projects and 2) the often fatal opposition from neighbors who cry that public housing will depress property values.

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Today, some 10,000 units in scattered site projects are either completed or under construction in more than 15 communities. The projects range from single-family homes and duplexes to New York City's "vestpocket" apartments housing 168 families. In each, the goal is the same: to meld public housing with going neighborhoods as inconspicuously as possible.

The Sacramento experiment has brought into focus the advantages and problems of diffusing the housing of low-income families. By last month, 46 Negro families and four white families had moved in.

How it began. For its maiden venture in scattered housing, the

Sacramento City-County Housing Authority picked a deteriorating neighborhood of lower priced homes. The area, called "Dogpatch" by some, had only one street with curbs, sidewalks, and gutters. Some of the houses, built and sold five years ago for \$9,750, are neatly kept. But many are ramshackle structures either built by the owners themselves or thrown up in a hurry by builders. The authority began buying lots quietly in 1959.

The project did not have to face the vigorous and organized opposition that has hamstrung large public housing project in other cities. Says Executive Secretary Kenneth Stuart of the Sacramento Real Estate Board ruefully: "This whole project was in the bag before we had an opportunity to oppose it. Our organization is against all public housing, and if they try to put up more we will oppose it as a matter of principle." Executive Director Albert H. Becker of the Sacramento HA concedes that scattered sites were adopted to sidestep opposition. As John G. Melville, San Francisco regional PHA director, told a

NAHRO panel: "That's what we like best about scattered site houses. We get them built before people who oppose public housing find out about them."

Negro opposition. But even after the project was "in the bag," the Sacramento HA did run into objections. The residents of Del Paso Heights are more than 90% Negro. To the authority's surprise, the bitterest and most vocal opposition to the project came from Negroes who didn't want "slum" Negroes moving in to downgrade their neighborhood. One outspoken opponent of the project was a member of the NAACP.

A Negro construction laborer, Isaac Holmes, summed up the feeling of many: "This is a quiet little neighborhood. The people all have young kids, attend church and there are no late parties. I've heard about these public housing people. They're rioting people. I'm afraid of a pattern they might set. It's not right. It's not fair." Said a Negro Air Force sergeant: "I've seen public housing in New York and other places. People don't take care of their houses when they're renting. I'm afraid that's what's going to happen here." Added another Negro sergeant: "We need people with higher intelligence, better jobs. This low income housing isn't going to give us that." On two streets, 85% of the residents petitioned that the project be abandoned.

The residents did not fault the houses themselves. The stucco structures, designed by Architect Raymond R. Franceschi and built by Meyers Bros Inc of San Pablo, ranged from two-bedroom duplexes to five-bedroom single houses. Of slab and fir plywood construction, the units compare favorably with the best in the neighborhood, are much better than many (see photo).

A white resident, E. J. Gallup, had some reservations about who might move in but he pointed out that three rickety old cabins had been replaced by spruce new homes on his street. He added: "They sure

are improving the looks around here."

To this, PHA men say "Amen." Proponents of scattered site housing hold it up as one way to replace dilapidated structures in existing neighborhoods that are deteriorating, thus giving neighborhoods a shove toward upgrading. Lots that cost the housing authority \$1,200 have now gone up to \$1,700.

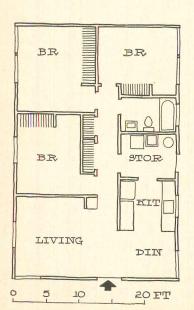
The authority sifted prospective tenants carefully, giving preference to occupants of big projects with good records of paying their rents, keeping up their apartments. Many were servicemen with families.

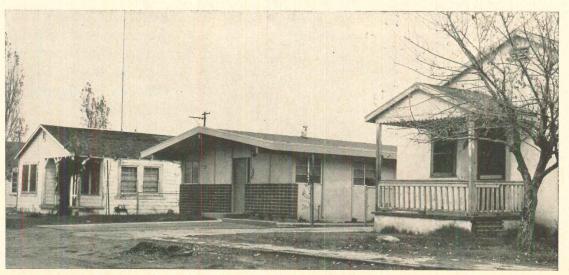
Opinions change. Since moving in, the public housing tenants have not yet acquired the universal approval of many of their new neighbors. Says one resident: "Some of us who opposed the project in the first place are remaining neutral. Of course, there's nothing we can do about it. They're in now." The Del Paso Heights Improvement Assn, which went on record as opposing the project, hasn't changed its position officially. But many, like Mrs. Holmes, have found that their worst fears of an influx of delinquent problem families have not materialized. They view the situation with grudging optimism, but they are still "waiting to see."

Some, like Mrs. Henry Holman, are enthusiastic. Says she: "I've met several of the families. They're very nice and not loud or boisterous. I think it's going to turn out fine. The homes are as beautiful as any in Del Paso Heights." The housing authority says it hasn't received any complaints about tenants—yet.

More expensive. Scattered site housing costs only a little more than big apartment structures, PHA men contend. The Sacramento houses cost \$8.28/sq ft to build, plus site development. (In North Richmond, near San Francisco, where 90 units are being completed, the cost is an even more modest \$7.80). Total cost for each

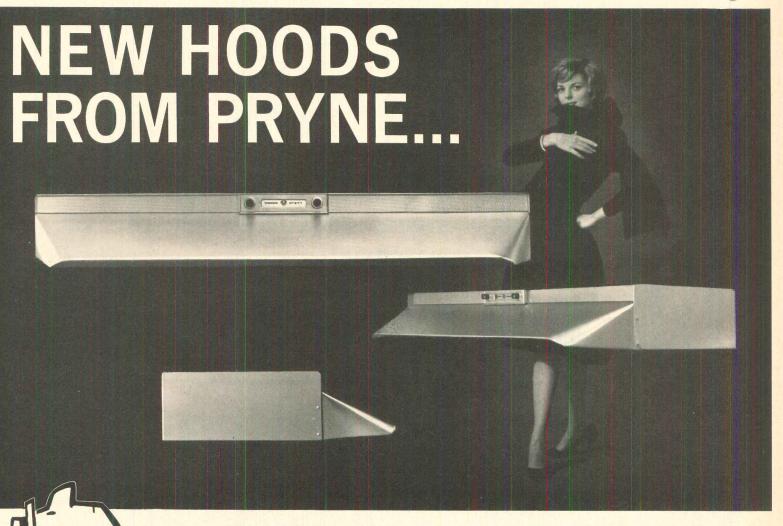
continued on p 57





SCATTERED SITE public housing gives a physical lift to a deteriorating neighborhood, as witness the center house, above, in suburban Sacramento. At left, floor plan of a typical PHA three-bedroom house.

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DELUXE MODEL 4100 . . . anodized aluminum in clear or copper finishes, copperized, stainless steel or color-coordinated. Built-in enclosed lamp, two-speed fan with quiet, aerodynamically designed blade. decorator trim.



STANDARD MODEL 4000...single-speed fan with anodized copper, aluminum or clear, copperized, stainless steel, and decorator colors.



Pryne has developed a complete new Fashion Line of Hoods that will give your kitchens the glamour of a fashion show...keep kitchens outdoor-fresh. Air delivery has been increased by the use of a new power pack designed to move more air quietly. Vertical discharge, self-contained, and duct-free units are available. Installation is easier than ever. Ask your Emerson Electric Distributor to show you the new Pryne Fashion Line. There's a hood for every home...in every price range and in a variety of finishes from anodized aluminum to decorator colors. Another of Emerson Electric's Finishing Touches...pre-sold packages of quality electrical accessories.

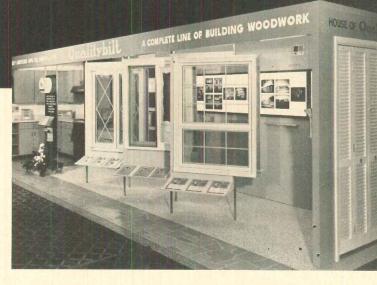


For You at the N.A.H.B. Show Biggest News in WINDOWS

Qualitybilt TRIUMPH

BOOTHS525-6-7

Also on display at the show — Farlofold and Dor-Mate doors, 4-Way, Casement, and Glider Wood Windows, and Qualitybilt Wood Kitchen Cabinets and Vanities. *Make a special note to see them!*



FARLEY & LOETSCHER MFG. CO DUBUQUE/IOWA amento unit, including land and ated overhead, came to \$12,compared to \$11,720 per unit in large apartment projects. ever, say public housers, tenance on dispersed dwellings no more and may turn out to less. Why? Tenants, removed the stigma of institutional ing, should take more pride in homes, do more themselves to them looking spruce. Says a ic housing official in Bainge, Ga. (where 36 units were up two years ago): "Nothing I d say could stress too much the riority of scattered sites. They 0-1 easier to rent and no more nsive to maintain.'

ith private housing in a slump, be builders are beginning to see arket for construction in scatl site public housing. A straw e wind: The Milwaukee homelers chapter has informed the or that its members will be glad o-operate in a scattered site ect.

ilders try own plan 'public' housing

Antonio home builders have virulently opposed low-rent ic housing in their city. Now, are launching a campaign to I housing so cheap it can tap bublic housing market.

parkplug of the idea is NAHB Vice President Jim Burke, sing with fellow San Antonio der Quincy Lee, chairman of HB's low income housing complete. To prove marketability of low-price housing, Burke 10 houses, sold them all at 50-\$6,950 on a single Sunday, out landscaping, driveways, out landscaping, driveways, interior finish or insulabut including plumbing and ricity, they required finishing ne owners, but not as much as ell house.

irpose of the experiment, says

Burke, was "1) to see if there was a market for them—and considering the sales I'd say there certainly is; and 2) to see what kind of people we'd get to buy them. I must admit, we got real good people—a thrifty type who only moved in a few weeks ago, and already are improving them."

But, says Burke, a more thoroughgoing program is needed. His plan: to persuade the city to relax its stringent plumbing, electrical and building codes to permit cheaper construction; and to relax subdivision codes to permit lots that now cost \$1,500 to be developed and sold for \$750. Financing, he says, would depend on FHA's willingness to go along on a slightly less demanding construction standard than its present sec 203i. Burke financed his own 10 houses himself (via a foundation) no-down, \$59/mo.

The plan, says Burke, is not limited to San Antonio. "We want to set an example for the nation."

Indications that the builders' idea may get a tryout in San Antonio come from City Manager Lynn Andrews. He has approved the Burke plan in principle, proposed that the city set aside 10 acres, pick builders to erect some 25 or 30 houses under relaxed codes administered by special engineering and health boards set up for the purpose. The city would make detailed studies of the results in costs, product quality and customer satisfaction.

. . .

In Portland, Ore., Mayor Terry D. Schrunk set up a conservation committee to study whether the city building code should be eased to spur remodeling of old downtown buildings to provide cheap, close-in housing. "This might be the answer," comments President Sam Wolsborn of Portland Home Builders.

NADA:

sier terms fail to boost sales

ada's housing market is echoing US slump, despite bigger loans longer terms just put into efby the government.

Ottawa, for instance, three four column classified display beckoned buyers last month such messages as: "practically ing down and a lifetime to" or "never before has such e been offered with such a erate down payment. \$885 will lle the purchase of an exciting om-designed 3-bedroom home, uding floor-to-ceiling log-burn-fireplace."

at salesmen sat behind empty s and watched the snow sift-down outside. Rarely did a cuser cross the threshold. Said eral Manager John Paradis of peau Construction Co, Ottabiggest developer: "We expect changes will increase demand.

agrees: "I don't expect we'll feel much impact for a few months. The earliest the building industry will begin to benefit will be sometime around the end of January or early in February."

The new terms of the National Housing Act—easiest in six years—cut down payments from 10% to 5% (on the first \$12,000), stretch repayment from 30 to 35 years, boost maximum NHA loans from \$12,800 to \$14,900.

Canada will have ended 1960 with 110,000 housing starts, Works Minister David Walker predicted in November. This would be a drop of 21% from 140,000 in 1959 and 31% from 160,000 in 1958.

In Toronto, for the first time in several years, bankruptcies appeared among home builders. Eight firms folded last year—none of

WATCH THIS SPACE



PRYNE HOODS

give your homes a

FRESH TOUCH

All new from Emerson Electric... Pryne Fashion Line hoods that put new life in tired kitchens. Completely redesigned for top efficiency... meets HVI and FHA performance standards.

Contemporary styling in anodized aluminum—copper, clear or decorator colors. There are Retractable Hoods, Island Hoods, Tilting Hoods, Self-Contained Hoods and Pure-Aire Duct-Free Hoods...hoods in every price range to suit every building need.

Another of Emerson Electric's *NEW* Finishing Touches . . . pre-sold packages of quality electrical products for Builders.





CHAIRMAN STEUDEL
Up from office boy



PRESIDENT BALDWIN

Down from Canada

New chiefs for paint maker

Arthur W. Steudel has moved up from president to chairman of Sherwin-Williams Co, the nation's No. 1 paint manufacturer. He remains chief executive officer. Succeeding Steudel as the company's fifth president in 94 years: E. Colin Baldwin, vice president and general manager.

Steudel, 68, went to work for S-W as an office boy in 1908, became president in 1940. In taking the chairmanship, he fills a post that has been vacant since 1944. Baldwin, 52, a graduate of Williams College and the Harvard business school, has worked for S-W since 1934. He will continue to hold the job as president of S-W's Canadian operation to which he was appointed in 1958.

Sales in the 1961 fiscal year which began last September are running ahead of 1960's pace, reports Steudel. In fiscal 1960, sales totalled \$282,279,282. Earnings were \$16 million, equal to \$6.04/share. Spring stock orders are up 8% to 10% over a year ago, added Steudel.

Squeezed by increases in labor rates and raw materials costs, S-W raised paint prices almost 3% last month. But Steudel says the company will not feel the effects of the price hike for several months because spring orders were placed at the old prices.

Wesley Songer quits as Crane president

Crane Co, which has been in a state of executive ferment since Thomas M. Evans took over as chairman in 1959, has lost another top man. Latest to go: Wesley A. Songer, who quit as president after less than a year on the job.

Songer, 41, former executive vice president of American Safety Razor Corp, was brought in by Evans as executive vice president of Crane in June 1959, to help reorganize the Chicago plumbing manufacturing company. He was named president in December 1959. Industry sources pointed out that Songer's resignation came on the heels of the appointment of Dante C. Fabiani as Crane's executive vice president. Fabiani, who has been mentioned as possible successor to Songer, was financial vice president of McDonnell Air-

craft Corp. He formerly held the same job at H. K. Porter Co., steel and electrical manufacturing company. Evans is also chairman of Porter.

Songer said he resigned "to take another job." He declined to say what job until returning from a West Indies vacation. He will continue as a Crane director.

Charles B. Le Bon has resigned as vice president of Arcadia Metal Products to form Carmel Steel Products. Le Bon is president of the new Downey, Calif company. Carmel will make steel-framed sliding glass doors, steel window wall and related architectural steel products. Le Bon will continue as a director of Arcadia, which he also helped found. Arcadia is abandoning steel products in favor of an all-aluminum line.

Cochran quits city post in 'conflict' dilemma

Architect Alexander S. Cochran has resigned from the Baltimore Planning Commission. Reason: the hoary problem of conflict of interest which plagues governmental agencies seeking the services of topgrade experts.

Cochran's firm-Cochran, Stephenson & Wing-was on the verge of getting a contract to design a \$4 million expansion of city hospitals. But the city solicitor ruled that under the city code, a paid official could not have an interest in a city contract. For Cochran, an award-winning urban renewal expert, it was a "frustrating dilemma." Said he: "I want very much to serve the city in the field of planning. Obviously I cannot render this service if it limits the practice of my profession and conflicts with commitments to my partners." He resolved the dilemma by quitting the commission. He was chairman of the master plan

For city officials, it poses a dilemma too: how can they get qualified architects to take a job which bars them from city work. Mayor J. Harold Grady named a three-man commission to reexamine conflict of interest laws with the hope of finding a way to avoid losing good men on purely technical grounds.

ARCHITECTS: AIA awarded honorary fellowships to Guillermo Rossell, Mexico's undersecretary in charge of federal properties, and Ramon Corona Martin, chairman of the international affairs committee of the Mexican Society of Architects. AIA and Mexican architects plan to form a joint Border Planning Commission.

The Pan American Federation of Architects elected Samuel Inman Cooper, of Atlanta, as its president at a congress in Buenos Aires.

At its annual convention in Philadelphia in April, the AIA will award honorary memberships to these non-architects for distinguised service:

Mrs. Helen Duprey Bullock historian for the Natl Trust for Historic Preservation; Douglas Whitlock, chairman of Structural Clay Products Institute; Walter D. Cocking, educational consultant for Overview; John T. Carr Lowe, attorney; Dr. George Bishop Tatum of the University of Pennsylvania's school of fine arts; Grady Clay, executive editor of Landscape Architecture and real estate and building editor of the Louisville Courier-Journal.

INSTITUTES elected these new presidents: Insulation Board Institute, J. W. Brown, senior vice president of Natl Gypsum Co; Air-Conditioning & Refrigeration Institute, R. K. Serfass, manager of Westinghouse Electric's air-condi-

Washington, D. C. Builder Edmund J. Bennett and the architectural firm of Keyes, Lethbridge & Condon have won the second annual NAHB-AIA Award of Honor for their collaboration in the design and construction of homes. The award is aimed at encouraging builders and architects to get together to improve housing. Bennett, a former government mannut.

agement analyst, started building

in 1953.

tioning division; Porcelain on Steel Council, C. W. Betz, vice presi-

dent of sales of Alliance Ware Inc. The newly formed council, rep-

resenting manufacturers of porce-

lain enameled steel fixtures and

their suppliers, is an independent as-

sociation affiliated with the Plumb-

Builder Donald L. Huber of Indianapolis and Dayton is consolidating two home component manufacturers into a new company at Camden, Ohio, Universal Mfg Corp. Huber, who is chairman, says the consolidation will permit "large scale efficiencies through mass production techniques." The management of Prefabricators Distributing Inc of Indianapolis, one of the two merged concerns, will run the new operation. Edwin A. Pierce is president and T. A. Anderson chief engineer.

Associated Press



TAMMANY'S JACK
Thirty-six friends . . .



HOGAN'S UNGAR
... and a reluctant witness

N.Y.'s \$4,400 fixup scandal

After nearly a year of cliffhanging suspense, the career of Manhattan Borough President Hulan E. Jack, which began at the end of a mop handle and carried him to the highest-paid elective office held by an American Negro, has apparently ended in disgrace in New York City.

What brought Jack to the end of his career—and his \$25,000 a year municipal post—was a \$4,400 remodeling bill for his Harlem apartment. The reason: Jack let an old friend and former campaign manager, Real Estate Operator Sidney Ungar, pay the bill while Ungar was seeking a \$30 million slum clearance contract from the city. This, a Manhattan jury decided last month, was a violation of city charter rules against conflicts of interest, and a misdemeanor. The jury also found Jack guilty of conspir-

ing with Ungar to conceal the

transaction. The verdict closed a tortuous series of legal maneuvers which began with Jack's indictment last (News Feb), shortly January after the New York Post exposed the Ungar dealings. The indictment was quashed by a New York Judge, but reinstated on appeal by the Marhattan district attorney, ex-Gangbuster Frank Hogan, in a fight that went to the state's highest court. Then followed two trials, in which 36 politicians, churchmen, labor and civic leaders-including harrassed Mayor Robert F. Wagner and Jack's fellow borough presidents—testified to his high character. The defense contended Jack was a naive innocent led astray by a diabolical friend. The prosecution labeled him a sophisticontinued on p 61

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WATCH THIS SPACE

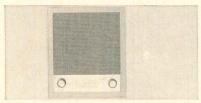




INTERCOM ... The Rittenhouse intercom permits calls to any remote station, at any time, from other remote stations... the same as from the master. From any room in the house the owner can monitor the nursery, answer the door or listen to recorded music.



AM/FM RADIO . . . The Rittenhouse Sound System has the first built-in all-transistor AM/FM radio . . . drift-free FM tuning, automatic volume control. Deluxe Music Stations with 8" speakers provide true high fidelity sound.



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One or more of these inexpensive receptacles,

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YOUR HOME BUYERS CAN LISTEN TO THEIR HI-FI ANYWHERE IN THE HOUSE THROUGH THIS RITTENHOUSE ALL-TRANSISTOR INTERCOM AND SOUND SYSTEM

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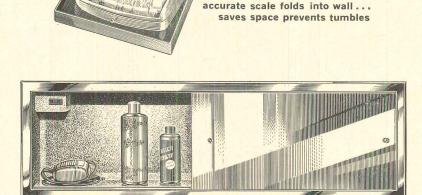
RECESSED

UNITS

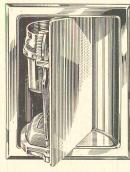
For that extra touch of delightful luxury and comfort in your bathroom, there's nothing to equal the classic styling of Hall-Mack built-in accessories.

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blends harmoniously with
any decor... saves precious space...
provides extra convenience for
every member of your family.
The traditional fine quality of
Hall-Mack accessories brings lifetime
beauty to your bathroom...
combines discriminating
concealment with full utility.
Accessories make the bath, so
to be sure to specify Hall-Mack
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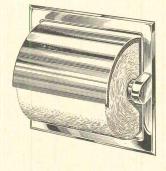
concealed vanity shelf with sliding mirrors



revolving door hides soap, tumbler, tooth brushes

semi-concealed paper holder . . . hinged hood keeps tissue clean, acts as brake on roll





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ed politician who "knew the

The first jury disagreed on a ver-; the second swiftly found him ty. Jack himself did not testify either trial. At both, he was ad with the testimony of Exnd Ungar, who received immuas a prosecution witness, after conviction got a 10-day conpt of court sentence for his ctant performance.

The verdict also—unless upset an appeal—ends a remarkable tical career which began shortly reflect Jack immigrated to the US on the Caribbean island of St. Lia at 15. He worked first as tor for a paper box company, necessary became a Tammany Hall ular. When the borough president processes to for the job.

Jnder New York law, the verconfronts Jack with a possible re years in prison, up to 500 in fines—and forfeits his For him, the chief question or is whether he is still entitled a city pension. The answer gs on whether he is 54 as he said in the past, or 55 as he we contends, and whether his job forfeit now or upon sentencing which is set for Jan 16.

But for New York and other cities, other questions still g: how can slum clearance—any other public purpose—republic support when high offiss sell principle for chicken feed? If chicken-feed deals come to t, what more sumptuous spreads y remain hidden?

doomed as Jack's probable suctor: Robert C. Weaver, 52, a 4,500-a-year member of the city's 1 using & Redevelopment Board. 1 average as Negro, is chairman 1 the Natl Assn for the Advance-1 the Colored People and 1 ner state rent administrator.

drops charges ainst 4 S&L men

arges against four former Miami ach Federal S&L officers that y misapplied funds have been pped—temporarily, at least the US government.

The defendants—Baron sch Meyer, Leonard Abess, n R. Becker, and George Kenly—were indicted in 1958 ews, Aug. '58). Among 21 ints were charges that they spired to share profits of loans de by the S&L and made unured loans through the S&L two banks they controlled to nebuilders in projects in which y also had a financial interest. JS Attorney E. Colman Madasked a district court to diss the case after the judge ed that evidence of similar nsactions not mentioned in the ictment was inadmissible under present indictment. Madsen d the government will seek a

ED: William E. Johnson, 64, eran executive vice president of

v indictment.

tack, Dec 4, at Overbrook, Pa.

Affable Bill Johnson, a World War 1 Navy man, put in stints as real estate editor of the old Philadelphia Public Ledger and subsequently of the old Philadelphia Record. He helped organize the Philadelphia HBA in 1944 and served as its first and only EO until his death. In 1948, he helped set up the association's Executive Officers Council, was elected its first president. Johnson also edited and published the Building & Realty Record, a weekly trade paper. He headed the Mayor's Emergency Housing Committee for four years after World War 2.

DIED: Charles S. (for Stein) Leopold, 64, consulting engineer and a leading authority on air-conditioning, Nov. 24, of a heart attack while watching the Pennsylvania-Cornell football game at Philadelphia.

Head of Charles S. Leopold Engineers Inc, Philadelphia, he designed air-conditioning and ventilating systems for some of the nation's biggest buildings (including the Pentagon and the Capitol in Washington, Madison Square Garden and the New York Stock Exchange). He also wrote many articles, and was a participant in House & Home Round Tables.

A graduate of the University of Pennsylvania (1917), he was a fellow of Britain's Royal Society of Arts and the American Society of Heating & Air-Conditioning Engineers and past president of the American Society of Refrigerating Engineers. Among his many honors: The Frank P. Brown Medal of Philade'phia's Franklin Institute and the F. Paul Anderson Medal, ASHAE's highest award.

OTHER DEATHS: Victor H. Rossetti, 83, honorary board chairman of Los Angeles' Security First National Bank, Nov 19 in Pasadena; Robert E. Bundy, 55, president and general manager of Potlatch Forests Inc, one of Idaho's largest lumber companies, and former executive vice president of Fiberboard Paper Products Inc, Nov 27 in Lewiston, Idaho; Norman H. Hammond, 74, Detroit builder and realtor for 40 years until his retirement in 1945, Dec 2 in Detroit.

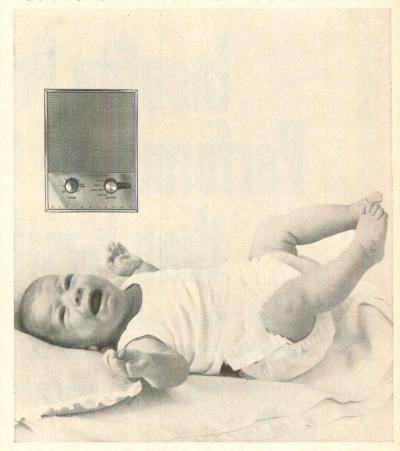
Trouble in San Jose

continued from p 42

which is supposed to have 10,000 houses when completed. At last count, 200 houses were unsold. "I'm lucky if I sell a house a week," said a salesman, glumly. Two years ago, Branden was selling 23 houses a day. But even now, sales at his nearby Bel-Aire Village (\$12,500 to \$14,500) are brisk.

FHA's latest unsold inventory figures cover the 8½ months from July 15, 1959 through March 31, 1960:

WATCH THIS SPACE



RITTENHOUSE INTERCOMS

give your homes a

SOUND TOUCH

It's the finest home sound system ever built...with a high fidelity voice that fills your homes with sell. The Rittenhouse intercom is fully-transistorized...has an AM/FM Radio, powerful amplifiers, large speakers, wall receptacles for the owner to plug in his own living room Hi-Fi, private Intercom service from remote to remote... even while recorded music is playing...and Electronic Door Chimes. Easily installed...low voltage...inexpensive to operate.

Another of Emerson Electric's Finishing Touches...presold packages of quality electrical products for Builders.





MASTER STATION



Insulite Primed Siding Performance Proved on more than 4 million homes

Builders know from experience that this siding makes homes easier and faster to build and sell!

Builders who have used Insulite Primed Siding know it's easier to handle, easier to work with—and that it saves time and money on every house they put up.

MOVES HOMES FAST. Homes made with Insulite Primed Siding have much more appeal to buyers. The deep shadow line, the absence of knots and splits, the extra smoothness of the

finish paint job means these homes move faster in almost any development. It gives you an important "extra" to sell: a lifetime of lower maintenance costs!

TRY IT YOURSELF. If you haven't yet used Insulite Primed Siding, plan for it on the next homes you start. You'll find out why the thousands of builders order and reorder.



CHOICE OF 3 DIFFERENT TYPES GIVES YOU DESIGN FLEXIBILITY Shown here is 4' x 8' plain vertical panel for board-and-batten construction.

Another choice is horizontal (lap) siding. It's 12" wide—gives exposure up to 10 ¾ inches. 8' and 16' lengths mean less handling, less waste.

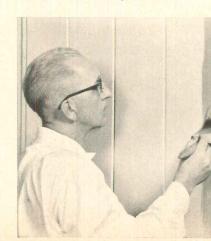
Also available are 4' x 8' grooved vertical panels. Grooves are ½" wide and 8" apart. Has shiplapped long edge for hidden joints.



EASY TO HANDLE-EASY TO WORK Easy to saw, plane and nail—and saves carpenters' time because it works so easily. Straight lengths, full widths and square cut ends mean less waste and less application time.

It has no grain so will not split or splinter, warp or bow. Nails start and drive home fast. No need to drill holes or use special nails. Excellent dimensional stability—boards stay butted.

TAKES PAINT BEAUTIFULLY Insulite Primed Siding comes ready for fast, smooth on-the-job finish painting. Fully primed on face, edges, ends and back to save cost of prime coat. In laboratory moisture tests, it had the best blister resistance of any material tested—and these results have been backed up by on-the-home use since 1957.





Chicago builder Larry Mills of Laurance H. Mills & Son, Inc. says:

"Not a paint complaint in the four years I've used Insulite Siding."

arry Mills is a builder of quality homes in the 26 30 thousand dollar range in the Chicago area. e was one of the first builders to use Insulite rimed Siding. He became sold on its value immeately, and has used it on almost all the homes his rm has built since 1957.

ompletely primed. Why is Insulite rimed Siding so resistant to paint blistering? The mplete deep-prime coat which is applied at the ctory is one reason. In fact new construction can and for several rainy days without a finish coat—ad there's no need to worry about Insulite Siding lking up water.

HAS NO STRUCTURAL GRAIN. And this rules out splits and knots where water can penetrate beneath the coats to cause paint blistering.

Still another reason why Insulite Primed Siding holds paint so well is the exclusive angle-cut "weather drip" edge which makes water run off the edge, rather than run back under the siding.

REMEMBER THIS: Resistance to paint blistering is only one of many good reasons why Larry Mills and thousands of other builders are using Insulite Primed Siding. Ask your dealer about this performance-proved siding. Or for special information, write Insulite, Minneapolis 2, Minnesota.

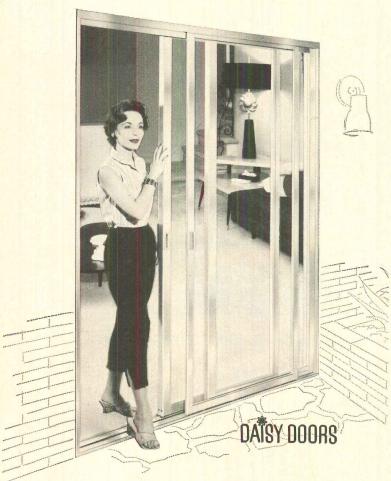
Plant capacity doubled for 1961

Now—for the first time since it was introduced in 1957—you can be sure of immediate delivery of Insulite Primed Siding. Plan to use this quality siding on all your 1961 home starts. Call your Insulite Dealer today.





Daisy doors sell on sight!



Buyers applaud styling and features; builders appreciate fast installation!

HOME BUYERS appreciate the obvious quality and clean, crisp styling of Daisy Aluminum Rolling Doors. And, when you point out Daisy's many additional features, it's sure to be love at first sight: exclusive Prowler-Proof Ventilation; positive seal weather-stripping; single or sealed-unit glazing; integral sliding screen with built-in bug barrier; smooth, fingertip operation . . . and many, many more.

BUILDERS EVERYWHERE know that Daisy Doors save time and money because they're so easy to install, require no painting. A wide range of sizes means that there's a Daisy Door to meet

almost any construction requirement. What's more, the heavy duty construction quality of Daisy is unmatched in its price field.

See how Daisy Doors can help you sell more homes faster. Write, today:

PETERSON VISIT OUR EXHIBIT BOOTH NO. 1122 WINDOW CORPORATION

720 LIVERNOIS . FERNDALE 20, MICHIGAN

61 houses for '61

The November issue is terrific! It's "chuck full" of good ideas. It is very constructive and practical. As an architect, I am grateful to you and your associates for House & Home and I am pleased with the fact that more and more architects are again designing houses.

John N. Richards, faia past-president, aia Toledo, Ohio.

1961 forecast

In his forecast, Miles Colean hit the nail on the head when he said, "People would buy if they wanted to spend their increased income for a better home instead of something else."

I believe that people will not be able to afford better housing at today's prices so long as their desire for better housing is tertiary to their desire for a new compact car, a colored TV set, etc.

If the component organizations in the housing industry continue to be content to talk to themselves and their fellows, they may be able to build a better mousetrap, but that no longer means that the world will beat a path to your door. Until through guts merchandising the quality home becomes more of a status symbol than the present items which compete with the consumer's dollar, the industry may only admire its handiwork from an esthetic point of view.

James V. Morgan executive vice president Society of Residential Appraisers Chicago.

I have read Miles Colean's housing forecast for 1961 with a great deal of interest and, while he may be somewhat over-optimistic, I believe his position and the story he tells are stimulating. If private enterprise is to measure up to its opportunities, it must respond to this kind of challenge.

I am so much in accord with Miles Colean's view that mort-gage money will not be a limiting factor but the other influences that he recites will be, that I incorporated this in a talk I made before the Mort-gage Bankers Association today.

HAROLD BOESCHENSTEIN president,
Owens-Corning
Fiberglass Corp
Toledo, Ohio.

HOUSE & HOME has again rendered a great service to the housing industry and the national economy by the timely presentation of Miles Colean's housing forecast. It sets forton

the bases to bring out the maggressive and competent eff. This will radiate optimism the buying public and revelope the present gloom psychologometric that nothing succeeds like cess itself. Confidence must reestablished and the actifulat will result will confidence for Colean's forecast.

David D. Bohan builder-developer San Mateo, Calif

We can agree with Cole conclusions that "money not be the problem" and "construction costs should relatively stable." Some of latent demand for new resid tial construction could well activated by the use of fur creativeness and ingenuity in chitectural design, and ther always room for cost-cuttin the process and for impre ment in sales techniques. emphasis of the current ar on contributions the bui himself might make, in opinion, is most pertinent this time.

Albert J. Roberts Chairman Federal L Bank Board Washington, D.C.

The land problem

House & Home did such a markable study of land use August that market measment of the differing result: Cuba and in Jamaica may terest your readers.

The credit of a country one way to measure its polic. This is reflected in the yield government bonds—its promoto pay.

In Cuba where land use changed by confiscation in name of reform, the \$44.7 plions of 4½% bonds due 1977, and the \$39.7 million 4's due in 1983 sell at 38 34% to yield 11.9% currer A few gamblers are willing take a chance at these pron being paid through a revolution.

In Jamaica for better 1 use they are revaluing land a transferring all taxes on provements to the value location. Jamaican 534% bedue in 1974 (\$9.9 millions of standing) are selling at 90 yield 6.9%.

The difference between a cit at 11.9% for Cuba copared to a 6.9% credit for Jamaican government is measure of differing appra of their violently differing pcies on how to recognize interest of all in good land together with maximum incitive to individual improveme Viva la difference!

Lancaster M. Green Lancaster & Norvin Gr New York City.

WAYS TO TURN "LOOKERS" INTO "BUYERS"









EASY TO CLEAN...EASY TO USE! Surface units of Westinghouse range platform plug-out completely for easiest cleaning. Controls "fine-tune" any degree of heat desired. Safety-Matic unit won't let foods burn. Platforms also available in other styles and finishes to fit any installation.

SO EASY TO USE... SEE INTO... REACH INTO! Meat keeps fresh days without freezing... vegetables stay crisp and store-fresh ithe new Westinghouse Center Drawer Refrigerator. Frost-free irefrigerator section, freezer, and center drawer. 8 Choose-N Change panel colors. For built-in or free-standing installation.



AS PRACTICAL AS THEY ARE BEAUTIFUL! There never seems to be enough storage space in any kitchen...but now you can solve that problem quickly and beautifully with Westinghouse easy-to-install Heirloom maple finish wood cabinets. Adjustable shelves provide complete flexibility.



EYE-LEVEL CONTROLS...OUT OF THE HEAT ZONE! The side-mounted Control Panel of the Westinghouse Imperial is only one of many features prospects will like. You'll like the fact that this de luxe oven can be built in or stacked without surrounding cabinetry. It installs with just two screws.

THE HOTTER THE WATER...THE CLEANER THE DISHES! The Westinghouse Roll Out Dishwasher has Hot Water Booster that guarantees 140° water for washing and final rinse. Handles service for ten. WashWell removes from frame for convenient installation. 8 Choose-N-Change front panels...install in minutes.



COMPLETE, COMPACT HOME LAUNDRY! Westinghouse Spacemates install in just 25 inches of floor space when stacked, just 50 inches side by side under the counter. Laundromat® has more washing power for cleaner clothes, including the new man-

PRESENTING THE NEWEST AND BEST FROM WESTINGHOUSE



Exciting new design of "split-level" platform provides new user cooking convenience. Each level has own "no-drip" edge to confine spillovers. Control Panel is mounted on top as part of platform. Oven has lift-off door and plug-out heaters, a cleaning feature with buyer appeal. Range is complete unit, right down to floor, with leveling feet to permit accurate line-up with adjacent cabinets. Requires onlysingle 230-volt power connection, easily made through front panel opening. Panel frame permits local customized panel installation to match kitchen decor. Where Westinghouse Maple Finish wood cabinets are used (illustration), a special matching panel is available. **You can be sure** ...if it's Westinghouse.

Westinghouse



SEND FOR COMPLETE INFORMATION	ON WESTINGHOUSE	APPLIANCES A	AND CABINETS
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Westinghouse Electric Corporation, Contract Sales Department 246 East Fourth Street Mansfield, Ohio.

, , , , , , , , , , , , , , , , , , , ,	
NAME	TITLE
COMPANY	
ADDRESS	
CITY	ZONESTATE



Par Oak-finished medium dark

Many combinations of Oak, Maple, Walnut and Cherry are ave

Beautiful BondWood®Parquet...

Moves into the Mass Market



Par Red Oak (natural finish)
—most popular grade in the
mass home market.

More and more builders are installing HARRIS BondWood Floors in medium priced homes because this finest of all parquets costs no more than ordinary parquet. Actually, it looks very expensive because the centuries-old tradition of expert parquet craftsmanship is exemplified in HARRIS BondWood—in gleaming geometric designs—in fact, in more woods and patterns than any other parquet.

And the beauty is deep—a lifetime of service with slats a full 5/16" thick, not tongue and grooved. Write for color booklet. Harris Manufacturing Company, Dept.HH-11, Johnson City, Tennessee. See our catalog in Sweets.

Finest in flooring since 1898

HARRIS FLOORING

symbol of quality since 1906

Potlatch LOCKWALL*

Goes up with ease and speed... adds natural beauty

Potlatch Lockwall plywood panels were designed with one man in mind — the builder. You get powerful-selling beauty of natural wood paneling with *outstanding* savings and convenience.

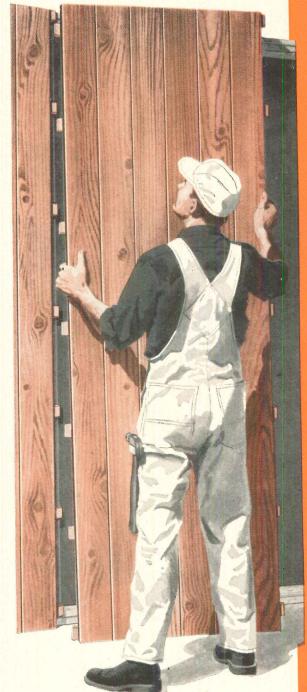
The Big Key: Factory attached, backerfurring strips interlock one panel to another. Edges are *precision-matched* and you nail backing strips to the studs.

Quick and easy...fewer nails required... face nailing eliminated...no clips or gadgets needed.

Lockwall is available in a wide choice of carefully selected, *Kiln-dried*

Western woods in modern V-grooved random plank patterns..

clear or knotty
styling...Inland
Red Cedar, Idaho White Pine,
Inland Larch or
Ponderosa Pine.
Conveniently
packaged in 6
panel units (32"
by 7' or 8' lengths)
in heavy protective
cardboard. Covers 16' of
lineal wall space.





Unmatched quality control, mixed carload lot service and a wide variety of products are available to dealers throughout the nation through Potlatch — a name associated with the finest in building materials since 1906!

From PFI's seven
mills comes a
choice of Idaho
White Pine, White
Fir, Douglas Fir,
Ponderosa Pine,
Cedar, Larch,
Spruce, Yellow Pine
and Oak Flooring.

Our facilities,
which produce
600 million board
feet annually,
assure the kind
of flexible service
today's building
industry demands.

Sales are handled through the genera sales office in Lewiston, Idaho and

Warren, Ark.
Bradley-Southern Div.
Pittsburgh, Penn.
1615 Oliver Bldg.
Kansas City, Mo.
2007 Bryant Bldg.
Chicago, Ill.
1829 Pacific
Opera Bldg.
New Brunswick, N.J.
P.O. Box 55
Deer Park, Wash.
Deer Park Ind., Inc.





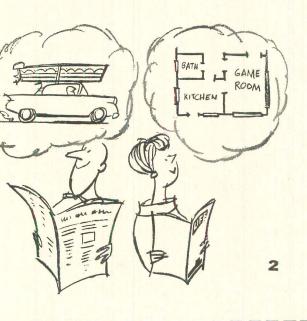


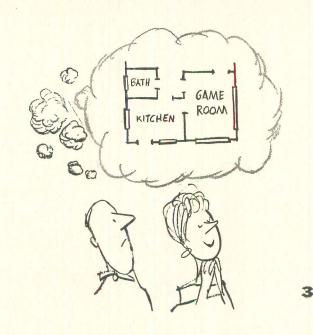
CHAIN OF DEMAND



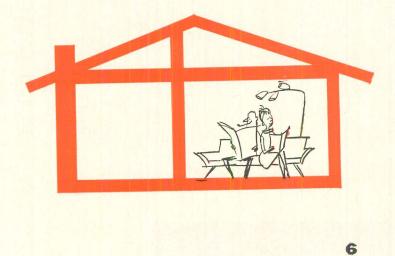
Where do you rank in the CHAIN OF DEMAND in you town? Four-star or forsaken. These days there are many desires, but just so many dollars. Building materials man ufacturers are assuring your share of these dollars by promoting the desire for better.

For more information about LIFE's new home or modernization





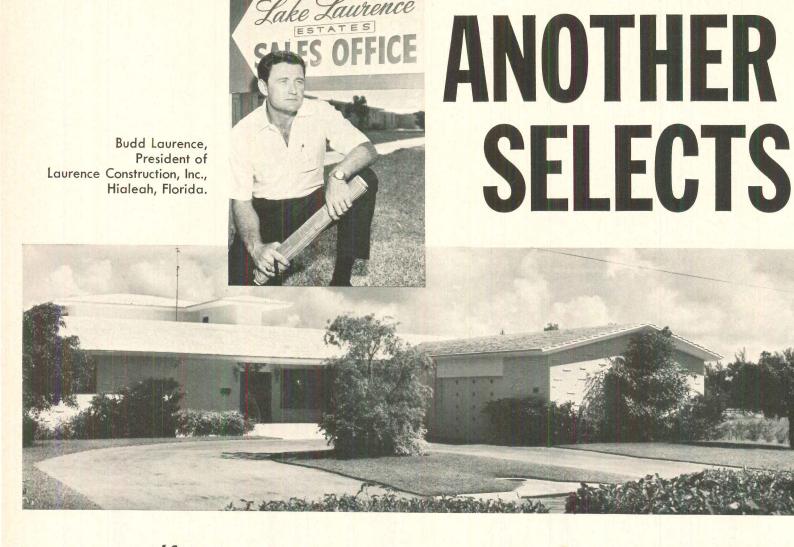




ng, better housing in their ional advertising. By tiesing with these national ands locally, you gain a apetitive advantage that a move you up in the AINOFDEMAND. To commod more sales in your del home selling, or in

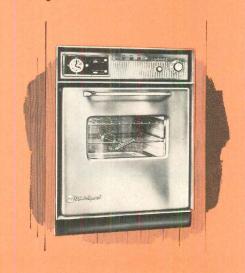
the promising market for modernization, link yourself to...

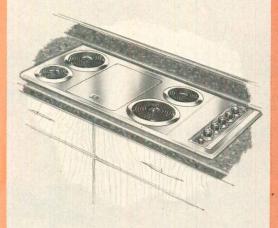




If you want lower installation costs, these new

Built-in Balanced-Heat ovens . . . a perfect blending of handsome styling, cooking capacity and automatic conveniences. Features built-in Bar-B-Kewer®, automatic Ka-Bob*, Roto-Baste* and rotisserie, Roast Sentry* and "smokeless" broiling. Available in gas or electric.





Built-in surface unit with big capacity griddle . . . automatic 2-in-1 thermostatic unit, high-speed flash unit, infinite-heat controls, signal lights, top-mounted control panel, 2 standard and 2 giant-size Jetube units and Dispos-A-Bowls*. Also available in gas.

New! Mark 61 model Refrigerator-Freezer is three wonderful appliances in one. A No-Frost Refrigerator, No-Frost Freezer and the IceMagic® automatic ice maker. It looks built-in, yet it's free-standing. Can be placed anywhere . . . in a corner, flush-to-wall or flush-to-cabinets.

Now...you can buy RCA WHIRLPOOL gas and electric appliances

QUALITY BUILDER RCAWHIRLPOOL

appliances for project and custom-built homes

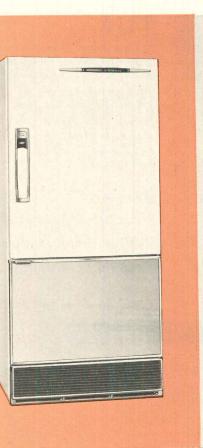
From modest \$13,000.00 homes to custom-built \$150,000.00 homes, Budd Laurence standardizes on RCA WHIRLPOOL appliances. He knows the value of their extra sales power.

Like Mr. Laurence, many other builders, in all sections of the country, are swinging to RCA WHIRLPOOL appliances to help them turn their homes faster. The reputation and dependable operation of RCA WHIRLPOOL appliances have real sales-closing appeal for homemakers. And, the complete line of built-in and free-standing appliances, in gas and electric models, offers real benefits to the builder. All appliances are engineered for

fast, easy, economical installation. All are available from one source with emphasis on delivery as needed. You'll find the prices are right with a minimum of service. Builders tell us it's the right line for quality builder installation.

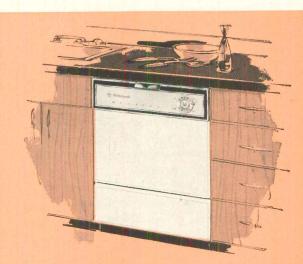


RCA WHIRLPOOL appliances are the answer!





Imperial model batch-feed disposer has automatic reverse which allows it to clear itself of most jams instantly. Built-in reversing switch can also be used as a master switch. A merchandisable "plus" feature.



Undercounter dishwasher is freshly styled for the trimmest look in the business, and offers the famous Filter-Stream* dishwashing system. For big capacity and cleaning power, this is the unit selected by quality-conscious builders and homemakers alike. Select-A-Door* trim method allows panels to be faced with material of purchaser's own selection, porcelain or brushed chrome.

*Tmk.



STYLED MERCURY

Luminaires

Line Material's distinctively new 1000 and 700 watt LINE 2E2 mercury luminaires offer superior lighting and elegant daytime appearance. The fresh modern styling complements and enhances the surrounding landscape and architecture.

A powerful, efficient optical system featuring Holophane's latest refractor provides unprecedented lighting quality.

Lustrous aluminum finish and five pastel decorator colors are available to add unique beauty to your lighting installations.

Ask your L-M Field or Lighting Engineer for complete details, or write to Line Material Industries, Milwaukee 1, Wisconsin.

FOR HIGH-LEVE OUTDOOR LIGHTING

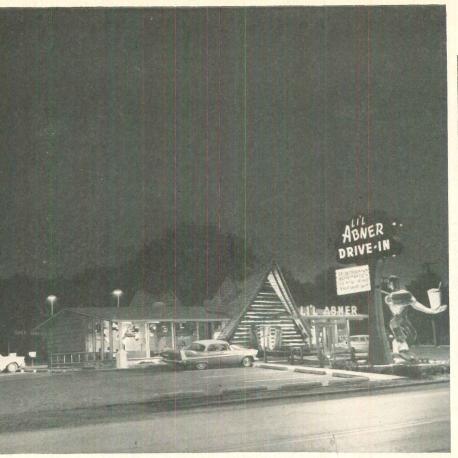
Dynamically elegan Progressively styled Handsomely modern Gracefully unique



MATERIAL Industries

Outdoor Lighting

DISTRIBUTION TRANSFORMERS - RECLOSERS, SECTIONALIZERS AND OIL SWITCHES FUSE CUTOUTS AND FUSE LINKS - LIGHTNING ARRESTERS - POWER SWITCHING EQUIPMENT PACKAGED SUBSTATIONS - CAPACITORS - REGULATORS - OUTDOOR LIGHTING LINE CONSTRUCTION MATERIALS - PORCELAIN INSULATORS - FIBRE PIPE AND CONDUIT



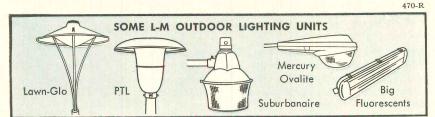
Approaches and service area of Li'l Abner Drive-In, Morton Grove, III., are well lighted by 18 L-M Post Top Luminaires. PTL's are available for mercury or incandescent, with choice of seven IES light patterns; with photocontrol if desired.

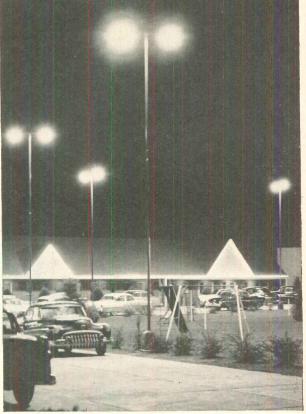
Light Your Commercial Jobs Better With L-M Engineered Lighting

When you build shopping centers, motels, drive-ins, you can assure your clients better evening business, more hours of use, better profits, by including L-M engineered outdoor lighting in your plans.

Line Material, leading manufacturer of outdoor lighting, offers a full line of equipment to meet almost every lighting need—from high intensity lighting for large outdoor areas to soft lighting for patios.

Ask your electrical contractor about a well designed, lighting job engineered for him by L-M Lighting Application Engineering service. Or mail the coupon for name of nearest Authorized L-M Distributor.





Managers of the attractive Cave City Motel selected L-M Mercury luminaires to light approaches and driveway and highlight the beauty of the building's architecture. Ten luminaires provide 2 footcandles on the ground.



PTL's light the approach and grounds of the Fontainebleau Motel, New Orleans. The scientifically designed optical system directs the light down, rather than onto the windows of the building.

HH-11

MAIL THIS COUPON

E MATERIAL® Line Material Industries, Lighting Division, Milwaukee 1, Wisconsin

Please send me L-M Outdoor Lighting Bulletin and name of nearest Authorized L-M Distributor.

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Business	一 十四 多是 9		
Address			
City	State		



Industries

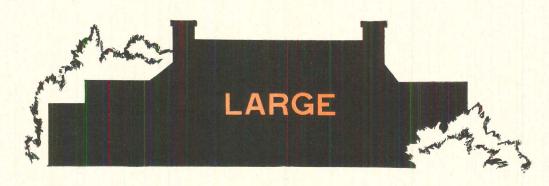
McGRAW-EDISON COMPANY



DISTRIBUTION TRANSFORMERS • RECLOSERS, SECTIONALIZERS AND OIL SWITCHES
FUSE CUTOUTS AND FUSE LINKS • LIGHTNING ARRESTERS • POWER SWITCHING EQUIPMENT
PACKAGED SUBSTATIONS • CAPACITORS • REGULATORS • OUTDOOR LIGHTING
LINE CONSTRUCTION MATERIALS • PORCELAIN INSULATORS • FIBRE PIPE AND CONDUIT







CRANE HAS PLUMBING TO FLATTER THEM ALL, INCREASE THEIR WORTH AND ADD TO YOUR PROFIT

People who think Crane plumbing is costly are behind the times. Fact is, Crane—fine as it is—comes in *every* price range.

Because it does, there isn't a plumbing installation that can't have Crane. When you think of the extra value the Crane name adds, there's all the more reason to specify it.

It's a name that'll bring you business and profits. Crane is luxury—but not costly. Your Crane plumbing contractor will prove it—down to the penny. See him.

NAHB Exposition Stop in and see us—Booths 256-259. See the new "Sunnydec" double-bowl sink, a new "Westmont" lavatory; the brand-new "Fermont" lavatory; Crestmont trim; Dial-ese faucets; Starlite accessories plus countless other plumbing, heating and air conditioning products that offer extra value for home owners and builders.



Plumbing · Heating · Air Conditioning Group

P. O. Box 780, Johnstown, Pa.

VALVES · ELECTRONIC CONTROLS · PIPING · PLUMBING · HEATING · AIR CONDITIONING

Doesn't every manufacturer claim to produce a "quality" window?

We've never heard of a manufacturer who didn't claim his windows were "as good as" or better than his competitors. Have you?

Why then, doesn't every aluminum window manufacturer carry the AWMA "Quality-Approved" seal on his windows?

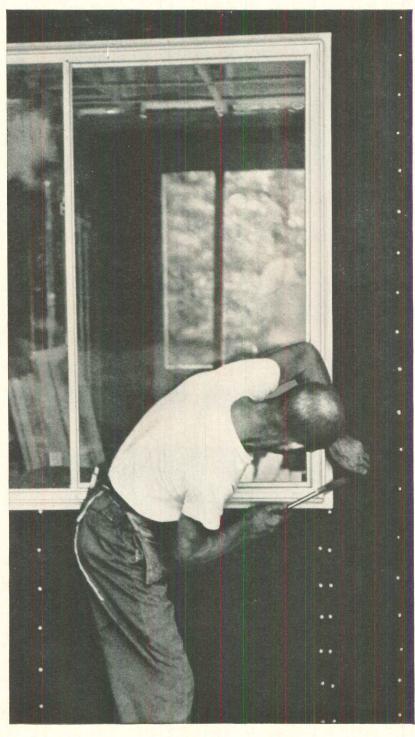
A good question... and the truth is, some manufacturers who glibly claim that their windows meet or even exceed the AWMA specifications actually couldn't pass all the tests when administered by an independent testing laboratory. You see, AWMA quality window specifications cover not just one but many factors including the metal alloy, wall thickness, strength of sections, size limitations, hardware, protective coating, as well as performance tests that cover air infiltration, deflection and other physical load tests.

The AWMA "Quality-Approved" seal on the window together with the official AWMA Conformance Test Report by a recognized, independent laboratory are your assurance of windows that satisfy FHA Minimum Property Standards in every respect.

Why take chances and waste time with aluminum windows of questionable quality when it's so easy to get windows that not only satisfy FHA requirements but will satisfy your most discerning buyers,—windows that are designed and built to eliminate time-wasting, costly call backs. For your own protection insist on "Quality-Approved" aluminum windows.

For a copy of the latest AWMA window specifications with the names of approved manufacturers and the types of windows they produce, write to the Aluminum Window Manufacturers Assn., 630 Third Ave., New York 17, N. Y. Attention Dept. H-611.







EXTRA-WIDE front doors are growing in popularity. Weldwood® Stay-Strate® Doors are ideal; they have inert Weldrok® mineral cores and hardwood edges to match the faces. These edges provide the rugged construction necessary for doors up to 4' wide. The wide range of beautiful hardwood faces available to you permits you to give continuity to luxurious wood paneled walls.

HEAVY-DUTY without loss of beauty—that's the strong appeal of Weldwood Custom Royal Doors. The colorful, durable Micarta® faces resist impact and abrasion, keep maintenance to a minimum. Custom Royal Doors are also available in both Class "B" and Class "C" Fire Door constructions.



ready-to-hang doors save you time and money

From fit to finish, Weldwood Doors come tailored to your job



FIRE PROTECTION means more than just stopping flame spread. Beautiful Weldwood wood-faced Fire Doors do *that*, and they also drastically reduce destructive heat transmission. Underwriters' Laboratories, Inc. rates and labels these doors for fire resistance and assured maximum protection against heat transmission (250° maximum after 30 minutes of test) in both Class "B" (vertical shaft) and Class "C" (room and corridor) openings.

Now you can order any Weldwood Algoma-made Door of to fit your frames, machined to fit your hardware, and fished to meet your specifications. This means you eliminated costly on-site work; and you profit from the sales appeal the handsome, performance-guaranteed* ready-to-hang door give your homes. Weldwood Doors are available in a wirrange of sizes and constructions for every opening.

*THE WELDWOOD DOOR GUARANTEE

United States Plywood unconditionally guarantees Weldwood Stay-Strate, Fire, Custom Royal Doors against warping, twisting, or manufacturing defects for the lift the installation (faces of Custom Royal Doors are guaranteed for two years), we accorded treatment considered good practice as far as storage, installation, and main nance are concerned. If any of these doors fails to meet these standards, United St Plywood will replace it without charge, including labor costs of hanging and refinish

WELDWOOD DOORS

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YOU CAN LIVE BETTER...ELECTRICALLY.

THIS HOME IS EQUIPPED WITH QO

THE FINEST CIRCUIT BREAKER EVER BUILT!



It's very easy to prove that Circuit Breakers help sell homes!

Today's home buyers are "housepower"-conscious. The "LIVE BETTER ELECTRICALLY" and "MEDALLION HOMES" programs have focused attention on the home's electrical system. Electrical equipment and appliances now are being provided and promoted as an integral part of the home. It takes adequate wiring to provide for these "built-in" electrical features and others that will be used later on.

When you install **QO** "qwik-open" circuit breakers in your homes, you have a potent selling feature. You're providing far more than just adequate wiring. You're providing convenience. There are no fuses to replace. Even a child can restore service, quickly and safely. You're provid-

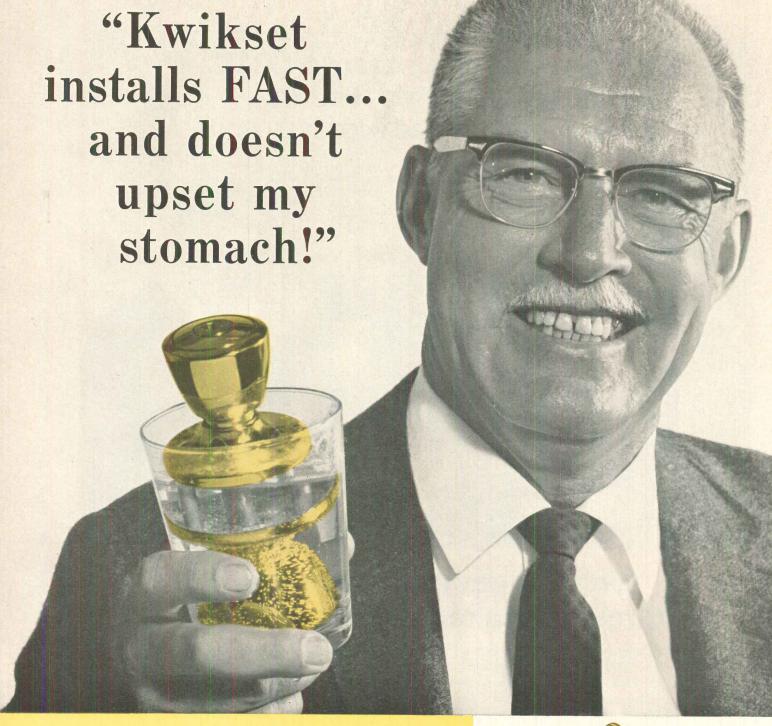
ing modern protection against overloads and "shorts." And—you're providing for extra circuits as they're needed in the future.

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

Let us send you the complete story
of QO... finest breaker ever built.
Address Square D Company,
Mercer Road, Lexington, Kentucky



SQUARE D COMPANY



No ulcers for me! I have my men install Kwikset locksets with the new Round Face Latch and Sok-It Strike. With these new developments, Kwikset installs 40% faster than present methods, without mortising, chiseling or screws.

And when we use the new built-in tool jig, we get a perfect, trouble-free installation every time. Such time-saving, money-saving advantages are the greatest thing since aspirin! Prove it for yourself. Have a Kwikset representative show you how to save 40% on lockset installations. Mail this coupon today!



America's largest selling residential locksets

KWIKSET SALES AND SERVICE COMPANY
A subsidiary of The American Hardware Corporation, Anaheim, California



KWIKSET DIVISION (Dept. BP)
The American Hardware Corporation
Anaheim, California
Please have your representative demonstrate how I can install locksets in six homes in less time than it previously took me for four.
Name
Company Name
Address

See how Kwikset locksets install faster at Booth No. 703-5 NAHB Convention



E. Staggs, president of Staggs-Bilt Homes, receives the "Good Housebuilding" Citation from A. Simonson, Home Building Director for Good Housekeeping Magazine.

"We have more than 20 full-time salesmen who are paid to sell houses. If they have to take time to sell or defend the products that go into them, it takes away from their basic job. We have found that products that carry the Good Housekeeping Consumers' Guaranty Seal require no selling and need no defense."

Jim Pennington, Vice-President Staggs-Bilt Homes

"Our participation in the Good Housekeeping Home Building Program, in my judgment, has the effect of adding another salesman to our staff."

R. S. MacNichol, Sales Manager Libbey-Owens-Ford

Raising Standards of American Housing: the Good Housebuilding Program

effort unique in magazine history, Good Housekeeping edicated itself to the consistent and effective up-grading nerican housing.

home-minded magazine, and a house-minded magazine, Housekeeping has now put all its celebrated facilities e setting of quality standards behind THE GOOD HOUSE-ING PROGRAM.

the Program cooperates with both building material and ment manufacturers and with builders in effective on-site otions whose consistent common denominator is quality to home-buyer.

fanufacturers' products are submitted to rigid evaluation, all products which earn the Good Housekeeping Cons' Guaranty Seal. Homes in which products are displayed high requirements for architectural merit, approved sites, for construction.

he Good Housebuilding Citation has a growing value in

has already been proved in 10,000 housing units. The tremendous authority of the Good Housekeeping Consumers' Guaranty Seal, which influences the buying decisions of 40,930,000* people, is proving to be as powerful in housing as in other fields.

The Good Housebuilding Program is a growing force in housing because, like Good Housekeeping Magazine and The Institute, it is based foursquare on integrity and dedication to public service.

For detailed information, write or telephone Mr. Calvin C. Herge, Advertising Director, Good Housekeeping, 57th Street and 8th Avenue, Goudnated by Conditional Conditions of Conditions

New York 19. COlumbus 5-7300.

GOOD HOUSEKEEPING

A HEARST MAGAZIN

A HEARST MAGAZIN

because nothing persuades like the truth

More General Electric Kitchens are installed



BUDGET (shown above)

The Mark 27 "drop-top" Range sets the pace for this small but sparkling kitchen. Refrigerator-Freezer (BG15T) fits flush in the corner, Washer-Dryer Combination (WD560T) and Automatic Dishwasher (SU 60T) complete the kitchen.

CUSTOM

could have a single Deluxe Oven built in one wall, matching Cooktop with exhaust hood the built-in look every woman loves. Refrigerator-Freezer in Mix-or-Match fashion color. Automatic Dishwasher and Washer-Dryer Combination.

DELUXE

might have the double Custom Oven with a matching Cooktop. Refrigerator, Bookshelf Freezer, Dishwasher, Washer, Dryer and cabinets—all planned in Mix-or-Match fashion colors. This would be the kitchen of a woman's dreams.



"MARK OF QUALITY YOUR BUYERS RECOGNIZE"

builders than any other kind because... women love 'em!

re's the best salesman for your homes ... most-preferred kitchen-laundry in America. The ther your homes are in the low, medium or stom price range, General Electric has the chen to light up a customer's eye . . . turn sitation into a signature on the dotted line. What's more, General Electric has a Custom that the Design specialist who will work with a to plan, from a wide variety of exciting

models, styles and colors, just exactly the perfect kitchen for your special needs.

Style, beauty, versatility, dependability . . . plus the prestige of the General Electric name . . . that's what a General Electric kitchen-laundry means to your prospects.

More than half of the women interviewed in a recent survey preferred General Electric home appliances above all other appliances.

ou get more than sales appeal from a General Electric Kitchen

You get a builder bonus in every General Electric home appliance you install.

BONUS:

u spend less on labor and installation. General ectric's "Straight-Line" appliances make the st of your available kitchen space. They fit easily with surrounding cabinets for an expasive built-in look.

BONUS:

rd-hitting pre-sell program. You get a comte merchandising program, along with sit-upd-take-notice advertising and publicity to ng prospects through the door of your Model me. The more prospects . . . the more sales.

BONUS:

Product available locally. 100 General Electric distribution points in every part of the country insure you quick delivery... scheduled to your convenience. No long waits and waste of time. No early storage headaches.

BONUS:

No service responsibilities. Once your appliances are installed, all product service becomes the responsibility of your General Electric dealer or distributor. No appliance repair or maintenance worries for you!



To find out more about General Electric Kitchens, clip and send this coupon today.

Don't forget the Medallion Home Program . . . an added Bonus for you. Ask your distributor about it.

Progress Is Our Most Important Product



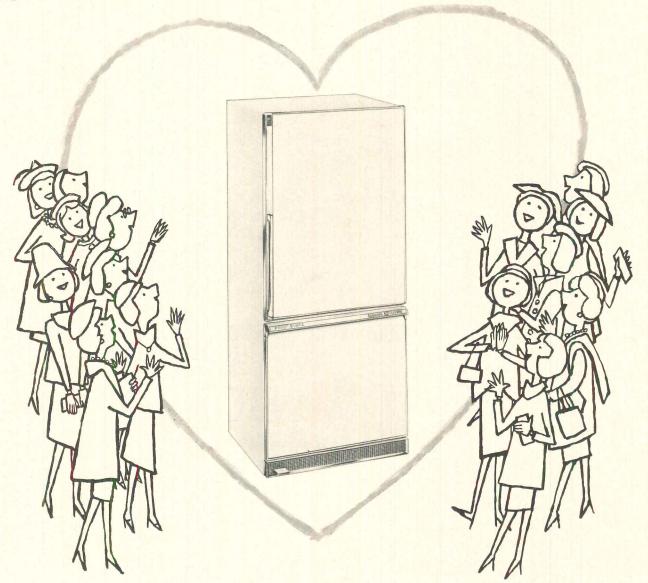
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Applian	ce Park,	Loui	sville	1, Ky.

Have your local General Electric builder sales representative contact me.

ADDRESS______STATE



Mark of Quality your customers recognize



More...and more women want a G-E Refrigerator

According to a recent survey, General Electric is the number one name in the home appliance field—and by a big margin. Could be the fact that General Electric makes such a broad line of refrigerators-many sizes, many prices, all with conveniencefeatures the ladies obviously like. Could be General Electric's dependability—6 million refrigerators in use ten years or longer. Could be you're making sales the hard way if you're not including a General Electric Refrigerator in your homes. Your General Electric Distributor will show you how easy it is. Call him now.

Progress Is Our Most Important Product







Household Refrigerator Dept., Louisville 1, Kv.

Ceiling and corner lines are clean and true in the finished "Steelfast" dry wall installation.

New "Steelfast" dry wall system helps cut costs and construction time

Research and development in home building have done it again—found still another way to help you beat down rising construction costs! Working closely with the National Association of Home Builders Research Institute, as well as individual home builders, U. S. Steel research men have helped in developing an advanced dry wall installation system called "Steelfast." Field tests have proved that "Steelfast" is capable of cutting more than two days from a builder's construction schedule. It eliminates the backing lumber and other materials used in conventional installation . . . plus six steps in the finishing process, including the application of corner tape and "mud." Never again will you lose time waiting for succeeding coats of "mud" to dry!

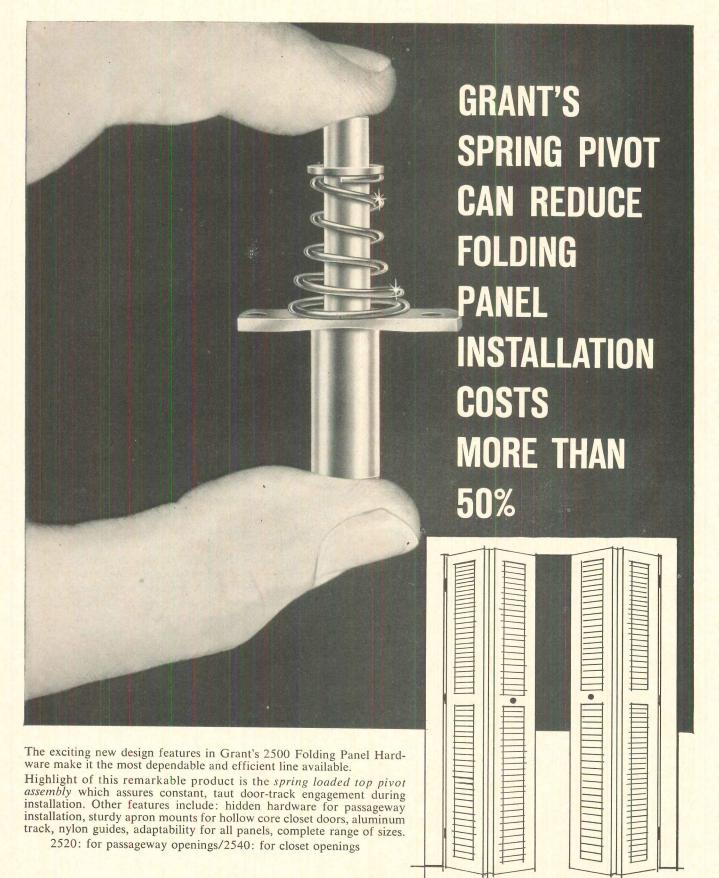
The "Steelfast" system uses cold-formed strip steel members at all corner and ceiling joints. They are formed to receive dry wall sheets along their edges and to hold them secure. "Steelfast" insures perfect corners automatically, regardless of framing conditions, because it keeps corner lines plumb and ceiling lines level.

The speedy "Steelfast" system will help you sell better homes at a lower cost to you and your customers. This is what U.S. Steel's research men are constantly striving for; and we promise you more significant developments in the months ahead. Write to us today for details on the new, cost-cutting "Steelfast" dry wall system. United States Steel Corporation, Room 6192, 525 William Penn Place, Pittsburgh 30, Pa. USS is a registered trademark



For better housing at a lower cost.





GRANT 2500 FOLDING PANEL HARDWARE

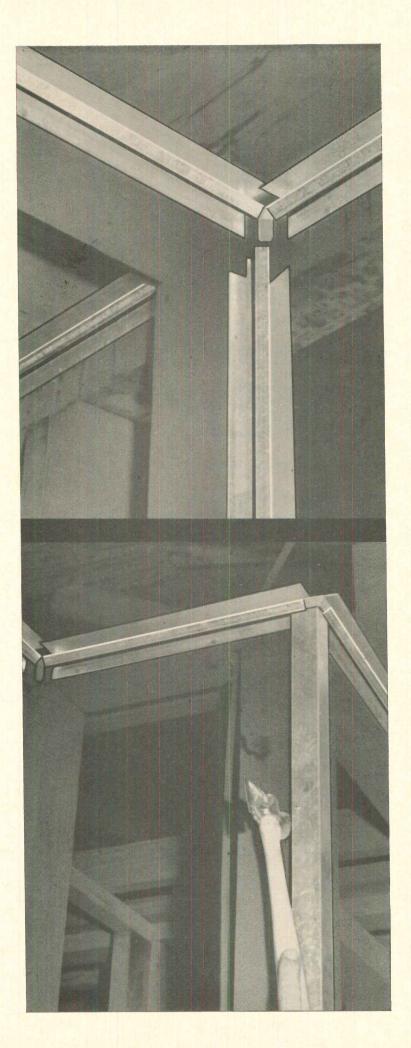


GRANT PULLEY & HARDWARE CORPORATION

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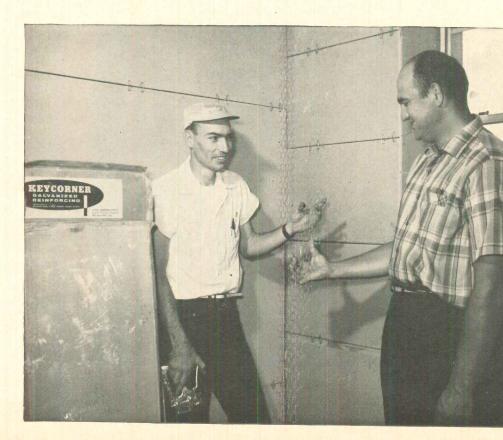
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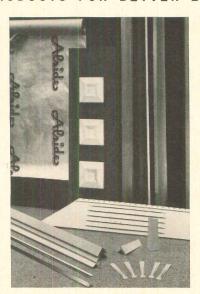
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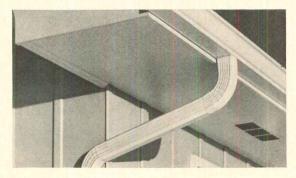
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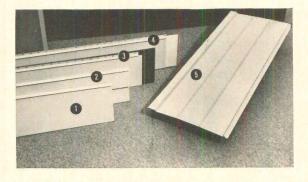
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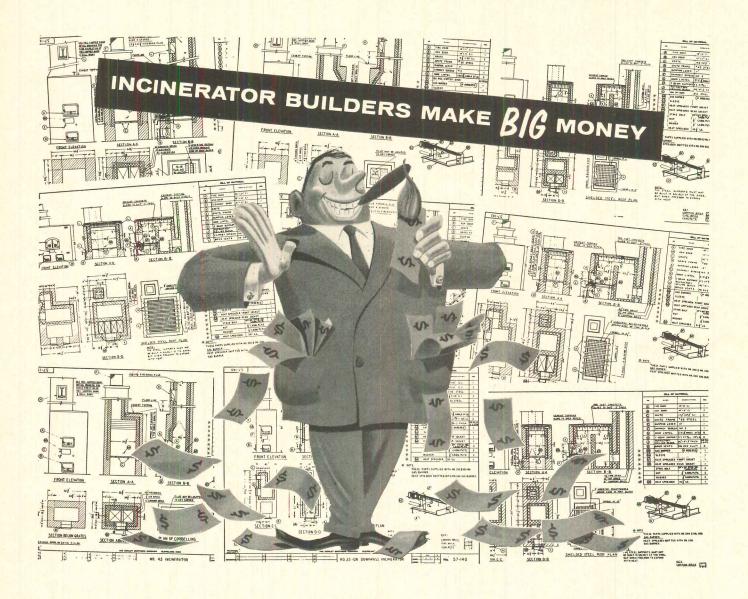
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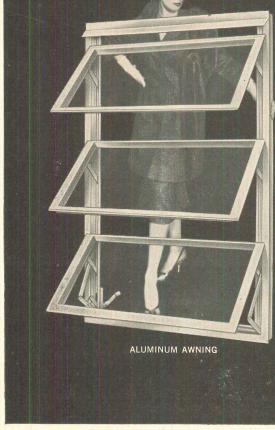
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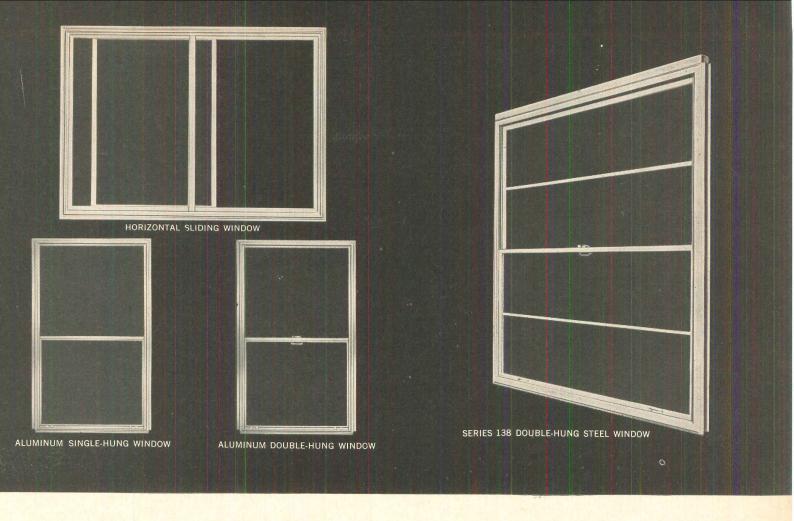
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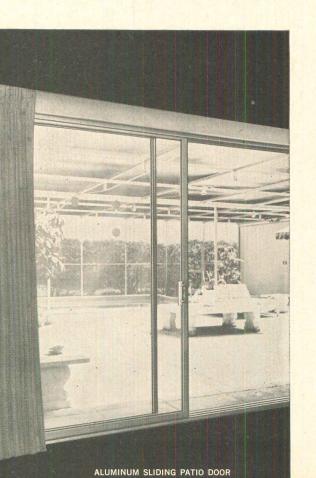


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JANUARY 1961



The Industrial Revolution In Housing:

PROGRESS REPORT 1961

The first year of the new decade has ended. As the second starts, the promised opportunities and expected problems come more clearly into focus. What has happened to the great challenge? Where is the response to the new opportunities? It is time to

take a New look at the Golden Sixties.....page 114 In some areas, the new roads to housing success are being marked out. And the professional who is leading the way is the New management man page 122 In all areas, the climate of housing, like the climate of all business, is changing to reflect the New economic outlook.....page 144 And as costs continue to rise, the leaders of our industry are faced with stopping—then reversing—the trend. To find the means and method, research-minded builders, architects, and manufacturers are taking a New approach to technology.....page 154

As prime land shrinks and lot costs climb, site development becomes a technical specialty with

New scientific earthmoving......page 166

And as sales continue to lag, the best of the merchandisers are finding their own opportunity. How are they selling where others can't? They're alert to the

New marketing trends......page 172

Lastly, the men who are making good in the new decade are making the most of everything the suppliers can offer them. What the suppliers are offering this year is shown in House & Home's annual home show

New products for 1961 page 192

Also in this issue:

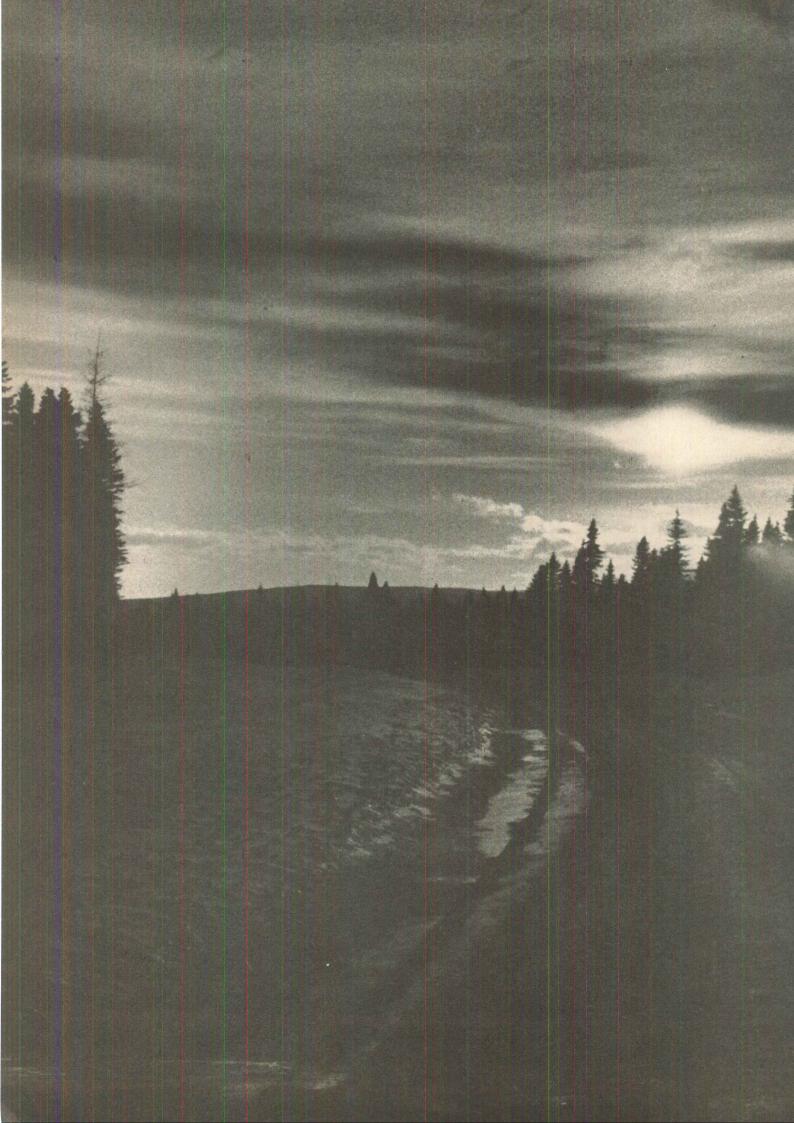
News indexed on page 41 Letters to the editor.....page 64 Publications page 206D

Advertising indexpage 286

Coming next month:

A report on the big market for retirement housing

New solutions to the old problem of codes



When we first stepped into the Sixties twelve months ago, we could see only through a glass darkly what lay ahead of us. Through the glass everything looked bigger and better—bigger markets, bigger opportunities, bigger almost everything except bigger problems. The problems actually looked smaller, because so many old problems were almost solved. And, anyhow, we thought the coming population explosion would make everything easy.

But now we have advanced far enough into the Sixties to see things face to face, and suddenly we find many things are changed. The potential market is bigger—yes—but the big market now is a very different kind of market, a market the housing industry has not yet learned to sell. The population explosion is coming—yes—but the population explosion won't come in time to do housing sales much good until 1965. The old problems are smaller—yes—but in their place we can now see new and perhaps bigger problems looming ahead—new and bigger problems whose solution will need new thinking and a new approach.

So let's start the New Year smart with

ANEW LOOK AT THESE "GOLDEN SIXTIES"

The problems of the Sixties are different because the markets for the Sixties are different. Around most cities the old markets are close to saturation, so we must learn to sell new markets to replace them.

The problems of the Sixties are different and bigger because the market, though bigger in potential, is much more competitive and much harder to sell.

The markets are more competitive because we are no longer just competing among ourselves for customers who had to buy a new house from one builder if they did not buy a new house from another. We are also competing against 40 million existing homes that are now outselling new houses three to one. We are

also competing against other industries fighting to get a still bigger share of the consumer dollar at our expense.

The markets are harder to sell because, around most cities,

- 1. We have built ourselves clear out of the shelter shortage that made selling easy (see vital statistic No. 1, p 118).
- 2. The price of older houses is falling, so more and more first-time buyers are finding they can get more for their money in used houses instead of new.
- 3. Most of our best prospects already own fairly good homes so they are under no pressure to buy again unless and until they are offered something extra tempting at a tempting price.

Even then they cannot buy until they in turn find a buyer for their present homes.

These homeowners have more than \$100-billion equity in their present homes they could use for down payments; their rising incomes would let them qualify FHA to trade up to homes priced an average of 71% higher than their present home.

These second-time buyers are the big new market potential for the Sixties. How to sell them is the big new market problem.

All markets are local, so all markets face different local opportunities, different local challenges, different local problems. Some cities are growing so fast that they still have a numerical shortage of shelter; other cities are losing population. Some cities have aggressive and growing minorities; others have almost no minority problems. Some cities have special attractions for retirement; others lose many of their senior citizens. Some cities are booming and enjoy above-average incomes; others are depressed areas. Some cities have low construction costs and relatively low land costs; others tolerate such high costs that a good home costs 50% more. But despite these local variations. . . .

Here are 13 problems that are getting more and more urgent almost everywhere

- 1. How to serve and sell the big markets that are still undersold: the big and growing market for good minority housing, the big and growing market for retirement housing, the big and growing market for better apartments, and the biggest new market of all—the second-time-buyer market for trade-up-to-quality homes.
 - 2. How to unfreeze the market for existing homes, so millions of present homeowners will find it easy and much less expensive to trade in their old homes to buy the much better new homes they can now afford. Until we do, trade-up can't create the used-house vacancies needed to provide good homes for lower-income families.
- 3. How to enlist more working capital, so fewer builders will have to work on a wasteful shoestring and more builders will have money enough to buy the equipment they need to cut their costs, money enough to pay better salaries to hold smarter associates, money enough to finance land ahead on a scale that will let them tie up the surrounding acreage and so retain for their own businesses the price rise their development will give the adjoining properties.
 - 4. How to make more friends, so more communities will welcome builders and new developments instead of trying to keep them out

with wasteful codes, wasteful site requirements, and wasteful zoning. (Best way to make more friends is to build better houses and create better neighborhoods. You can't expect the older residents to cheer if you try to make a fast buck building cheap houses whose buyers won't pay a third enough taxes to cover what they and their children cost the town.)

- 5. How to cut the waste out of our costs to meet the price competition of other industries that are now outselling us and making us take a 30% smaller share of the consumer dollar.
- **6.** How to get everybody in the industry—manufacturers, builders, architects, and designers alike—to work with the same standard dimensions, so we can achieve the tremendous savings offered by building with parts instead of pieces—factory-made or shop-made components sized to standard dimensions to fit together with minimum waste of ten-cent-a-minute on-site labor. (The dimensional standards are already agreed on; the problem now is to get them into general use.)
 - 7. How to sell new houses better and dramatize the new advantages only new homes can offer. In today's changed market houses are harder to sell than to build, so the skilled and knowing merchandiser is back at the top of the housing totem pole.
- **8.** How to make new houses so much more attractive and so much easier and pleasanter to live in that millions of families can be sold on spending more of their rising incomes for better homes instead of spending it all for plusher cars, costlier clothes, and better vacations. (See p 121.)
 - **9.** How to make new neighborhoods so attractive that people will gladly uproot themselves to enjoy new advantages and the new community facilities only new neighborhoods can offer. Says Builder Bob Schmitt: "The time is long past when we can expect homeseekers to move into a treeless, grassless, community-facilityless construction area."
- **10.** How to get land in good locations without paying speculators three and four times its true worth and so pricing good new houses out of the market.
 - 11. How to get better market research, so we won't be building the wrong kind of houses in the wrong locations, and how to use that better market research more imaginatively, so we won't go on underselling our market with houses too cheap to have enough sales appeal. (Much of this better research should be provided, market by market, by the federal government, which has spent more money to gather annual statistics on peanuts than to gather statistics on America's biggest industry.)
- **12.** How to provide good low-income and middle-income housing in big cities. This need cannot be met by private enterprise without enormous land-write-down subsidies unless and until the cities change their real estate tax systems. Today the overtaxation of buildings discourages improvements while the undertaxation of land subsidizes slums and inflates land prices sky high.
 - 13. What to do with nearly 20 million existing homes—some old, some fairly new—that are not good enough so anyone will want to live in them in the no-longer-distant years when the average family will have an income, in constant 1956 dollars, well over \$8,000 a year. Perhaps half these 20 million homes can be salvaged, at a cost perhaps half what it would cost to build them new; the other half will probably have to be abandoned and replaced.

Our problems for the Sixties cannot be cured for us by more Federal aids

Housing already enjoys more federal aids and better federal legislation than any other industry. If Washington would just stop using housing as a counter-cyclical device

tossed from boom to bust by the alternation of too easy money and too tight money, there is little left that Washington can do for us that Washington has not already done.

But housing still suffers from worse state laws and worse local rules than any other industry bad tax laws that subsidize slums in the cities and abet land speculation in the suburbs, bad foreclosure laws that make mortgages more costly, bad real estate transfer laws that keep the housing market frozen, bad state laws that let lawyers make a racket out of title search and closings, bad building codes that entrench waste and delay the vast savings offered by standardization and industrialization, bad site development requirements that waste billions of dollars.

Our problems for the Sixties cannot be cured for us by easier credit

Twenty-eight years ago FORTUNE could call housing the industry capitalism forgot, but today housing is capitalism's pet. Today housing enjoys five times as much consumer credit as any other industry, available at half the interest rate for six times the term; today the first-year pay-off on a

\$20,000 house is hardly a third as much as the first year pay-off on a \$2,000 car! Easy terms have now been pushed well beyond the point of diminishing returns; the homebuilders might be better off if amortization payments were bigger and faster, so it would take homebuyers less time to build up

the equities needed to trade-up to better homes. What we need now is a change in FHA regulations to base its income requirements on 40-year straight-line depreciation (which is a true cost) regardless of how fast or slow the amortization (which is a form of saving and not a cost at all).

So the housing industry's big new problems in the big new market of the Sixties cannot be solved for us by the federal government and they cannot be solved for us by the money lenders. They cannot be solved for us by more and bigger doses of what kept housing healthy and booming throughout most of the Fifties.

They can be solved only by a new self-reliance, a new appreciation of management's role, a new kind of industry teamwork, a new approach to land planning and land development, a new approach to technology, and a new industrialized approach to the market.

In almost every market from coast to coast some leaders are showing the way to solve these new problems and meet these new challenges.

So this issue of House & Home is planned, researched, written, and edited to bring you a case study progress report on what these leaders are doing.

But first let's take a closer look at the biggest change in the market and the consequences of that change:

Here are the vital statistics on the biggest change of all

Unless otherwise noted, the statistics stem from Econ mist Miles Colean's corparison of the Cens Bureau's 1957 housing iventory and a projection the Commerce Departmen family-income analysis.

1. The shelter shortage is over and gone

During the Fifties 12,444,765 new units were added to the housing inventory while population was growing only 6,018,000 families (plus 3,038,000 "unattached persons," i.e., bachelors, unmarried girls, widows, etc). So says census.

In other words, we have added far more new housing units than were needed to keep up with net new-family formation, so we have turned the shelter shortage into a numerical oversupply.

Says Jim Price of National Homes: "There are not enough first-time buyers looking for shelter to keep our volume up."

Says Armel Nutter, 1960 President of NAREB: "In most markets the need for more low-priced houses is over. The great new market we must learn to sell is the trade-up market for quality homes."

2. Most cities now have enough low-priced housing

"In every city I visit I find the highest vacancy rate in the lowest-priced rentals," says Jack Havens, 1960 chairman of

the Realtors' Build America Better Committee.

And Economist Miles L. Colean fills in the numbers. Sa Mr. Colean:

"Already in 1957 there were only 4,500,000 non-far families left with incomes under \$3,000 a year, but the were nearly 18 million housing units, good, bad, and indiffeent, priced within the means of those 4½ million poor families; there were only 9,250,000 families left with incom under \$4,000, but there were 24,600,000 housing units price low enough so these 9,000,000-odd families could qualified to buy them."

3. The lower-priced market is still shrinking

Despite the tremendous increase in total population that vecall the population explosion, by 1970 there will actually 12,850,000 *less* families with incomes under \$4,000 a year that there were in 1957; there will be no increase at all in the number of families with incomes between \$4,000 and \$6,00 (This projection assumes that incomes in constant dollars).

Il continue rising at a rate a little bit slower than they rose ring the Fifties.)

Population growth won't sustain the volume we need

Net new family formation will be far below a million a ar for 1961 through 1964, and at least half the new families il buy used houses, just as new families usually buy used

Until after 1965 the biggest increase will be young couples ore likely to rent than to buy and older couples who need irement housing.

So until after 1965 the long-heralded population explosion on't sell anything like a million new houses a year for us—alone a million and a half.

5. But the potential for better homes is growing

Says Economist Colean: "By 1957 there were already twice as many families who could qualify FHA to pay \$17,500 or more for a good home as there were houses in that price class."

In 1940 there were five times as many families with incomes under \$4,000 as families with incomes over \$7,500; today there are 2,000,000 *more* families with incomes over \$7,500 than under \$4,000. By 1970, there will be four times as many!

The whole net population increase from 1957 to 1970 will be in the over-\$7,500-a-year income bracket—families who can afford to buy at least a \$17,500 home. And more than half the net increase will be families who could afford to buy at least a \$23,500 home.

What these figures add up to is this: Our market has turned upside down

The problem is no longer how to make housing cheap enough to let poor people afford to buy what they need. The problem now is how to make housing good enough and desirable enough so people will want to buy what they can afford. Right now, says Economist Colean, the average non-farm family could afford to trade up to a home priced 71% higher than the home that family is living in today.

So let's restate the housing problem of the Sixties in marketing terms:

Housing at long last has followed clothing and food into the area of discretionary spending. From now on, just providing shelter will be a factor of less and less importance in the housing market, just as keeping us from starving has become a minor factor in the food market, and covering our nakedness has become a minor factor in the clothing market.

The shelter shortage is over. Nobody is sleeping on park benches.

America has been wiping out poverty so fast that the low-income family is the vanishing American, and it is high time everybody stopped talking about housing as if the housing problem of the Sixties would still be how to provide *more* housing cheap enough for the vanishing low-income market. Before most of this year's new mortgages run out, the average American family will have a bigger income in constant 1957 dollars than junior executives had right after the last war.

Builder Clayton Powell of Savannah, trustee of the Rearch Institute of NAHB, spells out our changed problem in the sentences. Says he: "Our industry has had its entire protein geared to selling distress purchasers—the people who do to get a house to live in. We have not been building uses good enough to make most of today's homeowners and a new home. We have not been building in enough sales peal and enough better living to whet their desire."

Says Builder Ike Jacobs of Dallas, another trustee of the ome Builders' Research Institute: "Now that the shelter

shortage is over, there is no excuse for building any new houses unless they are better."

Says Emil Hanslin, who handles sales for 62 Boston builders: "Millions of families have the money to buy better homes and millions of families have the desire to buy better houses. That's why 39,000,000 different adults shop the builders' model houses each year. Our problem is that most of them don't find what they are looking for—so instead of putting their money into the better homes they wanted, they spend it for something else."

So we come right back to where we started:

The housing industry's problem has turned upside down. The problem is no longer how to make new housing cheap enough to let poor people afford to buy what they need. The problem now is how to make new housing good enough and desirable enough so people will want to buy what they can afford.

The consequences of this change reach into every nook and cranny of housing

Consequence No. 1

Tomorrow's market for houses will be much more elastic, because almost ever body can afford to buy a better house but almost nobody has to buy unless l

On the low side, we could get by for a year or two without adding any ne housing at all, just as we got by without adding any new housing at all during the war.

On the high side, there is hardly any limit at all to how many houses t housing industry could sell if it makes them desirable enough and prices the low enough to meet the competition of other industries.

From now on the housing industry will have to seek most of its sales in a saturated market—but let's not think small about the sales potential of a saturated market. Everybody has an electric refrigerator—but the appliance makers are selling ten times as many new refrigerators in a market 95% saturated than they were able to sell when the market was only 5% saturated. Everybody has a car-millions of families have two cars; even the very poor families living in public housing have cars, so public housing projects have to be planned to accommodate acres of autos. But just because the car market is saturated nobody suggests that we need only 700,000 new cars this year because the population is growing only 700,000 families.

From now on population growth—even the so-called pop lation explosion—should be a dwindling factor in the dema for housing. The highest estimate of net new-family formatiis only about a million families a year until late in the Sixt -but right now there are some five million non-farm occ pied dwellings that are either dilapidated or lack a priva inside bath; ie, occupied dwellings that should be taken of the market at once. There are at least five million other of cupied rental units that would be vacated almost overnig if their tenants could find something better. And there a more than 40 million families who on the average could a ford to move to a home costing 71% more than their prese

urgent than to cut the inflated cost of reselling houses. This means cutting dov the inflated cost of lawyers' fees, cutting down the inflated cost of updating t title search, cutting down the cost of refinancing, cutting down the cost

Until we make it easy and much less expensive for secondtime buyers to trade in their present homes, too many builders will stay stuck in the cheap-house market, trying to sell lowpriced new houses to first-time buyers without much money

instead of selling quality houses to second-time buyers who rising incomes would qualify them for much better homes second-time buyers who now have more than \$100-billi equity half-frozen in their present homes.

Consequence No. 3...... And this may sound paradoxical at first:

Tomorrow's house will have to cost a lot less for what it offers.

Now that most people have money enough to buy something much bett than shelter, it is more essential than ever to get the cost of housing down because, in the plain words of Builder Ike Jacobs, "You have to offer more to the money to sell a \$20,000 house to a family that already has a reasonab good house than you have to offer to sell a \$10,000 house to a family doubl up with the in-laws."

As long as we had a shelter shortage, as long as millions of families had to buy new houses whether they liked the price or not, the housing industry could postpone facing the painful problem of squeezing the waste out of its costs and its prices. As long as necessity was forcing millions of families to buy, the housing industry could pass on to its necessity buyers the needless costs imposed by archaic and conflicting building codes; the housing industry could pass on to its necessity buyers the needless cost of make-work labor rules—like painting with a small brush instead of applying two coats with a spray gun in half a day; the housing industry could pass on to its necessity buyers the needless cost of inefficient on-site construction; the housing industry could pass on to its necessity buyers the needless cost of preposterously inflated land

prices—which are the greatest waste of all (anywhere from \$1,000 to \$5,000 a house for which the homebuyer g absolutely nothing at all).

But now that the shelter shortage is over, almost nobo has to buy a new house unless he thinks he is getting I money's worth. Millions of families can afford to tradeto a much better house, but just because they can afford does not mean they are going to move unless and until th are satisfied that the housing industry is offering them mo for their money than the other competing industries.

Fortunately, the last few years have developed so ma new ways and so many new products to build better for le that getting our costs down should not be too hard to do on the housing industry sets itself to the task.

Tomorrow's house will have to add a lot of new sales appeals. Tomorrow's house will have to include a lot more of the new things that make new houses new, because—in the words of top Realty Man Emil Hanslin—"Nothing is harder to sell than a new house that isn't new."

New houses built at today's wages and today's building costs can seldom compete on price alone with existing houses, any more than new cars can compete on price with used cars. No matter what the homebuilders do to cut their costs, the owners of existing homes can always drop their asking prices a little bit lower. "In a normal market," says Professor Ernest M. Fisher of Columbia, "homebuyers can usually buy a comparable amenity in an old house 10% to 15% cheaper—provided they are satisfied to live without the new advantages only new houses can offer."

That's why tomorrow's house will have to be very different and packed with new features, new advantages, and new sales appeals old houses lack. That's why, for example:

Tomorrow's new house will need the new sales appeal of r conditioning—and two years ago both Housing Adminisator Mason and FHA Commissioner Zimmerman warned s that in any climate where summers are hot any house ithout air conditioning will soon be obsolescent. Fortunately or the homebuilding industry, it costs less than half as much air condition a new house during construction than to air ondition an old house that has to be torn to pieces to get ne ducts in.

Tomorrow's new house will need the sales appeal of more bor-saving equipment to take the drudgery out of houseork—dish washers, and clothes washers, and clothes dryers, nd disposers, and appliance centers, and freezers to make nopping and batch-cooking easier, and soon electrostatic air eaners to make dusting a rarity. All this equipment osts a lot less to buy and install while the house is being uilt, and under the package mortgage it actually takes less ash and a smaller monthly payment for the first five years buy a whole house with all this equipment included than it akes to get the equipment alone installed in an existing house which probably does not even have adequate wiring).

Tomorrow's new house will need the sales appeal of more pace—and space costs only a third as much to add to a ew house as it costs to add to a used house.

Tomorrow's new house will need the sales appeal of full nsulation, so it will cost much less to heat in winter and nuch less to cool in summer—and it costs less than half as nuch to insulate a new house during construction.

Tomorrow's new house will need at least two baths and nuch better baths.

Tomorrow's house will have to be much better lighted.

Tomorrow's new house will need the sales appeal of much

bigger and better and more convenient storage for a much greater abundance of possessions—for lack of adequate storage is already one of the two most common complaints against existing homes, one of the two reasons most often given for wanting to move.

Tomorrow's new house will need the sales appeal of bigger windows and a landscaped view to enjoy outside those bigger windows.

Tomorrow's new house will have to be planned as part of a better community. Tomorrow's new house will have to be landscaped before it is sold, with big trees moved in to give it the established-community look. The day is past when builders can expect shelter-starved buyers to move into construction areas and live there while the rawness wears off.

Tomorrow's house will need the sales appeal of better location, which is the best sales appeal of all. The land speculators who are now holding the best land off the market until we pay extortionate prices are public enemy No. 1 of the homebuilding industry and the homebuying public.

Tomorrow's new house will have to be planned for rear living and privacy instead of being planned for front living within sight of every passing truck. Tomorrow's new house will have to be planned for integrated indoor-outdoor living and much more enjoyment of the land, which is what most families move to the suburbs to get.

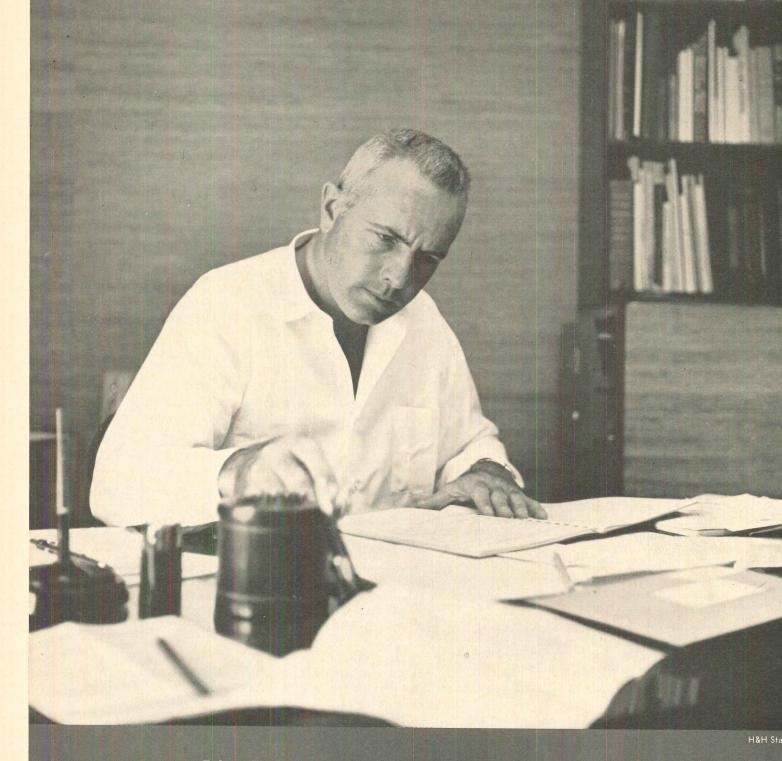
Tomorrow's new house will have to be much better planned and much better designed. It will need all the better taste and better living a good architect and a good designer can contribute. The kind of plan and design that got by for low-cost new homes during the shelter shortage won't tempt buyers to spend their discretionary dollars for more expensive homes now that the shortage is over.

You name it—almost everything about tomorrow's new house can be and should be new and better and different

because

unfortunately for today's homeowners but most fortunately for the housing industry and its suppliers—almost everything about yesterday's home is wrong for tomorrow's way of life and tomorrow's standard of living. No one of the faults by itself is too serious; most of them can be corrected if people are willing to spend enough money to correct them, just as it might be possible to rebuild a 1949 car with power steering and swivel seats. But taken together they sure enough add up to this—yesterday's house is as obsolete as yesterday's car, and that's the great chance and challenge for tomorrow's new house—the chance and challenge to offer Americans a whole new and better and happier and healthier way of life at home—instead of spending all their rising incomes to get away from their homes.

If the housing industry can meet the challenge there is almost no limit to how many quality houses it can sell in the years ahead in this new market where almost every family can afford to move to a much better home when it finds /END what it wants at a price that it likes.



Robert F. Lusk, Jr.

At 37, Lusk is president and chief stockholder of the Lusk Corp, a Tucson home-building firm which in 1960 grossed \$12 million (1,000 house sales) and this year aims at \$18 million. Lusk is Kansas-born, grew up in Houston, and graduated from Rice Institute with an engineering degree. He served in World War II as a Navy lieutenant on a destroyer (winning the Bronze Star), thereafter earned a master's degree at Harvard Business School, where he decided that homebuilding offered a big opportunity for trained management talent. He started building in Phoenix in 1948, with \$10,000 capital and using his own muscle for part of the labor. Two years later he shifted to Tucson, his headquarters ever since. He has been an NAHB director and president of his local chapter. He is a director of Catalina Savings & Loan Assn, is active in the Tucson Symphony Society and in several other civic groups, and has a wide range of interests (he has taught himself Spanish and Russian, "with difficulty," he says). Lusk is married to the former Kay Tollett, and they have three children.

n this decade when the housing industry is changing fast,

the man who is setting the pace is today's

NEW MANAGEMENT MAN

And of all the many new management men who are now

haping housing's future, the newest face on the national scene

is Bob Lusk of Tucson

"Management," says Bob Lusk, "is more than the science of business methods. Management is the art of employing and rewarding other men's talents."

By putting the science to work, and by practicing the art, Lusk has created a \$5-million homebuilding organization out of an initial investment of \$10,000.

Says he of the future: "Too many builders fail to realize the nature of their competition. Too many still think they need only offer better values than other local builders. Nothing could be more shortsighted. In the Sixties local builders will face more competition from giant builders, from multi-city builders, and from companies shipping manufactured houses into more and more markets.

"And builders will be competing even more than now with all the other consumer industries—auto makers, boat makers, the vacation industry, clothing industry, and others—that are seeking to attract the American family's discretionary spending."

And Bob Lusk, who has seen his emphasis on good management pay off, warns: "Builders who fail at the top management level will fail to grow. And if they don't grow in an expanding economy, they will stagnate and die."

"Expansion is the No. 1 problem that faces every builder—whether he knows it or not"

Bob Lusk believes this so strongly that "grow or die" might almost be called Lusk's Law.

"The builder who says he doesn't want to grow bigger had better think again," he insists. "Nobody in this business can stand still and expect to survive the Sixties. Even though we are in an expanding economy, with consumer incomes rising fast, and with a growing population to house, competition for the consumer dollar is increasing even faster.

"The only way a builder can compete successfully with other builders and other industries is to create better housing. He can do this only by using new methods, testing new materials, and holding down his costs. If he does this well enough to survive competition, he is almost certain to grow. And if he isn't growing, he is falling down on the job someplace."

Management is essential to expansion

"What housing needs most is the kind of efficient management other industries have," Lusk says. "I was convinced when I entered homebuilding 12 years ago that the future of the industry lies in industrialization and that the only way for a builder to become an industrialist is by following proven management practices.

"The chief reason our industry is taking so long to become industrialized is not just because of codes, or labor, or lack of capital, or technological backwardness—it is because of a shortage of management skill, and, even more, because of a failure to recognize the proper role of management.

"Our industry is under-staffed at the top and overstaffed at the bottom. Men are management's tools, and we are desperately short of the right tools, and of people who know how to use them. Most larg and small builders long ago learned how to handl other people's money, but few have learned how to handle other people's talents. Too many builder try to do too much themselves and in the wrong areas. They try to make too many *right* decision about the *wrong* problems. They spend too little time solving basic problems, too much time fillingless important functions which they should hir other men to take over.

"Good management starts at the top with policidecisions," Lusk adds, "and the more successful th builder, the less time he has for anything excepsetting policy and solving basic problems."

Capital is essential for expansion

If management is housing's first problem, undercapitalization is its second—and nobody knows it better than Lusk.

He has financed his own growth largely by plowing back profits, but even with many years of high after-tax profits he has had to pay stiff rates for short-term commercial loans and for long-term loans from private investors willing to take the risk of real estate investments.

The most critical need a homebuilder has fo capital, Lusk is certain, is for the "breakthrough that comes when he expands from a company with two layers of management to three layers."

Says Lusk: "For some builders, the breakthrough barrier may be when his sales volume is less than \$1 million. For others it might be when volume ha hit \$5 million. But it always comes at some point o expansion. In a small company building one devel opment, the sales manager does some selling himself

the superintendent is always in the field, and the builder buys materials and keeps track of costs with a small bookkeeping staff. Then suddenly when the company starts building in two or more areas, the sales manager needs project managers, the superintendent needs field managers, and in the office the builder needs a materials buyer, elaborate cost controls, and so on.

"We went through this barrier in 1955, and it was rough. Our profits plummeted as we added key men, most of whom we had to train. But it paid off. In 1954 we netted 27% after taxes on a \$1.6 million volume, in '55 we netted only 3% on investment with a \$1.8 million volume, but in 1956 we netted 28% on \$3.5 million. And ever since our profit on investment has been better."

Many businesses finance expansion through public sale of securities and over the last two or three years more and more housing firms have been turning to Wall Street for equity money (see H&H News, Sept). An alternate source of funds is what Lusk calls "exotic money"—loans available from individuals or

syndicates at interest rates of 12% to 18%.

Although these are steep interest rates, Lusk points out that the after-tax cost to the builder is not necessarily much higher than for some equity financing: "If you raise money by selling preferred stock to yield around 7%, this amounts to earnings of about 14% before corporate income taxes. If you go to the public with a common stock issue, you would need to offer a prospective 5% annual dividend and also (in common with accepted management practice) set aside another 5% for retained earnings. This totals 10% on net income and requires earnings of about 20% before income taxes. And selling stock means giving up part of your ownership and control."

According to Lusk's financial vice president, Russell Wilde, the company's own growth has been such that on June 30, its books showed total assets of \$9,910,899 against liabilities of \$8,555,781. Assets include more than \$1,000,000 in undeveloped land, carried on the books at cost but with an estimated market value in excess of \$5,000,000. Net profit for the fiscal year was \$485,000.

and is essential for expansion

And finding money for land acquisition is one of a growth-builder's chief problems. "Growth would be a lot easier," Lusk points out, "if our industry were not handicapped by its inability to tap the savings and loan associations for loans on raw land."

When a builder is increasing his sales volume, he needs enough land not only for his current building and development work, but enough land ahead to protect himself against the increase in land prices caused by his own success. Says Lusk: "We have long since learned that we must buy raw land far in advance of construction needs. Once we start developing raw acreage, the value of all the surrounding land skyrockets. If we did not control that land, too, we would just be giving away the added value we created. And it would mean having to make another long, costly jump beyond the built-up area to find more raw land."

But land is more than a matter of money. Almost everywhere *finding* the right land to buy is a problem.

It is a problem because so much good land is zoned out of the market—or is dangerous to use

because not zoned at all.

It is a problem because so much usable land is held for speculation by owners whose tax position keeps them from selling.

It is a problem because new multimillion-dollar land purchases are being made by well financed syndicates that hope to develop whole new cities.

When Lusk was going through his critical period of expansion, he found the normal problems of land supply aggravated by special problems. In the Tucson area, mountains limit builders' field of operation and, to make matters more difficult, a very large part of all buildable land is publicly owned. On top of these limitations, Lusk's search for sites for development was made tougher by big-acreage zoning that put much attractive land in a four-acre lot class.

Despite these obstacles, the fast-growing Lusk Corp was able to keep its land supply ahead of the rapidly growing Tucson market, and ahead of its own constantly increasing building volume. Today the company owns or has under option 3,900 acres in Tucson.

And of these three essentials, management is the most important

"In the end," Lusk says, "a builder's growth is dependent upon the caliber of his management, on the quality of his policy decisions."

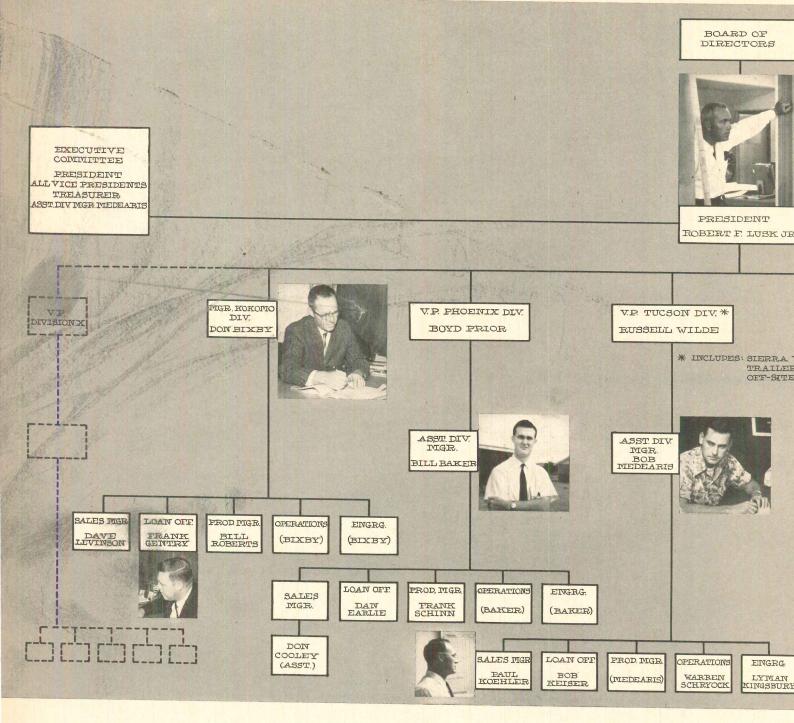
In steering the Lusk Corp from nothing to a \$12 million-a-year business, Bob Lusk had to find answers to questions like these, questions that face every builder who is now seeking to expand his own business:

- 1. When you are already busy from morning to night, how do you find time to do any more?
- 2. Should you be a specialist and stick to the kind of house you know how to build and sell best?
- 3. Should you limit yourself to a locale you know intimately—and where you are well and favorably

known—or should you branch out where the grass looks greener (and competition is keener)?

- 4. If you are already offering better value than your competitors, does it make sense to take a chance on a big switch in methods?
- 5. How do you supervise field labor efficiently when you are expanding your operation?
- 6. You can't grow faster than you can sell, so how do you sell fastest?

On the next 18 pages you will learn how Bob Lusk answered these questions for himself—and for his company—and you will see how he translated his answers into action.



POLICY DECISION 1:

'Invest in men—organize and staff now for future expansion"

Lusk has been following this policy ever since he put aside his own hammer and saw and started managing other men's work. Old hands at homebuilding in Tucson recall with a chuckle the onetime standing joke that "this fellow Bob Lusk has more vice presidents than carpenters working for him."

Lusk believed then, and he still believes, that one of the best ways to invest in the future is to over-staff at the executive level. "You can't grow," he points out, "unless you have plenty of men capable of filling executive posts as fast as they open up."

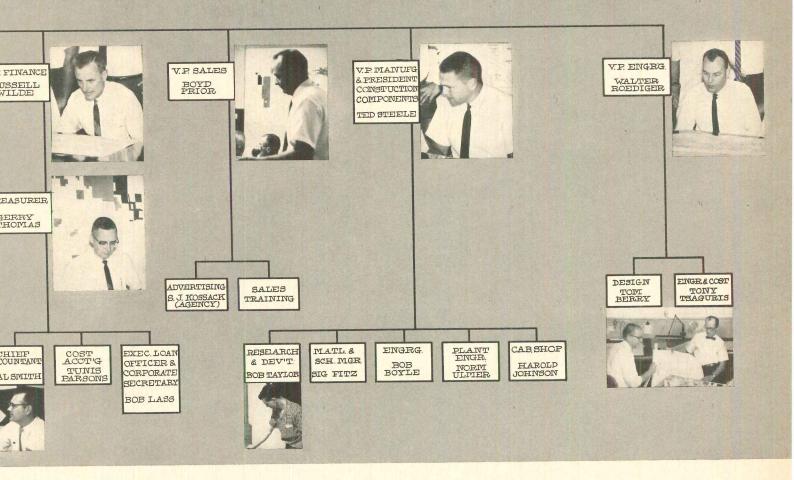
Two of Lusk's four vice presidents have been vp's since 1956, when the firm built only 300 houses (compared with this year's 1,000). Only one of the four vp's had previous experience in housing, but two hold master's degrees in business administration, and one holds a master's in engineering

Lusk's present organization chart (see above) shows a total of 37 existing executive positions and 8 more planned. But the 37 existing jobs are held by only 30 men, an indication of the growth problems that face even a relatively large organization where expansion has been carefully planned.

Salary and incentive payments to Lusk's 30 executives range from \$6,500 to \$50,000 a year, add up to close to \$350,000. The company's total payroll is only about 150 people, including 80 in a subsidiary operation.

"To have the right man ready at the right time," says Lusk, "you have to keep on the lookout for intelligent, ambitious men of integrity, and hire them even before you need them. This means offering enough pay and enough challenge to

PRODUCTS COMMITTEE PRESIDENT ALL VICE PRESIDENTS APPROPRIATE STAFF



old them after they are trained and needed."

So Lusk and Vice President Boyd Prior (like Lusk, a Harrard Business School graduate) annually interview East and Vest Coast college graduates and hire several promising young men each spring at starting salaries averaging \$6,600 a figure competitive with the pay scale offered top graduates by leading industrial companies).

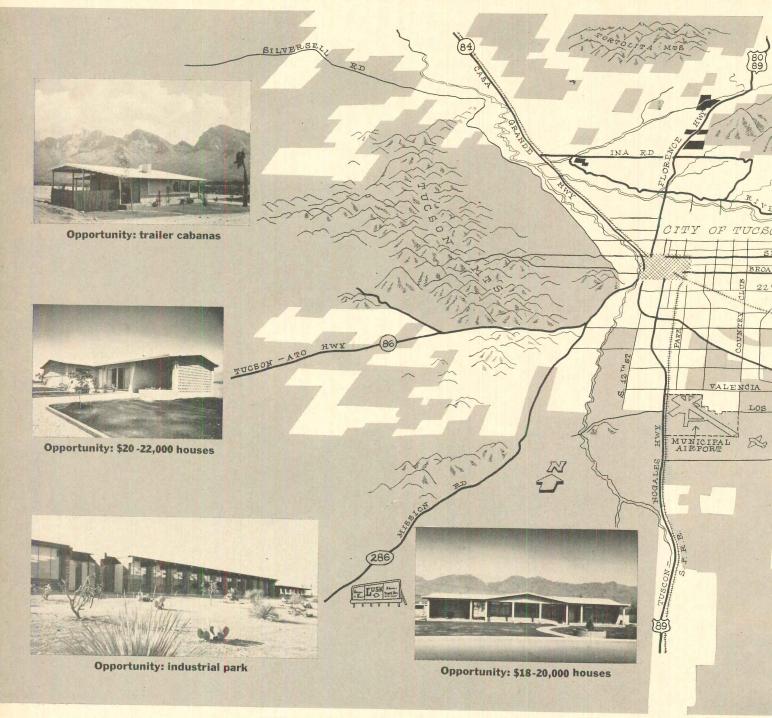
Trainees do not stay trainees for long

Newest name on the Lusk organization chart is that of David Levinson, Kokomo sales manager, who last winter was nead of the Harvard Law School Forum and had not yet heard of the Lusk Corp. Levinson joined Lusk last July, handled FHA mortgage processing for two months, trained as a salesman for a few months, then moved into the key sales spot in Kokomo.

In Phoenix, Assistant Manager Bill Baker argues today with engineers about the cost of outfall sewers and suggests new building methods to plumbers. Two years ago, he says, "I was studying things like philosophy and Spanish at Harvard. Mr Lusk told me I'd soon have more responsibility than I could handle. He sure gives you opportunities—and sure expects you to produce."

And trainees keep on advancing. Bob Medeiras, in college two years ago, moved up to special divisions manager a year ago, last month was named assistant division manager in the

big Tucson market.



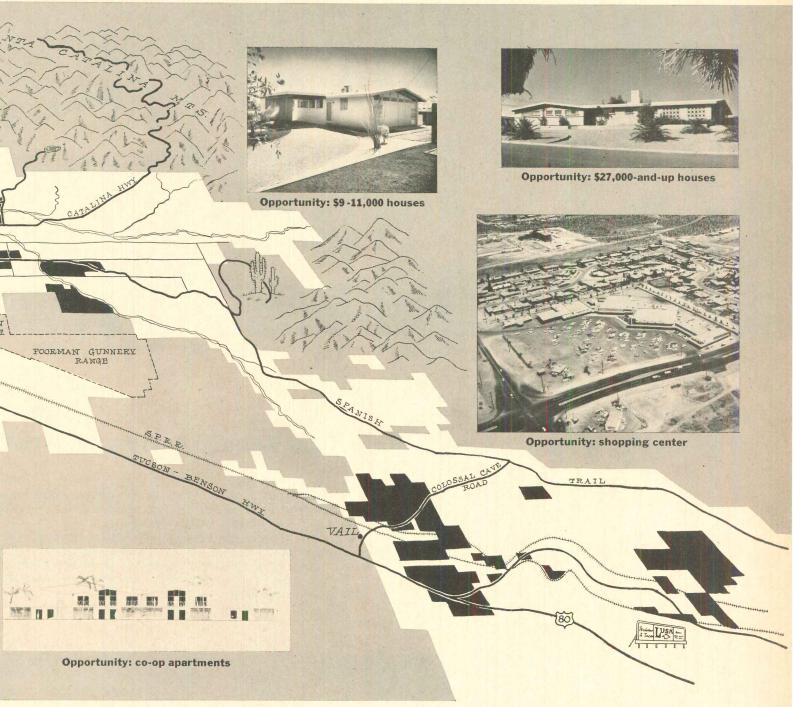
TUCSON IS AN OASIS in the southern Arizona desert, nestled among mountains. And as Bob Lusk correct

POLICY DECISION 2:

"Grasp every market opportunity within your immediate reach

In Tucson, Lusk has gone after almost every housing opportunity in sight:

- 1. The firm is building houses in five locations on the east side of Tucson and two locations to the north (see map). Says Lusk: "Tucson's growth has been mostly eastward, secondarily northward. I find that in most cities growth is mainly in one direction, secondary in another, and negligible in other directions. Our land purchases in the Tucson area were based on this belief, and have proved right."
- 2. The firm is building in every price class from \$8,900 to \$30,000 and in a wide variety of designs (see photos, above).
- 3. The firm has a custom division that builds one-of-a-kind houses priced from \$15,000 to \$60,000. Lusk has put up 114 of these houses.
- 4. The firm has opened a 1,690-lot trailer community for vacationers and retired people, putting the accent on community facilities—extensive recreational areas, sewers, under ground wiring and TV lines (so telephone poles and aeria will not mar the view of the Catalina Mountains close by Lots sell for \$2,700 up—and for \$3,400 more buyers can have a two-room cabana (see photo, top left) which their trailer can fit into snugly.
- 5. The firm has built a large shopping center. "We wanted to capitalize on the retail location our homebuilding was creating," says Financial Vice President Russell Wilde. "Now according to surveys, our shopping center is destined to be in the exact population center of Tucson in 1970."
- 6. The firm has participated in the development of a largindustrial park near Vail, a few miles southeast of Tucso



esaw 12 years ago, Tucson is a booming market for homebuilding. Last year starts were close to 4,000 units. Lusk owns land shown in black.

rst client is RCA, whose plant is shown above). In addition, reral thousand houses are scheduled to be built nearby for lustrial workers and for the retirement market.

7. The firm is about to build a number of apartments nilar to the design shown above (by Architect Nicholas Sallar). These will be sold as cooperative units.

Says Lusk: "The more of these opportunities we go after, be better our profit position. Economic synergism begins work for us. Profit from each project is greater because ch project helps us on the others."

In a market like Tucson, the opportunities get better by e year. In 1950 Tucson ranked 261st among US cities, th 45,000 population. Today it ranks 54th, has over 220,000 sidents, and is third largest city in the Mountain States fter Denver and Phoenix). By the end of the Sixties its

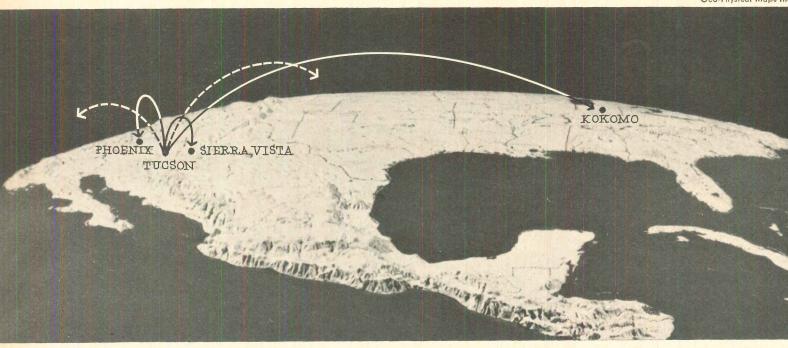
metropolitan population will be near 400,000 (according to the top-notch Tucson planning commission).

But opportunity is limited, even in Tucson

As the perspective map shows, geographic growth is limited by the large amounts of land (shaded) either owned by the federal and state governments (parks, Indian reservations, and military establishments) or held off the market (chiefly by Industrialist Howard Hughes).

Even some of the available areas (shown in white) are currently unsuitable for housing development because of rigid zoning (often as high as four-acre) or because of difficult topography. In addition to the tight land supply, housing opportunity in Tucson is tied to the rate of growth of industrial jobs in the area.

Frank L. Gayno



MULTI-MARKET OPERATION started in Tucson, now includes Kokomo, Phoenix, and Sierra Vista, Ariz. Other cities may soon be added.

POLICY DECISION 3:

"Extend your reach to broaden your market and narrow your risk

Lusk now builds in four very dissimilar markets. He plans to enter a fifth area this year and to expand to others later.

There is risk in this kind of expansion, as Lusk knows better than most, for he has stumbled two or three times. He was in Las Vegas but was forced to quit because, he says, "the market lost its strength." And he was blocked in El Paso by a tough zoning problem.

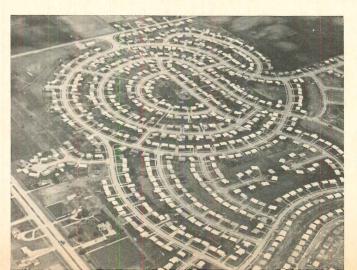
Even in Kokomo, where he has been selling about 200

houses a year, he nearly failed because his market stud failed to show that the apparent total market is highly seg mented by loyalties to individual towns.

But the risk is worth taking, Lusk believes, because 1) company growth depends on an ever-expanding market which Tucson alone cannot provide, and 2) geographic diversification lessens risk due to strikes, recessions, and other local market conditions.



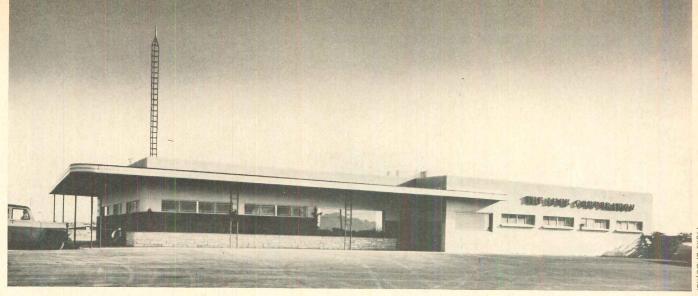
PREFABRICATED HOMES made by several Indiana manufacturers have been built by Lusk in Kokomo, Ind. Prices are \$10,500 to \$17,50



750 houses in Kokomo—hundreds to g

Lusk entered the Kokomo market four years ago "to test ou ability to operate a division far from headquarters," he says And he concedes he nearly failed because so many peopliving in small nearby towns resisted moving a few miles to the well planned new community. But sales are now good and when the present development is sold out later this year the company plans to buy more land and continue its successful Kokomo building operation.

CONCENTRIC STREETS dominate in this Kokomo community designs by Metropolitan Planners. It won an NAHB award for planning.



MAIN OFFICE IN TUCSON has radio tower for communication with autos in field, company airplane, and offices in other cities.

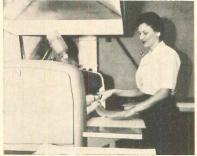
Lusk's GHQ remains in Tucson

This 13,000-sq-ft building serves as headquarters for the company's fast-developing interstate operations. Here are executive offices, the accounting, financing, purchasing, mortgage, and design and engineering departments, and show rooms and offices for the Tucson division. The office is well equipped mechanically for communications with distant divisions and for up-to-date methods of inventory and cost controls. A \$10,000 accounting machine and leased cardpunching machine hooked together provide quick records of all costs for every house under construction.



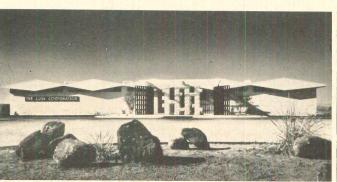
PHONE AMPLIFIER permits conferences over long distance.







MECHANICAL EQUIPMENT includes teletypewriter (left), blueprinting machine (center), Burroughs and IBM machines for cost accounting.



HOENIX OFFICE is 102'-long, faces entrance to "Country Gable."

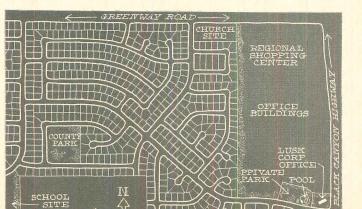


FIRST FIVE MODELS are carefully sited around a short cul de sac.

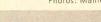
low in Phoenix—600 houses a year to go

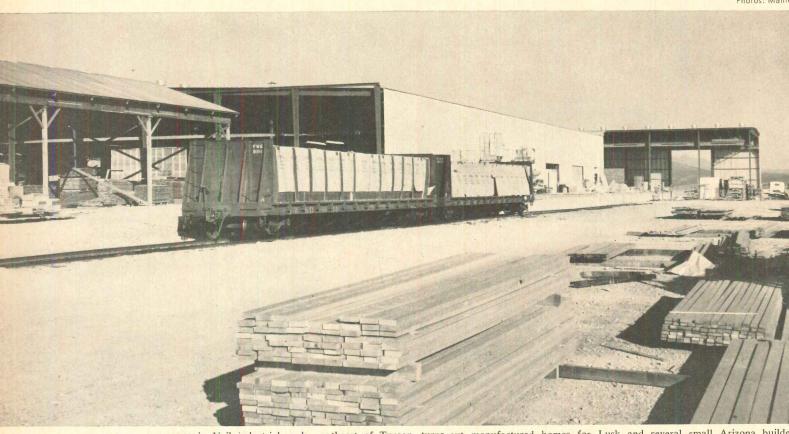
fore than 10,000 visitors attended the opening of Lusk's ig Phoenix development late last November. In the first ten ays, 28 sales were completed at prices ranging from \$10,900 or \$15,600 (mostly at the upper end of the price range)

o \$15,600 (mostly at the upper end of the price range). Says Vice President Boyd Prior, Phoenix manager: "We ope to sell 600 the first year, over 1,000-a-year thereafter. We expect to compete successfully in this tough market by ffering more varied designs and better community planning."



continued





NEW FACTORY in Vail industrial park, southeast of Tucson, turns out manufactured homes for Lusk and several small Arizona builded

POLICY DECISION 4:

"Shift to factory production 1/to cut costs, 2/to control quality and 3/to increase volume"

Last fall, Lusk took a long step toward full industrialization when he opened a big warehouse and manufacturing plant near Tucson to produce houses under controlled conditions.

A wholly-owned subsidiary, Construction Components (headed by Lusk Corp Manufacturing Vice President Ted Steele), owns the plant and sells to Lusk Corp in Tucson, Phoenix, and Sierra Vista, and to some smaller builders.

1. Materials cost less. The plant pays lower prices f many materials by buying direct from manufacturers in lar quantities. The big warehousing area cuts handling costs.

Benefits are already apparent:

Says Sig Fitz, materials manager (who came from t machine tool industry): "We have set up the same kinds controls to receive, warehouse, process, and ship homebuil ing materials that other industries use to handle machi tools, soft goods, or any other products. These controls a methods cut costs significantly over handling materials in t field."

2. Labor costs less. Says Steele: "With factory production there is less labor cost in a completed house. Even with fully unionized force in the plant, we pay less because lab is more efficient and we do not have to hire as many hig priced skilled men in the field."

Steele has worked out a contract with the local carpent union covering all men in the plant. Under the contra union members can shift categories (at different pay rates so there is little down-time to raise labor costs. Work steadier for the men, too.

3. Quality is improved. With close supervision of lab and extensive mechanization, new components are being pr duced that combine into better houses than can be built putting boards together in the field. And there is mo research into methods. One major benefit: fully enclos pre-wired panels (accepted under Tucson's building code

And potentially, the plant will be able to expand volur fast-with no added overhead cost-to take care of project within a 500-mile radius.



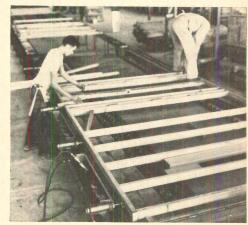
80,000-SQ-FT PLANT, not yet fully equipped, is now producing 75 houses a month with 80-man force. Output is expected to double in '61.



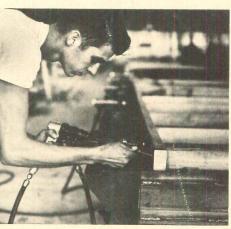
5,000-LB FORK LIFT picks up strapped package lumber to move it into the plant.



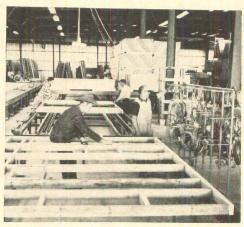
AIR-POWERED CHOP SAW cuts panel members to length fixed by pins along bar (foreground).



ASSEMBLY LINE has air-actuated framing tables to hold members in place for precise fitting.



Alling Gun saves much labor time. Here it is sed to nail sill of interior wall panel.



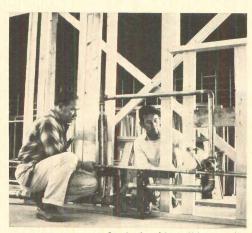
PRE-WIRED PANELS are made quickly with wiring chains (on rig) assembled in the plant.



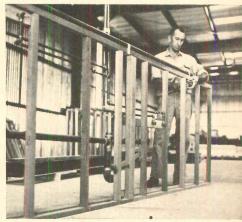
STAPLER is used to apply drywall to wired panel on another air-actuated framing table.



OOR MACHINE turns out ready-hung doors. One an can assemble 100 doors in a day.



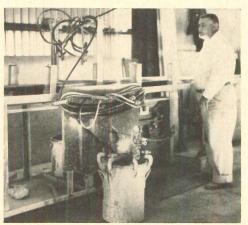
PLUMBING STACK for bath with wall-hung toilet is assembled in wall-length partition.



PLUMBING WALL for kitchen is readied for shipment. Waste and water supply is above floor.



INISH SANDER speeds work in cabinet shop, one f largest sections in the factory.



AUTOMATIC PAINT SPRAYER permits one man to do the work of 30 men painting by hand.



FIVE-TON OVERHEAD CRANE moves panel onto trailer. Recessed dock berths six trailers.





POLICY DECISION 5:

"Minimize field supervision

by subcontracting all site assembly work"

Says Lusk Vice President Boyd Prior: "Supervision on the site is a key problem in any homebuilding operation, especially when you are building a large number of houses at several locations. Good supervisors are hard to get at any price. We solved part of our supervision problem when we decided to make components in the factory, but this still left us a problem in the field.



TRAILER TRUCK hauls components for complete house in one load. Panels, trusses, cabinets are in trailer, appliances in box behind cab.

"We decided the solution was to contract for field erect with small independent operators. Many are our form supervisors or workmen. Today these men are profit-m vated entrepreneurs, but in effect they are also another la of management for us. Jobs are not let out to bid; unit pr are worked out in conference. They have an incentive make more profit by using the best methods they can. a \$14,000 house (like the one shown opposite), we Contractor Steve Demenge \$400 for rough carpentry. St can come out well ahead for that. What is more, his r feel they are working for Steve rather than for a rem soulless corporation, so they feel better about their wand do a better job."

Just as the independent contractors free Lusk from n supervision problems (and free Lusk's few field supervision from having to direct workmen), so does Lusk free the c tractors from many office responsibilities. Often the comp keeps the contractor's books, pays his men, buys his m rials, and helps him finance major pieces of equipment (the crane shown above and opposite).

This system has paid off for Lusk by lowering its f assembly costs by 5% to 8%. In addition, the company control costs better because it knows exactly what it have to pay to erect each house.

Adds Prior: "In combination with factory production, method of contracting cuts our costs from 12% to 15%

os: Manley



SONRY WALLS are built with Mexican adobe k by subcontractor before components arrive.



LOADED TRAILER arrives at 7 AM and carpentry sub's crane starts at once to unload components.



INTERIOR PANELS are unloaded one or two at a time, set on color-chalked lines marked on slab.



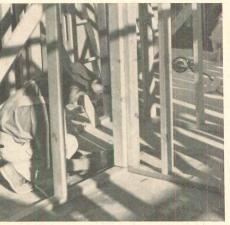
TERIOR WALL section is maneuvered into posia at rear of house next to masonry sidewall.



ADOBE AND WOOD WALLS are quickly fitted together (sometimes the masonry must be altered).



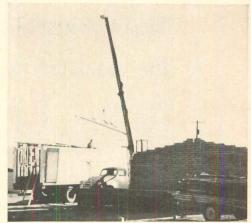
WALL TAKES SHAPE at rear of house as sections are added. Three panels extend 60' across house.



OR PLATE is cut (note power saw in backund). Plate is continuous for safe shipping.



HEADER over window and door at front of house is set by two men who also erect carport beams.



TRUSSES are lifted in groups to roof. Trailer is completely unloaded only 1½ hours after arrival.



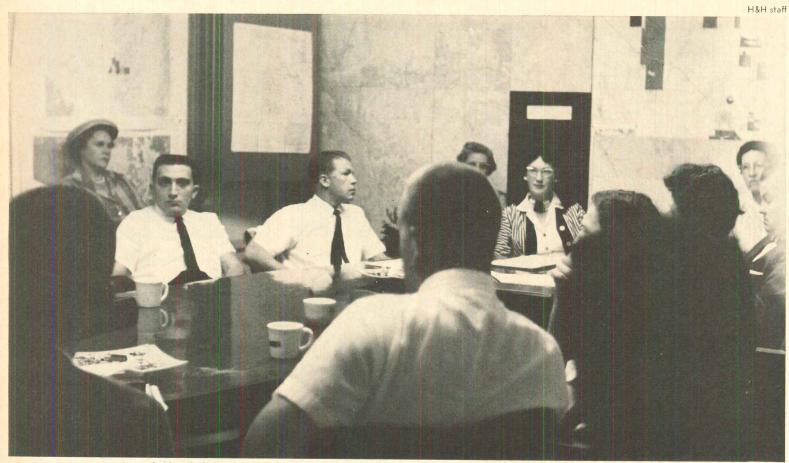
ELD SUPERINTENDENT has radio-equipped kup truck, can call Tucson office, Vail plant.



PLUMBING TREE is carried into house. Since photo was taken, tree is supplied built into panel.



HOUSE IS CLOSED IN by eight men (including crane operator) 5½ hours after components arrive.



SALES MEETINGS are held at 9 AM twice a week for 14 Tucson salesmen, shown here with four Welcome Wagon hostesses who help promote Lusk name.

POLICY DECISION 6:

"Train your salesmen to demonstrate the most-for-the-dollar value you are creating"

Lusk salesmen are always in training. They are thoroughly drilled in the values Lusk offers buyers, and they are schooled in theories of buyer motivation so they can emphasize the values that appeal most to different prospects.

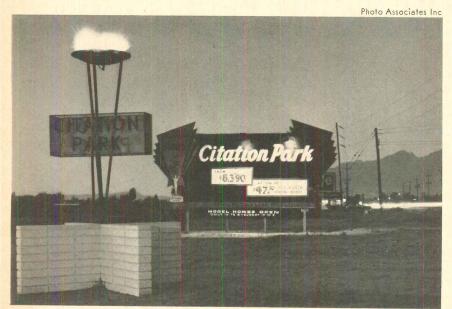
Twice a week they meet to pool information, discuss new models and products, and try new sales ideas on each other. They take turns working in all model houses, call on prospects from leads, and even go out calling from door-to-door. Many take business and selling courses on their own at night.

Says Tucson Sales Manager Paul Koehler: "There are many good ways to train salesmen and to sell houses, but whatever way you use, the most important guarantee of success for your program is to select your men carefully. The better my salesmen fit their job, the easier my job is to train them. We don't hire any man without first checking his personal and business references and we often give a psychological aptitude test."

Lusk salesmen must be intelligent, imaginative, outgoing, and above all honest. Says Koehler: "These qualities assure that the salesman will be able to talk easily with any kind of prospect, discover his interests, and convince him of the unusual values we offer. We insist on honesty in our salesmen because we cannot afford to let any man stretch the truth—and we feel that there is no need to stretch it."

Koehler teaches his men "these 10 important reasons that lead people to buy a new house":

- 1. Desire to conform with people they respect.
- 2. Desire for a better home to raise a family.
- 3. Desire for security.
- 4. Desire for more comfort and convenience.
- 5. Belief that a new house is easier to maintain.
- 6. Desire for an easily recognized symbol of success.
- 7. Belief that a home is a profitable investment.
- 8. Simple desire for a change.
- 9. Respect for a particular builder's reputation.
- 10. Fear of ridicule if they buy from a little-known firm.



ENTRANCE SIGNS—these for lowest price subdivision—are night-lighted.

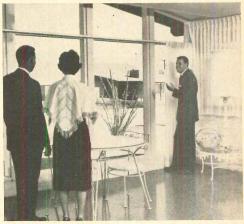
hotos: Manley



ALESMAN AT READY watches prospects* drive p to model. Models are open 10 am to 10 pm.



GREETING PROSPECTS, Salesman Bill Laird qualifies them for interest and ability to buy.



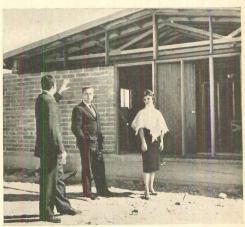
LEAK-PROOF WINDOW is demonstrated as Laird explains how unit was made in company's plant.



QUALITY APPLIANCES like oven, range, and arbage disposers are explained in detail.



LARGE CLOSETS are shown, with benefits of floor-to-ceiling doors and built-ins explained.



TRUSS CONSTRUCTION, shown in nearby house, "means weight won't crack your inside walls."



OT IS CHOSEN on site. Salesman shows only wo "because a wide choice confuses buyers."



DEPOSIT is signed. At this point, salesman's role ends and he takes prospects to office.



ACCOUNT MANAGER takes over and deals with prospects until the sale is finally closed.

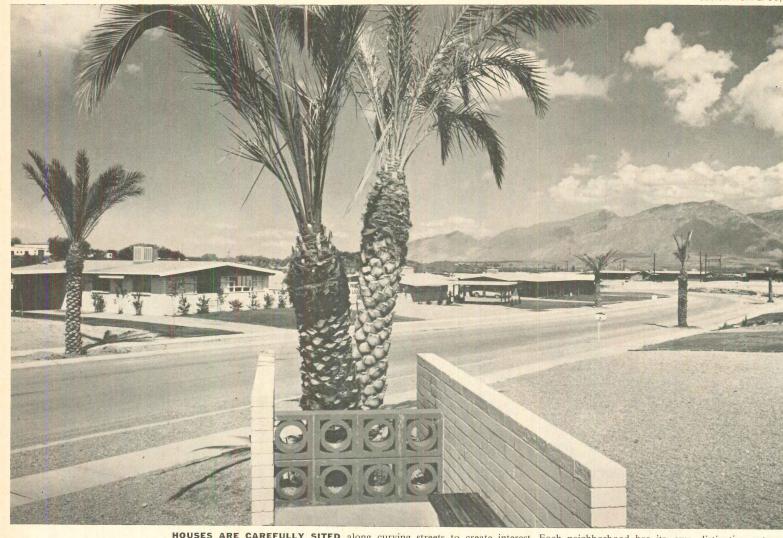


ON MOVE-IN DAY, Sales Manager Koehler turns over keys after final tour of inspection.



POST-SALES SERVICE is provided by uniformed repairmen, within a few hours after complaint.

To see Lusk's houses for yourself



HOUSES ARE CAREFULLY SITED along curving streets to create interest. Each neighborhood has its own distinctive entrane

MANAGEMENT TEST 1:

"The quality of neighborhoods is a test of the quality of management



DESERT LANDSCAPING adds much color to most Lusk communities in Tucson.

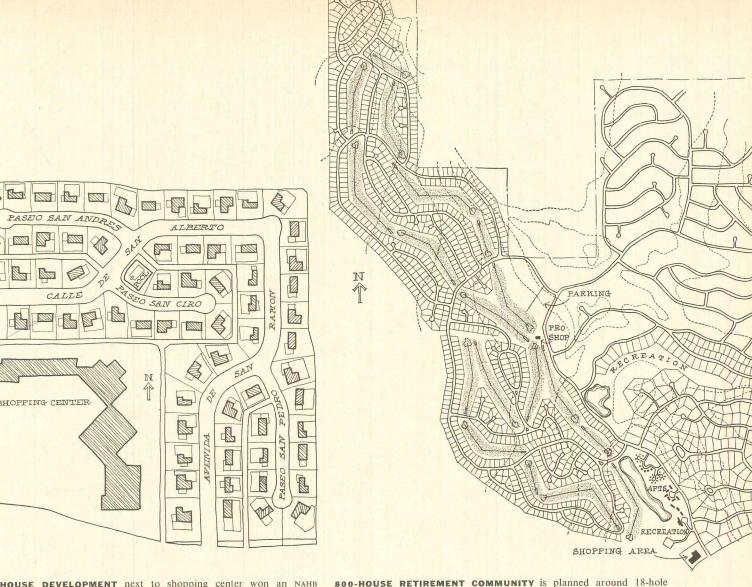
Lusk Corp has won an NAHB neighborhood award every ye for the past six years. No other builder in America has be so consistently acclaimed for community planning.

Streets are laid out in curves and cul de sacs to ta advantage of natural contours and scenery, to provide ea traffic flow, to prevent speeding, and to avoid dangerous int sections. (In the big plat shown far right, opposite, the is only a single four-way intersection.)

Lots are usually wide and sited so rear yards can be wall for private outdoor living.

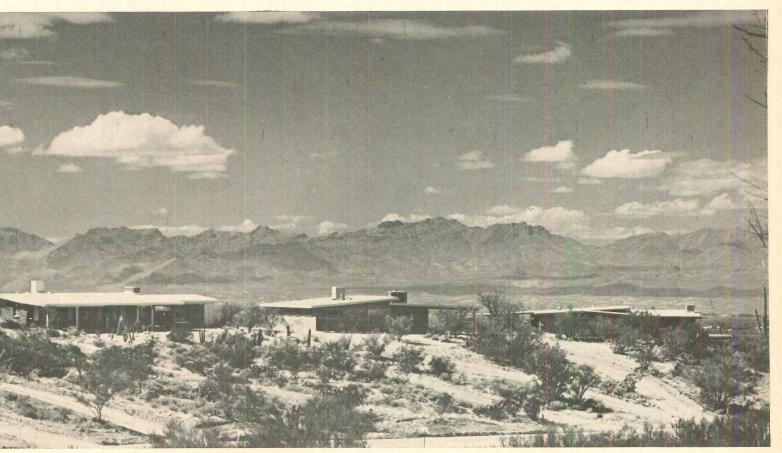
Houses are carefully sited for proper orientation to t sun and toward each other. There are no monotonous stre scapes because houses are set back varying distances fro

Shopping, recreational, school, and church sites are locat to fit each neighborhood's needs; and parks, swimming poo and similar facilities are donated to homeowner association which Lusk helps to organize.



HOUSE DEVELOPMENT next to shopping center won an NAHB shorhood award. Street lay-out prevents high-speed through-traffic. Imming pool and clubhouse lot were given to owners' group.

800-HOUSE RETIREMENT COMMUNITY is planned around 18-hole golf course on Lusk's property near Vail, Ariz. Sites for 260 larger houses are in surrounding hills. Planner: Guy S. Greene & Assoc.



NATURAL CONTOURS were preserved for one-acre sites in Catalina foothills north of Tucson. Riding trails wind through the community.



TYPICAL \$15,000 TO \$18,000 HOUSE in Tucson is this three-bedroom, two-bath model with about 1,600 sq ft of living spa

MANAGEMENT TEST 2:

"The quality of design is a test of the quality of managemen



\$18,000 TO \$22,000 MODELS like this colonial design have four bedrooms.



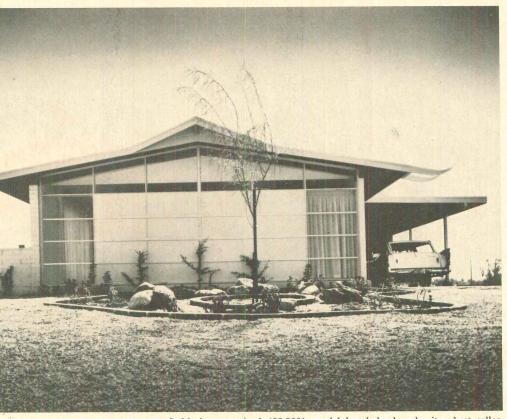
\$10,000 TO \$13,000 HOUSES like this one have about 1,300 sq ft of space.

"Lusk's houses have outstanding design," says Lem Nelsochief FHA underwriter for Arizona, "and we definitely githem credit for it in our appraisals."

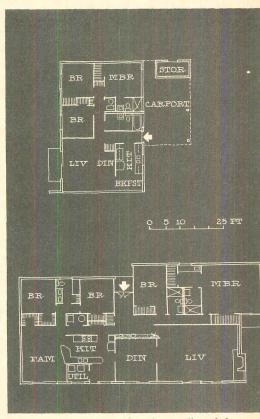
Buyers are offered a great variety (as many as 32 varitions of a single model) in exteriors, with the emphasis western and conservative contemporary designs. In the corpany's Phoenix development, exteriors are available in wo combined with either adobe, brick, pumice block, or slur stone

Architects who have designed Lusk models include Nichol Sakellar, Anne Rysdale, and John Sing Tang. The companiown design-engineering department (headed by Walt Rodiger) includes a domestic-science specialist as well as of signers and engineers.

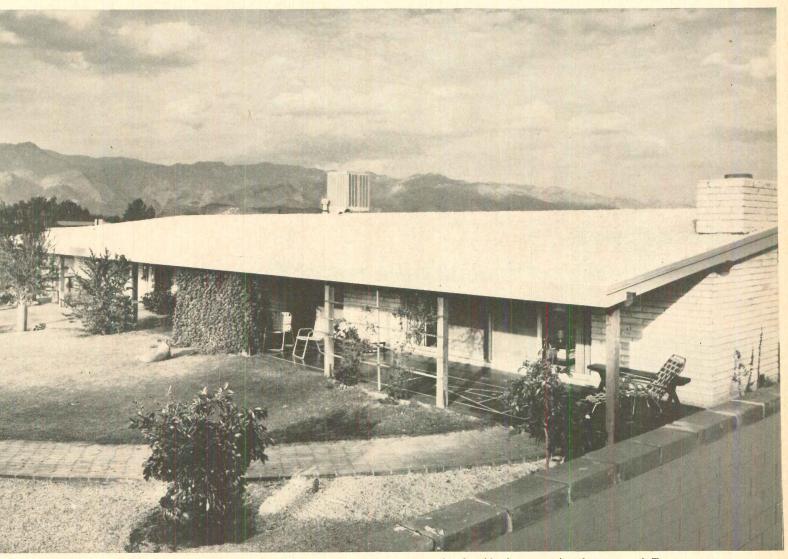
Most Lusk models sell at prices that work out at \$9. to \$11 per sq ft. These figures include land, and the high price also includes major appliances like built-in Univers Waste-King ranges and ovens, Waste-King dishwashing a garbage disposal units, and Vent-a-Hood range hoods. A evaporative cooler or central air conditioning is extra.



ORIENTAL DESIGN of this lowest priced (\$8,900) model has helped make it a best seller.



TWO FLOOR PLANS (for the small and large houses pictured left and below) indicate the wide range of models Lusk offers. All plans provide for outdoor living areas shaded by wide overhangs.

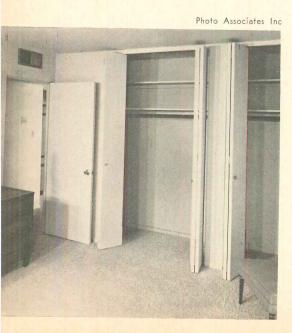


TRONG HORIZONTAL LINES of this \$28,000 model (seen from the rear patio) contrast sharply with the mountains that surround Tucson,



MANAGEMENT TEST 3:

"The quality of livability is a test of the quality of management





"Lasting satisfaction with a house," says Boyd Prior, Lusk vice president in charge of sales, "depends on its livability

"Is it a good looking, cheerful, and pleasant place to live Are the rooms—and the room arrangement—suitable for th kind of life the owners like? Is housekeeping easy? Does th house need little or no maintenance? Is there privacy? Pro vision for outdoor living? Enough handy storage? An attraction tive, efficient kitchen? Space for a party? A room or tw for peace and quiet? If you put these things in a house, yo build in livability for your buyers—and assure yourself

The photographs on these pages show how Bob Lus and his associates have succeeded in giving Lusk houses th quality of livability.

STANDARD FEATURES in all houses include wide closets with floor-to-ceiling doors in bedrooms and wall-hung toilets in all bath



WITCHEN in 990-sq-ft model opens to well lighted dining space.



ORGE KITCHEN in medium-price house is fully open to family open. It has Lusk-built cabinets, built-in appliances and TV set.



ATIO LIVING is featured in nearly all Lusk houses. Ramadas and wide overhangs shade rear windows and part of patio.

NDOOR-OUTDOOR LIVING is provided by glass wall between ving area and patio of this \$48,000 custom house. /END.

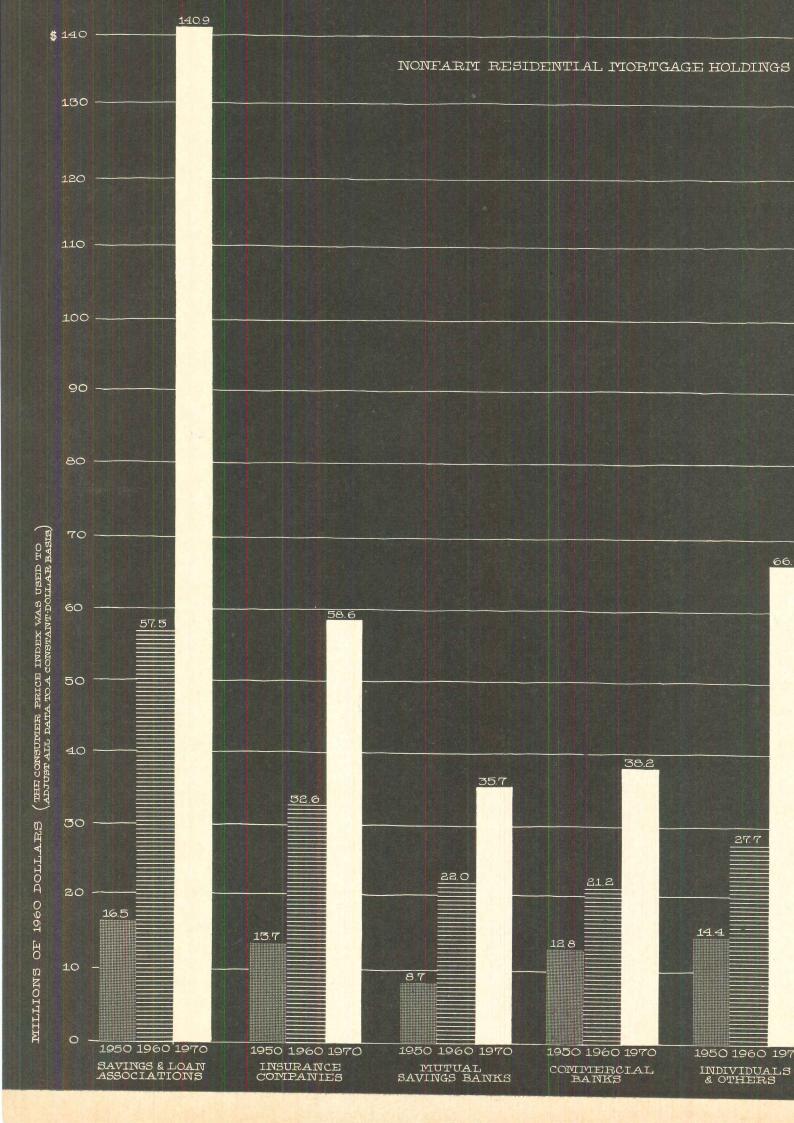


CLERESTORY across front living-room wall is obtained by leaving ceiling open to pitched roof for first 2' before first truss position.



MASTER BEDROOMS in larger models have up to 300 sq ft of space, ample closets, and dressing rooms.





NEW ECONOMIC OUTLOOK

That population explosion will be another few years coming.

Meantime, housing must look elsewhere for growth

in a US business climate beset by new problems.

Somehow, the notion gained wide currency about a year ago that beginning in 1960, the US economy—including housing—would rocket to a new stratosphere of business volume. Forecasters agreed with rare unanimity that 1960 would be a boom year. Why were they wrong? Why did the economy stay level instead of taking off?

In housing, at least, one of the more curious popular misconceptions seems to have involved the timing of the forthcoming population explosion when the World War II baby crop grows up, gets married, and starts producing offspring of its own. This fuel for the housing market won't be more than an insignificant trickle until 1965, at the earliest. And it probably won't grow to important size until 1968 or so.

But the mortgage bugaboo of the Fifties seems to be vanishing. As Economist Miles Colean's analysis (facing page) shows, private sources should provide enough money to finance at least 15 million new housing units—plus all the existing-house resales—in the next ten years.

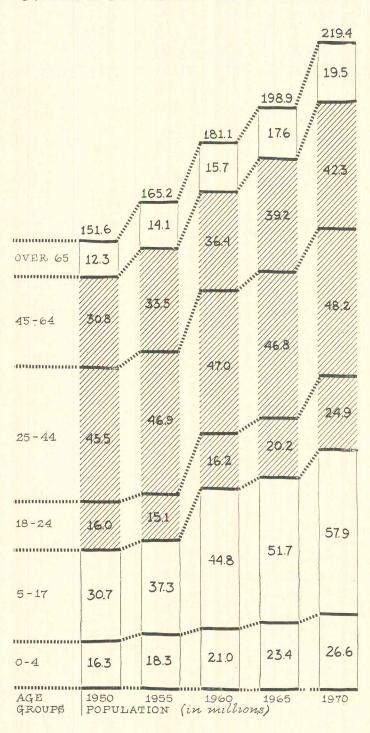
During the next five or six or seven years, housing's prospect for growth hinges on how fast it can set its house in order. So, it may well turn out, does the US economy's much discussed growth. Confronted for the first time in a generation by the discipline of foreign economic competition, the US economy faces an immediate choice: cut costs or watch markets shrink while unemployment continues to rise.

The Golden Sixties still should come true, but they haven't started yet.

ERE THE MONEY WILL COMEof to build some 15-million
dwelling units in the next ten
(rs (1961-1970) is detailed in

Here's why the population explosion won't give one-family homes much of a lift for about another five years

GROWTH OF POPULATION BY AGE GROUPS



SOURCE: CENSUS

More than three years ago (H&H, Oct '57) HOUSE & HOM carried a warning that the changing profile of the US popul tion would produce a big change in tomorrow's housin market. (Was anybody listening?)

Reporting on Action's \$250,000 study of housing problem we said: "The market for housing may change dramatical in the next 25 years. The reason is people. There are lots different kinds of people—young bachelors, married coupl with tiny kids, older married folk whose offspring have grow widows, divorcees. Almost every group likes a different kin of housing. In the next 25 years, the kinds who like to limit the suburbs—notably couples between 30 and 49 years of will increase very little. And the kinds of people who ten to want to live in central cities will rise spectacularly."

Now that the postwar shelter shortage is gone, now the apartment vacancies (7.6%) are at a postwar high, now the real estate market is enjoying its first normalcy in near a generation, this prophecy is beginning to be fulfilled. Thousing industry finds selling its No. 1 problem. And this spectacularly true of Plain Jane homes in the suburbs—house that used to sell themselves ten years ago.

You can see the underlying reason, the hard economic facts of life, in the graph (*left*) which shows how the nation population is growing—by age groups. For age groups at the best yardstick we have for breaking the housing mark into its components—the bachelors, couples, and widows where and want different kinds of accommodations. The branches for suburban homes is the 25-44-year-old-age groups. It has grown hardly at all in the last five years; it promises shrink in the next five. (Some experts put the age brack of suburban homebuyers five years higher, from 30 to be years old, but this would not change the statistical pictures.)

The 25 to 44-year-old group is not expected to grow aga until 1965; even then its growth up to 1970 will probably the smallest of any major population bracket—a 3% ga from 46.8 million to 48.2 million people. By contrast the will be

—a 24.7% increase (from 16.2 to 20.2 million) in the nefive years among young adults (18-24) who traditional prefer renting if they don't live with their parents. A between 1965 and 1970 this group will grow another 23.3 (from 20.2 million to 24.9 million).

—a 7.7% increase (from 36.4 million to 39.2 million) the next five years among middle-aged people (45-64). T market importance of this group is chiefly in trading up better housing. The group will grow another 7.9% betwe 1965 and 1970 (39.2 million to 42.3 million).

—a 12.1% increase (15.7 million to 17.6 million) in t next five years among older people (65 and over), who constitute the market for retirement housing. And this grow will grow another 10.8% (17.6 million to 19.5 million by 1970.

World War II's baby crop, which is now beginning overwhelm the nation's colleges, will probably have little i pact on the housing market until late in this decade. It was the mid-Sixties before that controversial yardstick housing demand, family formation, has picked up lo enough to produce the next population explosion of childred which will indeed touch off a huge new demand for housing up to now, the fact that family formations are running at higher rate than a few years ago is offset by the even high rate of housing construction.

Housing this year will depend heavily on the overall US economy and on buyers' attitudes

s year marks, if not the beginning, at least the widespread ognition of a new phase in the nation's housing market: buyer is in control. And his attitude toward buying a se has changed. No shelter shortage will force him to le for something less than he wants. No fears of rising es will impel him to hurry.

nstead, the potential homebuyer is looking at the merndise so carefully that anecdotes like this one about lder Ned Eichler ring a common chord:

Among the visitors to the Eichler's latest subdivision near San Francisco one recent Sunday afternoon was a particularly attractive young couple, who showed such real interest, asked such intelligent questions about the model house that Eichler took far longer than usual showing them house that Jenner took fai holder than distal showing them around. At the end, hoping to warm them up for a sale, he ventured: "Do you have any hobbies?"

"Oh yes," they replied.

"And what may they be?" Eichler inquired.

"Looking at model homes."

e upheaval in buyers' attitudes reflects in big part the disearance during 1960 of inflationary psychology. It dawned the public that inflation had been stopped—at least for time being. With foreclosures rising, homebuyers began realize that they could no longer count on an ever escalatprice level to bail them out of bad judgment. Indeed, the kening of the price push revealed that prices were already nigh as to make many houses something less than a bargain.

For the first time in the postwar era, housing this year not count on two old standbys to revive sales (and starts):

Inflation isn't likely to scare people into buying

Anything the incoming Kennedy administration does to np up the economy by spending more money will have st of its impact in 1962, not 1961. Inflationary psychology tht revive quicker, but up to now most economists do expect it to be important this year.

No dramatic price rises are in prospect. Manufacturers of lding products have capacities far above prospective dend—as does the homebuilding industry itself. So today's

h costs are not likely to look like tomorrow's bargains. Labor, as usual, will get paid more (more about this later), apparently not so much more as to drive prices up. The eeze now will be on profits.

Land prices will continue to be a problem. But the pace subdividing has slowed. Already, there are signs that, at st in some areas, the long rise in land prices has stopped. re, what seems in prospect for the immediate future is a athing spell.

Easier credit no longer will revive housing

Says Economist Saul Klaman of the Natl Assn of Mutual vings Banks: "The key lesson of 1960 is that housing can longer be counted on to play its usual contracyclical role the economy. Until the population upsurge is upon us in mid-Sixties, housing demand need not always be respone to the magic hypodermic of ample and easy credit." Says Executive Vice President Charlie Wellman of Glene Federal s&L: "We cannot expect housing to provide mparable leadership out of our present [overall economic] mp to that provided in 1954-55 and 1958-59." Why so? To understand the difference between the Fifties

d the Sixties, let's go back and look at what happened: In 1955, housing starts reached a peak of 1,329,000. This as housing leading the economy out of the second postwar cession. As the economy gained momentum, money tighted. Starts dropped to 1,118,000 in 1956 and to 1,042,000

in 1957. Then, in mid-1957, the economy showed signs of another decline. Starts in 1958 rose to 1,209,000. In 1959 they soared to 1,379,000 (BLs figures). To state it another way, housing entered the 1957-58 recession after a two-year drop in starts. Demand was backlogged. So when mortgage money became easier and cheaper housing starts zoomed. They climbed 20% from 1957 to 1958. They went up another 15% from 1958 to 1959.

"Our main difficulty in analyzing housing demand today is our tendency to think of 1960 as a mere repitition of 1958," counsels Lender Wellman. There is no backlog of demand. Rental vacancies stand at a postwar high of 7.6%. If you exclude rent-controlled New York City, where vacancies are nil, the figure would jump to more than 8%. In the faster growing, fastest building regions of the nation, vacancies are a lot higher (10.2% in the West, 8.9% in the South). Reports of completed but unsold houses are common. Sales of existing homes have slowed perceptibly.

Moreover, mortgage terms (down payment and amortization) have been eased so far that almost nobody argues today that it would be either wise or effective to ease them further.

In 1955, the average v_A down payment was 5.3%. In 1959, the average v_A down payment was 3.3%.

In 1955, the average va loan was for 27.4 years. In 1959, the average va loan was for 28.8 years.

The same trend is evident in conventional and FHA mortgage financing.

Even if the new Administration gives Fanny May a stiff shot of mortgage money at Treasury-subsidized rates, it is questionable whether it would do much to revive housing. And it is certain that the effect would not be felt until 1962—just as 1958's recession-inspired \$1 billion of Fanny May "special assistance" to build cheap new houses was felt principally the following year when the recession was over.

On top of these problems, the nation is confronted with a new and much more serious trouble in coping with recession by methods like easier money or deficit spending which helped in the fifties. It is the balance of payments problem. It

The gold crisis may tie the government's hands

Q. What is the gold crisis?

A. It is the rising outflow of US gold to foreign countries —a flow which has reached such serious proportions as to weaken confidence in the value of the US dollar, the basic currency of the free world. If left unchecked, it could mean ultimate devaluation of the dollar, slashing overnight the value of everybody's savings and, worse, disrupting world trade and prosperity to the great advantage of the Soviet Union.

The US gold stock now stands at \$18-billion. By law, \$12-billion of this is frozen to back up notes and deposits of the Federal Reserve System. That leaves \$6-billion. Since 1933, US citizens have been forbidden to own gold inside the US. But foreigners and international institutions with dollar assets can demand gold. These potential dollar claims now total \$20-billion—far more than the US could pay in gold if everybody asked at once, although this is, as a practical matter, inconceivable.

Q. What causes the outflow of gold?

A. The US' negative balance of international payments. The nation currently has a surplus of \$3-billion a year in her trade. But foreign aid and overseas military programs (including stationing US troops abroad), plus US investment abroad, produce a drain of \$7-billion. This leaves a \$4-billion deficit. The deficit has run to \$3.4-billion or more for three years in a row. As a result, our gold reserves have dropped \$4.5-billion since the start of 1958 and our dollar liabilities have risen more than \$6-billion.

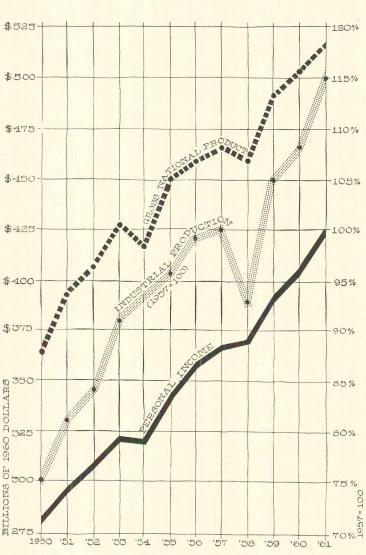
Warns Chairman William McChesney Martin of the Federal Reserve Board: "This is the first time in my lifetime that the credit of the US has been questioned. It is something the American people and American businessmen just do not understand. They look around, see they are riding in a big car,

have a good job. They don't understand the threat. A ve serious shadow lies over the American business picture."

The nub of this dilemma is that steps like easier money of more federal spending, which President-elect Kennedy migundertake to ease the recession at home, may well worse the US international financial situation. Both problems necession as some of the solutions conflict.

Business should pick up after mid-year but first the recession may deepen

SELECTED ECONOMIC INDICATORS 1950-1961



SOURCES: 1950-1959 DATA-- DEPARTMENT OF COMMERCE AND FEDERAL RESERVE BOARD
1960-1961 DATA--MILES COLEAN ESTIMATES

Last year the US economy demonstrated more tangibly the ever before its great strength in resisting recession.*

Last year saw as big a drop in inventories as the national has had since the end of World War II. Inventory grow dropped from an annual rate of \$11.4-billion in the first quater (the build-up after the steel strike) to a minuscule gate of only \$600-million in the third quarter and perhaps eveless in the fourth quarter.

As inflationary psychology melted away, stock prices bro sharply. The steel industry—once considered the bellweth of the nation's economy—staggered along at half capacity foreign steel and other metals, notably aluminum, cut into markets. Unemployment stuck at an uncomfortably high lev

But this series of heavy blows—blows which in times particle have jolted the US economy severely—produced only a slowing of its overall growth rate, a flattening out instead of setback. The single master indicator, gross national production was about \$504-billion for the year, 4.5% above 1959. It comes and spending rose slightly. Industrial production a eraged 108 on the Federal Reserve index, compared to 1 in 1959. Construction slipped slightly below 1959 only because of housing's weakness.

The big disappointment about all this is that busing experts were expecting so much more. Almost everyone for cast a business surge of near boom proportions from pent-demands in the wake of the steel strike. And almost every body was wrong. Exuberance about "the golden sixties" we confused with the prospects for 1960 itself.

The new year begins with the economy still hovering the same high level uncertainty it has shown since last sprir Business held up well during the last quarter. It may, as often does, sag during the first three months of this year. E the sag should be slight.

By spring, inventory liquidation should give way to a r in business buying. Construction will pick up seasonally was definite up-trend in government outlays and a smaller a vance in private non-residential building. Capital outlays commerce and industry will be only a shade below the lapart of 1960.

Personal income, as it did last year, will continue to i crease. The rate of savings will be high. All told, gross n tional product this year should reach at least \$512-billion-\$8-billion more than last year. Industrial production shou average about 115 on the Fed index—up 7 points.

^{*} Economists are in lively disagreement over just what the econor slump should be called. Federal Reserve Chairman Martin says "proably" 1960 was a "moderate recession." Raymond Saulnier, chairm of President Eisenhower's Council of Economic Advisors, says decline "barely qualifies as a recession."

wo long-term problems will remain, and could become erious

. Unemployment may go higher before it shrinks

This is one of the most pressing problems confronting the coming Administration. Some 4-million Americans were obless in November. There may be as many as 5.5-million lee by midwinter, and the total apparently won't drop much elow 4-million any time this year, largely because of the gh proportion of young people entering the work force for the first time. Keep an eye on what Congress does about the emocratic platform promises to raise the federal minimum age from \$1 to \$1.25 an hour. Some experts figure Congress ould only make unemployment stickier by boosting the inimum wage because unemployment is already concentated among low-skilled people and first time job seekers.

. Imports are making more inroads into US markets

High US labor costs spur automation. They also contribute US difficulties in exports and make our own market more tractive to foreign products. In today's political economy, age cutting is almost impossible. Businessmen must pin their opes on improving efficiency and persuading labor to wipe ut restrictions and make-work practices so the US can compete in the world's markets.

ut mortgage money will be no problem in 1961

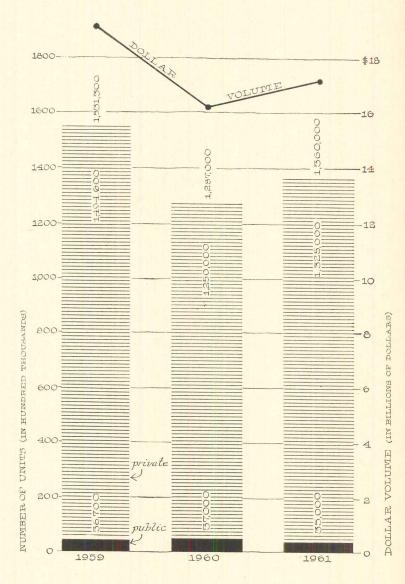
Compared with the severe scarcity of mortgage money at the start of 1960, the situation today is relaxed. A year ago, ith mutual savings banks driven by deposit losses (because of the celebrated Magic 5 Treasury bonds) to slash mortgage using sharply, builders could not plan with confidence that ortgage money would be available. Now, mortgage loans or immediate delivery (ie up to three months) are so carce lenders are scrambling for them. And advance combitments are easy to arrange.

In 12 months, interest rates on home mortgages (as estimated from yields on Fhas) have dropped about ½%. Some arther drop is still possible—which leads some builders to gure it is safe to make building plans without advance combitments on the prospect of lower interest rates when the omes are built and loans actually closed.

Across the US, FHA minimum-down 30 year loans—today's ellwether of the mortgage market—are now sold at prices anging from par in parts of New England to a 3 point dispount on the West Coast. Chances are that discounts will brink more between now and spring. Perhaps they will shrink mough to make par money widely available at 534 % interest. For the year as a whole, look for relative stability in mort-

For the year as a whole, look for relative stability in mortage rates. Institutional lenders no longer have big supplies f low-yield bonds to swap for mortgages. Corporate borrowing will be large enough to create competition with mortgages, lthough it will probably be on a smaller scale than in 1960, and to curtail the outflow of gold, the Federal Reserve will be under pressure not to let domestic interest rates sink so far they get out of alignment with rates abroad, which tend to be higher. Indeed, Chairman Martin makes it clear that the fed would probably have acted to ease money rates further and faster last year except for the nation's crucial balance of the asyments problem.

NONFARM HOUSING ACTIVITY 1959-1961



SOURCES: 1959 DATA--BUREAU OF THE CENSUS 1960-1961 DATA--MILES COLEAN ESTIMATES

A new look at '61 starts

Nonfarm housing starts will be up about 5½% in 1961. Probable total: 1,360,000 (1,325,000 private, 35,000 public). Dollar volume—in constant 1960 dollars—should reach \$17.15-billion—a similar 5% gain from the 1960 figure, \$16.3-billion.

These new forecasts by Economist Miles Colean for House & Home reflect the fall slump in starts, which apparently carried 1960's housing output some 75,000 units lower than earlier expectations (H&H, Oct.). This year's recovery, Colean predicts, will still be on the order of 75,000 private nonfarm units.

Farm starts probably added another 25,000 to 1960's output for a US total of 1,312,000. This year, farm starts should reach 28,000, producing a nation-wide total of 1,388,000 starts—some 165,000 units, or 10%, short of the 1959 peak.

Can private sources meet the next decade's needs for more mortgage money?

The idea that the existing, largely private, sources of mortgage money may not be able to finance the next decade's housing was planted last April by a Senate housing subcommittee report (News, May) which dealt chiefly with another issue. The subcommittee, headed by Senator John Sparkman (D, Ala), set forth the thesis that the US needs to build "a minimum of 16 million permanent non-farm housing units" in the ten years starting this month. It contended that this "goal" cannot be achieved without changes in federal laws that shape housing and mortgage credit. Sparkman's idea was that the President should set a national housing goal of a specific number of starts, year by year, and advise Congress annually what steps the government will take to see that these are built, including new legislation if necessary. The notion of the federal government, in peace-time, trying to control how many housing units should be built dismayed enough other senators so that Sparkman's plan was dropped during the Senate debate on the 1960 omnibus housing bill. But the idea persists that we may not be able to finance all the housing US citizens will want to buy or rent.

Sparkman took his stand while the nation was still counting the housing output by the old Bureau of Labor Statistics yardstick which showed that 1959, for example, produced 1,342,800 non-farm starts. The Census' improved counting system now pegs 1959 starts at 1,494,500.

This 11% discrepancy might be taken to imply that the housing subcommittee's vision of housing need should be boosted 11% to 17.8-million units for the decade. But the 1960 Census count of the nation's stock of housing found only 3.2% (384,700) more units than BLs had counted as starts in almost exactly the same ten years. The significance of this cannot be pinpointed, because statisticians can only guesstimate how many units built in that decade were lost to fire, flood, and deliberate demolition. Public housers and other so-called "liberal" groups now talk of a need for 2-million units a year. But they offer no explanation of how these could be sold or rented in a housing economy where rental vacancies have jumped 40% in the last three years and now approach an 8% national average.

Allowing for gradual but not radical changes in the industry itself, it seems probable that the housing output for the next decade will be something close to 15-million new dwelling units. This much, the existing chiefly private sources of mortgage funds should be able to finance—barring a resurgence of inflation psychology that crimps savings. Let's look at the figures:

How much mortgage money will we need?

It will probably take \$450-billion to finance the 15-million houses and apartments the US seems likely to build plus the millions more of existing units that will be resold at higher prices between now and the end of 1970. The actual amount of mortgage money it will take hinges on 1) the price level, 2) the stability of prices, and 3) the terms on which housing is sold (both down payments and amortization). None of these fits easily into a simple equation, but here are the assumptions and projections which underlie the \$450-billion figure:

- Consumers will demand bigger and better quality homes as their incomes rise. If there is no price inflation, this should boost the average mortgage on a new house or apartment from \$10,000 to about a \$12,200 average for the decade. That is a conservative assumption: a 20% increase in mortgage value. In the ten years 1949-59, the average mortgage increased about 50% in constant dollars.
- About 13% of new dwelling units will need no mortgage

financing, as at present. Net needed for new dwellings \$165-billion.

- Existing dwelling units will produce about twice as man transactions as new ones, based on ratios developed from the 1956 National Housing Inventory. And about 85% of these will require mortgage financing. The average loan over the decade will be smaller: about \$10,800.
- Net needed for financing existing homes and apartments \$285-billion.

Most of the \$450-billion will come from repayment of exist ing mortgage debt. Only about \$180-billion will have to b new money—that is, fresh savings or money siphoned from somewhere else in the nation's economy. Where will it com from?

The main sources of mortgage funds in the sixties will be the same ones that provided the bulk of the funds in the fifties

Taken together, they seem likely to furnish a smaller shar of the total financing for the nation's new homes and apart ments. Here is a rundown on their performance in the fiftie and their prospects for serving housing in the sixties: Saving & loans: Alone among the four big, traditional sources of housing money, s&Ls have a good chance of maintaining their fast growth rate and so of capturing an even bigger slice of mortgage financing than the 30% they now hold. s&Ls ha more than \$70-billion assets at the end of last year. Of this about 85%, or \$60-billion was invested in mortgages—almost all of it residential and most of that one-family homes.

By 1970, S&L assets may reach \$170-billion, according to study by Indiana University.* S&Ls are sharply limited by law as to what loans they can make except residential mortgages. So chances are that \$141-billion of the total will wind up i residential loans. The rest will go into reserves and non-residential mortgages. Thus s&Ls seem likely to boost their mortgage holdings by a whopping 145%, or \$83-billion. If the sounds fantastic, bear in mind s&L mortgage holdings show up 248% in the ten years that just ended!

Life insurance companies are likely to show a smaller rate of asset growth in the next decade than in the last one. Reasons

- 1. About three years ago, a marked shift began in the insurance buying habits of the US public. It turned awas from ordinary life and annuity policies toward term insurance, which is much cheaper but gives insurance companie little long-term money for investment. The cause seems that have been inflation which persuaded more and more families to put their long-term savings elsewhere. The trend has not reached a point where it dents the ability of life companies to invest at their historic rate.
- 2. Fewer policy holders and beneficiaries are leavin funds for investment with life insurance companies.
- 3. Tax and other laws governing life insurance companies are making them less and less attractive as manager of pension funds compared with corporate or independent trustees. (An independently-operated pension fund avoid income taxes. Moreover, the law lets it put a higher percentage of its portfolio in stocks.)

Insurance companies will probably put a smaller slice of their slower-growing assets into mortgages in the sixties that in the fifties. One reason is the rising demand for polic loans. Another is that many life companies are approaching

^{*} Indiana's study, "The Next Decade," projected \$166-billion in 195 dollars, which are here translated into 1960 dollars.

the ratio of mortgages to total investment that they think is sound business. Based on a projection of recent developments, the same Indiana University study suggests life insurance companies will increase their non-farm residential mortgage holdings from \$33-billion in 1960 to \$59-billion in 1970. This would be an increase of 80% compared to a 138% growth during the decade of the fifties.

utual savings banks also are likely to expand their mortgage ldings more slowly in the next ten years. During the fifties, vings banks not only saw a rapid deposit growth but also mpleted the sell-off of their World War II accumulation of w-yielding government bonds. The combination let mutual nks' mortgage portfolios swell by a whopping 153% (from .7-billion to \$22-billion), again in 1960 dollars. Now, e growth of savings bank deposits seem to be slowing down. the same time, the ratio of mortgages to other investments s leaped from 32% to 55%—close to what savings bankers el is an appropriate ceiling (see table below). So savings bank vestment in mortgages will probably grow no more than 4-billion, or 62%, during the Sixties. Savings banks have en the No. 1 buyers of FHA and VA subdivision housing ans in the inter-state market. Builders can hope that this rinkage in the acquisition rate will not exceed the prosctive shrinkage in the share of new housing that goes in bdivisions.

Commercial banks could put more money into mortgages the new decade, if they choose to. But their investment olicies and opportunities vary so widely it is risky to forecast at this will actually happen. If they keep their investment mortgages about where it has been for the last ten years 8½% of assets), commercial banks should account for a 7-billion increase in mortgage loans by 1970.

Thus the four principal institutional sources of private ortgage money should take care of \$140-billion of the \$180-llion of new money the next decade is likely to require. his leaves only \$40-billion, or 22%, of the needed increase mortgage funds to come from elsewhere.

ension funds should cover this gap

Over the last ten years, sources other than the four chief stitutional investors (mainly individuals, Federal Natl Mortage Assn, and other government lenders) have accounted for pout 14%, or \$13.3-billion, of the new money poured into cortgages. If this proportion remains the same in the Sixties, are increase in volume would rise to \$27-billion.

Pension funds—the kind whose interest in mortgage inestment is soaring dramatically now—would have to invest ally about 10% of their probable 1970 assets in mortgages provide the last \$13-million to finance the decade's projected housing.

The kind of pension funds that count the most are corpoate, non-insured funds managed by bank or individual custees, chiefly a handful of giant New York City commer-

NONFARM RESIDENTIAL MORTGAGE HOLDINGS AS A PERCENT OF TOTAL ASSETS

	1950	1960	1970
Savings and loan associations	79.7%	81.0%	87.3%
Life insurance companies	17.4	27.4	30.1
Mutual savings banks	31.5	54.9	60.2
Commercial banks	8.6	8.5	9.0

cial banks and trust companies like Morgan Guaranty, Chase Manhattan, and Bankers' Trust. At the end of 1959, this rapidly growing pool of pension fund money totaled \$25.3-billion.

Retirement funds of state and local governments account for another \$17.2-billion. Another \$1.9-billion is in funds managed by labor unions alone or jointly with employers. Of this \$44-billion accumulation, only about \$1-billion is invested now in residential mortgages.

Up to last year, pension trust funds had been a notable hold-out against buying mortgages. But this picture is changing with dramatic speed. Not only are the funds growing so fast they are almost forced to broaden their range of investments, but also mortgage men at last have proved and tested techniques and finance instruments which make it easy for pension funds to buy mortgages without being forced to set up large and expensive real estate departments to manage them.

By 1970, corporate non-insured pension funds may well grow to \$85-billion. If local government and union pension funds no more than double during the decade, they will swell to over \$38-billion, making the total pension fund accumulation about \$123-billion.

While 10% of this invested in residential mortgages would produce enough money to finance the balance of 15-million houses for the decade, 15% invested in home mortgages would let the nation build and finance another half million easily.

Mortgage trusts may be another big money source

This prospect is so new that analysis cannot yet hazard a guess about how much money it may tap for mortgages that now goes into other investments, notably the stock market. The law, which gives real estate investment trusts (and mortgage investment trusts) permission to distribute their earnings tax-free to shareholders, became effective only this month. Mortgage men call it "a real break-through." They predict it will let them tap a huge new pool of funds for housing by making it easy for average investors to put some of their savings into mortgages. The change in the tax laws which makes all this possible involves the same principle that has long been applied to securities investment trusts—a principle which made possible the astonishing growth of the nation's \$24-billion mutual investment funds.

Another sizeable if not precisely calculable source of mortgage money lies in foundations, school and church endowments, and other trusts and endowments. Few of these now invest heavily in mortgages. But their interest is rising. How much money individuals will invest directly in FHA loans, now that a change in the rules makes this possible for the first time, is another imponderable. But it should help.

Inflation remains the big danger to housing

Inflation multiplies the nation's demands for cash. Even a modest inflation averaging 2% a year would make the total need for mortgage money at the end of the sixties more than 20% higher than the constant dollar estimates presented here. Substantial inflation, in short, would make it impossible to finance anything like the quantity of housing the US will want because inflation makes people shy away from long-term investments in fixed dollar assets like life insurance or savings accounts in banks or savings and loans and put their money instead into equity real estate holdings and stocks.

The real problems of the sixties will be 1) keeping people interested in saving money and 2) building houses and apartments with enough appeal in quality and price to entice an ever more value-conscious public.



Up to now, industrialization has been mostly piecemeal—and has not cut costs as much as many experts hoped.

But today you can see emerging a

NEW APPROACH TO TECHNOLOGY

and totally new materials, new tools,

new systems—and enormous savings—may result.

The new approach goes back to fundamentals, systematically questions every phase of the homebuilding process. Its prophet is the industrial engineer with his stopwatch (photo opposite).

Almost every industrial plant—making anything from automobiles to razor blades—has an industrial engineering department. Its job: search systematically in every part of the manufacturing process for new ways to increase quality or cut costs.

The need for such study in homebuilding is obvious. Says Alan Brockbank, chairman of NAHB's Research Institute: "Builders need to research the total house, and until they do, they cannot expect to make their product completely competitive with all the things the public spends money on." Building costs have increased six fold in the last 70 years. 275% since just before World War II—the worst showing of any major industry. Again and again, new systems have been developed which turn out to save much less in practice than on paper.

A major reason for this poor showing: housing spends less than any other major industry on research—less than ½% of gross—and most of this is spent by materials manufacturers, not by builders.

And almost no money has been spent in studying the fundamental problem of whether housing is, after all, building the right product with the right production set-up and the right materials. This is the goal of the new approach to technology.



가 보는 보내는 내용이 있어요? 이렇게 되는 사람들이 되었다는 사람들이 살아 되었다. 그는 수 있었다는 시험을 하는 것은 사람들이 없다.

Industrialization has sharply increased labor productivit

Any engineering analysis of whether housing is indeed producing the right product with the right production set-up starts with one almost universally true fact: labor working in a plant is more productive than labor working in the field.

Unit labor costs are lower in the shop than in the field because men on a production line 1) work under controlled conditions, 2) can be supplied with labor-saving production equipment that cannot be used in the field, 3) can be supervised more effectively with fewer supervisors, 4) can specialize on fewer operations than is generally possible in the field, 5) can have their materials brought to them—instead of having to move to the materials, and 6) are paced by the flow of work along the line. Further, some building trade unions now have lower wage rates for year-round in-plant work.

Quoting from a recent study made by his company, Homasote Vice President Vaux Wilson points out: "For a house of 1,040 sq ft, it takes 227 manhours to produce all the wall and roof components [in a plant] and 65 manhours to erect them. If the same work were all done on the site, it would take 496 manhours . . . at \$3 an hour \$612 is saved."

The efficiency of in-plant labor has done more than anything else to change the way houses are built

The leading home manufacturers have long capitalized on the efficiency of in-plant labor—by setting up production lines like the one shown above. And as H&H reported last month, more and more builders are signing up as dealers. More and more leading builders like Bob Lusk (see p 13: John Long of Phoenix, Abe Johns of Tampa, Dave Fox Dallas, Clayton Powell of Savannah, Andy Place of Sou Bend, and Fischer & Frichtel of St Louis are building more and more of the house in their own plants. And more a more builders are buying more and more components.

The goal of all these builders is the same—to get maximus advantage from the efficiency of in-plant labor, minimize of pensive on-site labor—and thus cut total building costs.

But housing is still not using efficient in-plant lab to build enough of the house

Neither the manufactured-house approach nor the component approach has yet done much to solve the problem of hon-site labor costs for foundations, finishing, and mechanica And these three elements account for at least half the cost a house. At least so far, the problem of joints between pan and the possibility of damage have held back development in-plant finishing. Only in the last year have studies sho any alternate to laboriously constructed foundations. A licensing laws, codes, and vested interests continue to heack prefabricated mechanical components.

Yet if in-plant labor could be used on these jobs, the sings would be enormous. Prefabber Don Scholz reports the in the plant, we paint a house at a fraction of on-site convecan beat the cost of on-site plumbing by a third, and halve the cost of on-site heating installation."



V PANELS are made on efficient, cost-cutting equipment. This is Clark Industries' shop for production of foam-core sandwich panels.

. and developed new, better, and lower cost materials

gineering analysis of homebuilding will also start with this t: new materials and new finishes are now available that geared specifically to in-plant fabrication.

And these new materials are now available at competitive tes. For example, Clark Industries of Columbus, Ohio are non-loadbearing interior partitions (shown above) at a sq ft in carload lots. These partitions have $\frac{1}{4}$ " drywall es, foam cores, are 2" thick, are more effective as sound deners and more resistant to damage than conventionally it interior partitions. Clark also offers load-bearing exor partitions, with $\frac{1}{4}$ " plywood both sides, for 42ϕ a ft. Since these panels can be placed quickly on the job h a minimum of labor, these prices are at least competitive h any other system.

Though these polystyrene-foam panels are the first to reach market, a host of competitive panels are being readied. sic materials producers, with big investments in wood fiber, osum, aluminum, and other materials, are getting close to educing panels that are competitive with the lowest convental-building costs.

While these panels use relatively high-cost materials, they is be produced at competitive costs because they are made efficient in-plant production machinery (see photo above). It is a manufacturer had high enough volume to justify h-speed mass-production machinery, manufacturing costs and therefore panel prices) could almost surely be cut.

Factory-applied finishes can make the new panel systems on more competitive. Baked-on acrylic finishes—now used

on aluminum siding—have already proved themselves in the market. Even tougher and longer lasting than these finishes are some new sheet-form finishing materials, new hypalon roofing materials, and urethane floor finishes (see New Products, p 196. These finishes all have to be applied under controlled factory conditions.

In a test house, Pittsburgh Builder Arch Schwotzer cut costs \$801 by using factory-made panels

The house is identical to one of Schwotzer's standard models except that Koppers Dylite wall panels were substituted for his own shop-built wall panels. Here is his breakdown of the \$801 savings: unskilled manual labor was cut \$59; rough carpentry, \$78. He needed \$39 less rough-finish hardware, \$1,734 less lumber, \$24 less millwork, \$20 less nails. Because they are incorporated in the panel package, he eliminated \$167 in drywall, \$451 in windows, \$72 in lintels, \$185 in sliding glass doors. He paid \$1,734 plus \$205 shipping for panels. Finish carpentry cost \$25 more in the panelized house and electrical work cost \$60 more because, says Schwotzer, "the carpenters were not used to the trim and door systems, and the electricians were not familiar with the built-in raceway."

But Schwotzer figures he could cut down or eliminate these cost increases and get a greater total saving if he were set up to use the new panels on a routine basis. He also figures he would not reach absolute minimum cost until he had built 40 identical houses.

TIME STUDY OBSERVATION SHEET lists activities of one carpenter for 10-min period. Photos opposite show actual activity as data was recorded.

26

The next step in industrialization—a thorough study of

Just two months ago, industrial engineers working with NAHB and Koppers began the most detailed study of how houses are built that has ever been undertaken.

Pare

During a two-week period in November, as Hampton, Va. Builder Paul Bickford erected 14 identical houses with Koppers foam-core walls, the engineers recorded in great detail every operation the men on the job performed—and how long it took them to do it.

The time-study observation sheet above shows one small part of this study, recorded as a crew sheathed a roof. It covers the work of a single carpenter for a ten-minute period (see column headed READING)—from 47.01 minutes on the engineer's stopwatch to 57.00 minutes. As the man worked, the engineer recorded what he did in the column headed ELEMENT DESCRIPTION, the time at which he completed the operation in the column headed READING.

The ELEMENT TIME—the time it took to perform each operation—is simply the difference between subsequent readings.

During the two-week study, engineers completed over 250 such observation sheets—a mass of data that forms a detailed, step-by-step and minute-by-minute record of just how Bickford's crews built the test houses.

These time sheets are supplemented by stop-motion films (see p 160). A special camera took one exposure every three seconds as one house was erected and closed in. The 7,000 photographs show the entire crew working—will be used in conjunction with the time-study observation sheets in analyz-

ing every detail of the building process.

The observation sheets and the stop-motion film add up to the most complete record of how a house is built that has ever been assembled.

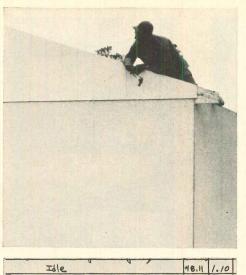
The data collected is now being carefully analyzed by the industrial engineers

They are now studying the time sheets line by line, and the films frame by frame. With this preliminary analysis, they hope to do three things:

- 1. Answer some of the specific questions posed by the sponsors of the project (see below).
- 2. Find out what operations in the homebuilding process might most profitably be studied in greater detail.
- 3. Develop new recording and analytical methods specifically suited to studying building operations.

Up to now, time study has been used mostly to study more or less repetitive in-plant manufacturing operations—in which one man or a small crew perform a job under controlled and highly organized conditions, usually within a relatively brief time span. As one of the project engineers pointed out: "Even though our basic techniques can be applied to any process, we often need to develop specific recording and measuring proc-

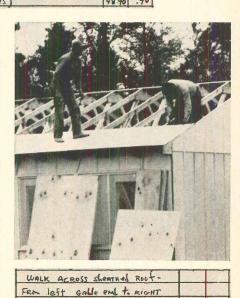












the whole building process-is now getting underway

to study new projects—like homebuilding—more meanfully."

is first study will help establish at least rough formance standards on present building methods

Says John King, NAHB Research Services Director: "The ic purpose of the study is to find better ways to reduce onlabor." With this and future studies, NAHB hopes to despect time and cost standards for many specific in-the-field erations. How long does it take to trim a gable, install all panel, hang a door, or sheath a roof? Analysis of cost ounting does not give this kind of specific information besee one crew or sub does a great many lumped-together is each day.

f the study can establish standards of time and labor for ailed operations, the data can be used in two ways:

1. A builder can compare his own performance to the data, if find out where he is getting substandard performance.

2. A manufacturer can use the data to evaluate new prods or systems. Does his new product eliminate enough labor justify its cost?

The study will also show exactly—rather than theoretically now a representative panel system (Koppers) goes together terms of time and labor. It will show just how long it takes

to raise a panel, install splines, nail siding overhangs to the sill, attach the plates, and so on. Says Bernard Sarchet, housing and panel development manager of Koppers: "One of our big objectives in helping to sponsor this test is to study the performance of our panels in the field. Even though we have a code-approved building system, we know it can be made better—and this study may show us where to concentrate our developmental efforts."

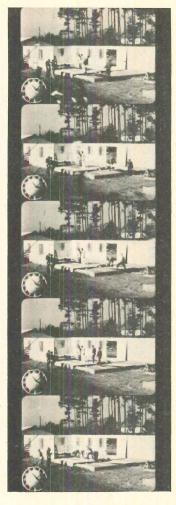
"But," says King, "if this preliminary study does nothing more than emphasize the value of this kind of detailed analysis . . . we will have done a lot for the future of homebuilding."

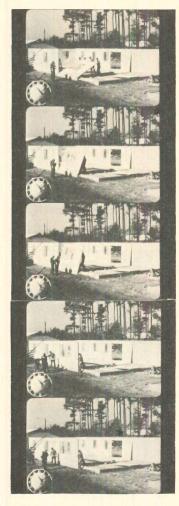
The engineer in charge of the project points out that the time study is just the first fact-finding stage of the job. "This is the phase of industrial engineering which we call work study. Work study gives us the facts—the what, where, who, when, and how of the job.

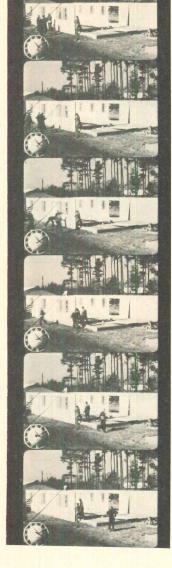
"With the facts you can determine how long it takes an average man (or an average crew of men) to do a specific job under normal conditions, with allowances for rest and unavoidable delay. And the operation can be given a standard cost by combining time, labor rates, material costs, and an allowance to cover amortization of equipment.

"But knowing exactly how the job is done now is just the first step in the industrial engineering job. The next step is to start looking for ways to do the job better—to start asking 'Why?'."









STOP-MOTION FILM is made by special camera which takes one exposure every three seconds. Films show entire crew at work, are used in conjunction with time study observation sheets in analyzing job.

This systematic study of the building process will show

As more and more detailed data like the NAHB time study and stop-motion film shown above become available, industrial engineers and building experts will have a better opportunity than ever to search for waste motion and inefficient operations.

The basic technique of spotting inefficiencies is to question systematically every detail of the present operation: product design, tools, equipment, supervision, scheduling, materials, materials handling, quality control, labor utilization. The engineers on the NAHB project, for example, can ask questions like these about:

Labor utilization: Would it save money to use more expensive but more skilled labor, or less expensive but less skilled labor? Would it save labor to shop assemble into bigger units? To pretrim in the plant?

Is the work of different crew members balanced? Or does one man stand idle waiting for another to finish a job before he can go back to work? Are the men wasting time and energy because no one told them the best way to do the job? Are unexpected bottlenecks or delivery delays wasting labor? Would more supervision keep the men productive?

Tools: Is a hammer the best way to fasten parts together? Would a power nailer pay off? Or an adhesive gun?

Is a flat-bed truck the best way to bring components to the site? Would a fork-lift truck or a crane pay for itself by permitting the use of bigger parts? Could special jigs be used to speed the positioning of parts—establish truss spacing, footing heights, outlet-box locations? Could jigs be used to hold things

that men are being paid to hold under the present system?

Scheduling: Does the schedule keep the job running smooth ly? Is it realistic? Or does it allow four hours for a 90-minute job because a sub is never on time? Might it cut total costs to use a prompt sub even if he charged more?

Is the schedule followed? Do materials arrive at the specified time? If not, can this be corrected? Do deliveries contain everything ordered? Would an experienced checker pay off

Are materials unloaded in the right place, so men don' have to go and get what they need whenever they run out o material? Could a laborer be used to keep skilled worker supplied with materials?

Materials: Would more finished materials be cheaper in the long run, even though more expensive to buy?

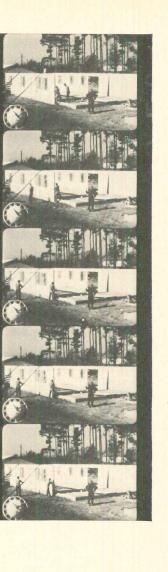
Do foundations have to be made out of concrete blocks o poured concrete? Is there anyway a foundation could be madin a plant? Or could plastics or cementious materials be field sprayed?

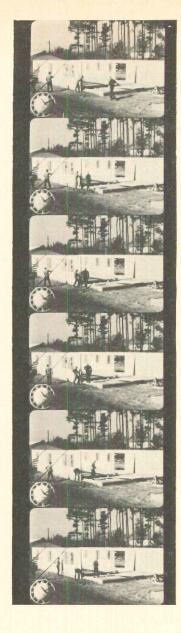
Are nails the best fasteners? Is it possible to use clips adhesives, or tapes?

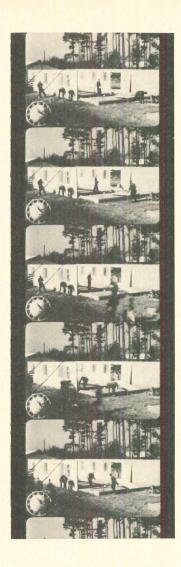
The house itself: Are the parts of the house designed properly? Is a door with hinges and hardware the best way to provide an openable closure in a wall?

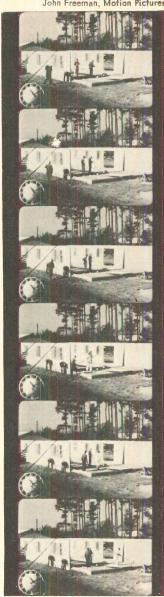
Are the parts designed to work together? What about th joints between panels? What about the fastening systems?

Could trim be eliminated by building the house to close









where the money goes—and where big savings are possible

olerances? Would better quality control help the problem? Though questions like these have of course been asked beore, the data now available make really accurate answers ossible for the first time.

Questioning the whole building process, engineers can pinpoint and rate housing's cost problems

As more and more cost data (on in-plant as well as onite operations) become available, engineers and builders will be able not only to spot high-cost operations, but 1) find out what the potential savings would be if a better method of doing the job can be developed, and 2) establish an order of priority for future development and research in new methods, new tools, new materials, and new systems.

In factory management, industrial engineers—trained to question every detail of the product and the way it is manufactured, and to solve the high-cost problems first—are expected to save ten times their salary every year. "But in a field that has had as little study as homebuilding," says one of the engineers on the NAHB project, "you can expect much greater savings."

Want to know more about the industrial engineering approach?

You can read the basic textbooks. Two of the best are 'The Industrial Engineering Handbook" by H. B. Maynard (McGraw-Hill) and "Motion and Time Study" by Ralph M. Barnes (John Wiley & Sons).

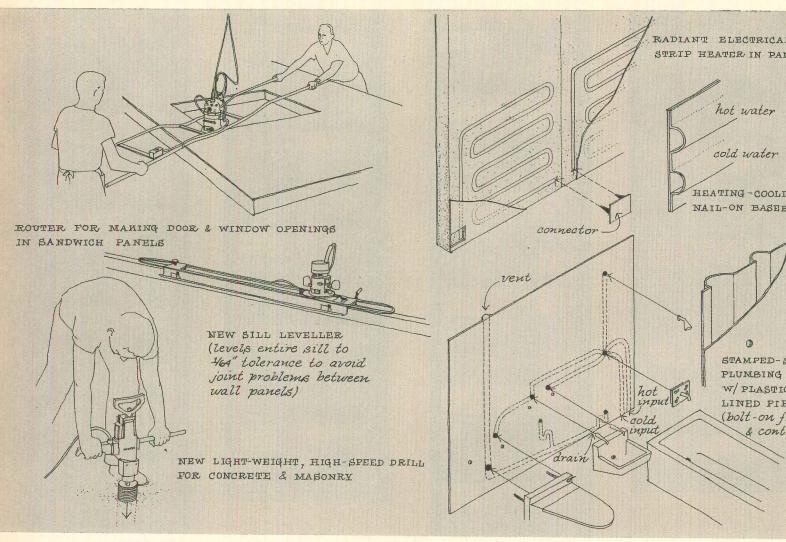
You can attend the regular one-day seminars conducted by most of the 111 local chapters of the American Institute of Industrial Engineers. They feature top men, and the small groups permit some individual attention to specific problems.

You can sign up for a one- to three-week summer course offered by some engineering schools (like Washington University in St Louis) and by some consultants (Allen H. Mogensen, Box 30, Lake Placid, N.Y.).

You might consider retaining a consulting industrial engineer, or hiring a full-time industrial engineer.

How do you find one? In addition to the usual sources (newspaper ads, engineering employment agencies, classified phone directories), the American Institute of Industrial Engineers, 32 W 40th St, NYC 18, has a placement service. It will also send the names of consultants. Both services are free.

What does an industrial engineer cost? Fresh out of school, industrial engineers earn about \$6,500 a year, after five years earn from \$8,000 to \$10,000. Consultants fees vary greatly.



NEW TOOLS AND COMPONENTS, some already on the market and some still in the "blue-sky" stage could cut costs by reducing labor.

The next step will be to develop new methods, new tools

Once housing professionals have a clearer idea of exactly where the biggest cost problems lie—and just how much can be saved by solving them—research and development by builders and architects and manufacturers can be given new direction.

It is not hard to imagine the development of a host of new tools, new systems for heating and plumbing a house, new joint systems for panels, new foundations, new forms of materials like those shown in drawing above.

Nor is it hard to imagine the development of totally new building systems that meet these goals set up by the NAHB Research Insitute: "The ideal building system must:

- "1. Reduce on-site labor and the number of required on-site skills.
- "2. Increase the use of multiple-function items.
- "3. Reduce the total weight of house for lower cost transport.
- "4. Improve structural connections and fasteners.
- "5. Reduce or minimize the effects of weather on building.
- "6. Improve materials handling and use of tools at the
- "7. Fit an industry-wide standardization that works for the whole house."

If the savings of new tools, new methods, new materials, new systems, and even new design concepts can be proven,

by the force of their logic these new ideas should gain a ceptance by housing professionals and the public alike.

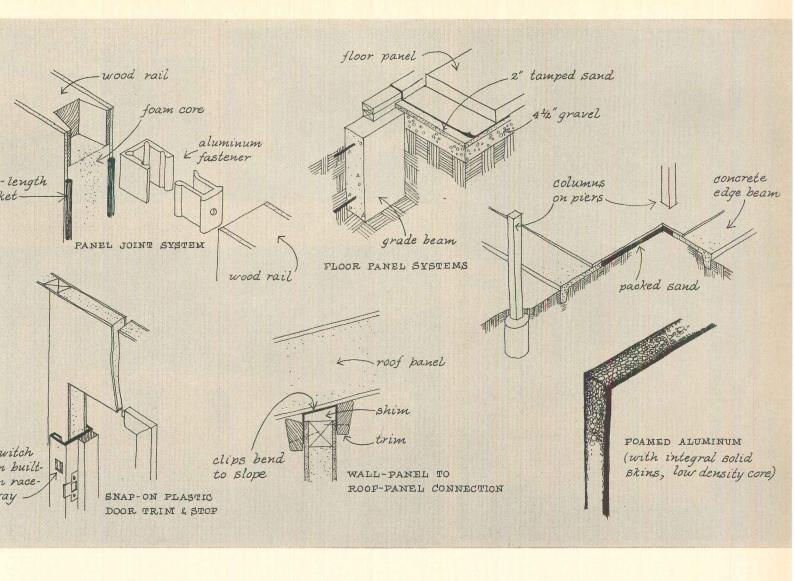
One of the great challenges is the need for materials suited to industrialization

Even the builders and home manufacturers with the me industrialized operations are still working mostly with to same materials—geared to site fabrication and dimension for manual handling—that builders have been using for year. What they now need and will need even more in the future is materials geared to in-plant machine production of the parts. These new materials might be sheets, coils, big sandwing panels, or big stressed skin panels.

There are two reasons big sizes are desirable in these nematerials:

- 1. It takes four men only 11 seconds longer to position 14'-long component than it takes two men to position a component. This is a savings of 18 manhours per house f the exterior wall alone.
- 2. Today, most finishing is done in the field because of t problem of finishing joints between panels and other materia. The bigger the sheets of material that can be used, the few the joints, and the more sense it makes to finish the part the plant.

These new materials may well encourage new systems. Sa Bernard Sarchet of Koppers: "We know sandwich panels ha



and new materials that attack the greatest inefficiencies

great future, but we need to learn how to use them to best dvantage. We think the panels must not be treated simply as subsitute for lumber house parts. The panels show cost adantages right now, but we feel that the real savings will go those builders who reorganize their operations specifically use sandwich panels. The NAHB-Koppers-Bickford study p 158) should go a long way toward showing just how to set p such an organization—and show us where to concentrate our development efforts."

Another great challenge is the need for new mechanical components

About a third of the cost of a finished house now lies in lectrical, plumbing, and heating work. Three-fourths of this ost is field labor. Yet almost no steps have been taken to industrialize these operations.

As NAHB's Ralph Johnson pointed out at the BRI meeting ast month: "It is not practical to try to design one mechanical fore or even a plumbing tree to fit all house designs. But only ix slightly different cores (kitchen, bath, heat, and hot water backed up, in left- and right-versions, with one bath, bath-and-half, and two baths) would fit a ½-million houses a year.

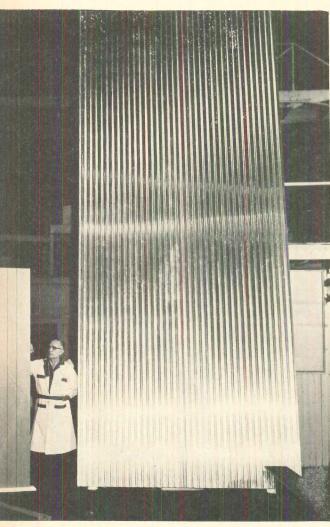
"This mechanical core should fit an industry-wide modular tandard. This means that outside dimensions of the mechanical component must be in even feet and dimensions in one direction should be limited to 8' for over-the-road shipments.

"The prefabricated mechanical component should provide for: one-stop installation so the unit can be set and connected in two hours or less; as much design flexibility as possible without giving the designers the problems of many outside finishes; easy repair and maintenance or "slip-in" substitution of a new subcomponent for a broken one; easier maintenance for the homeowner."

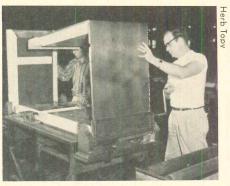
The standardization needed for industrialized homebuilding presents a big challenge to the architect

Said Architect Carl Koch at the BRI meeting in November, "Today many of us lack the imagination to harness the industrialized process by accepting the disciplines imposed by it . . . This lack is at least partially responsible for our failure to be effective in housing . . . Architects have always had to subscribe to one discipline or another—even in the Classic Greek period architects designed and built beautiful buildings using identical elements over and over again. Industrialized houses can have all the unity, beauty, and coherence of good architectural design, once the architects accept the discipline of the industrial process.

"We can do limitless things with new processes and new materials . . . By accepting—even encouraging the kind of discipline required to achieve efficient, economical, and beautiful industrialized components—we can harness industry to achieve our aims of providing an attractive, civilized environment at a price which everyone in America can afford."



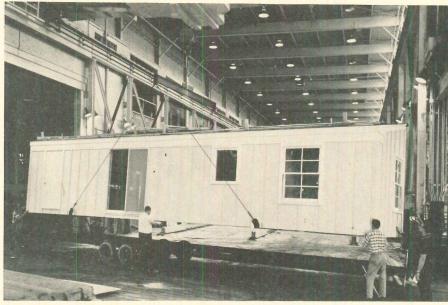
1. BIG SANDWICH PANELS, like this 8' x 20' Clarklite panel, could be used for a joint-free wall, or floor or roof.



2. PANELS COULD BE FOLDED by machine, like this unit used in refrigerator plants.



3. FLOOR FRAME could include ducts an plumbing lines, as in this Guerdin unit.



4. FACTORY-BUILT SECTION could be set on frame which would double as floor frame

and trailer used to haul house to site. Th is Don Scholz' production line.

The end result may well be a totally new building system

And, as it looks from here, there are plenty of reasons to expect that the new system will involve building and finishing either the complete house—or most of it—in the plant.

In a sense, it is unsound engineering to predict the results of the industrial engineering approach outlined in this story. But consider the evidence:

As reported in H&H last month (The All-Factory-Built House, p 88) Prefabber Don Scholz is now selling a 1,200 sq ft, all-factory-built house for \$2,000 less than a comparable conventionally prefabbed model. This house is completely trimmed, finished inside and out, plumbed and wired in the plant, shipped to the site in three sections. Since the materials used, and the way they are used, are nearly identical with a conventional house or conventional prefab, it is clear that the big savings in the all-factory-built houses are almost entirely in labor—and these are bigger labor savings than any other system developed so far.

Now consider the additional savings if some already developed, industrialized materials and techniques were fitted in:

1. Suppose the all-factory-built house, instead of being pieced together from hundreds of small pieces of lumber, assembled from a few big panels produced automatically. Foam-core panels are already being made in sizes up to 8'x20' (photo 1), could be made larger. These panels could be made prefinished inside and out, and might be cut and shaped into an almost finished wall or roof on automatic machinery now

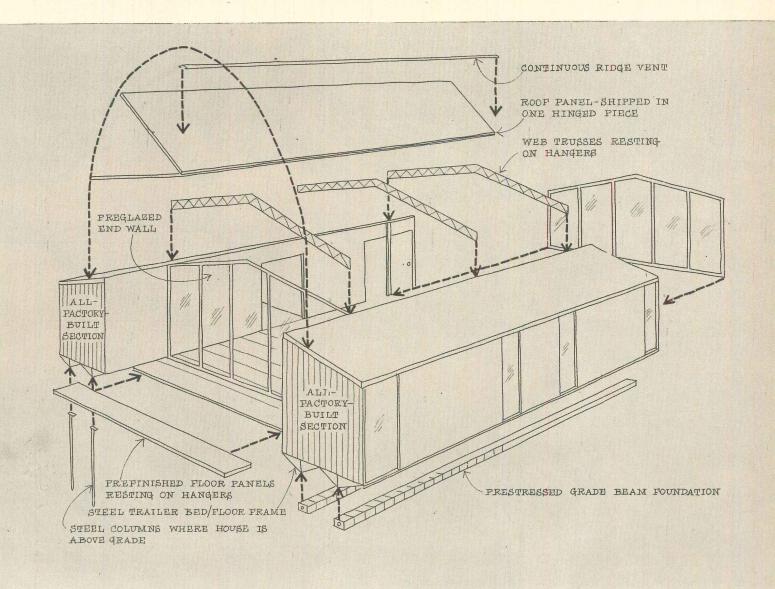
in use in appliance plants (photo 2). This would reduc the *amount* of in-plant labor needed to build the shell.

2. Suppose the house sections were mounted on a stee frame that included plant-assembled plumbing, wiring, an heating systems (photo 3). And suppose this frame wa equipped with wheels so the house sections could be pulled to the site as a trailer (photo 4).

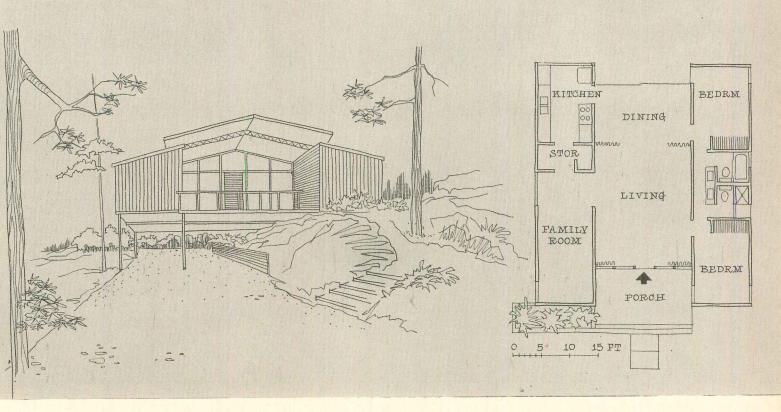
3. Suppose that at the site these all-factory-built section were lifted into place on minimum-cost grade-beam or col umn foundation (see drawing 5 opposite)—or perhaps ever "floated" directly on grade.

4. Suppose, as in the drawing, the two factory-finished sections were set parallel to each other (though they could be placed in any of several L or T or H arrangements) and the space between were bridged with plant-finished floor panels covered with a prefinished roof panel, and closed in with prefabbed window walls. This system which incorporates ideas from many sources) would not only take advantage of in-plant labor, but materials produced in a plant for in-plant assembly—and with a minimum of on-site labor would offer considerable design flexibility.

A house using many of these ideas has already been developed by Melody Home Mfg Co of Ft Worth. The lower drawings opposite are of a Melody model assembled of two all-factory-built sections—one with two bedrooms and bath, the other with a kitchen, and utility and family room—with a conventionally prefabbed living core between.



5. NEW SYSTEM might use all-factory-built sections including baths, utilities, kitchen, but (for design flexibility) living core assembled from big prefinished components.



/ENID



The day of hit-or-miss bulldozing is fast coming to an end-

thanks to the development of

NEW SCIENTIFIC EARTHMOVING

Today testing the soil is the first step

n preconditioning the site for industrialized homebuilding

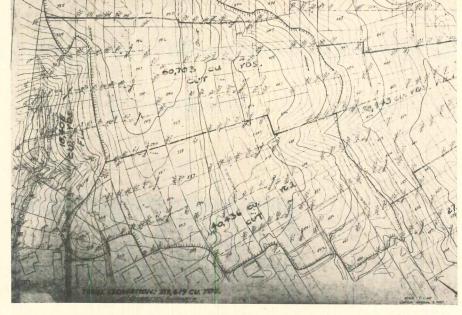
"Most builders concentrate so much on the structure of their houses that they lose sight of the important savings to be made right under their feet—by developing land on an efficient, scientific basis."

So says John Fischer of Fischer & Frichtel, St. Louis builders and developers. "Land and development costs—including off-site improvements like streets, storm and sanitary drainage—run from 18% to 23% of total cost," Fischer points out. "And rough or unknown soil conditions can cause variations and complications in foundations, slabs, streets, and sewers which pyramid development costs and lengthen the time and cost of building the house.

"In 1956, we decided to do something about these wide variations in lot costs. We started working with one of the outstanding soils engineers in the country, Henry M. Reitz, and we started buying our \$400,000 fleet of earthmoving machinery. Our aim was—and is today—to eliminate the variables; to industrialize our land preparation just as we have industrialized our houses [H&H, Mar '60]. Today, this move is saving us from 2% to 5% of the total cost of the house."

To see scientific earthmoving as Fischer & Frichtel practice it (and to see where the savings come from), turn the page.

Here is how to plan and carry out scientific earthmoving



1. You start with a plan for every cut the machines will make

This grading plan, drawn with 2' contour intervals, shows the volume of earth to be cut or filled by the earthmoving machines. Test borings made at strategic points over the entire area tell what types of soil will be encoun-

tered. Rock is located either by boring or by use of an electronic sounding device. Cost of preparing an elevation map like this averages about \$25 per acre, "but the costs are recovered 20 times over," says John Fischer.



2. You cut steep slopes only enough to get a buildable grade

The rubber-tired scraper is pushed over hills by a bulldozer. Loading the 15 cu yd scraper takes about one minute. With equipment like this, F&F move 4,000 yd of earth per day for 18ϕ to 20ϕ per yard, complete 450 lots per year. Before cuts are made, top soil is stripped and deposited out of the way.

If tests indicate rock in an excavation area, the hill is cut no deeper than 4' above the rock, so foundations can be dug without difficulty. (The tract shown is treeless. On tracts with trees, F&F plan contours to save big trees. And in any event, trees are moved in when the houses are finished.)



Photos: Arteaga

3. You replace the earth in 6-inch layers

The scraper spreads its 15-yd load of earth in long rows in the low areas that are to be built up. Earth can be deposited as quickly as it was scraped up—within ten minutes this mathine will have picked up another 15-yd load of earth and be epositing it in a line parallel to this row of earth. Earth is

systematically laid down in these narrow strips to form a 6" layer of fill. The area over which earth is spread is determined by the moisture content of the soil: when the soil is moist, it is spread over a large area for drying before it is compacted (as shown in the photo below).



4. You compact every layer to make it stable

A bulldozer blade levels the earth fill while a sheepsfoot amper, hauled behind, compacts it. The tamper is loaded with oil or sand, exerts a pressure of 4,500 psi on the fill. When the weather is hot and dry, the bulldozer hauls a double andem 50" diameter roller to get the proper compaction with

a single pass. Fills up to 40' deep (requiring something like 80 passes by the scraper) are sometimes made and compacted by this method. The fill is smoothed so it will not impound water. "The only contingency we cannot deal with is the weather," says John Fischer. "Rain shuts us down."





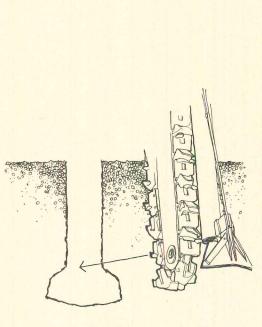


5. You test the degree of compaction of each layer

A soil engineer from Henry Reitz' engineering firm digs a nole with a small shovel (left), readies his core device (center), and pulls a test core of soil (right). Engineers are on the ob at all times, test each 6" layer for proper density (95% modified Proctor). The compacted soil is about 14% more

stable than the original ground, and its bearing capacity is proportionately higher. The dense stable soil, with a known consistency and content, makes all the earthmoving jobs that follow easier, quicker, and less costly (to see how this soil preparation saves money, turn the page).

Here are five benefits you gain from scientific earthmoving





1. You can dig a foundation right into the earth without formwork

In conditioned soil, a special "bell-bottom" spinner (see drawing) attached to the trencher cuts a smooth-walled 8"-wide trench with a 16"-wide pyramidal base for a footing. (Developed by Strauss Bros, Lincoln, Nebr. builders, the attachment is made by the Gordon Morgan Machine Co of Lincoln. It

sells for \$1,500). The smooth-walled trench eliminates the need for all formwork in pouring the foundation, and reduces labor to less than 5% of the labor required for a conventional square-bottom foundation built with forms. The trencher and attachment save over \$150 per house, F&F figure.

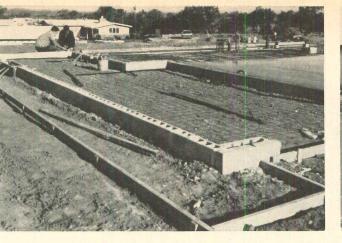




2. You can pour identical foundations on every site

Concrete is poured from ready-mix truck into the smoothsided trench up to the level indicated by the string. Since all soil has been compacted or tested for a standard compaction, the same foundation specifications can be used on every site. The bell-bottom foundation requires 25% less concrete, but

is 15% stronger than conventional square-bottomed footings with poured concrete foundation walls, say F&F. An extra saving: the cost of dismantling formwork, and cleaning and readying it for re-use. Total savings on pouring each foundation run from \$30 to \$50, says John Fischer.





Photos: Arteaga

3. You can prepare and pour your slab at lower cost

oncrete blocks are used to cap the foundation wall and form retaining perimeter for the wire-mesh reinforced concrete ab. Earth deposited by the trencher was previously spread at to form a slope for drainage around the slab.

Since the area around the slab has been smoothed, equip-

ment can be brought close to the edge and men don't have to fight their way over holes and mounds to do their work. "The efficiency gained is hard to measure in dollars," says Fischer, "but we know we pour slabs faster and hence save money."





4. You can cut your utility trenches easier—and to standard depths

he backhoe used to dig trenches for the house sewer line orks quickly in the conditioned soil, should encounter no bstructions. Water lines are laid in the same trench, but connections to the house trap are made outside the trench to void seepage. Bigger trenchers used to cut trenches for

sewer and water mains can also work quickly since the machine operates on a continuous slope and can therefore dig to a standard depth. F&F save \$75 to \$125 a house because machines are not pitted against rough conditions and because water and sewer lines are in one trench.





5. You can lay safer streets for less money

Concrete for streets is poured directly on smoothed earth. The stability given the soil by the compaction eliminates the need for special reinforcing over ground which would not otherwise be up to road-base standards. Steel forms used to nold the lanes of poured concrete become tracks for the pav-

ing machine (right) which spreads concrete, vibrates it to the proper consistency, and strikes it off at the right height. All street grades are 8% or under, considered safe in St Louis.

Total savings through scientific earthmoving average \$900 per house. /END



n today's tough market, old-style trial-and-error selling

is a sure way to go broke, Result:

NEW MARKETING TRENDS

Smart builders are now making more businesslike decisions—
all based on systematic analysis and planning instead of guesswork

"We've stopped guessing about our market," says big (and successful) Builder Bill Witt of Virginia Beach. "Now we analyze it carefully—and use the results to guide everything from land planning and house design to advertising copy and sales training."

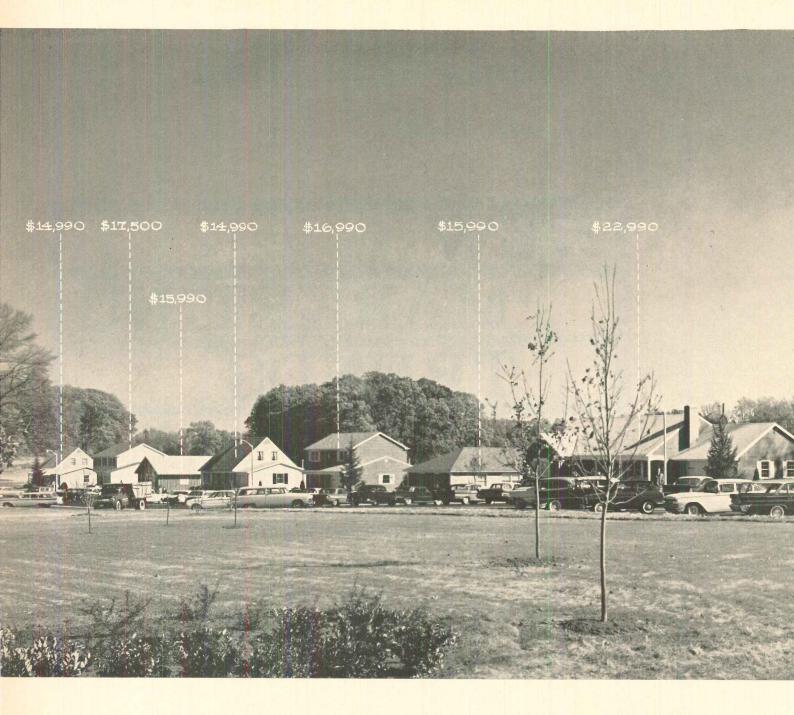
Witt's businesslike approach to marketing is characteristic of today's successful builder—he knows he can no longer afford to try something and, if that doesn't work, try something else.

Nowhere were the trends to analysis and planning more evident than at last fall's NAHB Marketing Seminar in Washington. More than 100 builders paid \$155 apiece to sharpen their marketing skills. Among the scheduled discussion topics: "Knowing your market," "Reaching your market," "Selling your market." One unscheduled (and after-hours) topic: the latest success of Builder Bill Levitt.

Levitt—an old hand at knowing, reaching, and selling his market—is selling faster than any builder in the country. To see how he is doing it, turn the page.

But Levitt's success in today's tough market is not unique. Although many builders are bogged down, some are selling well in almost every area. To see what separates the fast sellers from the slow, turn to the cross-country report starting on p 181.

And some builders are moving into new fields to fill in sales dips and spread their overhead. To see how a top merchant builder is succeeding in the big modernization market, turn to p 189.



More builders have traveled more miles to shop Levitt's new models because

These are the fastest selling houses in today's

At his new Belair, Md. community outside Washington, Bill Levitt averaging almost ten sales a day. His record: 302 sales in the fir week after his October opening (a new high for him), 96 more the next two days, 800 sales by the year's end.

Levitt's success—when housing sales are stickier than at artime since World War II—is drawing builders from all over the country to Belair. In November, for example, more than 10 builders, in Washington for a marketing seminar at the Nation Housing Center, spent an evening shopping his models.

The question in every visiting builder's mind: Why is Levitt se





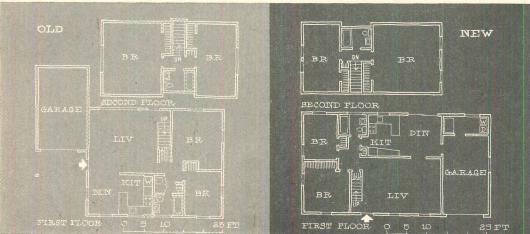
LEVITT'S NEW LINE of houses in Belair, Md. is the broadest he has ever offered. Belair advertising (above) stresses big values in new Levitt models.

ore-house-for-the-money market

so well? Levitt's answer: "We're selling well because our dollar-dollar value is better than anything else available in the area." Levitt is also selling well because he is aiming at the growing ddle-income market. His lowest-price Belair model (\$14,990) is for only \$510 less than the highest-price house offered a year of at Levittown, N. J. His new top price (\$27,500) is the highest ce he built custom houses in the 1930s.

But whatever Levitt's prices, builders who shopped his houses see that he is adding sales because he is adding value.





New 11/2-story (plan, near left) has 1,54 sq ft-110 sq ft more than old model (plan far left). Plan changes in new model shifte living room from rear to front, entry from side to front, kitchen and both bathroom from front to rear. Exterior variations includ Dutch Colonial (above) and Cape Co (below). Basic price (\$14,990) includes a conditioning and 8,400 sq ft lot.



Reason No. 1 for fast Sales;

Levitt is offering bigger, better looking, more varied houses

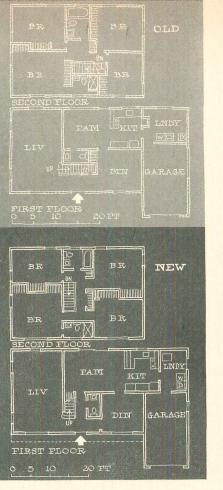


Every model at Levitt's new Belair community is larger than its predecessor at Levittown, N.J. (except the "Manor House" and "Country Clubber," late editions to his line).

And at Belair, Levitt has doubled the variety of houses available to buyers. A year ago he offered a choice of four basic models plus three variations. Now the choice is six models plus eight variations, which range from 1,400 to 2,508 sq ft. Four have four bedrooms, four have 21/2 or more baths (one has three baths, one 31/2).

Most Belair lots are bigger. Minimur size is 8,400 sq ft compared with 6,50 sq ft at Levittown, N.J.

Levitt's new designs (mostly trad tional) are better looking than his previous houses because they are closer t authentic period styling. One mode (above) is Dutch Colonial in character Another (top, opposite) has a garriso front. A third (bottom, opposite) ha the two-story pillars of a Southern Co lonial mansion. Variations (renderings include Cape Cod, French provincia and New England farmhouse designs.





New two-story (plan at left) has 1,854 sq ft—100 sq ft more than previous version (plan at top). In new model, stairs and powder room were relocated to provide true center hall, family room was enlarged by extending part of kitchen into laundry area behind garage. Four-bedroom house has trim garrison front (second-story windows align with first-floor door and windows), sells for \$17,500 with air conditioning and 8,400 sq ft lot. Three-bedroom version (right) has 1,772 sq ft and same first-floor plan, sells for \$16,990.



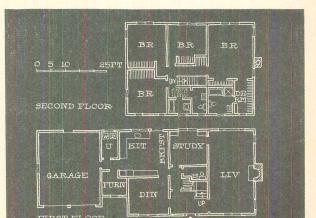


Luxury two-story (called "The Manor Iouse") is Levitt's largest and highest-priced nodel since he built custom houses before Vorld War II. It has 2,508 sq ft, sells for 27,500 with air conditioning, all appliances,

and 12,000 sq ft lot. Added to Levittown, N.J. line last year (H&H, Jan '60), it was not redesigned for Levitt's Belair opening. Pillared version above is one of four variations offered (two more below).











FAMILY-SIZE KITCHEN in \$27,500 "Manor House" has more than enough space for table and chairs plus plenty of counters and cabinets and full line of applications.

Reason No.2 for fast sales:

Levitt is loading his houses with extras at no extra price





BROCHURE HIGHLIGHTS EXTRA VALUE at Belair, includes questionnaire so buyers can check Levitt's houses against others.

"The price we say is the price you pay" —Levitt's sales slogan at Belair—is not just a catchy phrase.

It drives home the point that the basic price of every house includes: 1) air conditioning, 2) a built-in TV-FM antenna, and 3) kitchen and laundry appliances worth from \$1,000 in a \$14,990 model to \$1,500 in top-priced models. And in Belair's higher-priced models the basic price includes built-in features like bookcases, china cabinets, and ironing boards.

Appliances in all Levitt's new models include a range, oven, refrigerator, exhaust fan, clothes washer and dry (which keeps the community free unsightly clothes lines). In the 11/2-sto "Country Clubber" (\$22,990) Lev adds a disposer, dishwasher, and com nation refrigerator-freezer. And in \$27,500 "Manor House" he includes large double oven with clock and au matic timer.

To assure prospects that they do r pay extra for appliances displayed his model houses, Levitt posts a sign the kitchen of every model: "All t equipment you see in this house is cluded in its price."



FOLD-OUT IRONING BOARD (with sleeve-pressing attachment), washer, dryer, and cabinets are standard equipment in \$22,990 model.

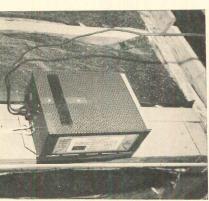


UXURY BATHS in higher-price models have g mirror, vanity top, tub plus shower stall.





PULL-DOWN STAIRS lead to 500 sq ft attic in "Manor House"—useful for storage in basementless model.



on is installed in attic of every Levitt model.



IOW MANY APPLIANCES can you count in his kitchen in Levitt's \$22,990 "Country Clubber"? Photo shows oven, refrigerator, ange, dishwasher. Not shown: exhaust fan nd garbage disposer. Cabinets—above and nder snack bar—are accessible from both itchen and breakfast area in foreground.

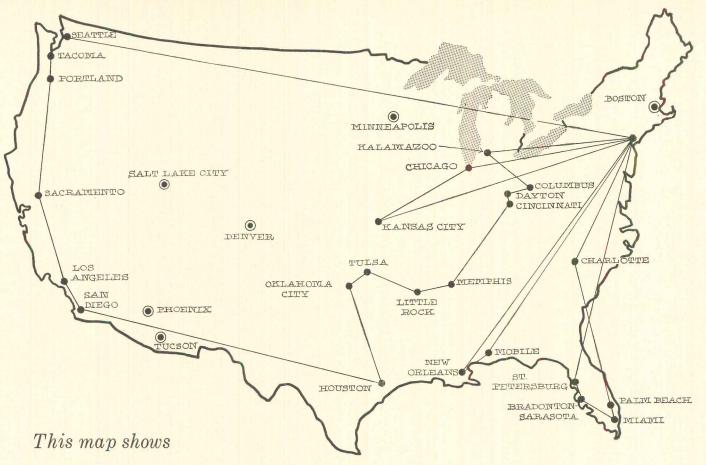
Here is a recap of Levitt's values—old models vs new

(ALL NEW MODELS ARE COMPARED WITH HOUSES PREVIOUSLY PUBLISHED IN HOUSE & HOME)

OLD MODEL	SQ FT	PRICE OF OLD MODEL	NEW MODEL	SQ FT	PRICE OF NEW MODEL	ADDED FEATURES
(SEE H&H, AUQ '58)	1 <u>4</u> 19	\$11,990	The state of the s	1,548	\$14,990	CLOTHES DRYER SEPARATE LAUNDRY ROOM SLIDING GLASS DOORS AIR CONDITIONING BIGGER LOT TV-FM ANTENNA
(SEE H&H, SEPT '59)	1,400	\$13,240		1,400	\$15,990	CLOTHES DRYER AIR CONDITIONING BIGGER LOT TV- FM ANTENNA SEPARATE LAUNDRY ROOM
(SEE H&H, AUG '58)	1,700	\$15,990		1,772	\$16,990	TRUE CENTER HALL BIGGER FAMILY ROOM AIR CONDITIONING BIGGER LOT. TV-FM ANTENNA
(SEE H&H, SEPT '59)	1,770	\$14,500		1,854	\$17,000	TRUE CENTER HALL BIGGER FAMILY ROOM AIR CONDITIONING BIGGER LOT TV- FM ANTENNA

AND HERE ARE NEW MODELS FOR WHICH NO COMPARISON IS AVAILABLE

(SEE ALSO H&H, NOV 60, P.110-111)	2,350	\$22,990	AIR CONDITIONING 12,000 SQ FT LOT TV-FM ANTENNA BUILT-IN OVEN & RANGE DISHWASHER CLOTHES WASHER & DRYER GARBAGE DISPOSER 2-CAR GARAGE COMB REFRIG/FREEZER 50 GAL WATER HEATER
(SEE ALSO H& H, JAN'60)	2,508	\$27,500	AIR CONDITIONING TV - FM ANTENNA 12,000 SQ FT LOT RANGE & VENT HOOD DOUBLE WALL OVEN CLOTHES WASHER & DRYER GARBAGE DISPOSER DISHWASHER COMB REPRIG/FREEZER LIBRARY 3 BATHS PLUS POWDER RM 2 - CAR GARAGE 50 QAL WATER HEATER



the 30 cities checked in the last 60 days by House & Home's Carl Norcross who reports

"From coast-to-coast, everywhere some builders have found the answer to today's market"

In a dozen years of traveling and studying the housing market I have never seen competition like today's.

And I have never seen builders so flexible, so quick to make changes in their houses, so quick to discard old ideas that no longer work, so quick to experiment with new ideas. So much is happening in most cities today that if you have not visited them since Labor Day, you probably don't know what is going on—who is selling and who is not.

I've learned that to sell houses in this market requires experience, skill, and perhaps above all, ingenuity. Buyers often don't know what they want until an ingenious builder offers it to them.

I've also learned that the big word today is "value." And by value I mean quality at work. Builders who are selling well—and there are many—have achieved a competitive advantage because they are giving more value than other builders. On the next page you will find a city-by-city summary of what I have seen successful builders doing to meet today's competition.

In 30 cities . . . from coast to coast

BOSTON—where sales are as good as last year

"Business is good and we're lucky up here," said the local HBA's Robert McPeck. "Sales are as good as last year but there are more 'pencil-and-paper' buyers who shop and compare. The big brokers who sell for so many builders—Martin Cerel, Middlesex Homes, and Robert Stone—are all selling. Says Stone's Emil Hanslin: "We've had a good spurt since election day. Quality and brand names have paid off this year—but buyers want volume too—a big house."

BRADENTON, FLA.—where a big man from Minnesota has moved in

I attended the opening of Orrin Thompson's Cape Vista (a few miles south of Bradenton on the main road to Sarasota) last month. Thompson is a 1,500-house builder from Minnesota who wants to grow bigger and decided Florida is the place to expand. I was impressed by his showmanship. He put his five new models (\$9,800 to \$13,100) and his sales office around a nicely landscaped oval, with a pool and fountain, on US 41 where up to 10,000 cars a day go past. His night lighting is especially good.

In his sales and display office he did some very smart things. Displays show photos of the four top men, tell about their building operation in Minnesota, their awards and achievements. Everything about the display builds confidence. Thompson invited 800 civic and business leaders and their wives to a preview party. At this writing it is too early to tell how sales are going. Later Thompson plans to move into other Florida towns (probably St Petersburg, Daytona, and Miami), taking on one new town a year.

CHARLOTTE, N.C.—where a top builder sets the pace

For years, Builder Charles Erwin has been doing most of the things that are now thought of as new ideas.

His system works so well that last year he sold over 800 houses at an average \$16,000 (including 150 over \$20,000). Here is a brief summary of what he does: He blankets the city;

builds in eight areas in all price classes; has ranches, splits, and hillside models; builds for whites or Negroes. He'll make custom changes.

Ervin has an 11-man sales force that is so persuasive people say, "If you don't want to buy a house, don't see Ervin." The top man, Mack Bost, sold slightly over 100 houses last year for a gross of \$1,750,000 and there were several other men right behind him. Sales Manager Jim Bolton does a superior job of market analysis and sales training. He gets real estate ads from all over the US which help him prepare his ads. Charles Ervin is a big, consistent advertiser and his all-day Sunday radio show of good music "is the best institutional advertising we've ever done."

When new plants or regional offices move to town, the Ervin task force goes into operation. They prepare beautiful presentations, go after personnel managers and key people like department heads.

NAHB Executive Officer Bob Barker showed me a number of splendid subdivisions. Charlotte has many fine houses and some of the most beautiful neighborhoods I've seen anywhere. There is no doubt that these attractive neighborhoods have been a major factor in influencing new firms to move here.

CHICAGO—where you can visit smart builders during the convention

Harry Quinn's Pacesetter Homes is worth seeing. An architect-turned-builder, Quinn hired Dick Brown of US Plywood as his marketing director, is now building houses priced from \$13,000 to \$80,000 in five areas. He also builds town houses and apartments. "We're heading for complete diversification in area and price," Brown told me. Quinn's broadening his line this month with a new subdivision of National prefabs. His sales staff finds prospects by direct mail and phone calls, and then sells them at the models. Their target: 500 sales this year, 800 next year.

Out in the northwest area I was impressed with the new models and new sales office at Centex' Elk Grove Village and by Jack Hoffman's Hoffmantown.

In the southwest, near Naperville, Jerry Concannon has a fascinating experiment underway. He hired market consultant Kelly Snow, and together they have created a whole new selling program: new Harnischfeger models, new furnishings, new landscaping, new sales manager, new ad agency, new salesmen, new sales training program. Everything is built around Snow's "motivated selling presentation." Snow is betting he can increase sales the way he did for Gene Glick last summer in Indianapolis (H&H, Dec). His unique technique: he writes a detailed analysis of each model and the types of families that are motivated to buy that model-and these analyses have proved very effective.

CINCINNATI—where spot building i paying off

Executive Officer Orville Brown gave me a six-point rundown on what build ers are doing to sell. They are 1) offer ing better terms, lower closing costs and secondary financing, 2) trying features like swim clubs and air conditioning, 3) doing more advertising, 4 offering more house, more space, more baths, 5) building in more than on location, 6) showing more models and more optional features. No one, he said has an inventory of more than one of two unsold houses.

Bill Hendy of the Arcose Co told m his firm was building in six places, ha grown from 102 sales in 1959 to 153 i 1960. "Today you don't force the market," he said, "You build 25 here, 4 there, and so on. Our problem is how t make as much per house on 25 as o 100. This year we are building 10% more at \$21,000 to \$30,000 and that much less at \$18,000 to \$21,000.

"Trade-ins are real big with usprobably 65% of our sales involve a old house. We've taken title to abou \$250,000 on trades, and we make man sales for owners. We now have a separate division of our realty company for handling old houses."

David Randman of Clearview tol me, "Our dollar volume is as good a last year. We hit something peopl wanted—houses at \$15,990 with community pool. We treated prospect courteously, gave them unlimited time showed them construction, and go away from high-pressure selling."

At Imperial Homes, I saw a group of Pease prefabs. Salesmen told me they's sold 150 since April 1. Best-seller was an 1,800 sq ft split level (counting garage and utility room) at \$17,995 on 60'x120' lot. It included a 12'x19' fir ished family room and a 10'x18' concrete patio, a folding snack bar, dishwasher, garbage grinder, range, an oven. It looked like quite a house to me They told me the Pease name helped t sell it.

I saw Bill Brennan's Heritage Hil which had opened in August 1959. Sales Manager Roy Leatherbury sai sales were a little less than the 1950 rate (July 40, August 31, September 220 October 12), but despite the slight drop Brennan raised prices \$500 on a 3-bed room house and a \$1,000 on a 4-bed room. He does a big advertising jowith spot announcements on TV an radio, consistent newspaper ads, an billboards. Brennan got good result from a contest on "I'd like to live it Heritage Hill because . . ." He als hired Jim Down's real estate research firm to analyze other possible markets.

COLUMBUS—where it takes ingenuit to sell

This is a very competitive marker Typical of successful builders there is Ernie Fritsche, who has improved his

Here is a profile of the

successful merchandiser of the '60s

1. He is a business man rather than a construction man

He is a student of business methods. He has built an organization of experts, and he delegates responsibilities. He has put his land buying, purchasing, and

accounting on a sound business basis. He travels, observes, learns, and adapts good ideas from other builders.

2. He is alert, flexible, fast moving

One of his outstanding characteristics is sensitivity to his changing local market. He can sense his prospects' often-vague desires for something new or different. He knows what price range, what style, and what area is selling best. Months before his competitors spot trends, he is capitalizing on them.

3. He is becoming more and more diversified

He has learned to grow, to spread his overhead, and to capitalize on his experience by building in more than one place.

He builds in more than one price class. To capture a larger segment of his local markets, he offers a wide range of houses—from compacts to Cadillacs.

He builds more than single-family houses. While houses are his bread-and-butter business, he also builds duplexes, apartments, motels, stores, shopping centers, small office buildings; and is beginning to get into the fast-growing and profitable home modernization business.

4. He moves into a new area with his eyes open

As he moves to a new town (especially if it is his first move to a new area) or goes into other new ventures, he depends on specialists from his own staff and from outside to provide him with facts on which

to base his major decisions. (Many builders who move into new areas or into new business ventures fail because they base their decisions on incomplete facts—or on wishful thinking.)

5. He has a marketing manager with a professional selling approach

He has employed a professional marketing director who knows market analysis, knows how to borrow good ideas from other selling organizations, knows

how to train a sales staff, and knows how to attract and sell prospects. Few successful builders are their own sales managers.

6. He knows that good location is still the No. 1 appeal

Good location has been talked about so much, we tend to take it for granted. But despite the relative scarcity of good close-in land, the smart merchandiser has either found a good location or created one —and has not followed the lead of builders who have become careless and bought land wherever it is easiest to get. He knows that prospects shop for neighborhoods before they shop for houses.

7. He has learned how to buy, finance, and develop good land

He knows that good land and economical land development is the key to his success. To finance large parcels he cannot handle himself he works with other builders—in partnerships or a corporation. He may cut development time and cost by owning earthmoving equipment.

8. He makes his neighborhoods a good place to live

He is doing better street layout, saving trees, paying more attention than ever to community facilities—for he knows that today's choosy buyers want more

than a good house; they want a good neighborhood. He is beginning to provide swimming pools, golf courses, green belt parks.

9. He goes out of his way to create good value

He knows that today the big word is "value." It means different things in different price classes and different areas; but whatever it means locally, the successful merchandiser is producing it. He knows that buyers are concious of high-quality materials and products; and that even if they plan to move up to a better house, in five years or so, they want a house with a high trade-in value.

10. He has learned that to sell today he must have fresh, new designs

He knows that never has there been such a premium on well designed houses with attractive exteriors, livable floor plans, space for an expanding family, indoor-outdoor living—but above all, some-

thing new and something better than families now have in their old houses. He is learning to work effectively with architects—he and his sales specialist working as a team with a creative designer.

11. He is doing a far better job of overall presentation

He sells from furnished models grouped in an attractive way, he has more models than he used to have, and he changes them more often. He is beginning to use the "continuous opening"—offering a new or changed model as often as once a month. He is quick to change a model that isn't selling. His sales office (even if it is in a garage) looks professional. His displays improve his corporate image and dem-

onstrate his good values. Everything he does is "o purpose"... to sell houses. What he spends on his presentation is in keeping with his over-all budget and he is careful not to go overboard. The chances are that he has tie-in promotions with national magazines and product manufacturers, but he is also aware that he must have something different from what he had last year and different from his competition.

12. He is putting new emphasis on "direct" selling

He knows that when there are fewer prospects, he must not lose a single one he might sell. So his marketing director is training salesmen to sell professionally—to analyze buyers' needs and wants and relate

them to a particular house. He knows that cancellations are still a major problem for builders, especiall in lower price ranges—and that better selling reduce cancellations.

13. He may subcontract his selling to a realtor, especially in a new town

In cities like Boston, Buffalo, Seattle, El Paso, Columbus or in Orange County, Calif. realtors may sell over half the new houses. Builders moving into a new

town or new area are quite likely to use a realtor t take advantage of his detailed knowledge of loca conditions.

14. He is making trade-ins an important selling approach

Almost every builder who is selling well today has some kind of trade-in program. If his houses are priced at over \$20,000 he is almost sure either to trade or help buyers sell their old houses. A big new

tie-in between builders and realtors has develope with the growing trend to trade-ins — realtors ar called in to help appraise and sell the old house s the new house sale can be completed.

15. He is a consistent advertiser

He has learned that the same business-getting techniques used by firms selling cars, air travel, cigarettes,

and cosmetics can be applied to his operation. So he tells his story loud and long every way he can.

16. He keeps his buyers happy with a post-selling program

He sells from 20% to 80% of his houses to friends or acquaintances of his past buyers. He adds hun-

dreds of people to his sales staff not only by givin value in the beginning, but by giving good service

17. He uses his local Parade of Homes to get prospects

He knows he gets prospects and eventual sales when a Parade arouses new-house interest among

thousands of local people. So he is generally in the Parade with the best house he can build.

18. He is alert to the most favorable financing plans

He knows that good financing always helps his salesmen's chances for getting a signature. So he takes advantage of FHA and VA provisions, moves into 203I housing if it suits him, perhaps into 213

cooperative financing. He may work out a soun system of secondary financing if he sells convention ally. Because he is reading the news, he is usual first to find new methods of financing.

19. He knows it is up to him to do something about high costs

He can't afford simply to pass along high building costs to consumers. So he has a program to reduce costs all along the line. To stay competitive he know he must build more efficiently.

hole marketing approach since I was ere two years ago. He now builds in to areas and two price classes: \$25,-00 to \$40,000 on the east side and 2,900 to \$16,750 on the west side. This year he will build apartments, may the pand to another city. To get facts a base his decisions on he has a market-g man who analyzes house sales in all arts of Columbus and other Ohio ties. Last year Ernie sold about 200 buses, aims at more this year.

I saw half-a-dozen other subdivisions, cluding two built by Jewel Homes. I lked with Jewel's president, Julius ohen, who also builds in Youngstown, incinnati, and Pittsburgh. He always lls through realtors because, he says, hey let me spread out and get experinced salesmen in any city. They also elp me find land. Over 50% of a builde's success depends on the salesman. Youngstown, one salesman named forris Olian sells one prospect out of our. How can you beat that?"

Bob Flath of Columbus Homebuilds estimated that 70% of his members all through realtors, so I called Realtor try Hackman to ask him how he ade sales. He said his firm sells for dozen builders, will soon add more. Our salesmen are better trained than he average, and we can pull prospects from sources builders can't reach," he had. "We opened some new houses tely and we spent six solid days studying them until we knew all the answers. The way are working three times as hard or make a deal today."

AYTON—where sales are slow and ompetition is keen

I visited Builder Dick Bowers at Normandy Farm Estates, south of town. He old me he'd opened in June and sold 0 houses by Thanksgiving, all over 20,000. He has two or three models, makes changes as buyers wish. For 22,000, buyers get 1,970 sq ft of living pace, plus a two-car garage and porch, on a half-acre lot. He uses two rechitects, Damon Whitmore or Dick o'Rourke, who also draw up changes.

"We have a clique going here," said sowers. "It takes \$5,000 to buy a house, and we don't use any second mortgages. We promote the idea that good people buy here—so if they have \$5,000, this is where they come. Our buyers are mostly age 32 to 40 who like living here, and they sell their friends."

The most significant thing Dick Bowers said was this: "We were educated
in a mass-construction system (at Huber
Homes) and learned how big builders
get their costs down. So I know what
hings ought to cost and what subs
charge. We know the good contractors,
and also know we get a better deal by
paying our bills on the 10th every
month. We also have learned that if you
do things right you don't get costly
callbacks. Our better methods may cut
as much as \$2,500 out of the cost of a
big house.

I drove nearby to see Don Huber's "Concept" subdivision where Sales Manager Bill Bachman said they had sold 92 houses since April 23, at \$15,650 to \$19,750. It was evening but everything was going full blast—lights were on, salesmen were at work, the models looked fine.

Bachman said they had more models than last year and are using the continuous opening. Adding new models from time to time stirs interest, he says. To get the name of every visitor they give away a \$140 TV set every three months, asking visitors to fill out a card. They also ask old buyers for friends' names. Salesmen find prospects by putting on parties and by calling at apartmonths, asking visitors to fill out a card. Apartment calls have produced 15 sales.

"Sitting around waiting for customers is in the past," said Bachman. "We're going to direct selling. You don't make the sale on these door to door calls, but you get them interested in coming out."

Builder Dean Schaffer told me he's selling to second- and third-time buyers and "almost every deal is a contingency—85% have an old house to be sold. I've taken 11 or 12 trades but I don't like them. It's a tricky business. I'm a basement man, but next year I'm going to give more square feet on a slab. I'll go to an L-shaped house with a two-car garage because that's better for boat owners."

Dick Brainard is another Dayton builder who doesn't like trades, but he takes them because "sales are down 30% and we're worrying and don't know what else to do. Recently we've lost money on all but one trade, and fortunately we made enough on that to give us a profit on all our trades." Brainard has his own realty firm. He sells houses from \$13,500 to \$17,000 in one area and from \$22,000 to \$30,000 in another.

DENVER—Where some builders are doing very well.

Lauren Cahill of the Denver homebuilders told me business is off some 10% but that custom builders like Gib Egan, John Crawford and Chapin & Grossman are doing fine, that Ben Elenbogan, Lou Cary and Hutchinson are selling well. Perl-Mack is the big seller, nearly 800 last year.

FORT LAUDERDALE—where you can see the epitome of "walk-in appeal"

Every builder or realtor who goes to Florida this winter should drive over to 6001 North Federal Highway (US 1) in Ft Lauderdale to see Haft-Gaines' new Imperial Point. The brick-walled entrance with scores of palms, lights, and fountains is so big and impressive you may think it is Arthur Vining Davis' Boca Raton Club. Houses are \$16,490 to \$28,900.

Jack Gaines and Burt and Dick Haft have the reputation of building the fast-

est-selling houses in their price class. It was dark when I got there and the spot lights, royal palms, fountains, and avenue of trees down to the models looked fine. But the real glamor comes when you open the front doors of the houses. Invariably you look across a big open area to something handsome—like a glass wall to a screened porch, patio, or pool.

When you ask yourself what's so good about a Haft-Gaines house it's like asking what's so good about "My Fair Lady?" The right answer is: people like it. I am quite sure that people like these houses because they have all the best ideas that custom buyers have been suggesting to Haft-Gaines for several years. Said Gaines: "You don't really sell a woman a house. She falls in love with it."

In talking about some of the recent failures in Florida, Bert Haft said: "The surroundings of some of those model houses bore no relationship to reality. They were so lush they weren't real."

"How do we sell today compared with a year ago?" said Jack Gaines. "We don't speculate. We build only when houses are sold, and we make custom changes. We have a better location today and our salesmen are better. Three years ago we sold from a trailer. We had a shanty office next. Now we've got a professional sales building ... We're giving a lot more value today —a better house for the money, better built and better equipped." I suspect they will hold the sales record in Florida this year in their price class.

HOUSTON—where one Parade a year worked so well they now have two

The biggest event in Houston home-building has come to be the spring Parade of Homes. Last spring's Parade did so much to boost sales of \$27,000-to-\$35,000 houses that builders in the \$9,000-to-\$15,000 range voted to put on a full parade. They built 11 models in each of two areas, 25 miles apart.

"We got a lot of people who otherwise would not have come out," said NAHB Executive Officer Gordon Neilson. "We know builders sold at least 50 houses, and over the months there will be more sales as a result of the Parade."

"I sold eight houses from my Parade model," John Lester told me, "seven of them to colored families. I build 60 to 80 houses a year for Negroes."

Buck Hausman used the Parade to test people's reactions to a Kaiser aluminum house, and found they liked it. "I'm enthusiastic about this house," he told me. "I'd been building in a higher price bracket and this opens up a new market for me."

Gordon Neilson tipped me off to the story of Ed Clarac and Sam Johnson, competing custom builders whose houses sell for \$50,000 to \$70,000 or more.

They wanted to advertise, but neither had enough money to make a dent in the big Houston market. So they pooled their resources, paid about \$6,000 for four ½-page ads, and sold about 25 houses between them. Each had a furnished model.

How to sell with a 50¢ brochure is being demonstrated by Cantrell & Mc-Millan, who build custom houses at \$45,000 and up. "We're doing better than last year," Glenn McMillan told me. "We have more models and more promotion, and we are following up our prospects more carefully. Our best idea is a new brochure which has easily paid for itself. We mailed out 10,000-many to people who are about to move to Houston. We get some names through personnel managers. If we can't get the names, we ask the companies to send out the brochure. We also mail out a monthly newsletter to all our old buyers and to our prospects. This year [1960] we'll sell 100 houses. Last year we sold 87."

A good merchandiser in Houston is Builder-Developer Ira Berne. Several years ago he spent extra money for professional land planning and a land-scaped entry road at his new Westbury subdivision. Now, with 2,800 families living there, his early investments are paying off. "A man driving home at night may never have heard the words 'good planning'," Ira Berne told me, "but he knows it feels good to drive along this main esplanade and through pleasant streets to his home."

Berne continued: "We sell secondtime buyers, who know what irritates them. The minute a woman sees a plan she tries it on mentally. If it fits, she'll buy it. We have a plan that 80% of our buyers want because it removes the irritants. In the kitchen, a woman wants to be a part of the group. Yet she wants the sink out of sight. From her control spot in our kitchen, she can see the breakfast nook, the den, and the rear patio. So, even while she's working, she is a part of any group.

"At night, when she's through in the kitchen, she can turn out the kitchen lights, turn on two overhead lights in the family room, and the kitchen disappears. It's like a theatre in the round—you see what is lighted and not what is in the shadows beyond.

"The entry is also very important. You come in our entry hall, and the house is three-quarters sold right then. You can go left into the living room, right to the bedroom wing, or ahead to the family room. This plan has real prestige value for friends to see."

KALAMAZOO—where there's no boom, no bust, just steady growth

It was a pleasure to visit a city that has grown steadily, and has such a diversity of industry that layoffs in one plant do not affect the whole town. The city has expanded almost in a circle—out along the highways in all directions.

There is so much good buildable land it can still be bought for \$1,500 an acre. Choice locations, of course, cost more.

The most remarkable houses I saw were some \$8,900 203I houses by Durabilt. They were 26'x37', had three bedrooms, one bath, oak floors, big closets, were built on a 4' crawl space with a cement floor. Buyers must paint outside and inside (or pay \$300 more). At only \$10 to bind the deal, there had been lots of buyers; but the houses were so new that the salesman did not know how many firm buyers they had.

KANSAS CITY—where the Home Parade is now a city institution

I was here for the opening of the 13th annual Parade. Over 100 builders in six counties took part and built 163 show houses of which 70 were furnished. "The Parade is the greatest thing the builders do all year, and it is now an institution which everyone looks forward to," says Executive Officer Leo Mullin. This year's show was a good one, and a big factor in picking up sales. Larry Winn sold ten houses, Midland Homes sold four on opening day, J.D. Spears was "well pleased by sales reports," and other builders reported sales and good prospects.

LITTLE ROCK—where a good location is still the No. 1 sales appeal

Executive Officer Inez Varner (one of the few lady executives in NAHB) skipped church one Sunday morning to show me around. First we went to an area called Lakewood, high, wooded, rolling ground with scores of view-lots above three or four lakes. It is such a nice place to live that builders have no trouble selling houses at \$25,000 or more.

I met Reed McConnell there. He builds in all price classes and in several locations. He told me his new-house sales were down one-third, but that his dollar volume was up—partly because he did "some fire jobs," rebuilding for insurance companies after fires. "In houses up here [at Lakewood]," he told me as we had coffee in his kitchen, "the public is increasingly aware of luxury items—and they want them. But we have to be careful that we're not deluxing ourselves beyond our buyers' means."

I also met Rip Munnerlyn, who builds at \$15,000 to \$30,000, often on owners' lots. "People aren't harder to sell these days, but it's harder to close a deal. You've got to give-and-take more—they want to bargain. It's a rude awakening to see how little a builder has left at the end of a deal." He broadened his operation and owns a number of rental units.

Builder Sylvan Lowe has turned to trades as a way of increasing sales. He used to build half spec and half custom, found he couldn't spend the necessary time and effort with custom buyers so is turning more to speculative building.

"The tighter the market gets the mory you have to trade," he said. "I formed my own realty firm which sells my trades and also lists old houses. It is better to sell a new house fast through a trade than to hold it and then have to slice the price."

LOS ANGELES—where builders ar planning ahead

"I've been in more planning conferences with builders than ever before, said Realtor Frank Hart. "They're now anxious to do right, and that's good For sales over \$20,000, trades are thanswer."

Said the local HBA's Pat O'Donovan "Our builders are tightening up of their salesmen, they're advertising more many building in more than one place. Said one big builder (Lawrence Wein berg): "You can't compete here today if you're undercapitalized or haven't a full team of experts."

MIAMI—where there aren't any boy left

The Miami area is fascinating be cause it is an exaggeration of everything happening in home marketing. It is the one spot where you can get a cran course in merchandising; you see no only some brilliant successes, but also some million-dollar failures.

Tom Richey has done a great job as marketing director for F & R, which has two subdivisions in Miami, one in Or lando, will soon have a fourth in S Pete; and also has a booming home modernization business (see p 189) Last year Richey helped F & R revamp one sales office and build a new one helped set up a new group of models to get a new subdivision into high gear Highly commendable is F & R's analysis of prospects (called a "Family Reaction Survey"), direct-mail campaign (4,000 letters some weeks), use of college boys to give circulars to Sunday motorists

Big Builder Herbert Heftler started in Miami with one subdivision in Caro City (\$11,970 up), then added higherpriced Brentwood Park (\$16,970 up) and last fall opened Sunset Park at \$14,145 and up. This month he is opening a big pool and recreation area at Sunset Park. His best seller had been at \$13,990, but last year he added two new lower-priced houses at \$11,970 and \$12,475 (each three bedrooms, one bath, storage room and carport) and a four-bedroom-two-bath house at \$13,990 which is a bigger house and a better value than earlier models at that price Last month Heftler added a three-bedroom, two-bath house but the price had not been announced when I was there.

MINNEAPOLIS—where sales are hard but not slow

Everyone is working harder to make sales, says Orrin Thompson who told

e he built a new cul-de-sac street, new odels and a new information center in the subdivision, will soon add new degres in another. Homebuilder's Larry elson told me both Nels Pearson and bob Mason were selling more \$25,000-35,000 houses than last year by showing new models with new features. Eckned & Swedlund have more models and the selling well, although slightly down om last year. Marvin Anderson, a posistent radio and TV advertiser, is aving a good year.

OBILE—where you can see business hool training pay off

I saw a building operation here that rengthens my belief that much progss in homebuilding is coming from bung men with business school traing. Mayer Mitchell graduated from the harton School in 1953. Within a few ars, working with a brother and a busin, he expanded a family realty firm to one of Mobile's most important tilding operations, selling some 200 buses a year in a slow market.

Mitchell set up an efficient organization with specific responsibilities for each man, a plan for growth, and IBM chniques for cost analysis. He hired trained specialists in land planning, esign, accounting, tax angles, marketg, relations with FHA. He has his own ortgage firm. After careful study Mittell decided he could save time and oney by doing his own earthmoving, rading, and street work. He has made as \$150,000 investment in equipment ay off in several ways (H&H will cover its in a future article).

He has diversified his operation. He as been building in two to four subvisions and this year will build in six. is firm owns rental units including a rofitable 608 that it bought and revilized. It has Negro housing, builds alops, will build a downtown office for self this year, may go into a shell-puse program.

EW ORLEANS—where land costs almost as much as in California

I came away from New Orleans with everal strong impressions. First was ow expensive raw land is, and how ostly it is to drain it and put in storm ewers. I saw lots in the Lake Shore rea that sell at \$250 a front foot. Orinary 1 ots (65'x120') c ost builders 7,000. Thus, when a subdivision like Carrytown (which opened last March) ells houses from \$12,950 to \$16,800, hey go like hot cakes. Rumors were hat this subdivision would sell some 800 he first year.

Despite the high land costs in New Orleans, three or four builders from Houston moved into the area (one moved back in November) and Centex bought some 33,000 acres east of town.

The lovely town houses in the New Orleans area called the Garden District

are impressive. This is an old residential section where land is expensive, lots are narrow, and either houses or fences are flush with the sidewalk. They show how much better it is to use the full lot and have a landscaped court or patio inside the wall than to throw away space in a front yard.

Perhaps the most valuable lesson New Orleans has for the building industry is its balcony apartments built around patios in the French quarter. I happened to be there one Sunday when 15 patios were open to the public. From the sidewalk you saw only a dark narrow passage. But the open patios inside were beautifully landscaped and had flower boxes on the balconies. The old brick walls cast a pink glow over the whole scene. New York, Boston, San Francisco, and San Antonio have nothing to touch it. Here are classic examples of how downtown land can be kept desirable and can bring in high

One of my guides around New Orleans was Bill Smolkin, an advertising man who also serves as marketing consultant for builders. He demonstrates how helpful a smart, analytical advertising man can be. To help Ernest and Bob Norman find prospects for higher-priced lots, Smolkin discovered a credit reporting service that gives him the name of everyone moving to town who earns over \$7,000. These names are followed up by mail and phone calls.

Bill also devised a telephone questionnaire plan. Girls in the subdivision office use their spare time to telephone people living in the area. In eight questions the girls get facts on which families need to move because their families have grown, which plan to move sooner or later, and which of their friends are thinking of moving. "A girl can get four or five prospects a day," says Smolkin.

"To sell houses these days," says Smolkin, "we need to crack the value barrier—not with houses just 2% or 3% better, but 25% better."

OKLAHOMA CITY—where business is slower, but there are few unsold houses

"Everyone here is merchandising more this year," Sid Davidoff, NAHB executive officer told me. "Furnished models have opened everywhere. Every week I'm asked for the name of a good advertising agency. Builders are beginning to do the things we've been telling them to do all along."

Sid drove me around and I saw some fine big houses by Tom Morris and Everett Dale Jr. One had three living rooms (formal, family room, big playroom). Kitchen cabinets and baths were especially good.

I saw a subdivision called Stonegate which typifies a growing trend: Two teams of two builders each (Morris Dale, and brothers Ralph and Harry Green) joined together to develop the land and build the houses. The houses, at \$21,000 and \$22,900, looked fine.

Trade-ins are a big help in selling, Tom Morris told me. They sell from 100 to 150 a year.

Land in Oklahoma City can still be bought for \$2,200 an acre, but most of it now costs between \$2,500 and \$3,000, I was told by Bill Stubbs and Earl Austin. They assembled enough land for 230 lots by buying pieces from 32 different owners. Their houses sell at \$13,250 to \$14,500. They sold 46 from April to the end of November, and are sold ahead of construction. Best selling feature: an oversized master bedroom. They install a two-ton Rheem air conditioner for \$695. All houses over \$20,000—and many at \$16,000 or less—have air conditioning, Sid Davidoff says.

Builder Jerry Ingram told me, "We'll sell close to 100 this year, and the chief reason is that we'll do custom houses for the price of speculative houses. We used to do 60% custom, now it's 95%. We build a model, keep it open three or four weeks, sell it, and build another. This way we pick up a lot of leads. Our basic houses run from \$25,000 to \$28,000. A year ago about 60% of our buyers wanted air conditioning—now they all do."

PHOENIX—where retirement housing is a big market

The new push here is on retirement housing, largely due to Del Webb's success at Sun City, where he says he sold 1,500 last year. Now both Staggs and Long are pushing retirement models. Competition in all prices is keener than ever. Long says 1960 was his best year.

PORTLAND, ORE.—where a young management-man builder is making good

Here I met a young builder named Dwight Haugen. He graduated from the University of Oregon as a civil engineer, spent a year at the Harvard Business School, a year with a mortgage firm, and began building in 1953. Now he does something over a house a week.

He builds houses from \$16,500 to \$22,000 in six locations. His best seller is a 1,540 sq ft house at \$19,500. He has furnished models, takes orders from them, makes custom changes. His financing is all conventional. He gets buyers to take out the construction loan to lower the price.

"I like trades," he told me, "and I make money on them. To get prospects, I pay \$60 a month to a local service for a list of several hundred newcomers to town. Another big source of prospects is referrals from old buyers." He does a big direct-mail business, leaves questionnaires in his models to get names and opinions, uses portable signs, billboards, newspapers, some radio and TV. Finally, Haugen says, "We've got the best crew of salesmen we've ever had, and Kelly Snow comes up a week each year to help train them."

SACRAMENTO—where there is lots of competition

This is one of the most competitive towns in the US.

Sacramento points up one weakness of market analysis: No matter how good a study is, it can't tell you what's in other builders' minds. Everyone's secret study showed that this was going to be a boom town. And it has boomed —but not enough to support all the out-of-town builders that have moved in.

There is so much to see here that about the best I can do is to say it is worth a visit. Subdivisions to see include: Rosemont, Dick Price's successful, well-presented neighborhood; College Green, Oliver Rousseau's new 500-acre development; Panorama Village, Al Brandon's vigorous move into town; Foothill Farms Estates, John Mackay's well planned subdivision; Hillsdale, Dave Bohannon's giant subdivision where Calico Homes, Gannon, and Peterson & Moretti build; Western Enterprises' Rossmoor, Merrihill, Parkway Estates.

SALT LAKE CITY—where you can see top value

Although I did not see Alan Brockbank's new houses in Salt Lake City, Editor-Publisher Prentice did and here's what he had to say about them: "They are the first houses built for sale around Salt Lake City with full air conditioning. They are all architect designed. They all have a new type of acoustical ceiling. They all have the best sliding-door tub enclosures that I have ever seen. Alan's splits and two-stories have separate furnaces for the top floors. All in all, I have seldom seen a builder's house loaded with so many values and so many attractive features."

ST PETERSBURG, FLA.—where the market has slowed down

It's always a pleasure to go back and visit a builder like Charlie Cheezem, who is a real pro at the housing business. He sold some \$3 million in houses last year, 15% ahead of '59. "November was the best month we ever had, with 42 sure sales and several probables," Cheezem told me. Most of his houses sell from \$13,000 to \$15,000.

"We're putting on a drive to make our whole company sales conscious," says Cheezem. "Jack Lewis, our construction head, has sold seven or eight houses. We're having a contest among our subs. Each is paired with a salesman and winners get gift certificates. Our trade-in plan works well, too."

"We're giving more value now for the same price—things like circuit breakers vs fuses, 100-amp vs 60-amp service, permanent white cement tile roofs, redwood fascia, awning windows, sliding glass doors, larger kitchen cabinets, larger kitchen windows, vanities in the bath. We can give a better house now because we're building more efficiently." This year Cheezem will build a new office building for himself and a 45-unit apartment for Negroes.

To me it is significant that Cheezem is not only the biggest builder in town, but also the biggest advertiser. He spends about \$150 per house for newspaper space and his Saturday TV show.

Builder Sidney Colen sold more houses this year than last partly because he's now building houses priced from \$10,950 to \$35,000 in five different locations. "People are still out to buy," Sales Manager Gene Alexander told me, "and they still have money. But they're dollar-educated and they want value, quality, and a good location." Says Colen: "We use all conventional terms, and half our sales involve secondary financing. I insist this is a sound method if you protect your buyers."

In St Petersburg I called on John Wahlman, vice president of the First Federal s&L, who told me that they now have a field man who spends full time keeping a monthly inventory of unsold houses. They've divided the area into 19 districts, and try to steer builders away from poor locations and away from price brackets or types of houses that are hard to sell. Between April and November, builders reduced the unsold inventory by 1,100 houses. But they still had 2,605 houses unsold. First Federal has had to take over a few foreclosed houses and get them sold.

"Some builders just aren't salesmen," Wahlman said. "There was one builder who used to sit in his model house on Sunday and if he saw a couple approaching with several children he'd shout out—and I'm serious—'If you don't have \$3,500 in cash, don't bring those kids into this house!' I admit he was an exception. But we've found that when you have a house that's been standing unsold, if you clean it up and cut the grass and then put it in the hands of a good realtor you usually sell it in two weeks."

SAN DIEGO—where a boom is slowing down

Newest big subdivision here is University City where there are 22 furnished models from \$18,500 to \$45,000. Proof that fresh, new designs sell faster than old designs is in evidence here, where some "that don't look like ordinary California houses" are best sellers. This big project is well worth seeing.

American Housing Guild is doing well. They added new models with different designs, expanded to three areas and "we're selling a lot harder," says Sales Manager Herb Seltzer.

TACOMA—where young builders are doing well

I was here for a Douglas Fir Plywood meeting on retirement housing, had little time to look around. Two young builders named Mayer & Peterson are doing well with components and prefinished parts and H&H will do a story on them next month. I heard Herman Sarkowski was doing well, was impressed by the size of upstairs family rooms at Robin Hood Estates.

TULSA—where builders know how to sell every price range

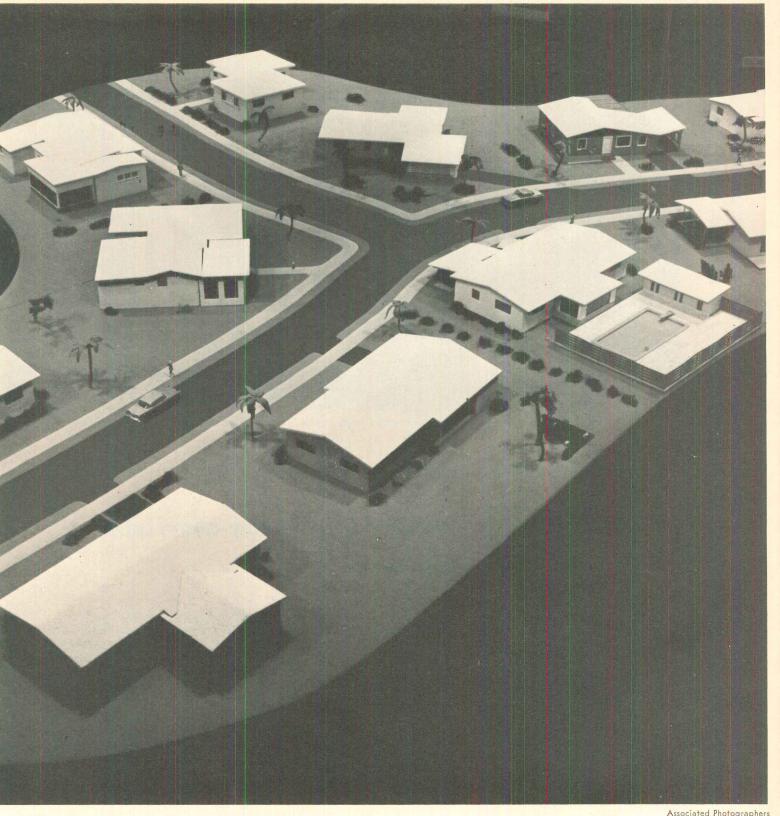
Thanks to Executive Officer Charles McKinney, I was able to cover a lot of ground and talk with a number of builders. Just talking to Andy Latch and Jim Nuckolls was worth the price of the whole trip! They are classic examples of builders who do something extra to sell houses.

Andy sold around 160 houses last year. One of his basic principles is diversification: He builds in three or four subdivisions, offers high-priced custom houses and houses priced as low as \$8,250. He is a land developer, part owner of a sewer company, and has a modernization business that grosses a half million a year.

Another basic principle he uses: be part of a team. He is now in three different land development groups. One is a 539-lot subdivision called Rolling Hills, which he developed with Jim Nuckolls. They believed the market would be good for an FHA 203-I house at \$8,250, but the problem was finding land. They went out 13 miles, paid \$1,000 an acre, built their own sewage treatment plant. FHA values the finished lots at \$1,500. In two years they sold 249 houses. They give buyers a sweat equity of \$225 for painting outside and inside, and 70% do it (so the down payment is \$25, closing costs are \$200, monthly payments with taxes and insurance, \$70). These are among the best 203I houses I've ever seen. Each builder has two models with several elevations. They found that many buyers can qualify for a bigger house, so they also sell a 1,144 sq ft house for \$13,000 under FHA 203B.

Jim Nuckolls, still in his 30s, is a master at selling custom houses in a slow market. "Last year was my best year," he said. "I sold 70 houses over \$20,000, as well as 58 of the \$8,250 203-I houses. How do we sell the higher priced houses? I always have furnished models. We sell custom variations of these houses and our prospects don't have to take any notes. We work fast on suggested plan variations with our designer, Jerry Wilson-by the next day we have a formal presentation ready, with the plan, elevation, a full set of notes, and even the client's name printed on the cover.

"We also have a trade-in plan that works. In one way or another, there is an old house involved in about 75% of our big-house sales. Like Andy [Latch] I believe in spreading out. I'm now in three distinct price classes and soon I'm moving into \$13,000 to \$18,000 which will put me in every price bracket."



Associated Photographers

These tabletop models—with add-on sections—are an eye-catching idea in the success story of

Why (and how) a merchant builder is expanding into the home modernization market



MODERNIZATION SHOWROOM draws big crowds. Near center of town, it helps sell modernizing the way model houses help sell new homes.

Says Builder Gene Fisher (far left in photo)

"Modernization is a natural for the new-home builder who wants to broaden his market"

And Fisher has the business to prove it.

Three months ago his firm, F & R Builders (which built 500 new houses in Miami last year), opened a remodeling division. The initial investment: \$36,000. By January 1, the new division (named Richheimer-Miller Home Modernizers) had contracts for \$150,000 in modernization work. And Fisher anticipates that in three years the annual gross can be as high as \$2 million.

Fisher tackled the home-modernizing market for three reasons:

- 1. He wanted a "balance wheel" to help level the peaks and valleys in new-house construction (especially in a volatile new-house market like Florida). Says Fisher: "We already have a gas utility business and a realty firm to give us more stability, and remodeling seemed a logical way for us to broaden our business base still further."
- 2. He wanted to spread overhead costs over a larger business volume. Says Fisher: "For the past couple of years we've had to add more and more to our overhead to sell our new houses. The home-modernizing division will be able to draw on our office help; our accounting, promotion, and advertising departments; and, of course, our top management. This will lower our unit costs on new houses."
- 3. He wanted to tap the enormous potential of the modernization market. "As new-home builders we have an advantage in the modernization business—we can cash in on the reputation we have built. We've put up over 7,000 houses in the Miami area since 1947. People are leery of the 'suede shoe' modernizer, and they know us to be reputable builders. So everyone of those 7,000 houses is an advertisement—and a potential job—for our remodeling division."

Is F & R hurting its new-home business by taking on a

"don't move, improve" modernization operation?

"Far from it," says Fisher. "There's plenty of business for both operations. In fact, our remodeling division sometime helps new-home sales. Often buyers can't qualify for as big a new house as they'd like. So we sell them a house they can afford by pointing out that they can add space later on. We can tell them just what the addition will cost."

A case in point is Village Green, F & R's newest Miam project, and the first fha 213 project in the area. Its swim ming pools, parks, baseball fields, and other recreational area make it highly desirable, but also make it somewhat higher priced than competitive projects. The Richheimer-Miller division has set up a remodeling display right in Village Green new-house salesmen are able to sell a smaller house on the strength of the location, and at the same time show the buye how he can expand the house later. (The new-house salesman gets a commission on any modernizing jobs he sells this way.)

Not only is modernization a natural for the new-house builder, the builder is a natural for modernization. Says Fisher

"Most of the management skills you use in building new houses are basic to home modernization"

Since F & R's new-home and remodeling divisions shar the same top management, the remodeling division is able to draw on the construction know-how of the new-home division. But there are other special advantages in this close association

F & R knows the local situation on codes and zoning requirements. "And these are just as important in remodeling as in new-home building," says Fisher.

F & R knows the best local subcontractors and suppliers "We know just what they should charge," says Fisher, "and we also know that they'll give us good prices, because they're anxious to keep our new-home business."

F & R has established credit sources—banks and mortgage companies—that it has worked with for as long as 13 years. And they have good credit with local suppliers.

F & R has an office staffed with people who know the proedures peculiar to building. "In fact," says Fisher, "our accounting department has taken over all the accounting for he remodeling division."

But Fisher has found that home modernization takes some nanagement skills that are not part of the typical new-home pullding business. Here are the three most important:

- 1. There must be an experienced modernization man in a pp position. Says Fisher: "Bernie Miller, vice-president in harge of the modernization division, has had 15 years xperience in home modernization. We couldn't operate without someone like him."
- 2. There must be a different kind of on-the-job supervision. The field supervisor for remodeling has a far more exacting cheduling problem because he has many jobs, in different tages of completion, scattered around town. "And he has to work with the customer breathing down his neck most of the time," says Fisher, "so he has to be something of a public elations man too."
- 3. There must be an estimating and control system deigned specifically for remodeling. F & R read about Herbert Richheimer's system in last July's HOUSE & HOME, sent Bernie Miller to New York to become the first graduate of Richeimer's new remodeling school (H&H News, Dec, '60), and so now operating under a Richheimer franchise.

"We've followed Richheimer's system down to the last enny," says Fisher, "and it has worked perfectly."

F & R has another basic tool it can apply to its home modrnizing division. Says Fisher:

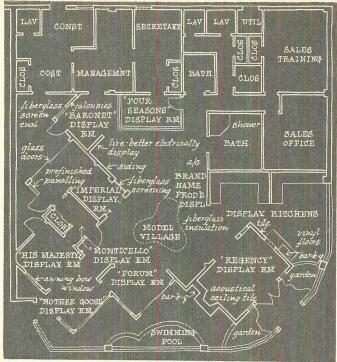
lost of the merchandising ideas that sell new homes vill sell home modernization as well"

The most important factor is the reputation of the builder. ays Tom Ritchie, vice-president in charge of advertising and romotion: "We emphasize the good will F & R has built p in every possible way, even to putting F & R's name on the Richheimer-Miller signs in front of the remodeling jobs in progress. And as Richheimer-Miller becomes better known, we'll stress the quality of their work just as hard as we stress the quality of our new-house work."

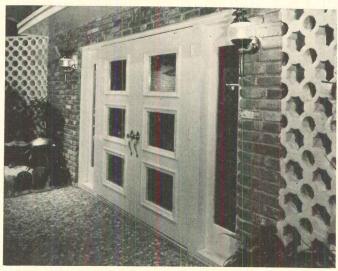
Ritchie says three other new-house merchandising techiques are especially important to the remodeling operation:

- 1. There must be a showroom that serves the same purpose or home modernizing as the model serves for new houses. Richheimer-Miller's elaborate showroom is shown in the lan and photos at right.) Says Ritchie: "We put the same are and taste into the showroom as we put into our model ouses. And we make the same basic effort to make the rospect dissatisfied with his present home by showing him omething newer and better."
- 2. Advertising must—as in new-house sales—be aimed at uilding traffic. "And the features we emphasize in our mod-rnization ads are the same," says Ritchie. "We stress the lamor of good new kitchens and baths; and the labor-saving evices that are built into them."
- 3. Brand-name products must be emphasized as much in nodernization merchandising as in new-home merchandising ays Fisher: "The good relationships we've established with manufacturers during our years of homebuilding have tood us in good stead here. We've had wonderful cooperation from them, particularly in setting up our showroom displays."

But there is one major difference between marketing new omes and marketing modernization. Says Fisher: "In modernization work, we are dealing with customers in their own ouses. So the whole approach must be more personal, and nust engender more confidence. Further, modernization needs salesman with more imagination. He not only must sell the dea of modernization, he should also be able to suggest other ways to improve the customer's home."



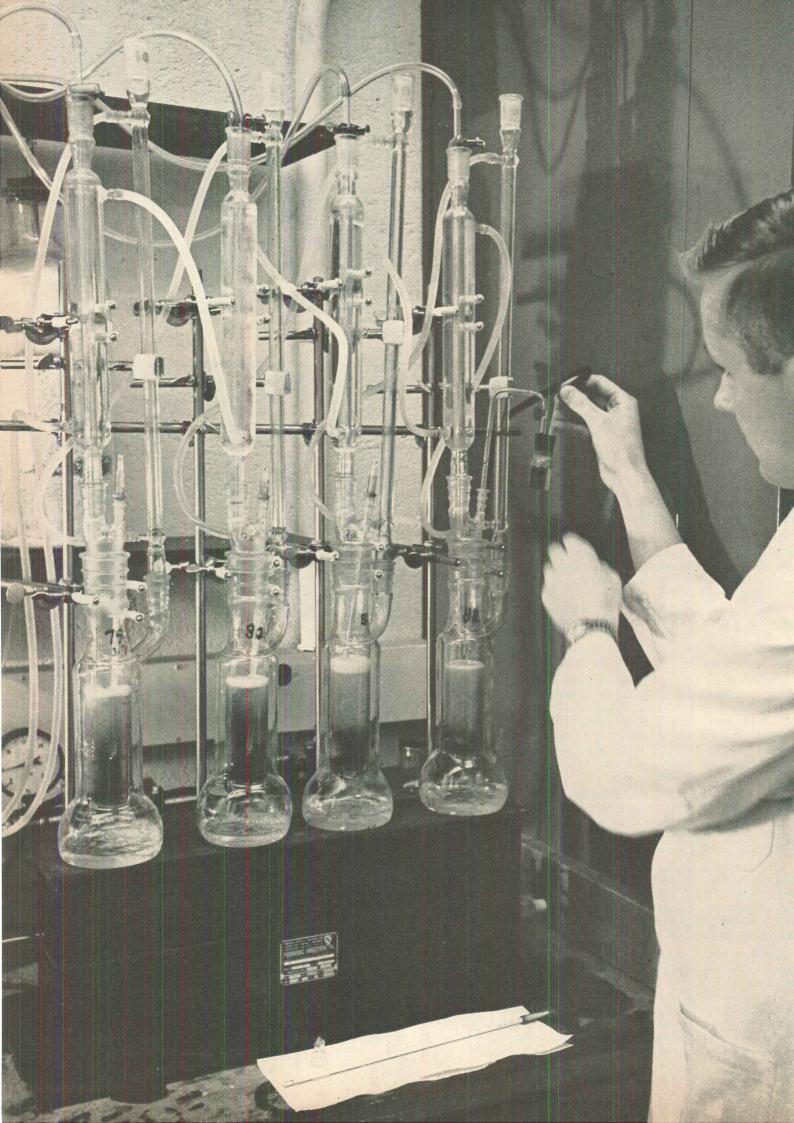
SHOWROOM PLAN allots space for mock-ups of modernized kitchens, baths, and other rooms and for displays of brand-name products.



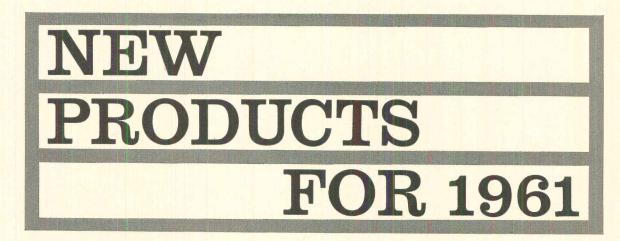
FRONT DOOR DISPLAY shows exciting possibilities of remodeling a front entrance and also serves as dramatic entry to showroom.



BATHROOM DISPLAY includes popular items in bath remodeling:



Manufacturers' research — a vital factor in housing today—
s paying off in the marketplace with



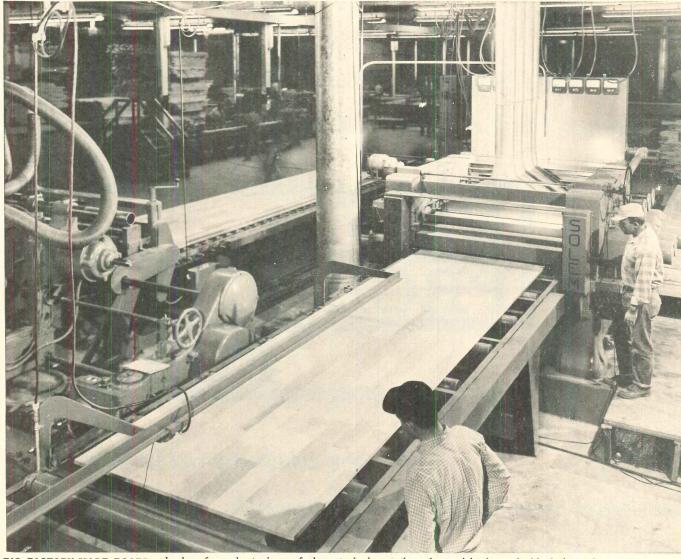
These products bring industrialization closer with better ways to make, handle, assemble, install, and finish the factory-made parts of a house

In this year's product show you will see boards big enough to fill a panel module; ranges—lots of ranges—that drop in place with a single hook-up; wood floors that lay like tile. And—at last—you'll see panels you can buy off the shelf to do the whole wall job.

To help you find your way through the product show for 1961, look for:

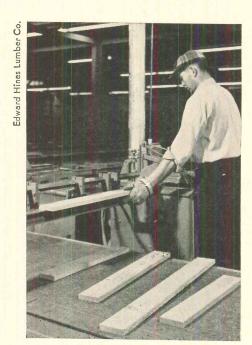
Manufactured lumber	on	page	194
Wood paneling	on	page	196
Plastic, ceramic, and metal wall materials	on	page	198
Structural wall systems	on	page	200
Flooring, wood and resilient	on	page	201
Appliances	on	page	202
Air conditioning	on	page	228
Bathroom fixtures	on	page	234
Doors	on	page	238
Windows	on	page	242
Sewage treatment plants		1	
Hardware	on	page	250
Miscellaneous columns	on	page	252

But you won't see everything—one issue couldn't hold the myriad products being introduced. So throughout the year, House & Home will bring you every significant development in the product market—in regular issues, or in special issues like March, when the magazine will be devoted to the house interior.



BIG FACTORY-MADE BOARD, glued-up from short pieces of clear stock, is put through an eight-drum double-deck sander.

Now you can get wood as wide and long as you want it



DEFECTS ARE CUT OUT and boards cut to length. Short pieces are sorted on conveyor.

For example, the big board in the sander above is 54" wide and 24' long. Boards like this can be assembled from selected shorts, edge-and-end glued into sheets that, within these dimensions, are as wide, long, or thick as you need.

The technology behind this development was first reported in House & Home two years ago (Oct '58) and the principles have been used for years in well known products like plywood and glulam beams. But with a difference! Plywood and glulam were developed to extend the structural characteristics of wood. The new manufactured lumber makes use of good wood spoiled by minor faults.

Because bad knots and other faults are removed, the "made" wood is easier to work. Because expansion and contraction are limited to small pieces, the boards have better dimensional stability. Because the grain is interrupted by cuts, the boards do not warp or twist.

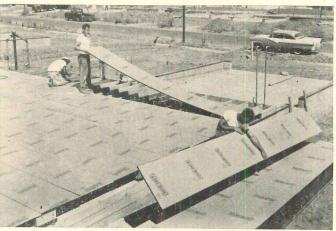
But not only do these boards do jobs

other wood can't, they save you mone Though the clear types are premiu priced, their bigness often saves enoug on labor to offset the higher cost for materials.

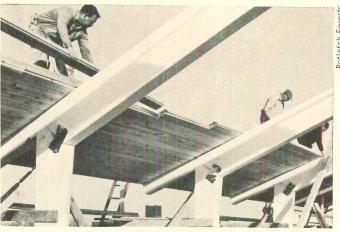
This manufactured lumber can lused in many ways. For example:

- 1. Wide boards make excellent paneling, wide one-piece fascias, strong war proof shelving.
- 2. Glued-up utility-grade boards, u graded by adding a heavy kraft out layer, make wall, floor, and roof sheat ing that approaches the strength of pl wood and the insulation value of fibe board in pieces bigger than either.
- 3. Dimensional lumber is face-lam nated to make t&g decking that h more face area per lineal foot ar greater length and strength than milledecking.
- 4. Shorts of stud sizes are finge jointed into FHA-acceptable framin lumber or into unlimited lengths dimensional decking.

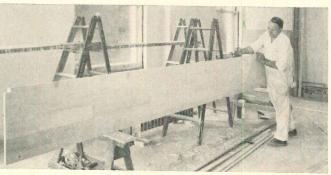
Here are the kinds of products now made from manufactured lumber



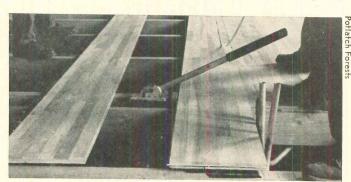
PAPER-FACED SHEATHING comes 2' wide, 16' long. It handles asily, goes on fast, gives a smooth surface with good nail holding.



LAMINATED DECKING offers a choice of facings in end-matched t&g, 21/2" to 37/8" thick, 51/2" or 71/2" wide, shrink, check, and warp free.



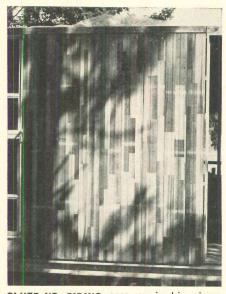
VIDE BOARDS are electronically bonded, smooth sanded on all sides. Common, select, and clear grades come 52" wide, 24' long, 4" thick.



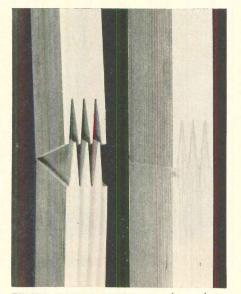
ALL-IN-ONE FLOORING acts as structural subfloor and finish floor over 3x6 joists 32" oc. Top surface is 3/8" x 2" oak or pecan strip.



VALL PANELS in 32"x84" or 96" pieces ave self-furring, self-aligning back strips.



GLUED-UP SIDING goes up in big pieces. Varied graining look good in natural stains.



FINGER-JOINTED LUMBER can be made-tomeasure as studs, decking, siding, moulding.

Here are companies making manufactured lumber products (and what they make)

dward Hines Lumber Co, Chicago. idewood is made in standard widths of 2", 16", 18", 24", 36", 48", 54"; nominal nicknesses of 4/4", 5/4", 6/4"; to 24' ong. Special orders to your dimensions. or details, circle No. 1 on coupon, p 282

seorgia-Pacific Corp, Portland, Ore. xtrawide redwood, in 10" to 24" widths, 4" thick, to any shippable length, with ne textured, one smooth face. Extrawide r, to 4' wide, 6/4 thick, 12' long. or details, circle No. 2 on coupon, p 282 Potlatch Forests, Inc, Lewiston, Idaho. Fast-on boards 3/4" thick, to 24" wide, 16' long. Lock-Deck laminated decking, 21/4" to 37/8" thick, 51/2" or 71/2" wide, to 16' long. Ply-plank flooring, strip flooring on two-ply subfloor 12" x 16'. For details, circle No. 3 on coupon, p 282

Southwest Forest Industries, Phoe-

nix, Ariz. Pronto Panel sheathing endjointed 11/16" and 25/32" boards laminated with kraft paper into 2' x 8' panels. For details, circle No. 4 on coupon, p 282

Tarter, Webster, & Johnson, San Francisco. Bond-Bord sheathing, 2' x 16' panels, 23/32" or 25/32" thick, plain or ship-lap. White fir laminated to 42-lb kraft. For details, circle No. 5 on coupon, p 282

Weyerhaeuser Co, St. Paul. Nu-Loc lumber in all common sizes and types to 24" wide, 22' long. Laminated decking $2\frac{1}{2}$ " or $3\frac{1}{16}$ " x $5\frac{1}{2}$ " or $7\frac{1}{2}$ " to 16' long. Prefinished Loc-Wall paneling, 32" x 7' or 8'. For details, circle No. 6 on coupon, p 282

Wood paneling—the big news is more durable finishes

More and more plywood, hardboard, particle board, and plaid board paneling is coming coated with flowed-on, rolled-on, and baked-on plastic finishes that cut damage in transit and in use Also, there's more texture: natural wood, grooved wood, sand blasted wood, resawn wood, perforated wood, woven wood. At these industrial processes cut labor on the job.



Natural defects give character to this new paneling

New hardwood plywood, called Heritage Hewn, is purposely mismatched—both in grain pattern and groove spacing—to give a natural effect. Random grooving falls on veneer splice lines,

not on a set spacing. Veneers are specifically cut to retain the knot holes and unique grain patterns, has the effect of antique hand-hewn wood paneling. Paneling comes in 4' x 8' sheets of birch,

oak, walnut, and cherry. Finish is penetrating vinyl with a transpar baked-on thermosetting topcoat.

Nickey Bros, Memphis.

For details, circle No. 7 on coupon, p

Poly-Clad package supplies full in

Protective film for wood products provides economical finish impervious to most common staining agents, chipping, and abrasion. Videne is a thermoplastic polyester sheet that can be laminated to any flat wood surface. The film can be reverse printed and embossed to upgrade inexpensive woods and simulate more expensive woods.

Goodyear Tire & Rubber, Akron.
For details, circle No. 8 on coupon, p 282

Pecky cedar panels are made from 1" pecky boards of Northwest incense cedar laminated between two 1" solid cedar boards, then saw-split and planed to 3/4" thickness. Pecky face is then sandblasted to remove fungi. Lam-Lok paneling comes in 8", 10", and 12" widths to 16' long, with straight sawn or t&g edges. Glue bond is waterproof.

Ed Fountain Lumber, Los Angeles.

For details, circle No. 9 on coupon, p 282

rior wood finish from one manufactur. The package: paneling in 12 differspecies, matching mouldings, passa doors, bi-fold doors, wainscot k woven panels, cabinet stock, putty stic Poly-Clad Plywall is plywood upgrac with a printed grain, and finished wa hard baked-on plastic coat.

Plywall Products, Fort Wayne, Inc. For details, circle No. 10 on coupon, p.

Pre-finished mouldings to match facory-finished hardwood paneling now as a tough family-proof baked-on finsh. Mouldings include baseboard, base hoe, outside corner, and other standard patterns. Each is individually packed in olyethylene bag for protection. Manuactured in color tones to match over 4 woods and finishes. G-P matching outty sticks also available.

Georgia-Pacific, Portland, Ore. or details, circle No. 11 on coupon, p 282

ifecoat finish for redwood products s available in neutral or paint prime or hree prime stains, back primed with lear water repellent to prevent capilary seepage between siding laps.

Simpson Timber, Seattle. For details, circle No. 12 on coupon, p 282

Decorative flakeboard, called Ven-O-Wood, is veneered with a wide number of domestic and foreign woods. Inluded are birch, Philippine mahogany, and rift grain fir. Long Bell's 4' x 8'

panels come ½" to ¾" thick.
International Paper, Longview, Wash. For details, circle No. 13 on coupon, p 282



Grooved hardwood veneer comes in many woods

Gruvwood, a 1/28" veneer on 1/8" tempered hardboard, has grooves cut almost to its flexible cloth backing. It can be bent around corners; is adhesive ap-

plied. Lists from \$1.20 to \$1.30 sq ft, grooved to any pattern.

National Products, Louisville. For details, circle No. 14 on coupon, p 282



Textured cedar plywood siding features a new deep brush-abraded surface with a pronounced grain pattern. Firolywood-backed panel can be painted, stained, or left to weather. In 4' x 8', 9', and 10' panels, 38" or 58" thick, for direct applications to stude (meets FHA minimum property standards).

US Plywood, New York City. For details, circle No. 15 on coupon, p 282

Dureen Flakeboard has a thin polyester film overlay to give a durable attractive finish to wood-chip composition board. Print Grain has a reverse printed woodgrain pattern; Hardwood Overlay has a clear film. Sold in panel sizes to 4' x 8' in ½" and ¾" thicknesses.

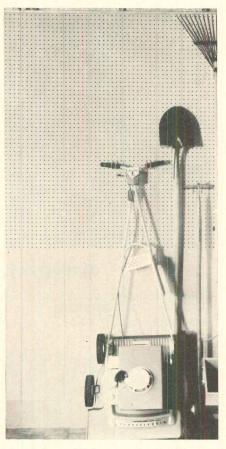
Kelvinator, Detroit. For details, circle No. 17 on coupon, p 282

Ply-Sawn siding has rough-sawn texture on 4' wide plywood, gives weathered look without handling problems of individual resawn boards. Like all plywood it is shrink, check-, cup-, split-, and expansion-proof. Panels are 3/8" thick, 7', 8', 9', and 10' long. For exterior or interior use.

Cloverdale Plywood, Los Angeles. For details, circle No. 16 on coupon, p 282

Primed paneling of grained hardboard with grooves 31/2" oc is new in Masonite's Seadrift line. Embossed surface is factory-coated with a white primer, can be readily two-toned with any rubber-base paint. Panels can be nailed over open framing.

Masonite, Chicago. For details, circle No. 18 on coupon, p 282



Garage liner is a factory-sealed 1/4" hardboard, perforated on top two-thirds for standard attachments, with a solid wainscoted bottom third. Overall random-plank surface eliminates visible joints between 4' x 8' panels, can be nailed directly to wall framing.

Georgia-Pacific, Portland, Ore. For details, circle No. 19 on coupon, p 282

Decorated panels—the big news is the endless variety

The photographed products show some of the variety: in opaque and translucent plastics, colored glass and perforated metal methodically stacked "brick" and deeply corrugated asbestos Particularly in synthetics you have a wide choice. The variety in plastic laminates goes on and on—this year there are more free form patterns, but somewhat fewer stylized prints.



Sun screens and dividers come in 14 standard designs

Carlton shojis are translucent plastic framed in mahogany finished in teak, black, driftwood, or white walnut. In 6'8" and 8'0" heights up to 4' wide. \$3 to \$5 per sq ft. Made to your size in both standard and custom designs.

Frames and hardware optional.

Carlton Products, Pasadena, Calif.

For details, circle No. 20 on coupon, p 28



Textolite Twilight (left) has gold-dust overlay on yellow, beige, or pink; silver-dust on aqua, silver gray, or lavender—to harmonize with copper-toned and stainless kitchen fixtures.

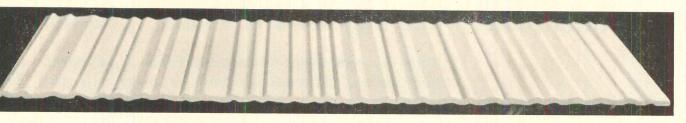
General Electric, Schenectady.

For details, circle No. 21 on coupon, p 282

Rodierglas (right) a decorative laminate made by baking chips of clear and colored glass between sheets of glass is handcrafted in 16" x 24" sheets. Lists at \$15 sq ft. Many patterns.

Leonard Rodier Co, New York City. For details, circle No. 22 on coupon, p 282





Deep corrugations give new siding strong textured look

eep-Tex siding of asbestos cement ds rugged texture, heavier shadow es because of its deeper corrugations. In six solid colors, protected by a Plasticrylic finish and permanized to eliminate warpage and shrinking. Joints are butted so they are practically invisible. National Gypsum, Buffalo.

For details, circle No. 23 on coupon, p 282

ecorative glass in 26 new rolled, red, and textured patterns is a availle from Lof. Maximum sizes are 48" 120" to 72" x 132" depending on patrn and type—regular, heat absorbing, wired—in ½" and 7/32" thicksses.

Libbey-Owens-Ford, Toledo.

or details, circle No. 24 on coupon, p 282

nyl sheeting, specifically engineered r lamination to steel, gypsum, plyood, hardboard, fibreboard, particle ard, or other sheet materials, is a caldered polyvinyl chloride developed r low-temperature, high-speed, conuous production. Colovin K.6 comes 30,000 colors, patterns, and textures rolls as long as 1,200 yards. New hesives cut costs, require less rigid nperature control. Product allows for expensive conversion of existing uipment to provide continuous proction.

Columbus Coated Fabrics, Columbus. r details, circle No. 25 on coupon, p 282

mulated stone building panels, ade of moulded polyester-acrylic resin nforced with fiberglass mats, duplite shape and contour of natural stone. x 4' panels can be applied over alost any existing wall or regular eathing. For interior or exterior use. Terox Corp, Franklin Park, Ill.

r details, circle No. 26 on coupon, p 282

narcoal aluminum siding is the latt addition to Alside's line, now availle in 14 colors. Colored products, th baked on finishes, include both rtical and horizontal siding, in various tterns, trim, soffits, fascia, gutters, d downspouts.

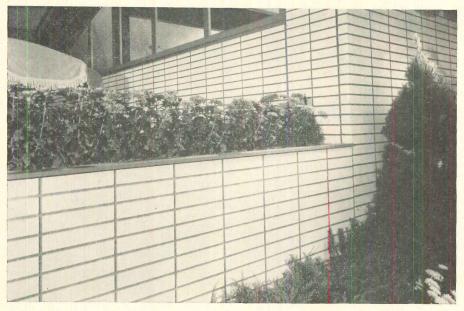
Alside, Inc, Akron.

r details, circle No. 27 on coupon, p 282

ructoglas fiberglass-reinforced pans can be used to 1) add a colorful te inside and out, 2) provide diffused tht and privacy inside, 3) reduce oling costs by filtering out infra-red d ultra-violet sun rays.

Structoglas Inc, Cleveland.

or details, circle No. 28 on coupon, p 282

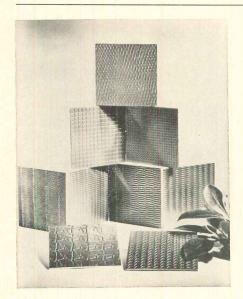


Foam-core panels have brick-veneer skins

Pan-L-Brick load-bearing panels have asbestos-cement skins on expanded polystyrene cores. Factory-applied facing is siliconized fire-clay brick. In three stacked bonds: Norman (11/2" x 12"),

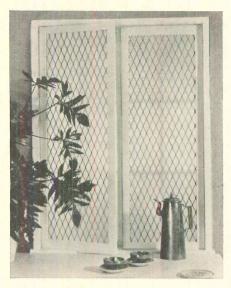
Roman $(2\frac{1}{2}" \times 12")$, or common (2½" x 8"). Complete line of brick colors. About \$1 sq ft. FHA accepted. Koppers Co, Pittsburgh.

For details, circle No. 29 on coupon, p 282



Sharonet, a textured steel, comes in 36 new patterns (seven shown above) for curtain walls or decorative panels. Available in stainless, carbon, or coated steel. Also useful for built-ins, dividers.

Sharon Steel, Sharon, Pa. For details, circle No. 30 on coupon, p 282



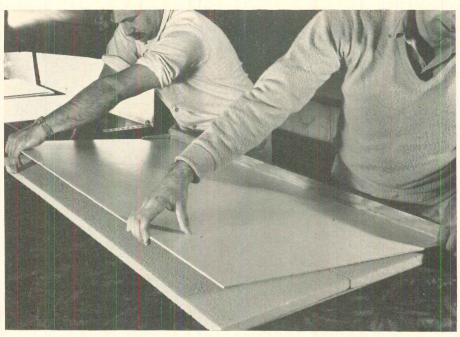
Leaded glass, a decorative translucent fiberglass panel, comes in crystal green or clear panels 24" x 96", 1/4" thick. Embedded steel strips come in diamond or shell pattern. \$2.50 per sq ft retail.

Barclite, New York.

For details, circle No. 31 on coupon, p 282

Structural panels—the big news is volume production

These new components for the industrialized house combine structure, surface, and sometimes finish, in a single big part. With gypsum or decorative sheet skins, they serve as partitions. Faced with stressed plywood or metal skins, they support the house. The five below all appeared at the end of 1960, join the dozen or so others reported on by House & Home during 1959.



Foam-core panels have ceramic-like face

Glasweld skins contact-cemented to both sides of foam-plastic core require only cold-press pinch rolls for bonding pressure. The unique asbestos-cement skins have ceramic-like surface, come

in a variety of thicknesses and permanent colors. Low coefficient of expansion minimizes joining problems.

US Plywood, New York City. For details, circle No. 32 on coupon, p 282



Condo-Lux stressed-skin panels are translucent, fiberglass-reinforced faces. Panels are 32" wide, 4' to 12' long, 2", 3", or 4" thick. Matching Condo-Wall has ribbed aluminum or galvanized steel skins, fiberglass batt insulation.

Dresser-Ideco Co, Columbus, Ohio. For details, circle No. 34 on coupon, p 282



Coden Wall has expanded polystyrene core with over 100 vinyl-on-steel, textured aluminum, natural wood, or highpressure laminate skins. Sizes to 4'x12'; 1", 2", or 3" thick. For non-loadbearing interior or exterior use.

Coden Industries, Columbus, Ohio. For details, circle No. 35 on coupon, p 282



Clark-Lite partitions are non-loadbearing, gypsum-faced. These 2" panel cost 28¢ sq ft in carload lots. Stressed skin load-bearing panels, in sizes to 8'x20'x10", have factory foamed-in place polystyrene cores, skins of almos any finished or unfinished sheet mate rial. Engineering services for specia applications are available from Clark.

Clark Industries, Columbus, Ohio. For details, circle No. 33 on coupon, p 28.



Kaiserwall 25/8" thick studless parti tions save 18 sq ft of floor space in average house. Solid 15/8"x6" ribs are laminated between sheets of Quilt-Lok gypsum board. Floor, ceiling, and side wall tracks are 2"x2" lumber.

Kaiser Gypsum Co, Oakland, Calif. For details, circle No. 36 on coupon, p 282

Flooring—there's big news in all types

In wood flooring, new thin laminated types are now available for mastic bonding on any dry subfloor (see also p 195). These should reduce both labor and materials costs. In resilient flooring, two trends are apparent: in styling, more mosaic and terrazzo types; in formulation, more tile for heavy-wear areas. Most new tiles fall in the middle price bracket.

Mastic Tile now uses a polymerite pinder in New Concept floor tile to make it twice as durable as asphalt tile, resistant to oil, grease, and alkali. In 37 colors. Retails about 15¢ sq ft.

Ruberoid Co, New York City.

For details, circle No. 37 on coupon, p 282

E. L. Bruce has a new dark-shaded aminated oak block flooring, for mastic installation on concrete or plywood sub-loors. Prefinished, each 9"x9" block is ½" thick with t & g edges.

E. L. Bruce Co, Memphis.

For details, circle No. 38 on coupon, p 282

Congoleum has a new luxury vinyl feauring geometric snow-flake figures in a crushed marble design. Two latest colors are white with gold figures, and beige with copper figures.

Congoleum-Nairn, Kearney, N.J.

For details, circle No. 39 on coupon, p 282

Goodyear Tire has a new all-vinyl looring—NoScrub DeLuxe—of heavier. construction than the original NoScrub. New 1961 patterns include a mosaic, a inear abstract, and a gold thread.

Goodyear Tire, Akron.

For details, circle No. 40 on coupon, p 282

Armstrong Patrician flooring in .070 gauge 6' sheet goods, consists of vinyland pearlescent chips imbedded in a clear plastic grout. Hydrocord back. About \$1.10 sq ft installed.

Armstrong Cork, Lancaster, Pa.

For details, circle No. 41 on coupon, p 282

Azrock has a new vinyl asbestos tile alled Shibui, a combination of beige, brown, and tan chips. It comes in 0"x9" tile, in 1/8" gauge at regular prices.

Uvalde Rock Asphalt, San Antonio.
For details, circle No. 42 on coupon, p 282

Gentile now makes Crystalite Grecian Marble vinyl in .080 as well as ½" gage. Also added is a new 1/16"-thick feature strip series in ½" to 1" widths, 36" long.

Kentile, Brooklyn.
For details, circle No. 43 on coupon, p 282



Flexible oak parquet installs like tile

Only 1/8" thick, these new prefinished two-ply laminated tiles can be scribed, cut, and adhesive installed like resilient tile, yet they look and wear like standard oak. The tiles can be installed on

the same underlayment as resilient tile to the same finished height which adapts them well to modernization.

Georgia-Pacific, Portland, Ore.

For details, circle No. 44 on coupon, p 282



Laminated plank flooring, ½" thick, in 3", 4", 5", 6", and 7" widths, comes in planks 2½' to 7½' long. Prefinished, it has plugs in plank ends, and can be adhesive installed even over radiant heated on grade concrete slabs.

Wood-Mosaic Corp, Louisville.

For details, circle No. 45 on coupon, p 282



Homogenous vinyl tile, called Ever-Nu, comes in .080 and ½" gages; 14 marbelized colors. Special composition does not shrink, resists wear and indentation, will not burn. For above, on, or below grade installation.

B. F. Goodrich, Watertown, Mass. For details, circle No. 46 on coupon, p 282

Appliances—the big news is in drop-ins and laundries

And more emphasis on compact refrigerators. But overall, this is not a year of big change. Only Hotpoint among the majors has a full new line, though some smaller makers (like Magic Chef Modern Maid) are branching out toward full kitchen lines. Recent models from seven major lines are reviewed here. Reviews of other kitchen equipment start on page 221.



NESTIQUOM S

Hotpoint offers this 30" unit as the top of its new "Town & Country" drop-in line of oven and range combinations. Called the "Custom 30," it feature "twin tower" controls; one "Super 2600 high-speed Calrod surface unit; and an oven door that can be lifted completel off for cleaning. Also featured in Hotpoint's full new 1961 line: a compact 28" wide refrigerator line designed to save floor space (it will be matched with a 28" line of food freezers later thin year); a clothes dryer that plugs into standard 115-volt circuit, an all-new dishwasher with the capacity to handle 12 place settings.

Hotpoint, Chicago.

For details, circle No. 47 on coupon, p 28

Kelvinator says: no more annual model changes

American Motors appliance division will no longer change the outward appearance of its appliances each year But it will continue to add operating features and make mechanical improvements as in the past. For example, the 1961 clothes washer looks just like the 1960, but a splashaway lint filter replaces a pump-type filter with over 3 parts. In electric ranges, a new surface unit temperature control regulates her more accurately and with fewer fluctuations than control used in older models.

Kelvinator, Detroit.

For details, circle No. 48 on coupon, p 28

Westinghouse has introduced a 30 drop-in range with a two-level top for the 1961 market. Controls are set on the side for easy access. A deluxe model, the offered later this year, will have complete set of automatic timing and temperature controls.

Other Westinghouse appliances introduced in late '60 include two new certer-drawer refrigerators, and a new lin of freezers, headed by a self-defrostin 14 cu ft model.

Westinghouse, Mansfield, Ohio.

For details, circle No. 49 on coupon, p 28



Whirlpool for 1961 has a washer dryer that takes only 29"x25½" floor space, stands only 36" high, yet handles a 10-lb load. Drying heat is modulated to the moisture of the clothes to avoid over-drying. Price for electric model: under \$500. Also new, "Blanket of Flame" range top (H&H, Oct '60), electric ovens with removable doors.

Whirlpool, St Joseph, Mich.

For details, circle No. 50 on coupon, p 282



Frigidaire has a double wall oven with French doors on top unit for easier loading, pull-out oven liner on lower unit for easier cleaning. Another new double oven has a drop-down door on the upper unit (instead of French doors) to simplify maintenance. Also new this year are folding surface units in 24" and 48" sections with two and four burners.

Frigidaire, Dayton.

For details, circle No. 51 on coupon, p 282



General Electric has enlarged its washer line across the board to 12-lb capacity while limiting front-to-back dimension to 25". New models have lint filters, bleach dispensers, multicycle controls. Also new from GE: three range hoods for countertop units, two 13 cu ft refrigerator-freezers to replace earlier 12 cu ft models.

General Electric, Louisville.

For details, circle No. 52 on coupon, p 282



Waste-King has a new electric built-in line with automatic clock-controlled roasting and baking, removable fiberglass insulated doors with patterned glass windows. New units styled by Industrial Designer Henry Dreyfuss match line of gas built-ins and dishwasher-dryers shown mid-1960, mobile dishwasher introduced in early fall.

Waste King Corp, Los Angeles.

For details, circle No. 53 on coupon, p 282

don't miss seeing the finest in heating and air conditioning

Specifically designed

You can cool up to 1,500 sq. ft. with this 2-ton LENNOX unit

This extremely compact and efficient "comfort package" has been developed to provide year 'round air conditioning in less expensive homes. Pre-charged, self-sealing Quick Coupler refrigerant lines join the large coil and the air cooled (waterless) condensing unit . . . no expensive refrigeration labor. Gas furnace also contains the materials and workmanship that have made the name Lennox synonymous with quality.

Gas Furnace...especially for SPLIT-LEVEL HOMES



Only 385%" high. Fits in low equipment rooms. Dependable up-flo models in 100,000 to 160,000 Btuh range. Will handle 2 to 5 tons of added air conditioning. Famous Lennox quality.

Revolutionary



The only year 'round air conditioner that is modular-designed for heating and cooling "tailored" to your needs...compact, quiet and attractive. Yes, the Landmark is truly the deluxe modern way to comfort condition your homes.

fresh air ELECTRIC HEAT AND HEAT PUMPS



Lennox has perfected electric heating equipment that offers the deluxe comfort that can only be provided by a ducted system. And with Lennox fresh air electric heating, air conditioning can be added anytime.

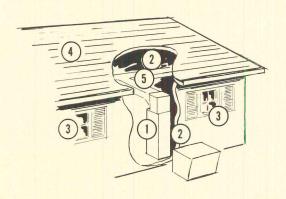
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equipment



You'll see the famous **LENNOX** line of gas, oil, and electric heating and cooling equipment...that will solve any application problem

> Come in and see why more and more builders are switching to Lennox. Inspect products that are years ahead in development, performance and application. See and hear the straight facts on: electric heat; air conditioning for the \$15,000 home; heating designed for split-level homes; and many more interesting, sales-centered heating and air conditioning ideas.



Eliminate expensive installation costs

- Use Lennox QC Builder Package (air conditioning and gas heating).
- Use 6" of insulation in ceiling; 3" in exterior walls. (It more than pays for itself, and year 'round air conditioning adds these features to your sales message...glamour, prestige, comfort, higher loan value, and higher resale value.)
- Use high-grade, tight windows; minimum glass on south and west.
- Use light colored exteriors and orient the house to minimize solar heat gain.
- Put duct in conditioned space.

Don't be satisfied with less than

HEATING · AIR CONDITIONING











Designed for small homes. Unit is extremely compact and can be installed with zero clearance to combustibles on both sides and rear,

permitting installation using a minimum of floor area.

All new





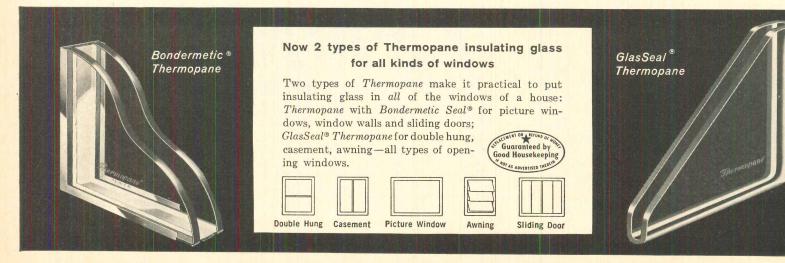
LENNOX INDUSTRIES INC., FOUNDED 1895 — MARSHALLTOWN AND DES MOINES, IOWA; COLUMBUS, OHIO; SYRACUSE, NEW YORK; DECATUR, GEORGIA; FT. WORTH, TEXAS; SALT LAKE CITY, UTAH; LOS ANGELES, CALIFORNIA. LENNOX INDUSTRIES (CANADA) LTD. — TORONTO, MONTREAL, CALGARY, VANCOUVER, WINNIPEG.



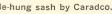


PEOPLE ARE LEARNING TO LOOK for the name *Thermopane* on windows in new houses. Advertisements in mass-circulated magazines—

Better Homes & Gardens, American Home, Living, and Good Housekeeping—are urging them to do so. For their own protection, and comfort.









How a piece of paper helps sell your house!

When prospects see this paper arrow pointing to the *Thermopane®* trade-mark inscribed lightly on the windows in your house, they can't help but be favorably impressed. They've read about the advantages of *Thermopane* insulating glass for years. And probably have talked to friends who have it.

Builders such as Medema Brothers, Chicago; Surety Builders, Cleveland; and Slavik Brothers, Detroit, have proved that using *Thermopane throughout* their homes gives them a competitive edge over builders who don't.

The name *Thermopane* helps their sales because it's the *best known* insulating glass. It's made in the U. S. A. *only* by the Libbey Owens Ford Glass Company, a financially responsible manufacturer who stands back of the products he makes.

LIBBEY · OWENS · FORD

TOLEDO 1, OHIO



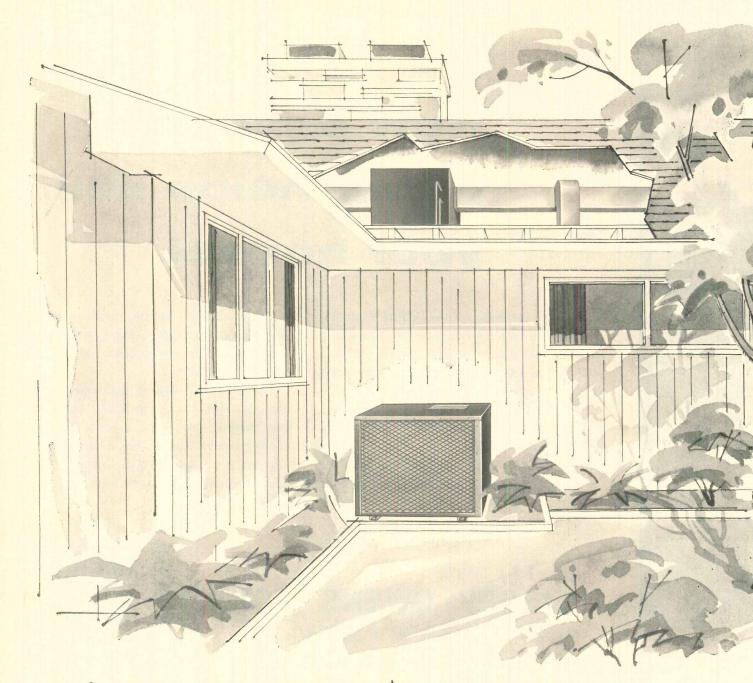
Thermopane® MERCHANDISING HELPS ****

Thermopane merchandising helps

L·O·F can supply you with merchandising aids—folders, sill cards, window stickers, sales-area displays. Also newspaper mats to use in your own advertisements and literature.



Now!..Trane brings complete air conditioning

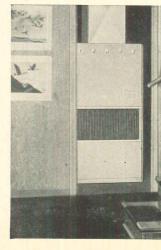


1. Heat, cool entire home with a new TRANE airto-air Heat Pump! Here's big building quality air conditioning, engineered to meet residential needs. This new TRANE Heat Pump operates electrically; uses new Trane Heat Pump operates electrically; uses no water, requires no fuel, provides heating in winter, cooling in summer. On cooling cycle, it operates as a conventional air conditioner, extracting heat from the home. On heating cycle, the action is reversed: heat from outside air is picked up by the refrigeration system. This, plus heat from the compressor is delivered into the residence. For colder climates, electric auxiliary, heating units are available.

hvered into the residence. For colder climates, electric auxiliary heating units are available.

An outside unit is usually located on the ground, with the indoor unit in the attic, crawl space or basement. No chimney or flue is needed. A ductwork system delivers both cool and warm air throughout the dwelling. The new TRANE air-to-air Heat Pump is available in 2, 3, 5 and 7½ hp capacities to heat and cool any size or type of home.

2. Year-around air conditioning for homes, stores, offices with this TRANE water-to-air Heat Pump. Easy to install, completely factory-wired, the TRANE water-to-air Heat Pump provides year-around comfort for homes, stores, offices. The modern, compact cabinet takes little floor space, may be installed within or outside of the conditioned area. Quiet, efficient, vibration-free, this unit meets every requirement in areas where water supply and disposal is adequate. It's available in 5 sizes: 3, 5, 7½, 10 and 15 tons.



ou 4 ways to provide at competitive prices

A new, compact Heat Pump—plus heating-cooling systems for any home, in any climate—add salability to your homes, while holding building costs down!

ERE ARE FOUR practical ways you can offer complete, year-around air conditioning in homes you build—and still keep your prices petitive. New Trane Climate Changer to give you an almost unlimited choice of tem for heating, cooling—or both. And this is lity air conditioning—manufactured by a ler in big building systems. It's matched ipment, produced in a new, modern factory igned exclusively for the manufacture of ckage' heating, cooling units that are built ther to work together.

est addition to the TRANE residential mate Changers is the industry's newest line neat pumps, air-to-air or water types. Comt, efficient, they're easy to install . . . provide

year-around comfort. Best of all, these new Trane Heat Pumps (air-to-air type) tuck away in attic, crawl space, basement or garage; take no usable floor space. Outside unit is neat, inconspicuous, with upward air discharge for quiet operation, location flexibility.

The name Trane on your heating-cooling system means full capacity, trouble-free operation. Each system is carefully installed by a selected air conditioning contractor. A Trane system marks yours as a quality home! For complete facts on the Trane Climate Changer line, just call your nearby Trane Sales Office . . . it's listed under "Air Conditioning" in the Yellow Pages. Or write Trane, La Crosse, Wisconsin.

For any air condition, turn to

TRANE

MANUFACTURING ENGINEERS OF AIR CONDITIONING, HEATING, VENTILATING AND HEAT TRANSFER EQUIPMENT

THE TRANE COMPANY, LA CROSSE, WIS. • SCRANTON MFG. DIV., SCRANTON, PA. • CLARKSVILLE MFG. DIV., CLARKSVILLE, TENN. • TRANE COMPANY OF CANADA, LIMITED, TORONTO • 100 U. S. AND 19 CANADIAN OFFICES



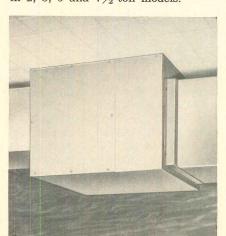
VISIT OUR EXHIBIT

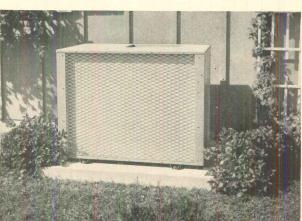
combination furnace and air ditioner heats and cools any type ome! This Trane Climate Changer be oil or gas-fired warm air type dow or downflow). Matched cooling fits on the furnace, may be installed a the furnace or added later—so may offer optional cooling! Heat-cooling use same duct-work, ing installation costs.

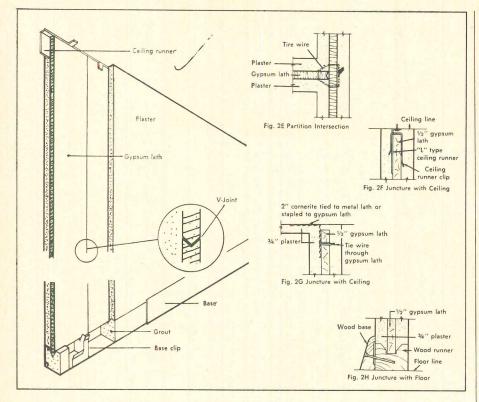
4. Independent cooling, for use with hot water heat or where there is no central heating, is provided by this Trane Climate Changer Fan-coil unit. Fits into just 5 square feet in attic, basement, utility room or garage. Ideal for use with Trane Baseboard and other wet heat systems in homes or small commercial buildings. Comes in 2, 3, 5 and 7½-ton models.

Needs no water: Outside compressor unit for Trane Climate Changer systems (1), (3) and (4) is air-cooled. Eliminates water supply and disposal problems frequently encountered in residential areas. Features upward discharge for quiet operation, freedom of location. Unit is compact, neat in appearance. 2, 3, 4, 5 and 7½-ton models—all with quiet centrifugal fans.









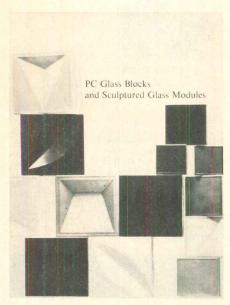
New manual shows latest plastering techniques

Architect John R. Diehl, with the collaboration of the plaster and lath manufacturers and the lathers' and plasterers' unions, has produced 366-pages on all phases of the industry. Besides showing the materials and techniques for all types of work—including acoustical, thermal, and fire insulation—the manual outlines many new developments like the solid plaster partition shown

above. This wall consists of plaster applied to both sides of metal or gypsum lath attached to floor and ceiling runners with the long way of the lath vertical. Temporary bracing holds the lath in place till the brown coat sets. Book is free to qualified professionals.

Natl Bureau for Lathing & Plastering, Washington, D.C.

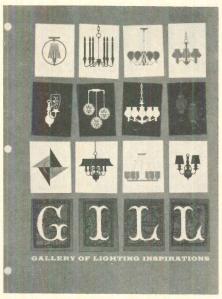
For details, circle No. P1 on coupon, p 282



Sculptured Glass Blocks for all types of building are described in full in a new 20-page AIA file folder. Blocks to diffuse or direct light, decorative blocks, colored blocks, functional blocks for curtain walls are described. Charts cover physical performance data. Installation details cover layout and installation costs.

Pittsburgh Corning, Pittsburgh.

For details, circle No. P2 on coupon, p 282



Decorative Lighting is keyed to masterpieces of painting in this new catalog from Gill. Fixtures include ceiling and wall units, chandeliers, and pendants that are compatible with art by Vermeer, Degas, Gainsborough, Cezanne, Modigliani, Picasso, Renoir, Wood, Rousseau, Klee, Van Gogh, Gauguin.

Gill Glass & Fixture, Philadelphia.

For details, circle No. P3 on coupon, p 282

New lighting line for builders

Thomas Industries Star Light catalog for 1961 is being launched with a big promotion. The 16-page color brochure covers a full range of fixture types—pull downs, chandeliers, wall and ceiling units, outdoor lights, etc. The fixtures are shown in room-idea settings to suggest how they may be used for better illumination and decoration.

Thomas Industries, Louisville.

For details, circle No. P4 on coupon, p 282

How to choose service equipment

Wadsworth's 1961 guide is now available. The new edition is fully indexed, covers 30-amp to 1,200-amp industrial safety switches, 30-amp to 600-amp general-duty service switches, 30-amp to 200-amp service equipment, raintight equipment, 30-amp interchangable circuit breakers, circuit breaker enclosures, wiring troughs with complete fittings.

Wadsworth Electric, Covington, Ky. For details, circle No. P5 on coupon, p 282

Contemporary light fixtures

A new series of ceiling, wall, and table fixtures are described in two new brochures. The fixtures all incorporate Rotaflex spun-plastic shades and globes in functional geometric shapes.

Rodisco Inc, Clinton, Conn.
For details, circle No. P6 on coupon, p 282

Resilient floor designs

Johns-Manville has a 10-page, four-color brochure showing 45 new floor patterns in J-M Terraflex vinyl-asbestos tile. The brochure also includes a fold-out chart of Terraflex colors. Price: 10ϕ .

Johns-Manville, 22 East 40 St, New York City.

For copy, write direct to manufacturer.

Wall and ceiling paneling

Marlite's 1961 catalog has eight pages in color. New patterns shown are deluxe marble, golden fleece, and lace. Complete data is given on high-gloss panels, plank and black, random plank, wood panels, pegboard, etc.

Marsh Wall Products, Dover, Ohio. For details, circle No. P7 on coupon, p 282

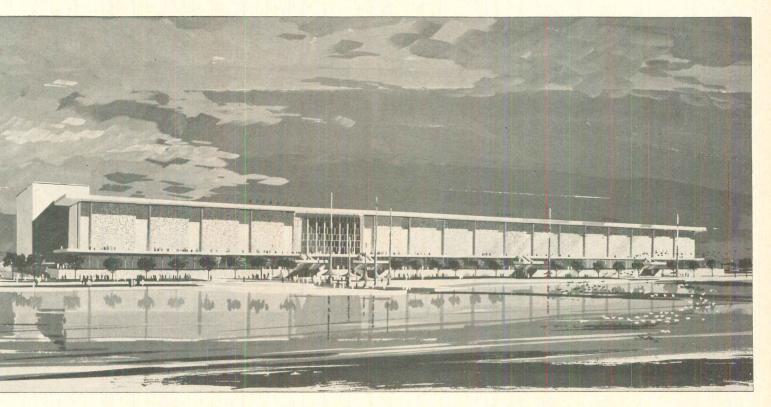
Extra-strong vapor barrier

Glas-Kraft has a 4-page brochure on its Ply-Bar, a six-layer vapor barrier composed of rot-proof kraft papers, asphalt laminates, glass fiber, and 2-mil clear polyethylene film. The brochure includes tracer drawings showing how to install it for dampproofing under concrete floors, as flashing, etc.

Glas-Kraft, Slatersville, R. I. For details, circle No. P23 on coupon, p 282



PRODUCTS SPECIFIED TO WATER-PROOF AND VAPOR-PROOF CHICAGO'S NEW \$35,000,000 EXPOSITION CENTER



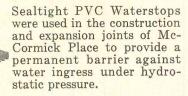
Premoulded Membrane VAPOR SEAL

... was used to effectively isolate the structure from the site, thereby eliminating moisture migration into the structure and the resulting problems of excessive moisture.



... Impermeable Perimeter Insulation was used at strategic locations to effectively eliminate heat loss now and for the life-time of the structure.

PVC WATERSTOPS







M°CORMICK PLACE

ARCHITECT: Alfred Shaw, Chicago, Illinois

CONSULTANTS: Carl A. Metz, John Dolio and John Root, Chicago, Illinois; Edward D. Stone, New York; John Ditamore, Lafayette, Indiana; and Fred Schmid, Los Angeles, California

GENERAL CONTRACTOR: Gust K. Newberg Construction Co., Chicago, Illinois

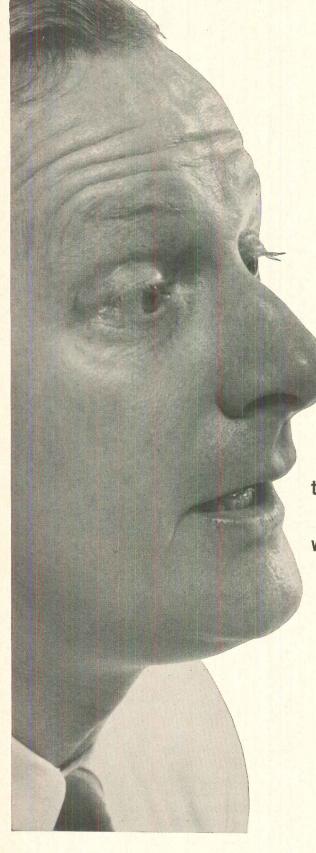
Magnificent is the word for McCormick Place . . . the largest and finest exposition center in the world. Larger than the Coliseum of ancient Rome . . . designed by twentieth century experts and built with the latest and best of building materials to endure longer than the Pyramids of Egypt. Because of the lakefront location special attention was given to the selection of products to be used to water-proof and vapor-proof this outstanding structure. We are justifiably proud that the Sealtight Products (left) were used to provide this important protection against moisture migration. McCormick Place is now one more of the thousands of important architectural structures that have been moisture-protected with Sealtight products.



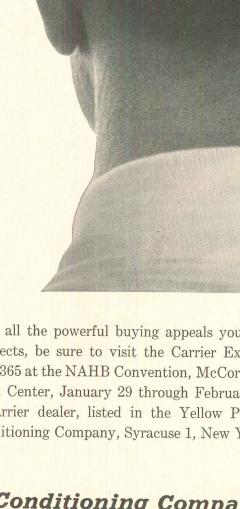
SEE THESE PRODUCTS IN BOOTH NO. 56 AT THE N.A.H.B. SHOW, JANUARY 29 to FEBRUARY 2

W. R. MEADOWS, INC.

10 KIMBALL STREET ELGIN, ILLINOIS



Have you heard how to plan a heating or air conditioning system with housewife appeal?



It's simple . . . when you start with the new Carrier Automatic Air Purifier.

In combination with a Carrier oil or gas furnace, it provides 5-Dimension Heating. Add a Carrier cooling system, and you can offer complete 12-month Home Air Conditioning like none other on the market.

To find out all the powerful buying appeals you offer your prospects, be sure to visit the Carrier Ex Booths 363, 364, 365 at the NAHB Convention, McCor Place Exposition Center, January 29 through Februa Or call your Carrier dealer, listed in the Yellow P Carrier Air Conditioning Company, Syracuse 1, New Y



Carrier Air Conditioning Compa

A DIVISION OF CARRIER CORPORATION

NEW PRODUCTS FOR 1961

Here is more new kitchen equipment

Long-Bell kitchen cabinets have birch veneered particle-board doors, with sealed and color-toned edges to match, in the new Contractor Line. Cabinet face frames are alder wood. Wall cabinets 44" high eliminate need for soffits. Special corner wall cabinet takes same space as lower rotary base cabinet—keeping doors lined up on both levels. Rotary base does not require extra wide top or angled corner—a saving of about \$15 per corner. Cabinets are carton packed, KD only, without hardware.

International Paper Co, Kansas City. For details, circle No. Al on coupon, p 282

Eight new kitchen hoods from Emerson fit a variety of needs. There are two self-contained units, two vertical discharge hoods, a duct-free model, an island hood, a retractable hood, and a blank hood to use with different fans or blowers. Most models come in four metal finishes and decorator colors to match appliance colors. List prices run from \$37.50 to \$102.

Emerson Electric, St Louis. For details, circle No. A2 on coupon, p 282

New duct-free hood by Miami-Carey has twin air-filter intakes mounted at either side for over-the-burner air-cleaning efficiency. Central fan unit pulls air through triple filter elements—aluminum mesh, spun fiberglass, and activated charcoal—to eliminate odors and grease. Clean air return is in upper slope of hood front, with diverter to direct air up away from cabinets and the cook's face. Pre-wired unit has push-button controls, comes in 30", 36", and 42" widths, in coppertone or stainless steel. Can be installed in less than 30 minutes, says the manufacturer.

Philip Carey Mfg Co, Cincinnati. For details, circle No. A3 on coupon, p 282

Built-in oven with integral exhaust fan removes smoke, grease, and heat from kitchen, permits closed-door broiling in upper oven of electric models. Viscount models fit 27" cabinet, have 3-spit rotisserie, fullview window, lights in upper and lower ovens. Also available without built-in fan vent.

Samuel Stamping, Chattanooga.
For details, circle No. A4 on coupon, p 282

Compact drop-in range top only 26" wide and new double built-in oven gives Tappan dealers 14 different ovens and 14 different counter-top units to fit almost every style and price of kitchen. All units are available in six colors.

Tappan, Mansfield, Ohio.
For details, circle No. A5 on coupon, p 282



Magic Chef shows new broad appliance line

Magic Chef and Dixie Products have consolidated under the name Magic Chef Inc. And as a new company, Magic Chef has introduced a complete new line of built-in and free-standing gas and electric ranges as well as upright and chest freezers and freestanding gas and electric ranges—all designed by Waltman Assoc. The completely new built-in electric line (above) includes four oven models in five colors, with

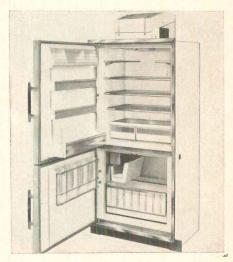
clock control, panel lighting, interior lights, signal lights, oven door windows, and optional rotisseries. Counter units have top-mounted infinite controls, giving full temperature gradation from top to bottom. They are available in 24" and 30" wide units. Entire line covers a wide price range—from lowest priced competitive models to luxury models.

Magic Chef, Cleveland, Tenn.
For details, circle No. A6 on coupon, p 282



Twin ovens cook complete meals automatically, keep food hot until serving time. Controls save gas or electricity by turning off heat when cooking temperature is reached. Tightly sealed doors and heavy insulation in these top-quality units make this cooking method possible. Ovens fit a single surround.

Chambers Built-Ins, Chicago.
For details, circle No. A7 on coupon, p 282



Built-in refrigerator fits 2'x3' floor space, offers 16.5 cu ft of storage in two compartments. Circulating cold air keeps both sections free of frost. Deluxe model has automatic icemaker. Doors come in 28 colors, copper, and stainless steel. Special panels may be field applied to match room decor.

Revco, Deerfield, Mich. For details, circle No. A8 on coupon, p 282



New range builds-in or stands free

This new "convertible" range can be installed flush against a wall, tight between cabinets. This model comes in 30" and 40" widths. Both have infrared broiler, removable oven door. Deluxe models also have automatic timer clock. New unit is well adapted to kitchen remodeling.

Admiral Corp, Chicago.

For details, circle No. A9 on coupon, p 282



Hinged range-top speeds cleaning

Caloric's countertop range has topmounted controls for safe and easy installation, color-coded burners and control kno and a porcelain enamel surface in pink, yellow, turquoi coppertone, black, white, and satin metal. Shallow 21/8" depleaves room for a drawer below.

Caloric, Topton, Pa.

For details, circle No. A10 on coupon, p



In-Sink-Erator for 1961 has a new plastic case. Automatic reversing action prevents jamming, dislodges pieces that can't be ground. Four models are available, priced from \$99.50 to \$159.50. Smaller Saturn and Silver Star have ½-hp motors; larger Mark 27 and Gold Coast have ½-hp motors. All carry a five-year warranty.

In-Sink-Erator, Racine, Wis.
For details, circle No. All on coupon, p 282



waste King Super-Hush disposer cuts sound by liquefying waste fast, and by encasing operating parts in a fiber-filled shell. Rubber cushions between disposer, drain, and pipes prevent vibration. Hardened-steel teeth permit faster operation while tripling unit's life expectancy. Super Hush: \$99.95. Other Hush models \$74.95 and \$59.95.

Waste King, Los Angeles.
For details, circle No. A12 on coupon, p 282



Harvill's three new DispoZmaste models 70, 90, and 120, all featu 1/3-hp motors, stainless-steel grindisleeves, corrosion-resistant metal allo and handy dishwasher connection. T 120 model has cast aluminum ou housing, fiberglass insulation, and floing aluminum and rubber "sound curion" mounting ring.

Harvill Corp, Los Angeles.
For details, circle No. A13 on coupon, p 2



Autone non-ducted hood only 7" deep extends 21" from wall to cover front ourners completely. Mesh filter removes grease, special "Micro-Flo" filter removes smoke, activated charcoal filter removes odors. Attaches to cabinets or wall. From \$84.95 to \$119.95.

Nutone, Cincinnati.
For details, circle No. A14 on coupon, p 282

New kitchen cabinets have warp-anddent-proof high-pressure laminate doors. Highly resistant to scratching, abrasion, and fading, they are available in various matched woodgrain patterns. Cabinet modies are Ponderosa pine.

Caradco, Dubuque, Iowa.
For details, circle No. A17 on coupon, p 282

cow-priced range hoods come in 24", 30", 36", and 42" lengths with brushed thrometone or coppertone enamel finshes. Fan, light, and push-button conrols are pre-wired to the outlet box. Retails for \$38.32 to \$36.66.

Ventrola Mfg Co, Owosso, Mich. For details, circle No. A18 on coupon, p 282



All-new dishwashers by Kitchen Aid come in three price ranges listing at \$289.95, \$328, and \$360. Prices slightly higher with pump-drain, maple tops, and stainless steel or copper finishes. Two higher-priced units have trim kits to hold any 1/16" or 1/4" thick cabinet front material. Top model has three washing cycles.

Hobart Mfg Co, Troy, Ohio. For details, circle No. A23 on coupon, p 282



Leigh series 5200 range hood has an acrylic finish resembling stainless steel, but is priced 42% to 46% lower than stainless. Fan delivers 215 cfm, enough to exhaust a 10′ x 12′ kitchen through a 15′ run of 3½″x10″ duct. Completely pre-wired and UL approved.

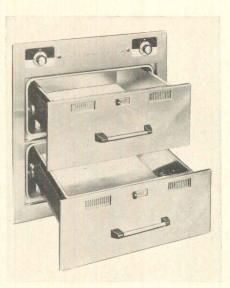
Leigh, Coopersville, Mich. For details, circle No. A15 on coupon, p 282

Condiment cabinet is a 10" high, twoshelf unit that comes 365%" and 485%" wide. Twin compartments are concealed by two translucent sliding doors. Shelves are only 8" deep.

Miami Cabinet, Middletown, Ohio. For details, circle No. A19 on coupon, p 282

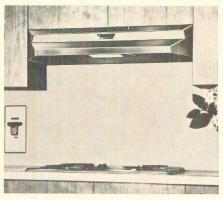
New gas built-ins have unique valve levers to light and adjust burners that are recessed when in "off" position. Raised edge of countertop limits spillovers, makes them easier to clean up. New oven has unique self-leveling and self-locking base plate that makes installation easy.

Brown Stove Works, Cleveland, Tenn. For details, circle No. A20 on coupon, p 282



Two-drawer food warmer features independent controls for each compartment. Thermostats dial heat up to 250°. Humidity selector marked "Moist" and "Crisp," can be set in intermediate positions. Unit consumes 900 w. Stainless steel drawers remove for easy washing in a sink. Unit fits 215/8" wide cabinet opening, 22" deep.

Thermador, Los Angeles.
For details, circle No. A24 on coupon, p 282



Trade-Wind hood has radial fan that produces high pressure for either horizontal or vertical discharge. Pushbuttons control two enclosed lights and two-speed ventilator. Comes in four standard lengths 30", 36", 42", and 48". Retail price is only \$55.

Robbins & Myers, Pico Rivera, Calif. For details, circle No. A16 on coupon, p 282

New compact refrigerator is 34½" high, 21" deep, 23¼" wide. Its 4 cu ft contains a 27-lb freezer compartment. Flush hinged door opens full 90°, even in corner location. Tecumseh compressor carries five-year warranty.

Marvel Industries, Sturgis, Mich. For details, circle No. A21 on coupon, p 282

New built-in ovens for gas or electric service come in fully automatic, non-automatic, or special builder models. Martha Washington single or double electric ovens are available. Gas models have broiler units below.

Gray & Dudley, Nashville, Tenn. For details, circle No. A22 on coupon, p 282



Frostless refrigerator-freezer offers panel fronts in walnut, birch, silver celeste, or "customizing panel" that can be papered or painted. Freezer door can be covered same way. Three combinations join 8.7, 10, or 11.6 cu ft refrigerator with 6.9 or 4.6 cu ft freezer. Lower-priced models come without decorator panels.

Amana, Amana, Iowa. For details, circle No. A25 on coupon, p 282



HOUSEWIVES appreciated having the washer and dryer in the bathroom. Stacked as shown, the Westinghouse Space-Mates fit in a space only 25 inches wide. A removable panel in a closet provided access for servicing.



THE UNDERCOUNTER DISHWASHER guarantees spotlessly clean dishes, b it heats its own water to a sanitizing 140 degrees. Choose 'N' Change panels give a wide choice of decorative effects.

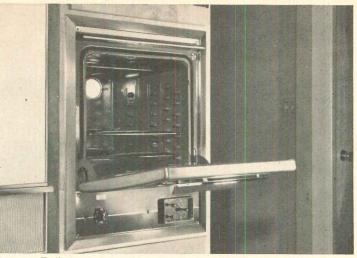
Leading Massachusetts developer says:

"ONE-CONTACT BUYING SOL WESTINGHOUSE RESIDENTIA



MR. ADELARD ST. ANDRE, the builder, is shown here in front of the first model home. It was built to prove that electrical heating is practical in a cold area like Massachusetts. The slight additional cost for equipment and power, compared

to the cost of oil and bottled gas, was no obstacle to prospective buyers snapped up six homes on opening day. Within three months all 28 hot the development were sold!



PPULAR Built-in Oven attracted lots of attention. Only 17 inches, it eless handles big meals. The unit slides easily into place, has only one electrical connection to be made.



LIKE THE OVEN, this 4-unit Range Platform goes into place in a jiffy. It drops snugly into the counter top without special fasteners. The Remote Control Panel and lift-out Corox® Units mean extra convenience in cooking and cleaning.

S ON THE NEW IARKETING PROGRAM"

r. Adelard St. Andre, president of Mount View Corporation, South of Massachusetts, speaking. "Like every builder, we want to cut so we tried the Westinghouse Residential Marketing Program at our clor Knolls development in Granby. It worked out just the way we "Yes, Mr. St. Andre got everything he needed—appliances and gequipment—with one contact. Deliveries were fast, complete, and cel And Westinghouse really pitched in to attract prospects! Six were sold on opening day alone. All 28 were gone in three months! he Mount View Corporation is planning a big 140-acre development th Hadley, with 225 Westinghouse Total Electric Homes! See what estinghouse Residential Marketing Program gives you:

source of supply...a complete line of quality home products. ING AND AIR CONDITIONING: Baseboard electric heating; heat ; central air conditioning and heating systems • WIRING DEVICES: centers; outlets, receptacles, switches; plus the popular Westinghouse atic Appliance Center • ELECTRICAL APPLIANCES: Built-in ovens inge platforms; water heaters; dishwashers; food waste disposers; retors; freezers; Laundromat® washers; dryers; combination washer-dryeom air conditioners • MICARTA: Counter tops and vanities, and the wall-building products • KITCHEN CABINETS: Wall and base on de luxe Heirloom Maple finish • APARTMENT ELEVATORS.

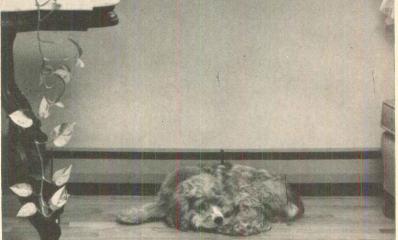
e point of contact... Residential sales managers in 54 principal ts responsible for full line marketing.

e coordinated merchandising plan... tailored to sell houses in e—traffic-building advertising, promotion aid, selling ideas, product ag, and publicity assistance.

how the Westinghouse Residential Marketing Program can save me and money... make building more profitable. Call your Westing-Major Appliance Distributor today. Or write Westinghouse Electric ration, Pittsburgh 22, Pennsylvania, for free booklet "New Direction w Profit for Builders."



EASILY built in, the big Refrigerator-Freezer was pushed into place before the trim kit was installed. 90-degree door opening within cabinet width saved valuable floor space.

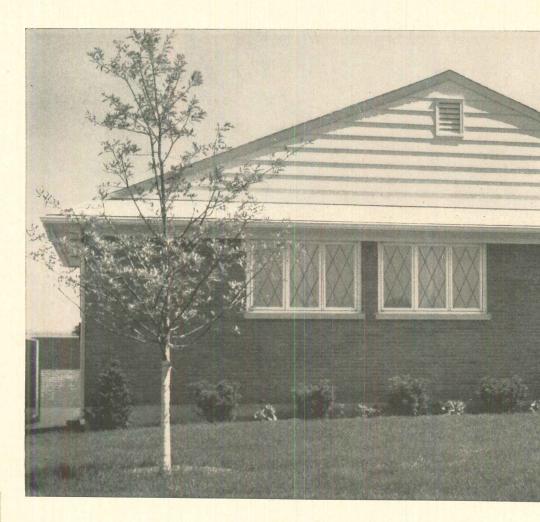


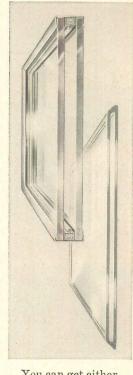
THE BIGGEST ATTRACTION was the electric baseboard heating. Every Batchelor Knolls home was a Westinghouse Total Electric Gold Medallion Home, Electric

an be sure . . . if it's

Westinghouse







You can get either glass-edgeormetal-edge in TWINDOW

Houses sell easier when they because buyers save on

Howard C. Reeves heads up a firm in Louisville, Kentucky that builds about 50 homes a year ranging in price from \$15,000 to \$18,000. He is past president (1959) of the Associated Home Builders of Louisville.

Here's what Mr. Reeves has to say about TWINDOW: "Our winter months in Kentucky point up the extra value of TWINDOW both to ourselves and to our buyers. The reduction of sweating and condensation through the use of TWINDOW is very obvious when compared to homes not having TWINDOW. Buyers save on heating and cooling bills—and they can forget about storm windows. We like such added selling features in our homes and our customers appreciate the added quality of TWINDOW Insulating Glass."

... the windowpane with insulation built in



Howard C. Reeves—Louisville, Kentucky, a National Director, National Association of Home Builders.

feature Twindow Insulating Glass heating and cooling bills

Tell your customer he can have all this comfort and convenience for not much more than he'd pay for single glazed windows with storm sash, and he's sold on Twindow. It helps close many a sale.

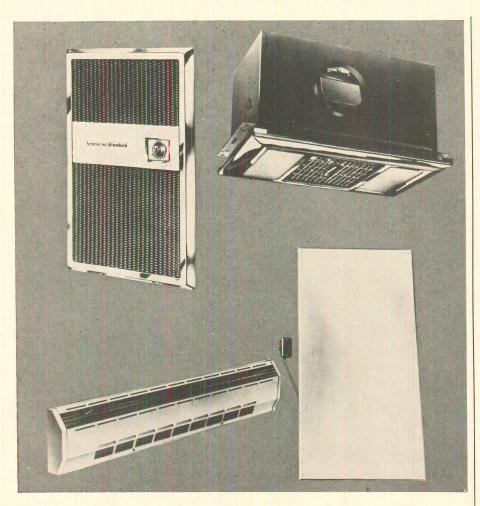
You can get TWINDOW Glass-Edge or Metal-Edge in all popular sizes for a wide variety of window styles. Our free TWINDOW booklet gives you the complete story. Write to Pittsburgh Plate Glass Company, Room 0199, 632 Fort Duquesne Blvd., Pittsburgh 22, Pennsylvania.



Pittsburgh Plate Glass Company

Paints · Glass · Chemicals · Fiber Glass In Canada: Canadian Pittsburgh Industries Limited

Air conditioning—the news is more central systems



Electric heat line introduced by American-Standard

Called the "Electri-Warm" line, these new units complement the electric warm-air furnaces and heat pumps offered by this company early in 1960. Typical examples of the new zone heating components are shown above. They are 1) built-in wall heaters, with individual thermostatic control and fan circulation; 2) ceiling insert heaters with dual lighting, exhaust fan, and air circulator built-in, switches and thermostat in a separate unit; 3) baseboard heaters with either fin-type elements or, as with the deluxe model shown, rod elements with welded fins. These are mounted on

floating holders so expansion and contraction will be soundless. Units are compact, 6" high and 2" deep, are supplied in lengths of 3' to 9', and capacities up to 2,840 w (9,693 Btu). They are controlled by individual room thermostats. And 4) ceiling panels (aluminum circuits are bonded between two layers of polyester film backed with fiberglass insulation) that are twice as efficient as electric cable (which A-S also is offering as part of its new full line). The panels come $49\frac{1}{2}$ "x25-7/16".

American-Standard, New York City. For details, circle No. A26 on coupon, p 282

Extra quiet heating is claimed for a new line of residential gas furnaces offered by Westinghouse. The air-handling system delivers large volumes (1400 cfm in the 100,000 Btuh model) capable of handling added cooling load. Quiet centrifugal blowers are belt driven. Expansion joint in heat exchanger cuts expansion-contraction noises. Up-flow coils for year-round conditioning give two to five tons of cooling. Three-row coils give maximum moisture removal.

Westinghouse, Pittsburgh.

For details, circle No. A27 on coupon, p 282

Unit conditioners in Emerson's 1961 line are all adapted to through-the-wall installation. Cooling capacities range from 7,000 to 16,000 Btuh. Features include: squirrel cage blowers, shockmounted compressors, staggered-tube coils, automatic controls.

Emerson Radio, Jersey City
For details, circle No. A28 on coupon, p 282

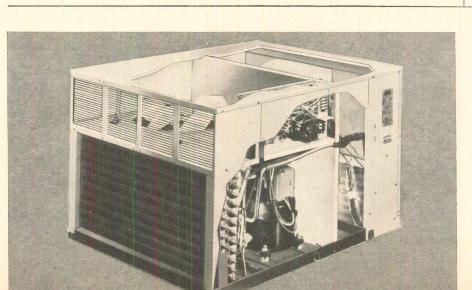
Small air-to-air condenser is now offered by Mueller in a 2-hp (22,000 Btuh) size to add cooling to small home systems. Blower is a large capacity, slow-rotating centrifugal unit to cut noise and wear. Sealed ball bearings and cushion mounts also cut noise levels. All parts are accessible for service. Condenser casing is fully weather-proofed.

Mueller Climatrol, Milwaukee.

For details, circle No. A29 on coupon, p 282

New condenser package from Command-Aire is shipped completely assembled, wired, and equipped with all safety devices (including high-low shutoff). New ca-301-303 unit is ARI rated at 36,000 Btuh. Compressor is 3 hp; 12" diameter blower is ½ hp. Unit may be single-phase or three-phase wired. Case is bonderized to resist corrosion.

Texas Products Mfg, Waco, Texas. For details, circle No. A30 on coupon, p 282



New Lennox heat pump is designed for easy installation. It can be set completely inside the house, with just the grille face exposed. Air is drawn in through the lower grille, which is the outdoor coil, turned 180° inside the unit, and discharged through the upper grille. The unit is supplied as an assembled package, completely charged, and with controls mounted and wiring connected.

Lennox, Marshalltown, Iowa. For details, circle No. A31 on coupon, p 282



w compact boiler is offered as a npletely packaged unit. Called the innyday 3", gas-fired unit is availe in three sizes (the largest, 125,000 ih) yet is only 25 1/8" tall. It is dened specifically for use with non-fers baseboard convectors.

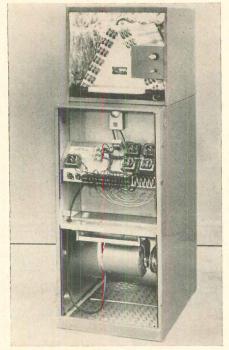
Crane Co, Johnston, Pa.

details, circle No. A32 on coupon, p 282



New Delco "365 Conditionair" heating-cooling units come in highboy, counterflow, and horizontal models. Remote condenser is weatherproof, designed for easy servicing. Units are available for gas or oil. Cooling capacities are from 2 to 5 tons.

Delco Appliance, Rochester, N.Y. For details, circle No. A33 on coupon, p 282



New Rheem electric furnace adapts to meet individual needs by changing connections of wire jumpers. Elements are set up in banks of 5 kw each. Furnaces come in capacities of 10, 15, and 20 kw, or 34,000 to 68,000 Btuh. Evaporator and two-stage blower optional.

Rheem Mfg Co, New York City. For details, circle No. A34 on coupon, p 282

mpact condenser for 2-, 21/2-, and on cooling system has been develed by Carrier. The Micromite is a Ided-steel hermetic compressor ensed in a zinc-coated 441/2"x221/2"-21/4" steel cabinet. Insulation and v-speed fan cut noise level.

Carrier, Syracuse.

details, circle No. A35 on coupon, p 282

Five new coolers covering the 24,000 to 58,000 Btuh range head the full new line recently introduced by Mathes. The units are factory-wired. Complete 1961 line includes five unitary heat pumps, 27 split cooling systems, 21 split heat pumps, ten room units.

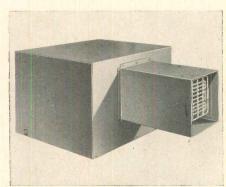
Mathes Co, Marble Falls, Texas. For details, circle No. A36 on coupon, p 282 New through-wall frame or its builder room-unit line is being introduced by Fedders. New frame avoids old bugaboos: proper alignment is made sure with built-in leveler; a triple wind barrier seals off the weather; proper overflow drainage is provided.

Fedders Corp, Maspeth, N.Y. For details, circle No. A37 on coupon, p 282



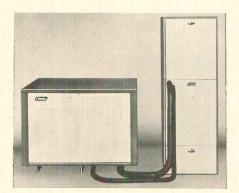
oncrieff oil furnaces have high airlivery capacity built in. This permits ding cooling coils without increasing ower size. Furnaces are available in ree sizes: 84,000, 95,000 and 112,000 uh bonnet output. Round fireboxes e refractory lined. Square radiator ves long flue-gas travel. Units are asmbled and factory-wired, and availle with or without burner vestibule. ooling coil may be installed in plenum.

Henry Furnace Co, Medina, Ohio. or details, circle No. A38 on coupon, p 282



Auxiliary heater, mounted in the main duct just off the main housing, allows new Trane heat pump to be used in colder areas. It cuts in automatically when temperatures drop below the capacity of the pump. Climate Changer heat pumps are split systems: the indoor unit pictured above includes evaporator coils, circulation fan, and air filters; outdoor condenser unit holds compressor and fan.

Trane Co, LaCrosse, Wis. For details, circle No. A39 on coupon, p 282



Coleman heat pump is designed for use with ducted heating and cooling systems. Two-part system is connected with factory-installed refrigerant piping. Excess capacity keeps operating efficiency high even in 0 F to 45 F range. Unit also has a 5-kw booster, and two more 5-kw stages can be added as needed. The condenser section has a built-in drier, reversing and service valves, and a defrosting system.

Coleman Co, Wichita. For details, circle No. A40 on coupon, p 282



Honeywell shows compact air cleaner

This new electronic unit is designed to fit the return plenum of forced-air systems, be readily accessible for service and cleaning. Three-inch ionizor-collector unit is standard equipment, and an additional collector unit can be used to increase filtering capacity. According to the manufacturer, cleaner is 70% efficient.

Supplied with the unit is a washing kit (right). Signaling device (fore-

ground) shows when filter needs cleaning; cell is removed from unit, treated with a detergent, and washed out in the plastic-backed trough. Safety switches cut off the current whenever the access door to cell is opened. Maker says unit need be cleaned only four times a year.

Cost of the units is \$317 to \$324, installed cost, \$350 to \$400.

Minneapolis-Honeywell, Minneapolis. For details, circle No. A41 on coupon, p 282

I

Gas wall heater is easy to install, requires just one fuel connection, and

uses no electrical wiring. It is recessed in the wall, is faced with a chromeplated grille. Both radiant and nonradiant types are available, in capacities of 4,000 to 8,000 Btuh, and at prices ranging from \$25 to \$46. All are A.G.A. approved for use in combustible walls.

Peerless Mfg, Louisville. For details, circle No. A42 on coupon, p 282 Money-saving package adapts any boiler-side or top outlet, upfeed or downfeed, right or left hand-to full hydronic heating. Hydro-Flo Pak components include booster pump, compression tank, relief valve, pipe, tank, and boiler fittings. Pre-engineered parts assure fast installation, with no estimating, no call-backs, no trips to the shop.

Bell & Gossett, Morton Grove, Ill. For details, circle No. A43 on coupon, p 282

New motorized valve gives fully zoned heat in an hydronic system with only a single circulator. Electric motor drives a slow-operating gear train (to avoid water hammer). Sealed mercury switches are completely silent. Valve fits within baseboard radiator. Positive shutoff prevents leakage.

Edwards Engineering, Pompton Plains,

For details, circle No. A44 on coupon, p 282

Gas space heaters in 30,000 to 70,000 Btuh capacities make up Arkla's 1961 Radiant-fire line. They feature top controls, full-width radiant panels, plus large warm-air grilles. Fan circulation with a 5" blower is optional. Decorative front panels can be changed to match decor.

Arkla, Little Rock, Ark. For details, circle No. A45 on coupon, p 282

Radiant comfort heaters for indoor or outdoor use have just been introduced by Fostoria. Since no heat is lost through convection, units work well as patio or entryway heaters. Element is a linear quartz tube that converts up to 86% of electrical energy into heat. Units are 25½" or 47½" long, use 550 to 6,000-w.

Fostoria Corp, Fostoria, Ohio. For details, circle No. A46 on coupon, p 282

Electric ceiling panel for 2'x4' exposed-grid construction is made by Arvin. New 240-v units make full room draft-free, all space usable. Heating element is a printed circuit in a Mylaraluminum-Mylar sandwich backed with 3/4" of fiberglass insulation. Unit puts out 62.5 w per sq ft.

Arvin Industries, Columbus, Ind. For details, circle No. A47 on coupon, p 282

Smaller heater is new in Pioneer's Safti Wall-Vent line. New unit has an 18,000-Btuh input. Like other units in line, new model draws fresh air, exhausts flue gases through wall. Easily accessible side panel makes cleaning easy. Template supplied by Pioneer makes installation no problem.

Pioneer Mfg Co, Los Angeles. For details, circle No. A48 on coupon, p 282

Hot-water heat and service are joint benefits of Hydrotherm's new system. System combines cast-iron boiler, insulated expansion tank, pre-cut fittings and baseboard. With these engineered parts, test installations have been made in a 1,250 sq ft house in four manhours.

Hydrotherm, Northvale, N.J. For details, circle No. A49 on coupon, p 282



now simplifies and speeds the tricky job stallation on household doors. Works like the chassis units, molded of tough Du Pont EL nylon resins, slide smoothly together nd post into round sleeve, square post into are sleeve—and the self-aligning latch case els to the right or left of the central lock embly to compensate for bevel-edged doors or improper boring.

emarkably simple to install, the lockset s of low-friction ZYTEL provide a lifetime nooth, quiet operation without lubrication. re's no rust...no corrosion...and the bolts e been tested up to 1,500,000 cycles ore showing any perceptible wear.

metallic colors to complement the lockset trim.

As a builder of reputation, you will benefit by looking for the better-made labor-saving building hardware made with ZYTEL. Lockwood and other manufacturers of all types of quality hardware will be glad to answer your

POLYCHEMICALS DEPARTMENT



Room 2507Z, Nemours Building, Wilmington 98, Delaware

- ☐ Please send me more information on ZYTEL.
- ☐ Please send me more information on Lockwood Lockset.

___Position___ Company

Street

"My savings on electric nouse neating let in



"I THINK ELECTRIC HEAT IS THE COMING THING," says George Wilson. "It's the most comfortable heat there is. And I ought to know. I have it in my own home. It costs less to install and it's simpler to schedule. My electrical contractor handles the whole job. And buyers like it when I tell them how cool they'll be in the summer, with so much insulation."

ild in better value that sells my houses faster."

Builder George Wilson, of Wooddale, Illinois, tells how flameless electric house heating helps him offer the higher quality that moves his \$18,500 homes faster

As George Wilson explains it, his prospects already know that electric house heating gives them the best possible value in terms of comfort, cleanliness and low maintenance.

In addition, builder Wilson saves many dollars on building with electric house heating. These dollars go into extra values that convert "lookers" into customers.

For example, Wilson's savings pay for an insulation job that far exceeds minimum code standards. This gives Wilson potent sales arguments in terms of lower electric bills and greater year-round comfort for his customers.

Another selling feature Wilson gains is the extra space in utility rooms which a bulky furnace would normally occupy.

As a builder, George Wilson finds that electric house heating is easy for him to schedule and follow up. His electrical contractor handles the heating installation along with his normal wiring job. Wilson feels that the amount of time and trouble this saves him is impossible to calculate in dollars.

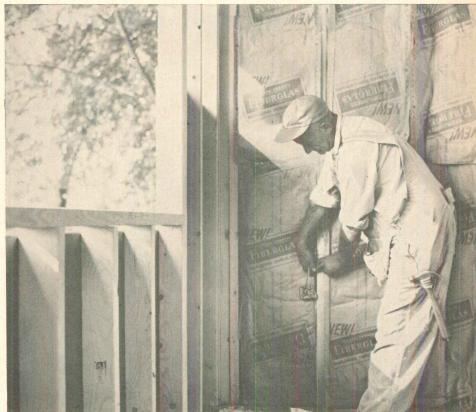
George Wilson's experience shows why builders all over the country are swinging to electric house heating. To date, they've installed it in more than 850,000 homes in the U.S. So it's important for every profit-minded builder or developer to find out all he can about flameless electric house heating in his area.

For detailed information, call your local electric utility company soon.

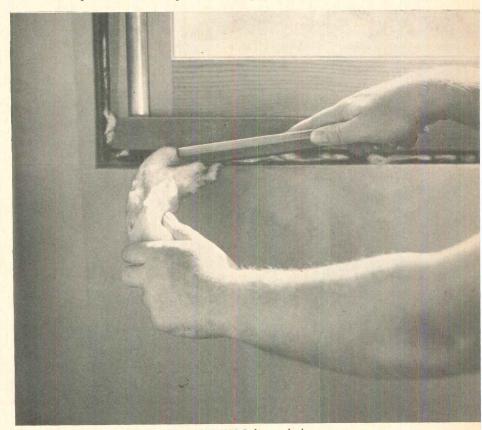
Visit the LIVE BETTER ELECTRICALLY Booth, No. 1001, Jan. 29 - Feb. 2, at the N.A.H.B. Convention in Chicago.

SATISFIED HOMEOWNERS, like the George Spreads, vouch for the extra value electric house heating gives their home. "There's no dirt or dust," says Mrs. Spread. "And the fact that it's flameless means a lot to us."





"INSULATION IS THE SECRET of economical operation and buyer satisfaction," says Wilson. "I put 3" of insulation between the joists and in the crawl space. And then I put sisal kraft paper on top of that."



"I COMPLETELY WRAP MY BUILDINGS beyond the minimum requirements," Wilson says. "But it pays off. I've only one home that didn't come within \$10 of the heating estimate. And that was caused by a faulty thermostat."

With clean, comfortable Electric House Heating

YOU LIVE BETTER ELECTRICALLY



Baths offer new style, new practicality



Norris-Thermador presents new fixtures

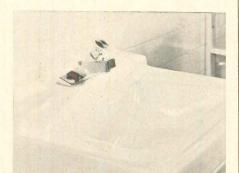
Corner bathtub, left, is of porcelain-onsteel construction with sound-deadening undercoating. The base is recessed, and there are safety handrails around the top rim. Other features include a wide seating rim, and a leakproof flange adaptable to any wall surface. Tubs are available in either right- or left-hand models.

New water closet, right, is built as

two-piece unit for economy, but has the low lines of one-piece unit.

Also offered for 1961 are two new vitreous china lavatories designed for vanity installation. Both are 20"x18"; one is a full countertop type, the other has an exposed front. All fixtures are available in color.

Norris-Thermador Corp, Los Angeles. For details, circle No. A50 on coupon, p 282



New countertop lavatory by Kohler features unusual styling. Rear rim, where faucets are mounted, is angled forward, making faucets and drain more easily accessible. Lavatory is built of enameled cast iron. The overall size is 20"x18", the basin itself is 16"x11". Overflow is built into the front. Unit is available in all standard Kohler colors.

Kohler Co, Kohler, Wis.

For details, circle No. A51 on coupon, p 282

Moen faucet unit is lavatory adaptation of shower control introduced a year ago by this manufacturer. Control knob is pulled out to control volume of water, turned left or right to control temperature. A one-piece valve cartridge controls both functions, can easily be removed for replacement. It is guaranteed for a full year after installation.

Moen Faucet, Elyria, Ohio.

For details, circle No. A52 on coupon, p 282

New bathroom accessories in solid brass are now being manufactured by the Miami Cabinet Division of Philip Carey. The line includes towel rings and bars, soap dishes, tumbler holders and grab bars, and all with either brass or satin chrome finish.

Miami Cabinet, Middletown, Ohio. For details, circle No. A53 on coupon, p 282

Wall-hung water closet with a onepiece body will be offered by Case for 1961. Interesting feature is a nonoverflow device which automatically shuts off all water entering the bowl if trap becomes clogged.

Case Mfg Co, Robinson, Ill.
For details, circle No. A54 on coupon, p 282

New medicine cabinet by the F. H. Lawson Co has mirrors for a three-way view. The unit has conventional mirrors on its sliding doors and two smaller wing mirrors that can be angled to permit a woman to see her back.

F. H. Lawson Co, Cincinnati.

For details, circle No. A55 on coupon, p 282

New recess tub offered by Eljer combines a sculptured front with a straight floor line for easier floor tile installation. It was designed by Dave Chapman, well known industrial designer. Construction is enameled iron. Unit comes in white and five colors.

Eljer, Pittsburgh.

For details, circle No. A56 on coupon, p 282

Deluxe medicine cabinet, called the Wall-Vanity, is available in three lengths —28", 32", and 44"—and has three full-length shelves inside. Two-way lighting is provided by top valance which throws light down for shaving, etc., and up off the ceiling for general illumination. Wall-Vanities are available in white and four other colors or primed for job-site painting.

Lau Blower Co, Dayton.

For details, circle No. A57 on coupon, p 282

Two new bathtubs in the Contour line have been announced by American-Standard: a 5' corner model, and a 5½' recess model. They include the same basic features: a wide corner ledge in front that can serve as a seat, and a similar ledge diagonally across the tub where bottles and other toiletries can be placed. Another new item from A-S is a low-cost 20"x18" lavatory.

American-Standard, New York.

For details, circle No. A58 on coupon, p 282



ROLSCREEN

the inside screen that rolls down, up and out of sight.

Home buyers instantly recognize the unique convenience of ROLSCREEN®the inside screen that rolls down in the spring and up in the fall. The "here'show-it-works" attraction of ROLSCREEN will continually remind the occupants of your good judgment in installing PELLA WOOD CASEMENT WINDOWS. Inside storm panels are also self-storing. Removable muntin bars available in regular, diamond and horizontal styles. The lasting beauty of genuine Western Pine is fortified by a 16gauge steel frame surrounding the entire window. For sizes and prices, call the PELLA distributor listed in your classified telephone directory or mail coupon.

____ THIS COUPON ANSWERED WITHIN 24 HOURS ____

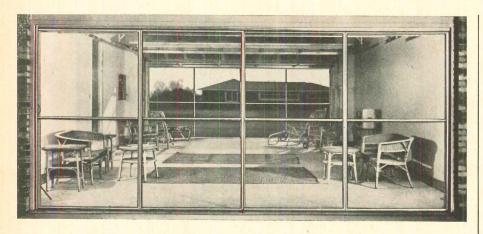
PELLA ALSO MAKES QUALITY WOOD MULTI-PURPOSE WINDOWS, WOOD FOLDING DOORS AND PARTITIONS, ROLSCREENS AND WOOD SLIDING GLASS DOORS

ROLSCREEN COMPANY, Dept. MB5, Pella, Iowa	
Please send illustrated details on PELLA WOOD CASEMENT	WINDOWS
with the exclusive Rolscreen feature.	

ADDRESS

CITY & ZONE

Doors-more sliders, folders, by-passers, in many new finishe



Screen doors convert garage to summer room

New by-passing screens open any standard garage to summer sun and breeze, but keep it insectproof. Made for both one- and two-car openings, these lightweight sliders can be installed by one man. They do not interfere with regular garage-door operation.

By installing a second garage door

and a set of these screens on the rear or side wall of the garage, it becomes a covered breezeway for the summer months. Doors have rolled aluminum frames and fiberglass screening for long service life.

Raynor Mfg Co, Dixon, Ill.
For details, circle No. A59 on coupon, p 282



Fabric-covered folding door has new rolling-post hanger. Both ends of the door are free to move so every inch of closet space can be reached. Spacemaster 200 series comes in 24 vinyl fabrics and literally thousands of colors. Only four screws are needed to install the rolling-post type, only eight for the fixed-jamb taype. Modernfold door retails for \$25. Discounts available to builders for quantity purchases.

New Castle Prods, New Castle, Ind. For details, circle No. A60 on coupon, p 282



Bi-fold door units in four widths, fit right into standard 6'8" by 3', 4', 5', and 6' wide flat-jamb door frames (not included). Pre-hinged doors are carton packed with all hardware. The only site labor needed is to surface mount tracks, brackets, and hangers. Four types are offered: 1) with louvered top and solid bottom panel; 2) two louvered panels; 3) three solid raised panels per door; and 4) hollow-core slab doors.

Ideal Co. Waco, Texas.

For details, circle No. A61 on coupon, p 282

Accordion doors in woven mahogany and vinyl are designed to fit any opening up to 8' x 8', up to 16' openings with double doors. Doors slide on nylon guides, won't creep in closed position, have handles with thumb-button locks for positive security. In natural, white, or beige 32" x 8' door retails for \$18.99.

Clopay Corp, Cincinnati.
For details, circle No. A62 on coupon, p 282

Laminated flush doors feature a new tough surface coating, for use where abuse and hard wear occur. A sheet of polyester resin is pressed into the face veneers of the solid core doors. Called Tigaclad, the surface exceeds NEMA standards for decorative laminates in resistance to wear, scrubbing, boiling water, cigarette burns, and stains.

Weyerhaeuser Co, Marshfield, Wis. For details, circle No. A63 on coupon, p 282

Folding partitions have 10%" wide solid-wood-core slats veneered with walnut, ash, birch, oak, pine, or luan. Steel tracks and ball bearing rollers insure easy operation. Available in heights to 20' and widths to 50' per unit. Factory finished or for on-the-job-finishing.

Rolscreen Co, Pella, Iowa. For details, circle No. A64 on coupon, p 282

Sound-resistant accordion doors not only divide space but keep it quiet. Designed primarily for churches, restaurants, and institutions they are also quality dividers for two-child playroom-bedrooms. Doors are factory made from two Multi-V Foldoors, joined by a single post so they operate as one unit. Two kinds of insulation reduce sound by both reflection and absorption.

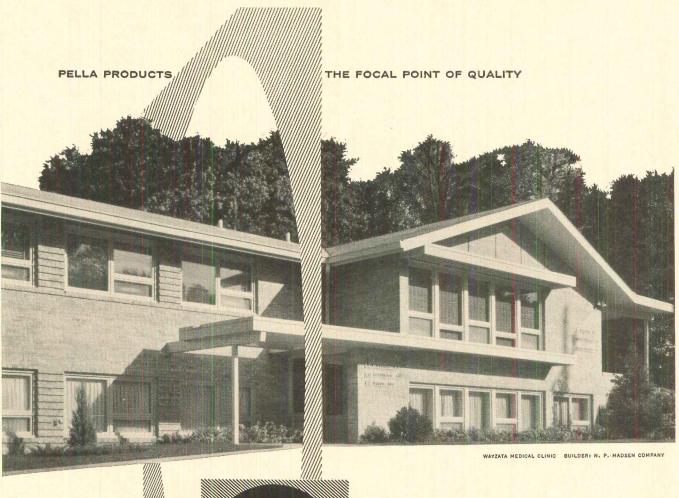
Holcomb & Hoke, Indianapolis. For details, circle No. A65 on coupon, p 282

Sliding door screens have tension springs to hold nylon top-rail gliders in place, adjustable rollers to ride the bottom track. This eliminates the tendency to jump the track—a common problem with sliding screens.

Daryl Industries, Miami. For details, circle No. A66 on coupon, p 282

New wood garage doors round out the line for Berry, largest manufacturer of steel garage doors. They now offer competitively priced doors in every price range and style for both residential and industrial use.

Berry Door Corp, Birmingham, Mich. For details, circle No. A67 on coupon, p 282



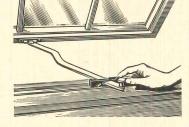
VISIT PELLA
N.A.H.B. EXHIBIT
SPACE 419-420
McCORMICK PLACE



wood multi-purpose windows

give commercial buildings "home" convenience

Your commercial customers will long appreciate both the residential atmosphere and practical convenience of PELLA WOOD MULTI-PURPOSE WINDOWS. The handsome wood frames offer recognized insulating advantages and self-storing inside "storms." Stainless steel spring-type weatherstripping is on all 4 sides of the sash. A complete range of 20 standard-size M-P units combine into hundreds of combinations for any kind of architectural treatment. To save your construction time, PELLA WOOD MULTI-PURPOSE WINDOWS arrive factory assembled, and in many areas local warehouse stocks are available. PELLA also offers WOOD TWINLITE® WINDOWS, featuring awning convenience with the traditional "double-hung" look. Call the PELLA distributor listed in your classified telephone directory or mail coupon.



UNDERSCREEN OPERATOR

is of extruded aluminum. Exclusive nylon GLIDE-LOCK® permits locking M-P window in 10 positions.

PELLA ALSO MAKES QUALITY WOOD CASEMENT WINDOWS, WOOD FOLDING DOORS AND PARTITIONS, ROLSCREENS AND WOOD SLIDING GLASS DOORS

ROLSCREEN	COMPA	NY,	Dept. MB6,	Pella, lo	owa	
Please send details	on PELLA	WOOD	MULTI-PUR	POSE and	TWINLITE	WINDOWS.

NAME

__THIS COUPON ANSWERED WITHIN 24 HOURS ___

FIRM NAME

ADDRESS

CITY & ZONE STATE



Lakeview Estates designs Built-in Color TV into medium price dwellings. Each of the 100 homes in Lakeview Estates, Pennsburg, Pa., contains RCA Victor built-in Color TV... flush with living room walls.



In Tucson, Arizona, The Lusk Corporation includes RCA Victor Built-in Stereo in its Desert Steppes development. These lovely homes are in the \$14,000 to \$17,000 price bracket.

RCA VICTOR built-in home entertainment

...adds luxury and



RCA Victor Room Dividers add flexibility to floor plans. Stereo and TV are combined in a truly functional furniture unit which fits into homes in so many ways. It's a sales-building idea for new construction . . . a simple way to design the "look of tomorrow" into remodeling plans.

The "custom-built look"

Today's homes, designed and built for gracious living, are given an added air of luxury when RCA Victor Built-ins are part of the plan.

For the increasingly popular family rooms . . . in kitchens, living rooms, bedrooms . . . in any room these specially designed instruments are simple to build into walls, closets, cabinets—with no need for special, complicated construction.

RCA Victor produces television and stereo specifically designed for built-in use. And every instrument has, of course, the quality, dependability and superb performance which have made RCA Victor the most trusted name in home entertainment.

Whether you are planning new construction, remodeling, or adding to existing structures, plan to build in a home entertainment center. It's so easy with the variety of RCA Victor instruments designed just for this purpose.



'exas builder says "TV helps sell homes." Texas builder Frank Carter includes RCA Victor Built-in TV in such attractive installations as this built-in home entertainment treatment in his Dallas, Texas project.



Mentor, Ohio, builder features RCA Victor Built-ins.

DeFranco Construction Co., Inc. \$35,800 custom homes include an RCAVictor Home Entertainment Center with built-in Color TV, Stereo and Room Divider, to aid sales.

convenience to your homes

attracts customers—helps close sales



ach RCA Victor instrument s specifically designed for built-ins

t's a simple matter to plan for built-in home entertainment with RCA Victor units. Off the floor, in the wall, out of the way—and beautiful . . . with no complicated construction equired.

Everything the builder needs for quick installation is hipped together, including the master unit, speakers, mounting brackets, cables, baffles and frames, hardware, and letailed instructions for wall openings and installation. Units are available with front or rear ventilation, and matching peakers may be obtained for placement in other rooms,

to provide high-fidelity sound throughout the home.

Ask the RCA Victor Distributor near you for full details and specifications. RCA Victor sales engineers can offer valuable help, too, in selecting the models best suited for your plans. Call on their experience.

A colorful booklet describing Built-in Home Entertainment is available from RCA Victor at no charge. Just send the coupon.

TMK(s) ®

RCA Sales Corp., Box 1226 A37, Philadelphia 5, Pa. Please send your free booklet describing Built-in Units, including the new Room Divider.

Name		
A 11		

The Most Trusted Name in Electronics

Windows show better insulating, easier operating features



Here's a new economy casement

The new windows by the Malta Mfg Co are designed to fit in series with other windows in a wide range of modular openings. These new single-light-sash casements come in a variety of heights and widths to work from bedrooms—where windows are shallower—to living

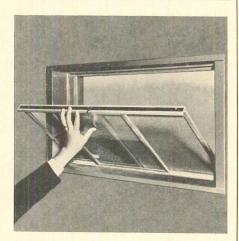
rooms where windows are deeper. Snapin muntins to make diamond, colonial, and horizontal divisions in the single light are available. Frames are shipped knockdown.

Malta Mfg Co, Malta, Ohio. For details, circle No. A68 on coupon, p 282



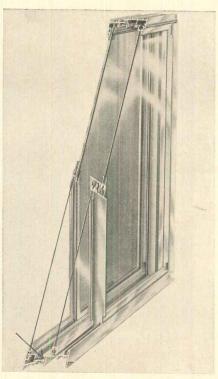
New compressible jamb for doublehung wood windows makes them easy to remove for cleaning, easy to replace. Two spring balances on each sash (one on a side) prevent the sash from tilting. The self-adjusting jamb section maintains a permanent air seal regardless of atmospheric conditions. Take-out can be installed with stock frames and sash. No extra millwork parts are needed.

Zegers, Chicago.
For details, circle No. A69 on coupon, p 282



Sliding basement window snaps into place in standard frames and surrounds. The new aluminum unit does not protrude at all into the basement room and allows complete ventilation control. Conventional drapes and blinds may be used with this unit. Sash lifts out from the inside for cleaning. Slides of extruded plastic cut down heat transfer. Screens are fiberglass.

Gates & Sons, Denver.
For details, circle No. A70 on coupon, p 282



New insulated sliding window in aluminum has a sliding storm sash built into the frame so there is minimum heat transfer. A high-impact vinyl extrusion with which inner and outer frames are joined (arrow) forms a thermal break. The same feature is used in a new double-hung model.

DeVac, Inc, Minneapolis. For details, circle No. A71 on coupon, p 282

Factory-applied box header has been added to Andersen's Strutwall window component. The plywood box header on the Strutwall unit eliminates the need for double 2x6 headers in conventional and Lureco construction.

Andersen Corp, Bayport, Minn. For details, circle No. A72 on coupon, p 282

New basement window is a combination of bonderized baked enamel steel frame and aluminum slider and screen sash units. Steel gives it strength, aluminum easy maintenance. The sash units are fully weatherstripped and easily removed for cleaning. Vinyl sliding tracks prevent metal to metal contact.

Colorado Metal Prods, Denver. For details, circle No. A73 on coupon, p 282

New insulating window uses a wood surround to frame sliding aluminum sash and storm sash. New unit also uses double-pile wool weatherstripping, shows no condensation at a temperature difference of 90° and 50% inside relative humidity.

Kota Prods, Rocky Point, N.Y. For details, circle No. A74 on coupon, p 282

America's finest homes feature Shakertown exterior decorating products





HANDSPLIT CEDAR SHAKES



CEDAR SHAKE GLUMAC PANELS



SILVARA NATURAL STONE

customize your exteriors... minimize your costs...

WITH NATURAL MATERIALS FROM Shakertown!

Caught between rising costs and increasing competition, alert home builders everywhere are adding extra sales appeal . . . selling more quality homes . . . while actually reducing application costs with Shakertown Products! Proof: 100 sq. ft. of pre-stained, pre-insulated Cedar Shake Glumac Panels can be applied in about one hour. Colored nails and Jiffy Corners help speed the job. Proof: Silvara Natural Stone . . . beautiful, genuine stone . . . can be applied over wood or block in half the time, at half the cost of full-cut stone. Proof: Cedar Handsplit Shake Roofs create a distinctive decorative effect . . . lasts years longer than other premium roofs.

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Hats off to Cincinnati where booming sales of AllianceWare hold real meaning for you.

AllianceWare's complete line is chock full of genuine features to help you sell and install. You'll quickly see that your city, too, can be another hot AllianceWare market.



AllianceWare Permasheen porcelain-on-steel bathtubs... Offering styles and sizes to fit every bathroom . . . every budget! Include full-size grab rails, wide seats and patented wall-hung installation that holds tub firmly in place, eliminates wall separation. One man can install them, too, since they're steel, not cast iron . . . stronger, yet lighter.

See the complete AllianceWare line unveiled at the Builders' Sh



The new Character Lir



Alliance Ware vanities... the ultimate in clean-line design at economy prices. Rigidly constructed of harmoniously colored porcelain enamel on metal panels with custom aluminum trim. Feature integral soap dishes, hidden overflow and anti-splash beads. Porcelain enamel is acid and stain resistant. Reversible sliding doors (optional at extra cost) enable changing decor by simple reversal of doors to expose new complementary color. Available in a variety of permanently brilliant colors that add a new accent to bathroom furnishings.



NEW!...the Emperor... Eliminates traffic problems with a stylized double bowl lavatory set into a 47" counter area. Three sliding doors afford entry into large under-lavatory compartment.



NEW!...the Admiral... Provides roomy 47" counter top space with a 20" x 18" lavatory built right in. Includes large drawer and a giant compartment entered through any of three sliding doors. Available with lavatory on left or right.



NEW!...the Diana...Provides dressing comfort and bathroom beauty... a dressing table with leg room along with a lavatory cabinet. Available with lavatory set into left or right side of 47" counter area. Cabinet base is 32".

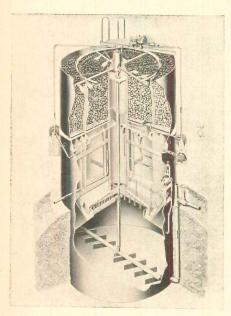
hicago, Illinois · January 29-February 2 · Booths 330, 331, 332

y AllianceWare

amp) subsidiary

OFFERING FOR THE FIRST TIME...
AT ATTRACTIVE PRICES...A COMPLETE BATH
WITH ALL PLUMBING ABOVE THE FLOOR!

Sewage treatment plants are being made in more types and size



Bio-Pac is a new packaged sewage system available in capacities from 5,000 to 50,000 gallons per day (50 to 500 population). All operations are included in a single tank, and digestion is by trickling filter. A comminutor is included with each unit, and where extra purification is desirable, a chlorination unit is available. Largest tanks are 18' in diameter, need project less than 6' above grade.

Link Belt, Chicago

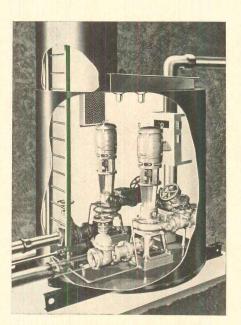
For details, circle No. A75 on coupon, p 282



Chicago Pump is offering a new small sewage plant. Called the "Rated Aeration SS", it is built in three capacities: 1,000, 3,000, and 5,000 gallons per day, making it useful for small groups of houses, clubs, or motels. Treatment is by super aeration, and the unit includes comminutor, aeration tank, air pumps, and clarification compartment. The plants can be installed above ground or below ground.

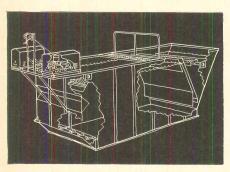
Chicago Pump, Chicago

For details, circle No. A76 on coupon, p 282



Tex-Vit sewage-lift stations are shipped as complete, ready-to-install packages ranging in capacity from 100 to 2,000 gallons per minute. The steel shell is coated on the outside with an epoxy material that prevents corrosion. A blower provides the interior of the station with a complete change of air every 60 seconds. All electrical equipment, including switches and breakers, is pre-installed.

Tex-Vit Supply, Mineral Wells, Texas For details, circle No. A77 on coupon, p 282



Oxygest sewage-treatment plant features a redesigned aeration machinery section. It is designed for small subdivisions, motels, and schools, and is shipped either as a single unit, or as two sections which are bolted together at the site. The tanks are built of steel, and are available in 27 standard sizes. Oxygest units reduce sewage through the super aeration system. Both the aeration tank and the settling tank are combined in a single unit, and a system of baffles provides an automatic sludge return sys-

Smith & Lovelace, Lenexa, Kan. For details, circle No. A78 on coupon, p 282

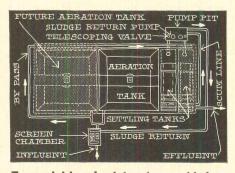
Suburbia steel plants provide extra corrosion resistance. All major components of these sewage treatment units are coated with epoxy resin and a second layer of coal tars. According to the manufacturer, this gives the steel tank a permanence comparable to that of concrete tanks. Suburbia plants can be expanded from installations to serve as few as 200 homes to units that will handle as many as 10,000 homes. They can be permanent installations, or demounted and rebuilt in other locations when piped sewerage is available.

Municipal Service Co, Kansas City For details, circle No. A79 on coupon, p 282

Accelo-Biox, a new packaged treatment unit built by Infilco, will handle populations of 75 to 3,000. The plant uses air-entrained oxidation provided by a circulator which also recirculates sludge and clarifies within the same tank. No compressor is required.

Infilco, Inc, Tucson Ariz.

For details, circle No. A80 on coupon, p 282



Expandable plant has been added to sewage treatment equipment manufactured by Yeomans Bros. The Extended Aeration system can be built as a smaller unit, then increased in capacity by adding a second aeration tank and settling tank (shown by dotted lines in drawing, above). Tanks may be built of steel, concrete, pre-cast concrete, or silo block. Other products featured by Yeomans this year will include the Cavitette, a single-house treatment plant, and a new electronically-controlled sewage ejector.

Yeomans Bros, Melrose Park, Ill. For details, circle No. A81 on coupon, p 282



They both loved the Delco-matic Garage Door Operator!

They looked at a lot of homes. Nice ones, too, with big fireplaces and lots of closet space. But the one they *bought* also had a Delco-matic Garage Door Operator. Having a garage door that would open and close at the touch of a button was something they didn't expect, yet a convenience they could really appreciate. Especially when they've got their arms full, or it's raining, or when they come home late at night.

Their builder has Delco-matic as standard equipment in all his homes. One, because it gives him something in the *garage* to help sell his homes—a convenience-appliance he can actually demonstrate and let his customers try for themselves. And two, with Delco-matic, there's no builder call back. For Delco-matic is the trouble-free, all-transistor garage door operator. And if service ever is required, it's completely taken care of by local United Motors Service electronics dealers.

Isn't Delco-matic the kind of idea you could use in your homes? For more information, call your local representative or mail the coupon for our new illustrated facts and figures brochure.



Division of General Motors, Dayton 1, Ohio

Please send me more information on the all-new, all-transistor Delco-matic Garage Door Operators.

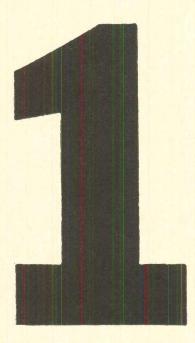
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Delco-matic is sold and installed by the Crawford Door Company and other authorized Delco-matic distributors.

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To tell your customers about the Comfort-Conditioned Home and its extra values: local publicity and powerful **National Advertising Support** in LIFE...carrying on the year-in-year-out momentum of a multi-million-dollar promotion.



To guide you in building the right home in the right place at the right time at the right price: simple, basic Market-Analysis Guide . . . an organized method of forecasting what your customers will be looking for in a new home.

And the whole program is backed by the most powerful THE COMFORT-CONDITIONED HOME

THE HOME THAT SELLS even in tough markets. Independent research shows that 70% of the Comfort-Conditioned Home builders surveyed had equal or greater sales in 1960 than in 1959.

THE HOME THAT SELLS because the appeal of its extra comfort, convenience and economy has been proved. The 1960 score: 90,000 Comfort-Conditioned Homes sold.

THE HOME THAT SELLS because it has full-thickness insulation . . . the construction feature most wanted by home-buyers (according to independent surveys) . . . now recognized by FHA for its part in cutting monthly fuel costs and thereby reducing income requirements for mortgages.

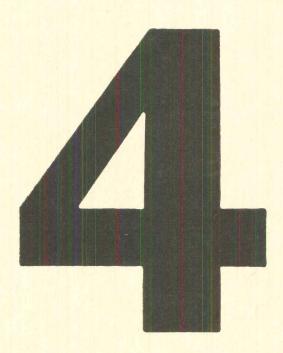
THE HOME THAT SELLS because it is equipped for Ful Housepower, and can offer a whole range of other sought after advantages, including dent-proof, corrosion-proofiberglas* Screening.

1961 CAN BE A BETTER HOME-SELLING YEAR FOR YOU—WITH THE HELP OF THE

TURN "EYE-ERS" INTO BUYERS



help your salesmen turn "eyes" into buyers: The **Salesmaker's**raining Course and the **Sales-**aker's Kit... complete, easy-toasp instructions... phone calls to
ake, letters to write, sales clinchers.



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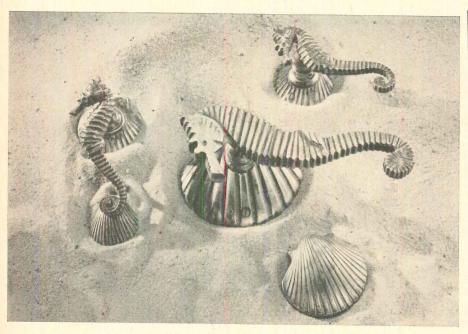
Make yourself comfortable at the Fiberglas exhibit at the 1961 NAHB convention. Booths No. 117, 118, 119

Owens-Corning Fiberglas Corp., Dept. 67-A, National Bank Building, Toledo 1, Ohio



MEODY CONDITIONED HOME PROCEDURE OF WITH IT

Hardware shows decorative and labor-saving ideas



Custom hardware has sea shell design

The pieces above make up part of a new Carmel series of custom hardware. Shown here are two sizes of lever latches featuring sea horse levers with shell roses, a sea horse and shell door knocker, and a shell covered key plate. The line also includes shell designs for door and drawer pulls. This series is made by Schlage's Peabody division in cast brass with green patina.

Schlage Lock Co, San Francisco. For details, circle No. A82 on coupon, p 282

New round-face latch from Kwikset has a 3° bevel for mounting in flush doors. The face is covered with a wrought-iron brass cap. The new latch cuts labor time since it needs no mortising, chiseling, or screw fastening.

American Hardware, Anaheim, Cal. For details, circle No. A83 on coupon, p 282

Drywall door frame saves \$2 or more per opening, claims Amweld. The new frame eliminates notching, trimming, and fitting, goes in place in under ten minutes. Hinge jamb, strike jamb, and header are premitered, include hinge and strike. Frames fit stock doors.

American Welding & Mfg, Niles, Ohio. For details, circle No. A85 on coupon, p 282

Pocket-door lock from Kennatrack is made of solid brass with long-wearing nylon latch. Locks come in five finishes: polished brass, satin brass, polished and satin chrome, bronze. Types include privacy, communicating, and exit locks.

Kennatrack Corp, Elkhart, Ind. For details, circle No. A84 on coupon, p 282

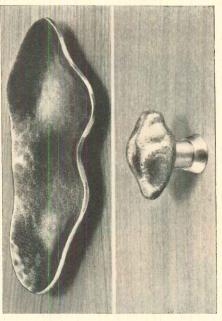
Hammer-in truss clip can be installed without heavy equipment, in the shop or at the site. Four sizes handle most residential truss sizes. Gusset prongs are raised above plate before being installed, are then driven flat to grip truss member. FHA accepted.

Panel-Clip, Dearborn, Mich. For details, circle No. A86 on coupon, p 282



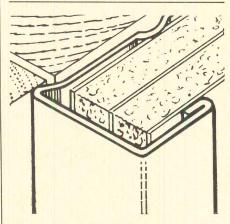
Laminated-drywall casings are now made in a complete line. All types are available in ³4" grounds in 7' and 10' lengths. The new type 102 shown is used without joint cement, is slipped over the board around doors or windows to give a modern look with a minimum of labor. Four styles for nailon application are designed to be used with joint cement. Nails are driven through the flange and gypsum board into the stud, then cemented over.

Casings, Inc, Milwaukee.
For details, circle No. A87 on coupon, p 282



High style doorsets are part of the new custom line of Towne Hardware. Originally designed as one-of-a-kind pieces by the late Fernand Leger, Paolo De Poli, Van Day Truex, and others, they are now being offered at the top of Yale & Towne's list. Materials used match the styling: gold plate, silver plate, bronze, enameled copper, etc. The styles are available in various types of locks — key-in-the-knob, mortise, Mono-locks, and even panic exit devices.

Yale & Towne, White Plains, N.Y. For details, circle No. A88 on coupon, p 282



Metal door frames are now being made for use with studless drywall or foam-core partitions. Frames come in varied types: one shown is reinforced for hinge attachment, comes complete with universal strike plate, dustbox, rubber door silencers. Knockdown sections can be installed in ten minutes with only a screwdriver and are completely adjustable for square and plumb at any time. Frames come in all stock door sizes for walls 2" to 3" thick.

Kewanee Mfg Co, Kewanee, Ill. For details, circle No. A89 on coupon, p 282

continued on p 252



the exacting requirements for

TRUSSED RAFTERS -

That's why I use it exclusively."

SAYS HERBERT O. ROOT, President. Dade Truss and Manufacturing Co., Inc. Leading Florida Truss Manufacturer

"Southern Pine's grading features, including proper seasoning, plus its ready availability, make it the ideal stress-rated material for superior truss manufacture."

The Federal Housing & Home Finance Agency says: "The greatest need to assure the efficient use of wood in residential framing is the establishment of a full-length, all-purpose grade with established working stresses for all loads to which wood is subjected . . . bending, tension, compressions, shear, etc. This grade should be independent of the size and length of the member and should include 1" boards for use in trusses and other light framing. This ideal grade is most nearly approached today in SOUTHERN PINE."



 Uniform grading throughout its length permitting simple beam, cantilever, continuous or tension-loading design.

A STRESS GRADE GUIDE

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ame superior qualities that make Southern Pine "the ideal -rated material" for trussed rafters are yours for any other ural use when you insist upon grade-marked, trade-marked



McCORMICK PLACE

EXPOSITION CENTER, Chicago, Illinois

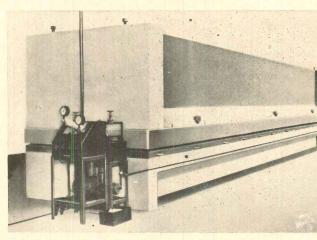
Register now! The fee is \$15 for men, \$10 for women. Advance registration and hotel reservations can be made by contacting your local NAHB association, or the address below. But, do it now! Remember, you've a date to hear panel discussions and talks by experts on merchandising, financing, construction techniques, marketing, and research . . . everything new for home building. Over 1000 display units—150 more exhibitors than last year. All meetings and exhibits will be under one roof in the world's newest, most glamorous exhibit area. So, don't forget . . register now!

NATIONAL ASSOCIATION OF HOME BUILDERS

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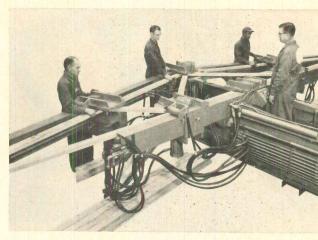


PRODUCTS FOR 1961



Concrete truss press plate-joins trusses up to 40′ long. jigs are used: while one truss in pressed, another is assening the second jig. Trusses are taken in and out from the rather than the end for faster operation. Hydraulic ungravity fed.

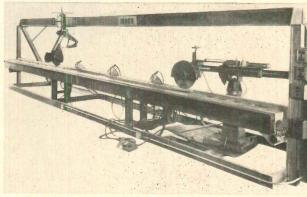
Gang-Nail Sales Co, Miami.
For details, circle No. C1 on coupon, p 282



Truss assembler will fabricate trusses with pitches 1½-in-12 to 6-in-12, spans from 16′ to 38′. Called Truss-O-Matic, it has eight separate hydraulic presses squeeze the connector plates into the truss members. It assemble a truss in 2½ minutes.

Truss-O-Matic, Chicago.

For details, circle No. C2 on coupon, p 282

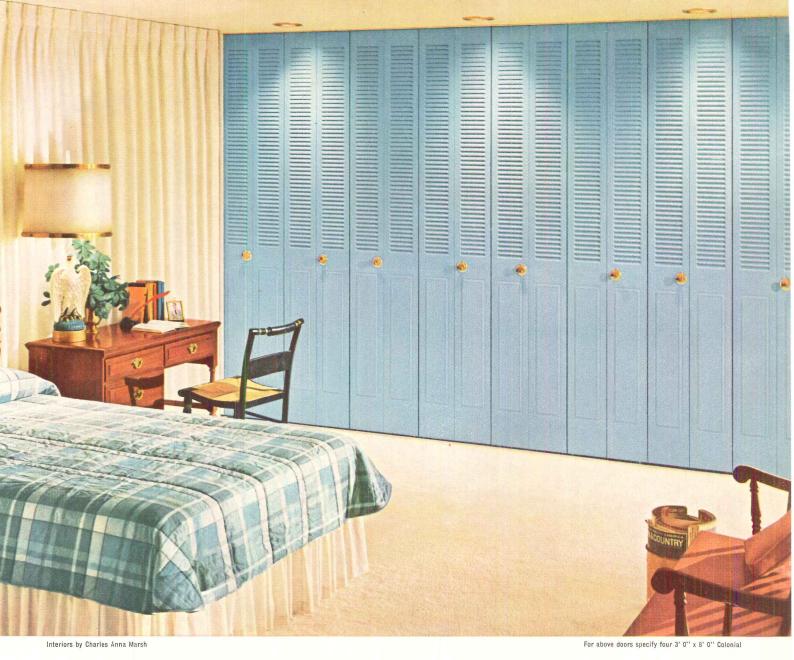


New truss cutter will handle long angles in bottom che Two 5-hp radial saws are used: a ram saw that can mal angle cut up to 22" long, and a swinging cut-off saw indexes to the ram saw. Saws are air operated, as are clamps that hold the wood members.

Idaco Engineering Co, Oakland.

For details, circle No. C3 on coupon, p 282

continued on



5 Outstanding Reasons

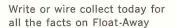
Why Float-Away Metal Closet Doors Are Your Best Closet Door Buy!

- 1. \$14.97 extra profit on every closet because Float-Away, floor-to-ceiling, closet doors eliminate unnecessary framing, wall finishing, costly labor! Shipped pre-assembled with complete installation instructions.
- 2. Float-Away floor-to-ceiling metal closet doors gain $\frac{1}{5}$ to $\frac{1}{3}$ in useable closet space over conventional closets, a feature important to your customers!
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- 5. No warping, binding, swelling, or maintenance problems ever. Five-year guarantee!



For above door specify 6' 0" x 8' 0" Flush







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GUSTIN-BACON FIBER GLASS INSULATION

Everything about new G-B Fiber Glass Building Insulation tells you it is truly a product of the highest quality. You need only look at its smooth, uniform thickness . . . feel its ruggedness and resilience . . . study its outstanding thermal characteristics . . . experience its ease of application, and you will realize that here is the product that is setting the new standard of quality in the building insulation field.

Thanks to recent expansions of our manufacturing facilities, this superior new building insulation is available to builders throughout the midwest. Your local lumber supply dealer will soon have a complete line of G-B Fiber Glass Building Insulation to meet your every insulation need.

Write today for a free new 12 page guide to better residential insulating, including The All-Weather Comfort Standard and complete data on this superior product.

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258 W. 10TH STREET, KANSAS CITY, MO.



this kitchen SELLS houses in today's market

For many years, and especially in today's market, the fine-furniture craftsmanship, beauty of design and finish of Yorktowne Kitchens have proved to be powerful incentives in the selling of thousands of homes. Now, in 1961, Yorktowne gives you even greater advantages with its complete lines . . . covering your entire price range and offering a range of finishes. In addition, Yorktowne Kitchens not only are unconditionally guaranteed, but are now backed by the Good Housekeeping Seal of Approval. For kitchens with more proved house-selling incentives, be sure to see the full Yorktowne line for '61. Illustrated folders and detailed specifications sheets await your inquiries. Write today.

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Rilco Laminated Wood "Stars" In "Strangers When We Meet"

NEW COLUMBIA MOTION PICTURE WITH KIRK DOUGLAS, KIM NOVAK, ERNIE KOVACS AND BARBARA RUSH

The natural beauty of Rilco laminated wood beams and posts play a major role in Columbia Picture's new movie, "Strangers When We Meet." The plot is closely interwoven with the design and construction of an all-wood home — and throughout the color production exposed Rilco laminated wood members help to provide the necessary feeling of warmth and character.

The contractor, Kenneth B. Wamsley, Santa Monica, Calif., also discovered advantages in Rilco laminated wood . . . workmen were able to quickly erect prefabricated Rilco products just ahead of the tight filming schedule.

You too will be pleased with the fine workmanship and beauty of Rilco laminated wood structural members. Produced from top quality Douglas Fir, they reflect Rilco's ability to combine structural and decorative advantages in a most economical manner.

Whether it's residential, church, school, commercial or industrial building, Rilco adds natural beauty . . . enables you to build better for less.



Home designed by Columbia Art Directors Ross Bellah and Carl Anderson; engineered by Victor Gruen Associates, Architects, Beverly Hills and New York City.



Weyerhaeuser Company

Rilco Laminated Products Division

W843 First National Bank Building St. Paul 1, Minnesota

District Offices: Tacoma, Wash., Fort Wayne, Ind., Linden, N. J.

FOR 196



Franklin-stove fireplace in a new ger (30"x48") model is being introd by Manchester-Pierce. Unit comes with screen and grate built in; a gas log an inlet pipe can be added. Fully insulated the comes with 2" high rectangular of of 9" rectangular flue. Price \$480.

Manchester-Pierce, Santa Fe.

For details, circle No. C4 on coupon, 1



Freestanding fireplace has heat-rant glass on three sides, firescreen fourth. It is set on a raised hearth covered with a star-shaped hood. Ho 37" square, hearth 43" square, unit tall. Glass can be replaced with insusteel panels if fireplace is set close to

Majestic Co, Huntington, Ind. For details, circle No. C5 on coupon, 1



Fireplace and divider are combin this new unit. The divider is adjustable any ceiling height, and is available modular lengths of 16", 24", and 32", fireplace is fully insulated, will handle up to 30" long. Fire screen is but Package includes flue, flashing, roof

Condon-King Co, Seattle.

For details, circle No. C6 on coupon, 1

continued on p



wardrobe unit is shown at left of som door, above. It has wooden according to the door of the store of the st

ergreen States Forest Prods, Tacoma. letails, circle No. C7 on coupon, p 282



wall-hung furniture is named vest Valley Colonial". Included in the ure two types of desks (roll, flat-top), ets, cupboards, chests, shelving, with louvered, or bottle-glass doors. Furst sections are hung on vertical strips fast to the wall (32' oc to coincide studs). Metal hooks hold furniture to strips. FHA accepted.

orthwest Chair Co, Tacoma.

letails, circle No. C8 on coupon, p 282



kitchen nook has wrought-iron legs ther black or coppertone finishes. The can be either right or left-handed, is ted front and back so part or all can sed as room divider. Both the table and corner buffet top are finished with nica.

ormalux Co, Buffalo.

details, circle No. C9 on coupon, p 282

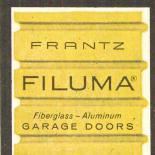


THE DOOR THAT LETS LIGHT

Filuma, with exclusive sculptured design, in glamorous colors to match any home, is the exciting news in garage doors today. No other door has won such wide acceptance in so short a time. The translucent fiberglass diffuses soft daylight inside to transform any garage into a pleasant extra room . . . actually eliminates the need for garage windows! Weighing only 1/3 as much as wood doors, it is the fastest to install and easiest to operate. It's trouble-free . . . warp-proof, shrink-proof, shatter-proof. It's maintenance free . . . needs no glazing or painting. And it's weather-tightthe tapered track and fleximatic guide seal out elements. Encased in strong, durable aluminum frame it cannot bindever! Filuma with inside-outside latch, chrome handle, 111/2" headroom, and zinc plated hardware, is truly tomorrow's door today!

*Patent Pending

Filuma is available in five attractive colors to assure perfect home harmony: Coral, Yellow, Green, Tan, and White. Complete Filuma literature is available by writing Frantz headquarters at Sterling, Illinois.





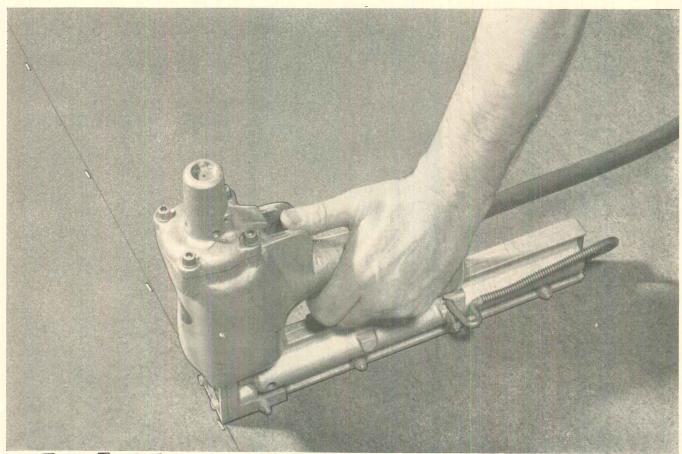
Filuma comes in ten sizes to fit all residential openings

FILUMA IS PRODUCED EXCLUSIVELY BY

FRANTZ

MANUFACTURING COMPANY

STERLING, ILLINOIS



NAIL DOWN **PROFITS**

WITH SPOTNAILERS Every time a carpenter fumbles in his apron for a nail and drives it with a hammer you lose money. Efficient builders on the jobsite and home manufacturers in the factory are driving fasteners up to 2" long with the touch of a trigger or pushbutton. They are cutting costs, reducing worker fatigue and erecting homes in all weather with automatic Spotnailers - how about you? Compare the cost savings below and estimate how much you can save.

An eastern contractor's crew applied sheathing 4-5 times faster with a Spotnailer.

A contractor found he could Spotnail plywood at 25% of his hand nailing costs.

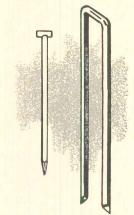
A Pennsylvania contractor saved \$125 per house by Spotnailing sub-floors, interior walls and the roof.

An Ohio builder doubled production of roof trusses just by giving the same crew a Spotnailer and box of staples.

A California builder found he could consistently Spotnail 3 times faster on 4 different rough sheathing jobs and on other finishing work.

An Oregon builder applied roof shingles 6 times faster with a Spotnailer.

Send for our "Builder Brochure" with F.H.A. Standards and 14 Illustrations of Spotnailers cutting costs.

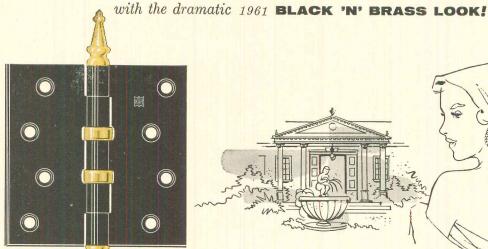




BRANCH PLANTS: CLARK, NEW JERSEY . LOS ANGELES, CALIFORNIA . OFFICES IN PRINCIPAL CITIES Spotstaples meet F.H.A. Standards for subfloors • wall sheathing • roof sheathing • gypsum lath • floor underlayment • asphalt shingles

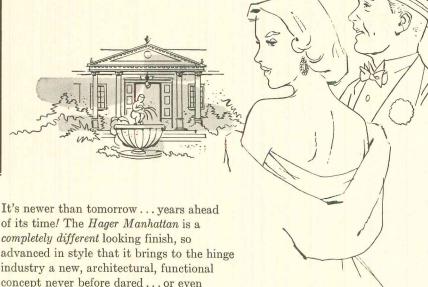
The Hinge of Distinction...

the sophisticated high-fashion hinge



BB-1241 M Steeple Tip

HAGERManhattan Finish available on all Butt Hinge Classes and Sizes.



of its time! The Hager Manhattan is a completely different looking finish, so advanced in style that it brings to the hinge industry a new, architectural, functional concept never before dared ... or even dreamed possible...in 100 years of hinge manufacture.

The new Hager Manhattan is designed specifically for the architect or builder who has searched until now for a hinge to give the final perfect fillip to the product of his creative skill. Here is modern hinge art, design and color that opens new vistas for hinge decor in modern architecture.

In superb Black 'N' Brass, the Hager Manhattan is another bright, new Hager finish to electrify the hinge world. Include it in your plans. Specify finish symbol-Mthe Hager Manhattan . . . the hinge of distinction—for contemporary homes and decor.



put a **PLUS** in your plan



BARS

homes faster

Today's home buyers look for "extras" in convenience and design features. Dwyer Snack Bars offer both. The convenience of kitchen or refreshment facilities for the game room, enclosed in a compact and smartly designed built-in bar. Sealed-in-porcelain kitchen unit is complete with electric range, refrigerator, oven, sink, storage, lock-up beverage keeper, utensil drawer, sandwich board. (Cooking facilities optional.) The bar front comes paneled in a choice of fine woods or in unfinished fir for decorating on the job . . . adds the custom touch that pleases discriminating buyers. Dwyer Snack Bars are available in sizes from 57" to 89" in length, each with stain and marresistant top. Fast, economical installation. Make Dwyer the "extra" in your next home!

Dwyer also makes a complete line of compact kitchens 39" to 69" in length, gas or electric, for standard or recess installation.



Dwyer Products Corporation Dept. L-1501, Michigan City, Indiana Gentlemen: Please send complete information on Dwyer Snack Bars.

name

company name

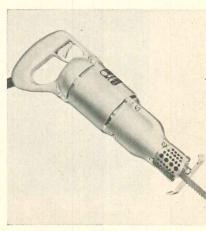
address

Also send information on full line of Dwyer Compact Kitchens.



Heavy-duty all-purpose saw has offset blade, so it can make flush cuts either side, up or down. The blade can mounted in six different positions, different blades are available to cut wor metal. Saw can be run at two differences speeds. Price: \$89.50.

Stanley Works, New Britain, Conn. For details, circle No. C10 on coupon, p



Heavy-duty sabre-saw has long str (1") and low speed (2300 strokes minute). Three-way chuck allows the bl to point down or to either side. Doul edged blade lets operator make comp pocket cut without changing blade positi 'Rock-and-Lock" shoe can be set fl with the work regardless of cut an locked to provide a firm base for supp Black & Decker, Towson, Md.

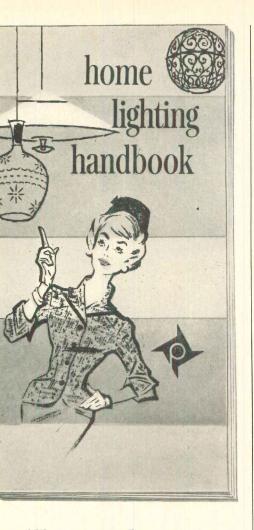
For details, circle No. C11 on coupon, p



Recipro Saw has slide switch in han for fast control of two cutting speeds: 34 strokes per minute for wood, 2400 metal and plaster. Blades are mounted center to facilitate cutting in corners next to walls. Top handle can be set three positions to permit right- or le handed operation, adjustable foot pern using different blade sections.

Skil Corp, Chicago.

For details, circle No. C12 on coupon, p



66 illustrated pages of nusual treatments for

ome lighting, today, is a creative art—an art at Progress' HOME LIGHTING HANDBOOK lps any homeowner to master. An armchair cursion through its 36 colorfully illustrated ages fires the imagination with ideas for velier environment, even as it introduces the ader to the techniques of proper, delightful ome lighting...Scores of inspired and novel hting treatments—for every room, every corner a home, indoors and outdoors. Those who use is HANDBOOK will discover that the art of thting goes hand in hand with the art of living!



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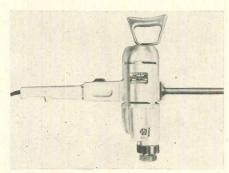
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NEW **PRODUCTS** FOR 1961



Gasoline-powered drill can be used where electric power is not available. Port-O-Drill is run by a 2.2-hp air-cooled engine. Fuel tank is pressurized, letting drill be operated in any position. It is equipped with a 5/8' chuck, (3/4" chuck on special order), weighs 30 lbs.

Schnacke Mfg Corp, Evansville, Ind. For details, circle No. C13 on coupon, p 282



New heavy-duty drill has two features; two-speed transmission which operates the spindle at either 250 or 500 rpm and can be shifted while running; and a reversing switch which permits the drill to be run in reverse at full speed. Unit can also power speed reducers, hoists, elevators, etc. Price: \$285.

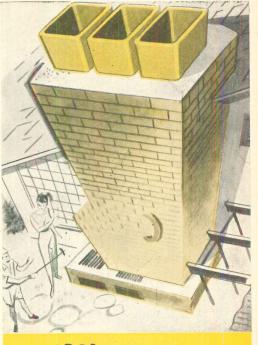
Black & Decker, Towson, Md. For details, circle No. C14 on coupon, p 282



New impact drill will cut either masonry or reinforced concrete. It will cut openings from 3/16" to 4" in diameter, using carbide-tipped core bits, cut through steel in reinforced concrete without deflecting, and will break out with little or no spawling according to the manufacturer.

Stanley Works, New Britain, Conn.

For details, circle No. C15 on coupon, p 282



100% Fireproof

best protection against dangerous chimney and flue fires

Only Clay Flue Lining is adaptable to all fuels—coal, oil, gas and wood. With Clay Flue Lining, conversion to any new heating system, no matter what fuel it burns, is safe. Multiple purpose flues of Clay Flue Lining are safe for fireplaces, grills, incinerators. Clay Flue Lining is 100% fireproof . . . won't melt under heat. Chemically inert, it's unaffected by chemicals and gases . . . does not rust, rot or corrode. Specify and install Clay Flue Lining with confidence . . . it never wears out!

Write for free fireplace folder and data-filled booklet on safe chimney construction.

CLAY FLUE LINING INSTITUTE

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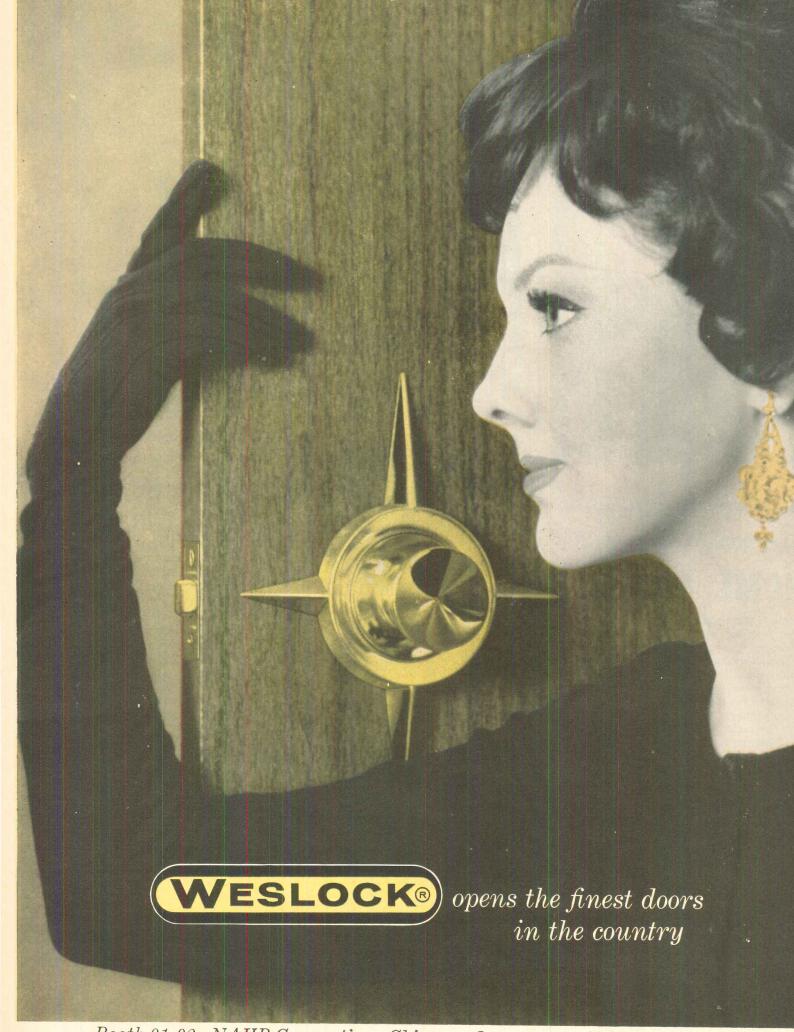
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Manufacturing a line of diversified types, sizes, grades, dimensions and finishes of plywood, Long-Bell assures you of prompt delivery and realistic prices.

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Equipped with the latest automatic equipment, Long-Bell's ultra-modern plywood plants manufacture plywood panels to meet the closest hairline tolerances... give you "plus benefits" of such technological advances as Super Microseal® and waterproof plastic overlays.

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Douglas Fir Plywood

Interior Sanded Exterior Sanded Marine Exterior Texture One-Eleven Exterior Sheathing Unsanded 2ⁱ4-1

(Prompt delivery is also assured on scarfed plywood in long lengths for marine and industrial uses. Long-Bell plywood will be milled tongue and groove, "V" groove or shiplap, if desired.)

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Many species and varieties of hardwood plywood are also manufactured to hairline tolerances.



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engineered for low heating and cooling costs
with stainless steel and vinyl double
weather stripping



The BILT-WELL Casement, especially engineered for maximum efficiency, has tubular gasket type weatherstripping on stops and stainless steel spring leaf on all edges of sash. This exclusive double-weatherstripping method lowers air infiltration to a minimum—a figure that exceeds Commercial Standards Requirements by four times. This means dollar savings for the user.

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Patented Unitized Frame`
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Concealed Hinges.
Widest Choice of Sizes.
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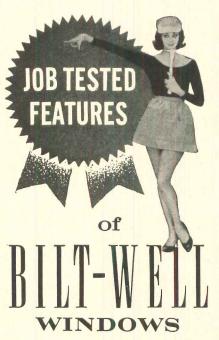
Every BILT-WELL Casement exceeds all U.S. Government requirements and are so labelled —permanently and clearly! U.S. Patent Nos. 2,866,234 and 2,918,710.

***BILT-WELL "Job-Tested"** means the products have been thoroughly tested in actual construction for ease of installation, weather-tightness, ease of operation, durability and acceptance.

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have a 90° opening sash have concealed hinges have double weatherstripping have dovetailed joint construction have patented unitized sill have gold-tone hardware have choice of regular or thermal insulating glass

BILT-WELL DOUBLE HUNG WINDOWS

have flexible jamb-liner weatherstrip have patented unitized sill have removable sash have jamb adjustors have choice of regular or thermal insulating glass

BILT-WELL AWNING and AWNING-VUE WINDOWS

have removable sash have concealed hinges have removable glazing bead have choice of operators have gold-tone hardware have choice of regular or thermal insulating glass



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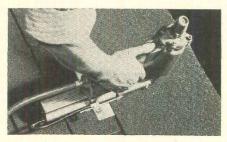


PRODUCTS FOR 1961



Powasert nailing gun will drive nails up to 21/2" long (8d) with heads up to 3/8" in diameter with a single blow, at 120 nails-per-minute rate. Nails can be fed to the new gun from a hopper through a transparent, flexible hose.

United Shoe Machinery Corp, Boston. For details, circle No. C16 on coupon, p 282



Spotnails stapler has an attached guide bar that automatically positions asphalt shingles anywhere from 3" to 5" to the weather. The gun will drive a staple 2" long and 1" wide, which provides more holding power than a roofing nail, the maker claims. Also new from Spotnails: a mallet-driven model for base shoes; a self-cleaning model for gypsum lath. Spotnails Corp, Chicago.

For details, circle No. C17 on coupon, p 282



Bigger staples can be driven by this new gun manufactured by Duo-Fast. It will handle 16-gauge staples ranging in length from 1-9/16" to 2" for installing structural materials such as sheathing and flooring (above).

Fastener Corp, Franklin Park, Ill. For details, circle No. C18 on coupon, p 282

News

(Advertisement)

Leading kitchen equipment manufacturers to spotlight latest trends, Feature new Emerson-Pryne hoods, Rittenhouse intercom-sound systems at NAHB Show

Progressive builders are becoming increasingly aware that "modern kitchens help close the sale," and leading kitchen equipment exhibitors at this year's NAHB Show will display the latest trends in modern kitchen sales appeal. One of the outstanding features in their booths will be the new Emerson-Pryne FashionLine kitchen hood and the new Rittenhouse Intercom-Sound System. The highfashion styling and sales appeal of these new "Finishing Touches" from Emerson Electric's Builder Products Group is expected to attract considerable interest as two of 1961's most distinctive new products. Either the new Pryne hood or Rittenhouse Intercom will be on display at the following booths:

> Elkay Manufacturing Co. Chicago, III. Booths #595-7

The Kitchen Maid Corp. Andrews, Ind. Booths #372-3

Mutschler Kitchens Nappanee, Ind. Booths #585-8; 600-03

Geneva Modern Kitchens Division of Acme Steel Co. Geneva, III. Booths #566-7; 583-4

> IXL Furniture Co. Goshen, Ind. Booths #225-6

The Mengel Co. Union City, Ind. Booths #543-4

> Coppes, Inc. Nappanee, Ind. Booths #591-3

These new products will also be on display at the Emerson Electric Builder Products Group Booths #456, 457, 459 and 460, along with the very newest trends in home ventilating, lighting, heating and cooling.

EMERSON ELECTRIC BUILDER PRODUCTS GROUP







be sure to see•



Eljer's sensational exhibit in Booth 616 at the NAHB Convention and Exposition in Chicago from January 29 through February 2...it's three stories high and full of exciting new bath and powder room fixtures.



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Better value is your answer to selective home buyers. Why not select windows that give you "sellable" features? The TM unique built-in double insulation factor gives you that "extra touch" in the windows of your home - adding value without adding cost.



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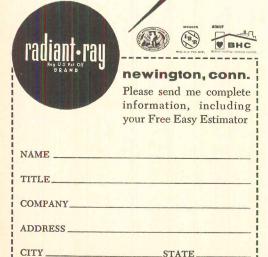
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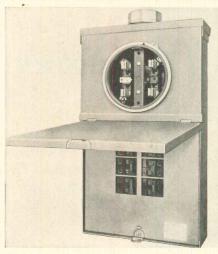
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NAHB Convention McCormick Place, Chicago · Booth 16

For modernization of present structures or installation in new building, specify and insist on Radiant-Ray baseboard radiation. Get all the cost-saving advantages of hydronic heating plus the proven quality of Radiant-Ray, the most complete baseboard line in the industry ... IBR approved ratings. Buy from this one source and fulfill every heating requirement in home, apartment building or institution



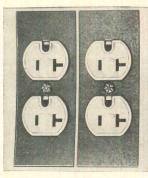
FOR 1961



Meter socket and load center are combined in this exterior service panel. Three capacities-100, 150, and 200 amphave space for six 240-v, 2-pole circuit breakers. All three units are 3-wire, singlephase for use in 120/240-v systems.

General Electric, Providence.

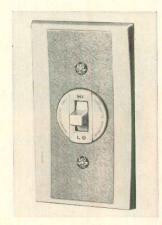
For details, circle No. C19 on coupon, p 282



Kitchen appliance center will handle up to four portable appliances, with a total load of 5,000 watts. Four types of caps can be used, including two grounding types. The center is fed through a 125/250-v circuit with two 20-amp fuses, includes mounting box, outlets, and wall plate.

General Electric, Providence.

For details, circle No. C20 on coupon, p 282

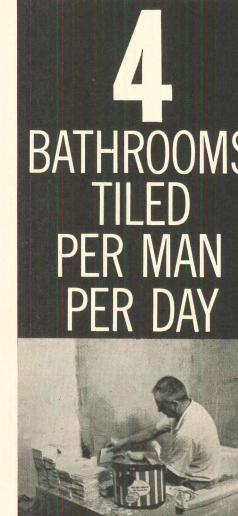


Dimming control is provided by twoposition switch that fits standard mounting box. In "high" position, lamps have full brightness; in "low" position, brightness is cut to 30%. The switch has a capacity of 300 w, can handle two or more lamps.

General Electric, Providence. For details, circle No. C21 on coupon, p 282

continued on p 273

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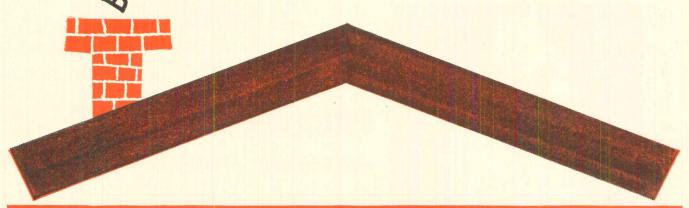
Right now in Levittown, as well as in develop all over the nation, one mechanic is installing four bathrooms in just one day. Certainly it ta special material to do the job. That's Miracle Co Tile Adhesive. Truly the mechanic's mastic. Ma Miracle Adhesives Corporation, who introduced the set' adhesive method of setting clay tile more the years ago, and has been the pacemaker to progr setting tile ever since. And, Miracle has engineer Ceramic Tile Adhesive in accordance with the mech own specifications. All over the country tile mec have told us what they wanted. In economy, in cov in long open time and in real waterproofness. A combined in Miracle's Ceramic Tile Adhesive, fine most economical tile adhesive in Miracle's entire 20 history. Really long lasting, too! Try it. You'll be deli with the way it speeds install

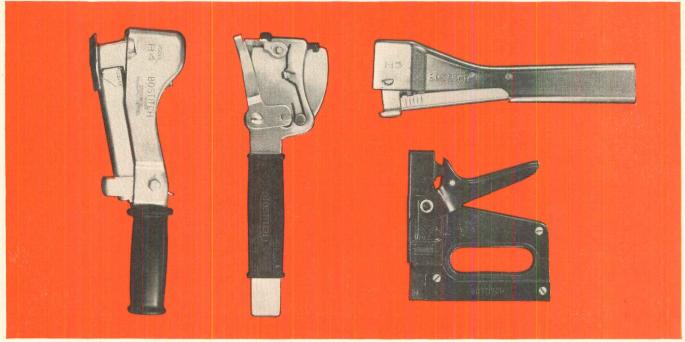
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H4 Hammer—heavy-duty roofing stapler. For shingling and other heavy tacking jobs. Recommended by International Conference of Building Officials. Builders say it cuts shingling time in half.

H2B Stapling Hammer—drives medium-weight staples fast, with little effort. Long reach, one-hand operation. Experienced builders depend on it for many tacking jobs.

H5 Stapling Hammer—for light tacking jobs, gives you fast fastening action. Light yet strong enough to drive staples with 3/16", 1/4", or 5/16" legs into soft materials

or wood. It's ideal for installing foil-type insulation.

T-5 Tacker—the standard by which all other spring tackers are compared. Operates with an easy squeeze of the hand. Small nose permits staple location as close as 1/16 inch to inside of rabbet. Also available with heavy spring for hard-to-penetrate materials.

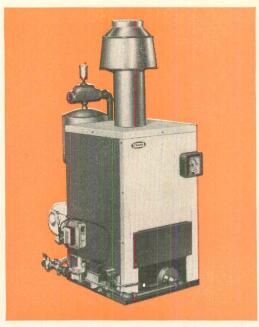
Rugged Bostitch tools speed work on all building jobs where staples can be used. You can equip your crew with Bostitch tools before your next start. Then, see for yourself how much faster the job goes, how much time and money you save. To prove to yourself without capital investment, rent Bostitch tools for a trial. Your building supply dealer will be glad to work with you. See him soon.

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521 BRIGGS DRIVE, EAST GREENWICH, R. I.

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SUNNYDAY 3—three sizes: AGA-approved gross outputs of 60,000, 80,000 and 100,000 Btuh. Needs only 20" x 24" to 32" of floor space.

2 BRAND-NEW



PACKAGED GAS BOILERS

Ultra-compact Profit-priced Fast installing

CRANE SUNNYDAY 3 Here's a low-cost, economical-to-operate gas-fired boiler, complete with automatic controls, designed specifically for nonferrous baseboard heating in small modern homes. Highly efficient cast-iron boiler . . . uses only a small amount of water to give *quick* delivery of heated water to all radiation units. A midget in size . . . fits most anywhere there's a *little* space. You can install it *fast*—to slash your costs on a single installation or sharpen your bid on multiple home projects. It's completely factory assembled and wired—just position, hook up radiation, connect gas and electric supply lines and the Sunnyday 3 is ready to operate.

A Crane unit throughout—with features you'd expect only in higher priced units. It will pay you to get the facts NOW...call your Crane heating contractor for details.



SUNNYDAY 8-nine sizes from 36,000 to 180,000 Btuh net I-B-R water ratings.

NAHB See these two new, outstanding heating units and other quality Crane heating, plumbing and air conditioning products at the NAHB Convention, Booths 256-259, McCormick Place, Chicago, Illinois, January 29-February 2, 1961.

CRANE SUNNYDAY 8 GAS-FIRED BOILER

This modern packaged boiler for gravity or forced hot water or steam systems is ideal for new construction or boiler replacement. A deluxe unit in every way, topped with Crane quality and yet priced to be competitive with ordinary heating units. The Sunnyday 8 is built of cast iron, the lifetime metal, to high standards of design and engineering excellence to provide long-life, dependable performance. The Sunnyday 8 helps round out the line to let you specify Crane in homes of all sizes and to provide quality at a price that's right in line with competition.

To make your homes more attractive... for visible proof of quality... use Crane heating, plumbing and air conditioning throughout. Crane costs no more... adds extra salability. See your Crane plumbing and heating contractor for detailed specifications on quality products at competitive prices.

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VACU-FLO the most popular advance in built-in ome appliances in thirty years! Vacu-Flo is the uilt-in Home Vacuum Cleaning System Plug Featherlite Hose in conveniently located wall inlet and presto! . . . Instant su-

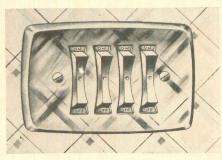
per vacuum power. Dust and are whisked away through tube lines concealed all partitions or under floors. No machine to No cord to tug. . . and cleaning is so quiet. vy duty power unit is remotely located in use, utility room or basement. Vacu-Flo really ens and speeds up house cleaning.

usands in use. Patented. Years of proven percance. And it's healthful . . . contaminated e air," the exhaust fumes of portable vacuums, armlessly exhausted outdoors.

-P PRODUCTS, INC. Manufacturers

Department 2

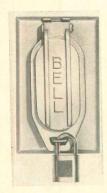
PRODUCTS FOR 1961



Low-voltage switches for remote-control systems are available in gangs up to four, plates come in buff or transparent with gold or paper insert to match walls. Pilot light in handle of each switch tells when circuit is in use.

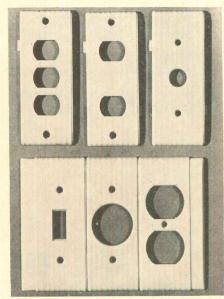
Remcon, Lynbrook, N.Y.

For details, circle No. C22 on coupon, p 282



Outdoor receptacle has padlock hasp, protects children against accidental shocks, makes it impossible for power to be "stolen." Saf-T-Lok cover is made of diecast aluminum, has rubber gaskets, and is completely weather-proof. Front plate is brass, finished in aluminum baked enamel. Bell Electric, Chicago.

For details, circle No. C23 on coupon, p 282



Sectional wall plates fit any combination of receptacles, switches, or phone jacks. Sections come as end pieces or center pieces with connecting lugs which align automatically. The plates are brown or ivory plastic.

Pass & Seymour, Syracuse, N.Y.

For details, circle No. C24 on coupon, p 282

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Building Materials at Wholesale

You benefit from the economy of one-stop buying and single invoicing to reduce paper work and accounting costs. Plus extra savings with the M-W pre-paid freight plan covering more than 7,000 items.

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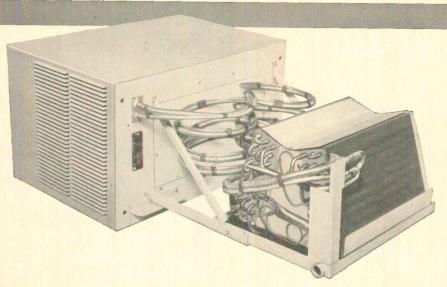
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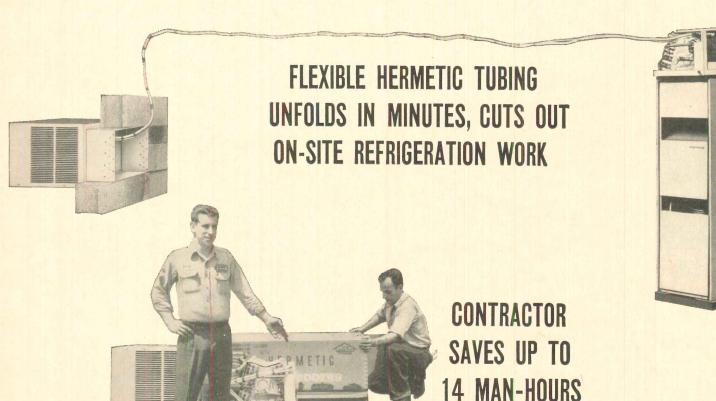
How can I afford NOI

R. A. Osias, Long Island's leading developer, comments on the revolution in whole-house cooling that enabled him to feature Fedders' FlexHermetic as standard equipment in his 490 acre, 800-home "Village on the Hill" development.





FIRST FACTORY-ASSEMBLED,
FACTORY-TESTED REMOTE
AIR CONDITIONER ASSURES
OUTSTANDING PERFORMANCE



ON EACH HOUSE

o air condition now...

when it adds \$1500 in extra sales value to my new homes for a few hundred dollars?"

"Long ago, we learned the importance of good buying for profitable home-building," says Richard A. Osias, President of the Osias Organization, Inc. "We get maximum value for every dollar we spend on lumber, wallboard and hardware.

"But these days, there's an even more important area for good buying—sales value and merchandising power. We measure every dollar we spend against how much it adds to our homes in value that customers can see, understand and want. We're very interested, too, in how much sales excitement we can get out of our money.

"That's why we're providing Fedders FlexHermetic Air Conditioners and companion FlexAire Gas Furnaces in every home in 'Village on the Hill,' two of each, in fact, in larger models using zoned heating-cooling systems. We plan to use this automatic year 'round comfort system as the principal plank in our merchandising and promotion platform for 'Village on the Hill.'

"We'll be getting as great a value as we give. FlexHermetic economies are due solely to a revolutionary manufacturing technique that eliminates costly and critical on-site refrigeration work. Our heating contractor, United Combustion, Inc., will install it in an hour and a half, using a two man crew. Because the FlexHermetic is manufactured and tested under carefully-controlled factory procedures, rather than under uncertain at-the-site conditions, owners can be sure of outstanding performances.

"These days, it takes more than lots of living room, solid construction and realistic prices to sell new homes in volume and profit. We think nothing fills the gap as well as air conditioning...a sure sign that a new house won't become obsolete in a few years. And we think no air conditioner can match Fedders FlexHermetic in low initial cost, in top quality, in installation savings."



SALES VALUE...MERCHANDISING POWER. Regency Ranch model, in the \$22,000 price range features five bedrooms, playroom, raised rear patio...and year 'round cooling and heating by Fedders FlexHermetic Air Conditioner and FlexAire Furnace. Manor House, a 2-story model in the \$24,000 price range, is the first home in the New York area with zoned heating and cooling to sell for under \$30,000.

Now-FlexHermetic models for 2, 3, 4, and 5 bedroom homes, for forced warm air and hydronic systems. See them at Booth 155-156 and Fedders Hospitality Suite at NAHB Convention...or mail coupon today.

F-L-E-)	$\langle \cdot H \cdot E \cdot R \rangle$	R-M-E-T-I-C
UNIFIED	REMOTE AIR	CONDITIONER BY
CC	MA	EDG

Fedders Corp., Dept. HH 120 Maspeth 78, New York

Please send information on FlexHermetic Air Conditioners □ and FlexAire Furnaces □. Have a representative call □.

Name

Profitable Planning (starts with PLAN HOLD®

Vertical and Roll Files

for PLANS, PRINTS, DRAWINGS

You increase efficiency and cut expense with PLAN HOLD filing equipment:

- Systematic filing is practically automatic; you find the plan you want in seconds...no clerical time wasted.
- 2. Your investment in valuable plans is protected; sheets never get mutilated or lost no replacement expense.



Wall mounted out of the way, this unit holds up to 1200 sheets in only 24 lineal inches.



Made of furniture steel, these PLAN HOLD roll file units can be stacked as desired. Take sheets of any length up to 5' wide.



Adaptable to all your needs . . . PLAN HOLD vertical and roll files come in modular sizes, fixed, mobile, portable and in cabinets. At engineering supply and office equipment dealers. Mail this coupon for illustrated catalog and prices.

Plan Hold Corporation, Dept. 603 5204 Chakemco St., South Gate, Calif. Please send me your current catalog and price list.

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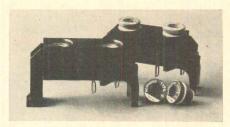
FOR 1961



Small-base unit has been added to this manufacturer's line of pin-type lampholders. Intermediate and medium-base types are also available. Lampholders supply temporary lighting either indoors or out, can be wired without breaking wires, be used with stranded 20 to 12 wire gauge.

Leviton Mfg Co, Brooklyn.

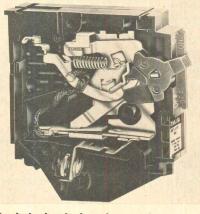
For details, circle No. C25 on coupon, p 282



Stab-in-fuse bases are "homeowner proof." They have receptacles molded to S-fuse size, require no adapters. There are no fuse shells, so "jumping" with a penny or washer is impossible. Each fuse block has a special clip locking it into panel.

Federal Pacific Electric, Newark.

For details, circle No. C26 on coupon, p 282



Back-to-back breakers take up only half the space of conventional circuit breakers, make possible an eight-circuit load center in no more room than a conventional four-circuit center. Also available from this manufacturer: a new line of pure white switchplates and other devices to match white walls, or to contrast strongly with other wall colors.

Bryant Electric, Bridgeport.

For details, circle No. C27 on coupon, p 282

continued on p 280

Give your houses new sales appeal with the

ELECTRONIC MAGIC

of amazing new





THE MOST FABULOUS appliance ever develor for kitchens, Airsweep is a potent new sclincher!

IRRESISTIBLE SALES APPEAL! Airsweep g home owners two astounding advantages: Traps smoke, cooking odors, pollen and bacteria electronically. No filters to replace ozone bulbs. (2) Makes kitchen air healt! zestfu!! Airsweep adds miracle negative ion the air it purifies—which scientists find combay fever, asthma, colds, headaches, blood p sure, drowsiness, and fatigue. Also adds a boon to housewives!

A MONEY-SAVER, TOO. Saves cost of out vents, ducts, special wiring. Saves cabinet sp GIVES FLEXIBILITY to kitchen planning—lo

EASY INSTALLATION. Mounts in minutes on or under cabinet with just four screws, conn to standard household current.

AIRSWEEP is the newest of a complete lin 42 range hoods, 15 exhaust fans, by Progr Distributors in every area.



PRODUCT OF PROGRESS MANUFACTURING
CO., INC., PHILADELPHIA 34, PENNA. WORLD'
LARGEST MANUFACTURER OF RESIDENTIAL LIGHT
ING AND RELATED ELECTRICAL PRODUCTS.

GET DATA ON AIRSWEEP, the big news in range hoods, and the complete Progress line.

PROGRESS MFG. CO., INC., Phila. 34, Pa.

Send information Range Hoods and distributor to:	on the Exhaust	complete Fans plus	line of	of ne
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City	Zone	State_

As seen on THE PRICE IS RIGHT



To the more than 30,000 Builders and Dealers who will attend the NAHB Show in Chicago in January:

We cordially invite you to visit our display in booths 450-451-452-453 and see why you cannot afford to make your own kitchen cabinets — when our large scale factory operation offers you

Mass production economies plus unlimited opportunities for custom kitchen designing
Carefully selected raw materials and scientifically engineered construction
Accuracy and smoothness in machining through the use of heavy production equipment Uniform and complete sanding in preparation for finishing A finishing procedure incorporating the latest application technique - conveyorized oven-accelerated drying — which permits use of the highest type of finishing materials applied with a maximum film thickness (durability of finish and hazard resistance are remarkable) Constant inspection insuring consistently high quality Instant delivery by our 59 warehouse distributors, along with all built-in appliances, and assistance in kitchen planning and installation

"For the Most Beautiful Kitchens of them all"



BRONZEGLOW. BIRCH



Save on construction costs with the new '61 FORD TRUCKS

SAVE FROM \$31 TO \$157 ON PRICE* ALONE WITH FORD'S F-100 STYLESIDE PICKUPS

Contractors everywhere are finding that the half-ton Ford Styleside is priced below all other comparable pickups! And these rugged pickups are designed to keep right on saving with lower maintenance and operating expenses. Their durable, one-piece cab-and-box construction provides increased rigidity and eliminates a major source of rust and corrosion. Not only does the sheet metal last longer with this stronger body, but it also contributes to a quieter ride.

And you can save more . . . because you can carry more on every trip. Styleside bodies are longer and wider with loadspace increased as much as 16%. In addition, wheelbases have been lengthened 4 inches and this combined

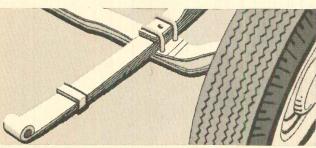
with the improved shock absorbers gives a ride that's unexcelled in its field—proven by scientific Impact-O-Graph tests. For construction work the angle of approach has been increased so you can climb steeper drives or go over deeper ditches or gullies. Ford also offers America's lowest-priced* 4 x 4 with big 8-ft. box, the F-100 Flareside.

And you can save on operating expense! Ford's Mileage Maker 223 Six is standard on all conventional pickups to keep gas costs low. The economical 292 V-8 is available for jobs requiring extra power. Both engines are equipped with Ford's Full-Flow oil filter that lets you get 4,000 miles between oil changes.

*Based on a comparison of latest available manufacturers' suggested retail delivered prices







SAVE UP TO \$150 ON FRONT TIRES! In certified tests of cruck suspensions, Ford front tires lasted up to twice as ong. In 50,000 miles, savings can add up to \$150 on a pickup... more on two-tonners. And Ford's sturdy I-Beam front axle and leaf-spring suspension not only cut tire wear, but their simpler design also cuts maintenance costs.

12,000 MILE OR 12 MONTH WARRANTY

SAVE WITH GREATER DURABILITY . . . on all 1961 Ford Trucks, each part, except tires and tubes, is now warranted by your dealer against defects in material and workmanship for 12 months or 12,000 miles, whichever occurs first. The warranty does not apply, of course, to normal maintenance service and to the replacement in normal maintenance of parts such as filters, spark plugs and ignition points. Never before have you had such protection . . . such evidence of long-term economy!

SAVE WITH FORD'S NEW 262-CU. IN. "BIG SIX" ALL-TRUCK ENGINE FOR TOP PERFORMANCE AND ECONOMY

America's savingest two-tonners offer a big 262 Six with the power of big displacement, the gas economy of 6-cylinder design, plus the durability of heavy-duty construction. This engine features a sturdy stress-relieved block, strong forged steel crankshaft, long-lasting stellite-faced intake and exhaust valves, and durable pyramid-type connecting rods. And Positive Crankcase Ventilation reduces oil dilution and sludge formation to extend engine life. Ford's proven 292 V-8 and 292 HD V-8—the V-8's with "six-like" economy—are also available for your special power needs.

You also save with other new durability features like the more rugged frame, stronger radiator with new lock-seam construction, improved cab and chassis electrical wiring, plus longer, easier-riding and more durable rear springs. Ford's parallel ladder-type frame with standard 34-inch width allows you to install new or transfer your present special construction bodies quicker and for less. Also, the frame drop in the cab area lowers cab height . . . makes for easier entry.

FORD TRUCKS COST LESS



YOUR FORD DEALER'S "CERTIFIED ECONOMY BOOK" PROVES IT FOR SURE ...

Spoiled!

I never thought I'd rave about windows, but honestly!-my beautiful wood windows, equipped with Zegers Take-out make such a difference in housekeeping that I'm spoiled! They're so simple to remove and replace. Window washing is done inside, safely and easily. Weather-tight, too—cuts fuel costs! Won't let in winter cold, summer heat, or year-'round dust and dirt.



A slight sideways pressure and your Take-out equipped window is out. Each sash has two balances so it fits perfectly, won't ever tilt, lifts with a finger tip!



See how easily it can be washed! No tedious climbing and washing on the outside when Take-out is in the window.



Zegers Take-out provides complete protection against weather because it in-

corporates the famous Dura-seal
weatherstripping principle. When you
build or buy, look for
windows equipped
with Zegers Take-out they're in the bestbuilt, best-buy homes and apartments. Write for literature today! ZEGERS

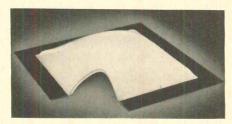
INCORPORATED 8090 South Chicago Avenue Chicago 17, Illinois Manufacturers of Dura-seal, Take-out and Dura-glide

PRODUCTS FOR 1961



Plastic shutters are made of rigid Geon vinyl. They will not split or warp, and their color is integral to the plastic. Shutters are vacuum-formed from 1/16" extruded sheet. They are not yet in full production but are expected to sell for \$11-\$13 a pair. This compares with a cost of about \$11 a pair for unpainted wood shutters of the same type.

Marine Control Labs, New Orleans. For details, circle No. C28 on coupon, p 282



Self-flashing skylight has twin plastic lights. Outer layer is made from acrylic sheet to give greater weatherability; inner layer is fiberglass reinforced polyester for added strength. The sealed dead-air space between adds to the insulating efficiency of the unit. Flat flanges extend 4" on all sides to provide flashing. Flanges can be nailed directly to roof deck, and roofing lapped over them and sealed. Other types of Twin Domes are available for curb installation in flat roofs.

Wasco Products, Cambridge, Mass. For details, circle No. C29 on coupon, p 282



New photocopy machine is low in cost (\$99) bringing it within reach of smaller business firms. It will copy any document or drawing up to 8½" wide, and of any length. Exposure fidelity is assured by direct lamp-to-paper contact. Powered rollers feed copy at constant speed. Nylon gears never need lubricating. Plastic housing is impact-proof. Weight: 12 lbs.

American Photocopy, Evanston, Ill. For details, circle No. C30 on coupon, p 282

Give them what they want at a price they're willing to pay!



Gas and Electric Water Heaters Gas and Oil-Fired Boilers Gas Furnaces and Wall Heaters Sealed Gas Wall Heaters Gas Incinerators

Sound impossible? Actually, it's easy and a sure way to increased sales and profits for you! First, your customers want "brand name" products such as Basmor-Little, pre-sold through national advertising.

Second, they want products which incorporate new features for top performance and dependability, plus decorator styling, to meet their modern family needs. Third, they want to pay a reasonable and fair price for these products.

That's why more and more builders are building with Basmor-Little . . . heating and water heating equipment that gives their homes MORE SELL-POWER! How about you? See us at the NAHB Exposition, Chicago, Booths 46-47.



BASTIAN-MORLEY CO., INC. LAPORTE, INDIANA Branch Plants: San Rafael, California and Pittsburg, Texas



.... AWARD-WINNING HOMES BY PLACE — TO FIT YOUR MARKET!

Award-winning designs in a full range of 3-4-5 bedroom ranches, colonials, splits and 1½ stories—led by the exciting new Comanches series (sells for \$9000 with lot—over 4500 orders in 60 days!)...

... Full range dealer services—everything from land acquisition assistance to field engineering to complete merchandising programs to full range financing services . . .

... Plus the know-how to put them together into building and selling programs that really get results . . . it's no wonder that . . .



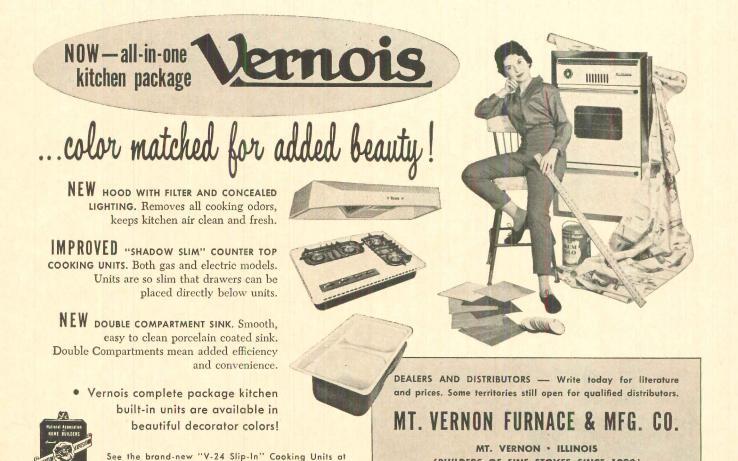
Write, wire or phone:
Marc Donaldson, Vice Pres.-Sales

PLACE HOMES, INC.

1212 S. Walnut Street South Bend 21, Indiana AT 8-9111

(BUILDERS OF FINE STOVES SINCE 1920)

YOU'LL GROW FASTER WITH PLACE IN THE GROWING 60's!



BROKEN WATER LINES? Sewer Back Up? GROUND WATER **LOW COST Insurance** Against Water Damage with

The ORIGINAL and Best Yet **Submersible Pumps**

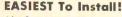
Prevents Basement Flooding



Protects valuable apliances, heater, fur-nace, or game room equipment.

Compact Easy to hide

- under the floor out of the way
- out of sight!



- No floats to adjust No rods to foul up
- No water level worries

Just plug it in any 115-v. outlet, connect discharge pipe and it's ready to go!



Won't Flood Out!

Completely submersible—all controls inside the pump-motor can't flood or burn out—has thermal overload protector with automatic re-set.



Model 59A

Budget Priced Basement Pump

- Fully Automatic
- 1850 GPH at 10-ft.
- 6 1/8" high, 8 3/4" wide

Heavy Duty Sewage Pump

8600 GPH at 5 ft. head



Model 139

6800 GPH at 10' Rugged Bronze Construction



Approved Multi-Purpose Model 109 Pump

Moves fluids fast— 3300 GPH at 10' head-bronze or cast iron—easy to install

Complete Line — 600 to 8600 GPH See Your Wholesaler

Division of The American Crucible Products Co. 1305 Oberlin Avenue • Lorain, Ohio

Magnetic tape to seal doors and cabinets or to act as weatherstripping for metal windows is now available. Magnetized particles are extruded in one side of the vinyl tape, the other is non-magnetized.

Applied Magnetics Corp, Leeds, Mass.

For details, circle No. C31 on coupon, below

Tissue-thin tracing paper that can even be crumpled without being destroyed is now offered by K&E. Banknote is 100% rag-fiber bond made on slow-running top-jacketed machines.

Keuffel & Esser, Hoboken, N.J. For details, circle No. C32 on coupon, below

Hammer-in fastener with safety han dle has been added to the Shure-Se line. The heavy-duty tool keeps worker away from the work where heavy blow are needed.

Olin Mathieson, New York City. For details, circle No. C33 on coupon, belo

Fast joint finish is assured by Best wall's new Five Star cement. The new mix has long wet life but dries fast t cut finishing time, minimize shrinkage The maker also reports superior work ing qualities. Five Star can be mixed i volume and stored without spoiling.

Bestwall Gypsum, Ardmore, Pa. For details, circle No. C34 on coupon, belo

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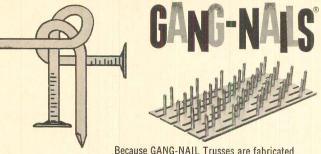
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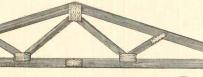
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Because GANG-NAIL Trusses are fabricated to your specifications, every one fits perfectly on delivery . . . installation takes less time, requires less manpower . . . there's no waste and no rejects. Even complicated roof frames fit right THE FIRST TIME! GANG-NAIL Trusses are rigid, true and firm. There are no split or damaged chords because GANG-NAILS are pressed into the wood, NOT HAMMERED.



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FABRIC DOOR

Many builders leave the Columbia-matic Fabric Door right in the carton—the buyer installs it later—in seconds. No painting, no hanging, no hardware, no framing necessary. A real space saver. Neat folding, narrow profile, portable, reversible, washable. Lovely vinyl covering, heights to 8', widths to 4', can be hung in pairs.

For complete details write:

THE COLUMBIA MILLS, INC.

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Newest of the new... Featuramic gas and electric built-ins by

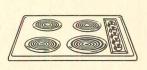
BROWN

Watch her eyes flash with excitement when she spots this sleek beauty. Listen to her purr over the dozens of distinctive features and conveniences. You're about to close another sale. For these all-new Brown Featuramic gas and electric built-ins offer the "more" she wants . . . at the "less" she wants to pay.

You save on installation costs, too. For the new Featuramic built-ins are in place and connected in a few minutes time. Only one cut-out is needed for the surface cooking units. And with the exclusive Brown mounting plate, ovens automatically level-up as they slide into place. Mail this handy coupon for full details and specifications of the Brown Featuramic gas and electric built-ins... newest of the new.







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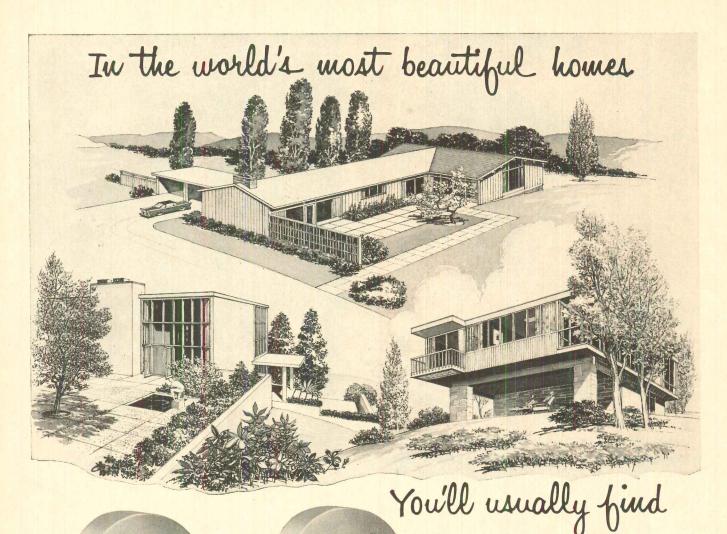
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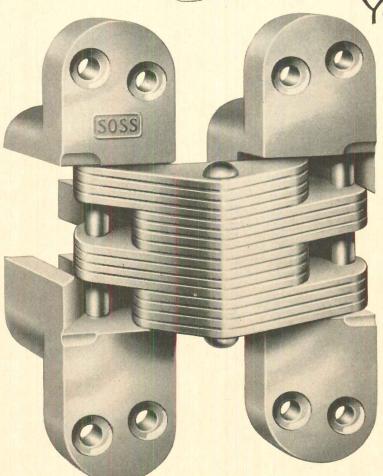
- MAIL THIS COUPON TODAY----

Please rush complete information and specifications for the new Featuramic gas \square electric \square built-ins.

NAME__

COMPANY_





"The Hinge That Hides Itself"

SOSS

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HINGES

for complete information and prices, see your building supply dealer or hardware dealer, or write us.

SOSS MANUFACTURING COMPANY

DEPT. HH-9
P. O. BOX 38, DETROIT 13, MICHIGAN

Modern ONE PIECE Maid DIIII T. I. I. BUILTOII

The New Town House 24"

SAVE up to \$117.50

Total	4	1 1	7 50
No extra 110 volt outletsaye	υp	to	7.50
24" counter top coveringsave	uр	to	20.00
No 24" base cabinetsave	υp	to	20.00
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Here's a one piece built-in that slides into the space normally occupied by a 24" base cabinet. Chrome frame around range top adjustable for a tight fit over the counter top. Attractive chrome moulding forms frame around doors and protects finish on adjacent cabinets from heat whenever door is opened. Needs no separate base on which to be mounted. Four leg levelers make any correction for uneven floors. Available with matching sides if used at end of kitchen. Your choice of Modern Maid's matching colors or brushed chrome.

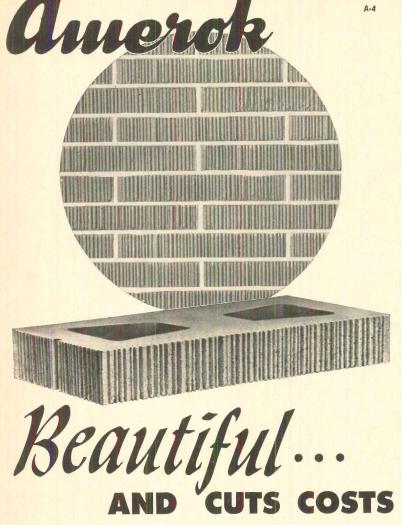
SY INSTALLATION des easily into 24 ch space. Needs no

PLEASE SEND PRICES AND FOLDER ON THE 1961 LINE OF MODERN MAID GAS AND ELECTRIC BUILT-INS AND AUTO-MATIC DISHWASHERS IN MATCHING COLORS.

NAME ADDRESS CITY_ STATE.

BUILDER DISTRIBUTOR DEALER

CHATTANOOGA 1 TENNESSEE



Amerok creates new horizons in masonry. There's newness in its striated texture...tomorrow's touch in the wide color range...thought of contemporary styling in its clean-lined symmetry.

And it's easy to build with Amerok. It is strictly in modular conformation. Precisely dimensioned. Generous voids to entrain air and lighten the load on footings and foundations. Ample structural strength. Two lengths — 16'' and 12''; two thicknesses — 8'' and 4''. Two heights — $2-\frac{1}{4}''$ and $3-\frac{5}{6}''$. Half units for each size. Striated or plain face.

Price? Beauty considered, 8-inch-thick Amerok is easily the lowest cost masonry available. Material for material, usually costs less than lumber. And there's the 4-inch-thick for cavity walls, or veneer over frame.

Write for brochure "New Horizons in Masonry" and name of nearest manufacturer.

BRIKCRETE ASSOCIATES, INC., 416 W. 25th, HOLLAND, MICH.

MANUFACTURING TERRITORIES ARE NOW AVAILABLE

Amerok is relatively low in price because it is produced in local plants, from local aggregates, for local or regional consumption, practically eliminating the terrific costs of freight and distribution, and permitting a generous mark-up on basic costs. For these reasons, the manufacture of Amerok can be a very profitable

operation, either for your own building projects or for sale to others in the area.

The Amerok machine is compact, self-contained and fully automatic. Plants operate under franchise, with exclusive rights in protected territories. Equipment investment is nominal with extended payments to responsible parties. Write for "The Story of Amerok."



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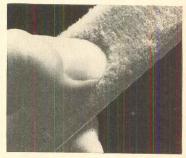
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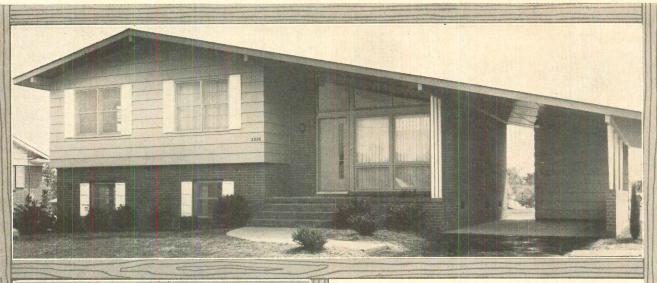


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