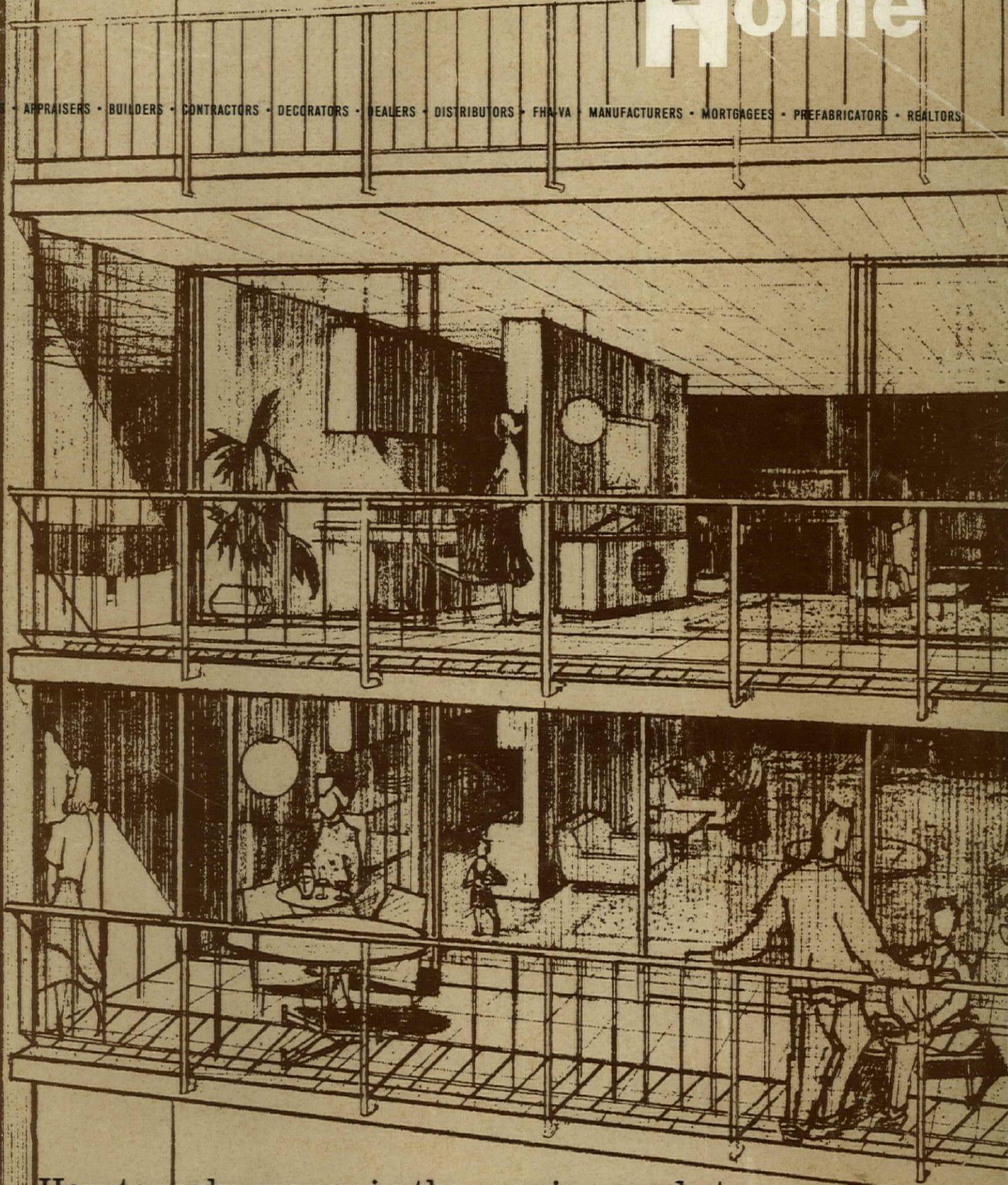


OCTOBER 1960 SIX DOLLARS A YEAR - ONE DOLLAR A COPY

House & Home

ARCHITECTS • APPRAISERS • BUILDERS • CONTRACTORS • DECORATORS • DEALERS • DISTRIBUTORS • FHA-VA • MANUFACTURERS • MORTGAGEES • PREFABRICATORS • REALTORS



How to make money in the growing market
for the right kind of new apartments

Celebration... Sellebration...
now an **INLAID VINYL** flooring with
Sellsational home selling features!

AMERICANA

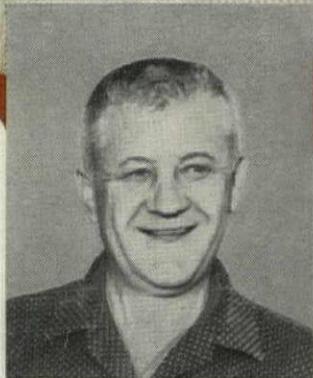
Congoleum-Nairn proudly introduces a Flor-Ever® Vinyl floor that for the first time gives your homes every selling "extra"—with no extra in cost!

Flor-Ever Vinyl, you know, has been the quality symbol in millions of homes. Now, "Americana" offers three *new* features.

1. Flor-Ever in a luxury design with decorative "chip colors" in the newest style—to correlate with today's color trends in appliances, top coverings, paints and wall coverings.
2. A blend of Flor-Ever's famous features (the non-porous quality that defies household staining and gives easy-care glow) with a beautiful new sateen finish that disguises scuffs, hides underfloor irregularities and resists indentation... a magnificent vinyl by the yard for a virtually seamless expanse of beauty.
3. A pricing policy that fits EVERY home selling budget—plus Congoleum-Nairn's great "Model Home" policy and promotional selling helps.

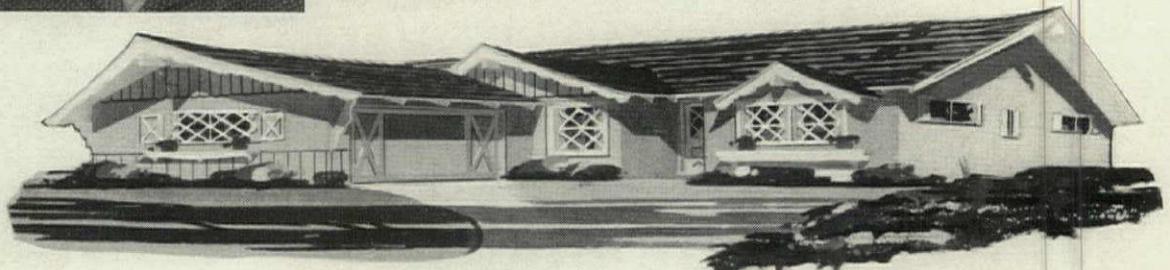


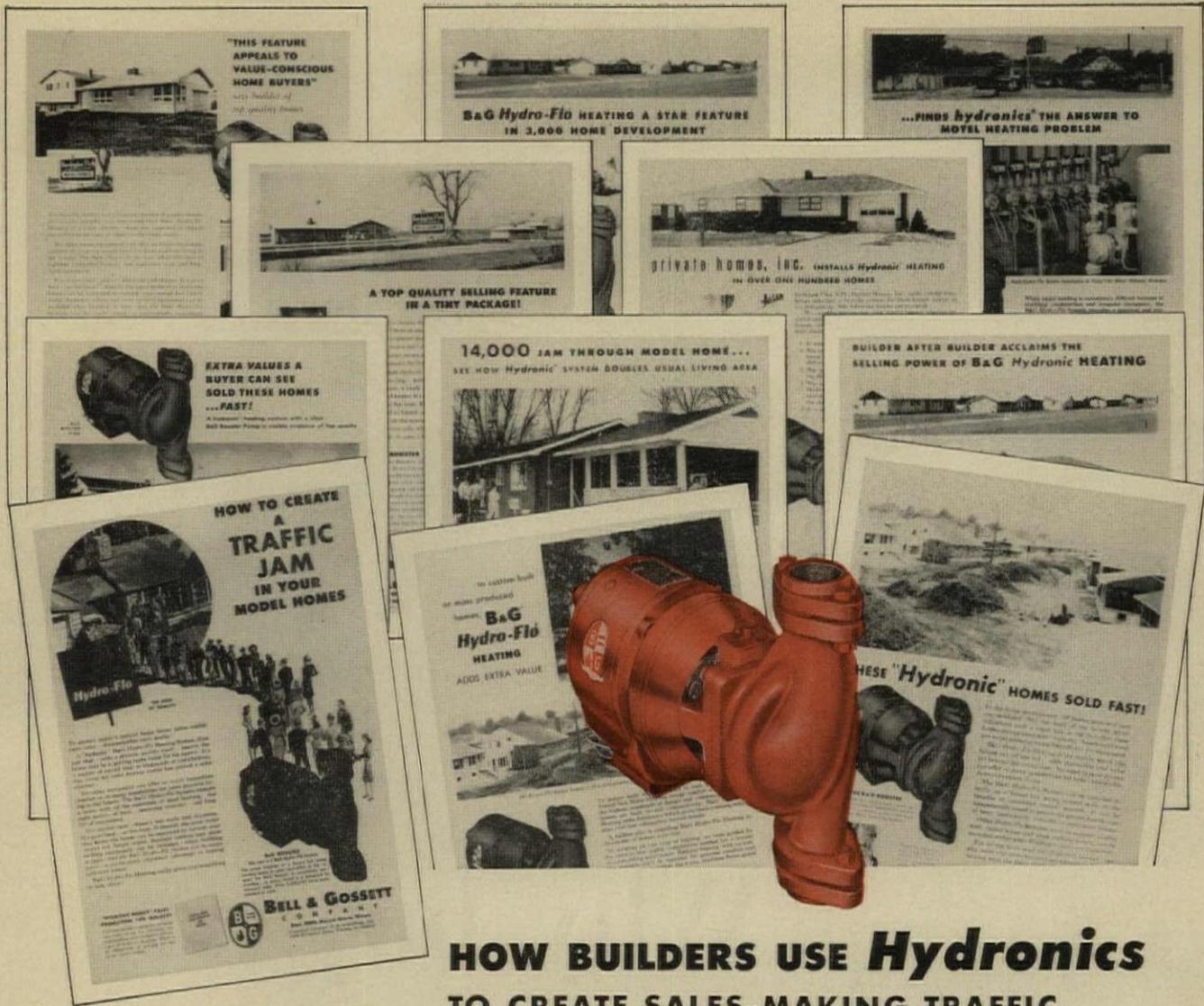
Congoleum-Nairn
FINE FLOORS



**"...will help SUN RAY sell
luxury and comfort—at sensible prices"**

says James R. Murphy, sales manager of Sun Ray Estates, the highly successful development created by R. A. Watt. And to Mr. Murphy's shrewd appraisal of Americana Vinyl's value for smart builders need be added only the fact that Sun Ray's color coordinator, Mel Grau also selected Americana for his sales-exciting interiors.





HOW BUILDERS USE *Hydronics* TO CREATE SALES-MAKING TRAFFIC THROUGH THEIR HOMES

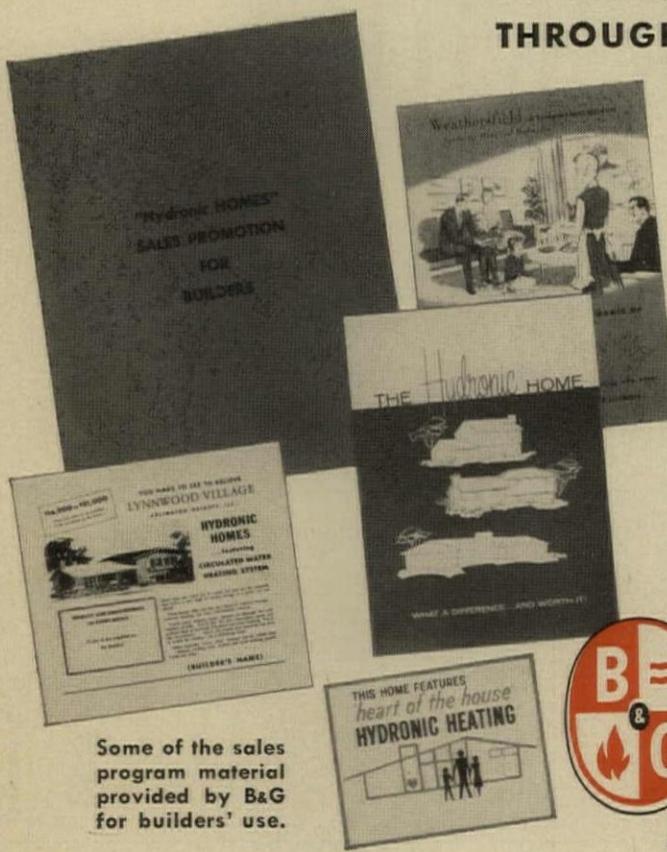
The B&G Builder Sales Program is a tested and proved method of using *hydronics** to help sell homes. It recognizes the fact that to make sales, a builder must create traffic through his model homes by means of some distinctive feature which identifies them favorably to the prospect!

The B&G Builder Sales Program presents an outstanding traffic-creating plan and provides all the necessary sales tools. It enables the builder to demonstrate to his prospects that the comforts, conveniences and extra benefits of B&G *Hydro-Flo* Heating — a hydronic system — are far superior to any other kind... definitely a distinctive feature!

The B&G advertisements shown here are evidence that hydronic *Hydro-Flo* Heating helps sell homes. Each ad is a case record of a builder's success.

Write today for your copy of the "B&G Sales Promotion for Builders."

**Hydronics*: The science of heating and cooling with water.



Some of the sales program material provided by B&G for builders' use.

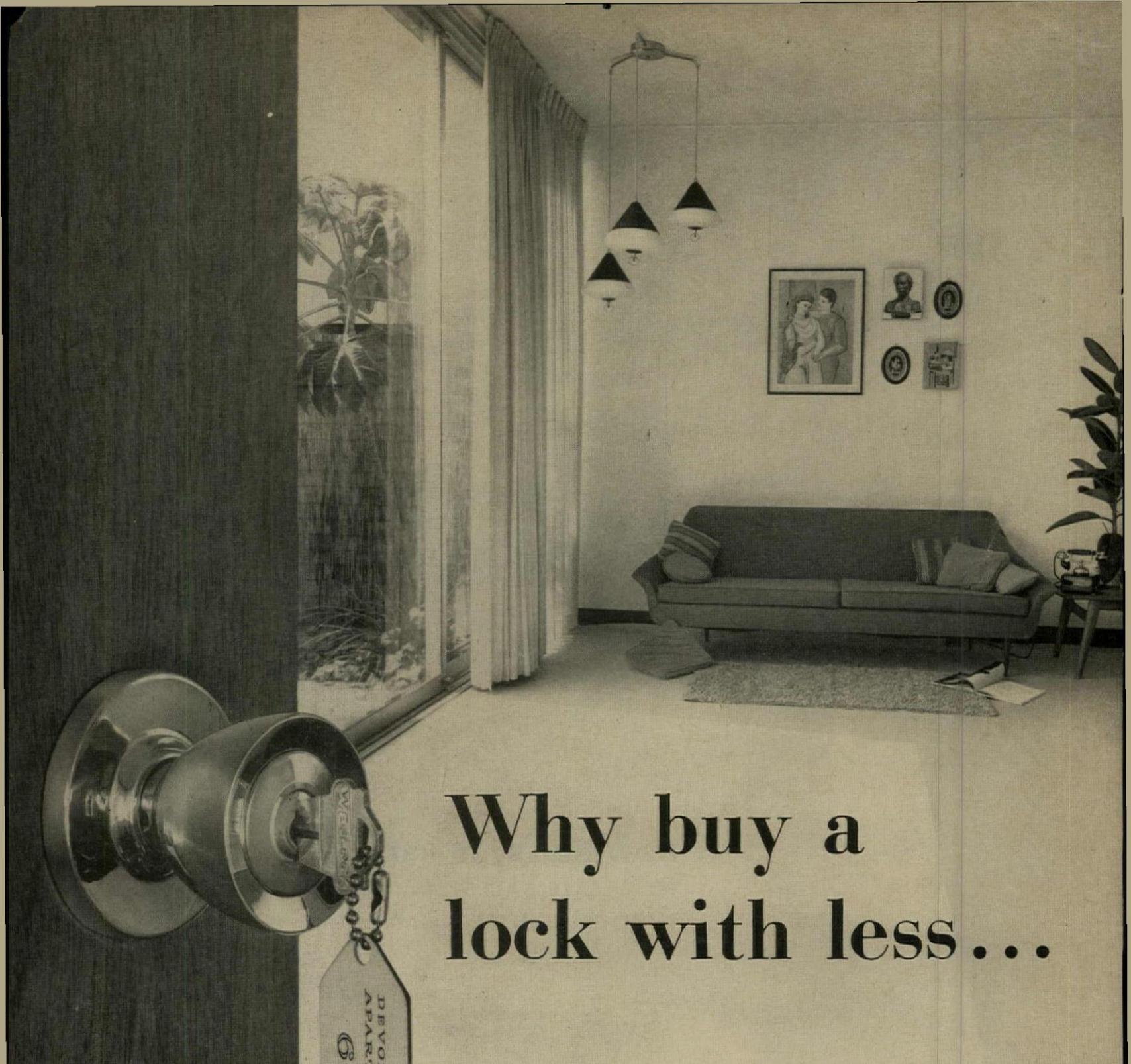


Hydro-Flo® SYSTEM

BELL & GOSSETT COMPANY

Dept. GJ-10, Morton Grove, Illinois

Canadian Licensee: S.A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto 16, Ontario



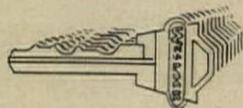
Why buy a lock with less...

ONLY WESLOCK gives you all four big benefits you demand on the doors of your apartment houses. A lock by any other name will not!

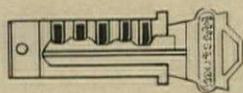
Take a good look below.

Measure any other lock you wish against this yardstick! You'll soon discover that only Weslock has designed the lockset that best suits *your* building requirements.

1 Up to 100,000 different keying combinations



2 5-pin tumbler security



3 Panic and lockout proof



4 Operation without knob during construction.



WESLOCK®

opens the finest apartment doors in the country

Western Lock Mfg. Co., 2075 Belgrave Ave., Huntington Park, California

THE MAGNIFICENT NEW

**LOW
COST**



MATADOR

BY INLAND HOMES



Dominate the \$10,000 home market

(INCLUDING LOT)

(or the \$11,000 market including bath-and-a-half, garage and lot)

MATADOR FEATURES THAT ASSURE VOLUME SALES

 **12 distinctive Matador designs** by the industry's top designers: Colonial, Contemporary, Ranch, French Provincial and Swiss Chalet. Choice of slab, crawl space, or full basement. Single car garage available.

 **Over 1,000 sq. ft.** with outstanding traffic pattern.

 **Unique family area** and spacious kitchen, 3 roomy bedrooms, and a large living room.

 **1½-baths** or 1-bath and walk-in closet in basement and garage floor plans.

 **Plenty of storage space.** Big closet in every bedroom, guest and linen closets, handsome birch wood kitchen cabinets.

 **2" x 4" construction throughout.** Cedar shakes factory applied, double coursed. Horizontal siding also available, or sheathing only for brick.

 **Finest brand name materials** and unexcelled craftsmanship throughout.

MODEL HOME FINANCING AT NO COST

Inland Mortgage Corporation will supply complete construction financing for a Model Home in your subdivision . . . at no cost to builder-dealers.

Contact Inland Homes today! Write, wire or phone (PR 3-7550). Neal B. Welch, Jr., Vice President—Sales, Department H-10, Piqua, Ohio.

INLAND HOMES



INLAND HOMES CORPORATION Executive Offices: Piqua, Ohio
Plants in Piqua, Ohio; Hanover, Pa.; Clinton, Iowa

MANUFACTURER OF AMERICA'S FINEST HOMES

For your gas built-ins
these famous twins mean

FULL CONTROL



FLAME MASTER™ . . . the unmatched low temperature oven control system

Robertshaw FLAME MASTER

- full temperature control down to 140° . . . for warming, defrosting, food keeping
- no w-i-d-e temperature swings
- no buttons to push
- cool, complete modern cooking
- longer service-free life



FLAME SET™ . . . the newest "burner with a brain"*

Robertshaw FLAME SET

- no more burned pans
- no more scorched food
- small flame for small pans
- BIG flame for BIG pans
- simplest to operate

*AGA MARK

. . . only from Robertshaw . . . the name that MEANS temperature control!

. . . and these superior features are important to all homemakers. For greater value and full satisfaction, insist on both these *exclusive* controls . . . only from Robertshaw . . . the name that MEANS temperature control. Write today for more details. Robertshaw Thermostat Division, Robertshaw-Fulton Controls Company, Youngwood, Pennsylvania.

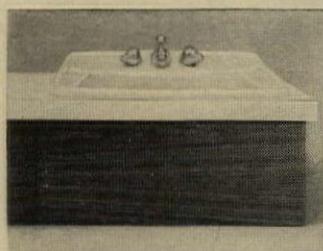
VMA 6969.

Robertshaw





New *Brian* "Uni-Rim" design eliminates conventional metal rim. Lavatory is available in color or snowy white.



Brian lavatory can be installed on any type counter top—marble, tile, plastic or wood.

Exciting news for architects, builders, plumbing wholesalers and contractors is the revolutionary new *Brian* vitreous china counter-top lavatory . . . another "first" in style and design from Eljer. Exclusive "Uni-Rim" design eliminates the costly metal rim between lavatory and counter top . . . unique "J" clip assembly permits fast, economical installation *without tools!* More than 1,850,000 homeowners and prospective homeowners (*your customers*) are being "sold" on the new *Brian* lavatory through distinctive full-page, four-color advertisements in leading national magazines.

ELJER
Division of The Murray Corporation of America

3 Gateway Center
 Pittsburgh 22, Pa.

New *Sorrento* 5' enameled iron recess bath with exclusive modern apron design with straight floor line . . . in snowy white or choice of six soft pastel colors.





Sensational... Sellable

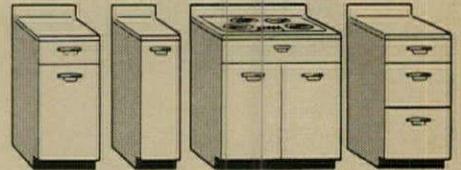
Sensational new finish, Traditional — a vinyl of beautiful and natural grain inseparably bonded to Republic Steel Kitchen door and drawer fronts.

Sensible... the charm of yesteryear with all the conveniences of tomorrow. An all-steel kitchen with an exciting new finish that blends dining and living areas into centers of gracious living.

Sensational... Sellable... just what the homemaker ordered. So sensational, so sensible, the buyer doesn't have to make a choice — just a decision.

Send for complete information and color sample.

Standard Units of Republic Steel Kitchens are available in a wide range of sizes in base and wall cabinets, sinks, drop-ins, and accessories to meet every kitchen need and size. Easy to sell, easy to install!



CUSTOM KITCHENS... for profit builders

REPUBLIC STEEL
Kitchens

REPUBLIC STEEL • BERGER DIVISION
CANTON 5, OHIO

REPUBLIC STEEL KITCHENS, DEPT. C-9537-B
1028 BELDEN AVENUE • CANTON 5, OHIO

Please tell me more about the advantages of Republic's Traditional Finish and send color sample.

Name _____ Title _____

Firm _____

Address _____

City _____ Zone _____ State _____

Another nine-page report from
Douglas Fir Plywood Association

22

ways to build more house for the money with

**DFPA-QUALITY TRADEMARKED
FIR PLYWOOD**

5 ways to save with one-step siding-sheathing
5 ways to cut sheathing and subflooring costs
6 ways to build better, faster with components
6 new ways you can use fir plywood box beams

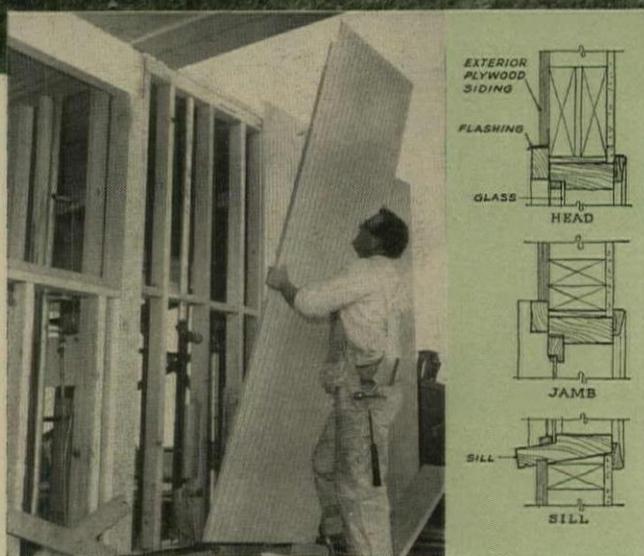


22 WAYS TO BUILD

MORE HOUSE

FOR THE MONEY

Why spend time and Exterior plywood



Typically, T 1-11 is nailed to studs 16" o.c. Edges are shiplapped. Standard millwork is available to fit. Insulation can be applied between studs if needed. For more information on fir plywood siding-sheathing, write Douglas Fir Plywood Association, Tacoma 2, Washington.

1

Eichler Homes saves \$200 a house with Texture One-Eleven® siding-sheathing

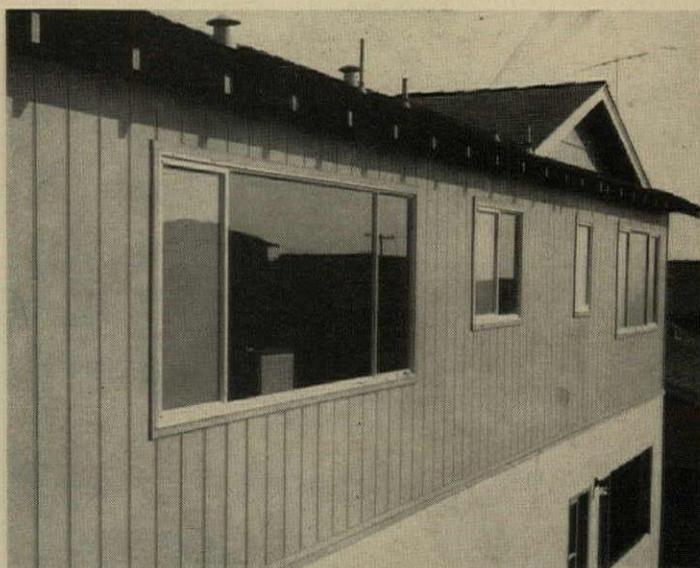
Eichler Homes of Palo Alto, whose handsome project houses have won most of the country's top awards, is cost-conscious as well as style-conscious. Since switching to Texture One-Eleven® (vertically grooved) fir plywood as siding, Eichler has shaved \$100 a house off his siding costs, and has virtually eliminated callbacks due to faulty siding. By nailing T 1-11 directly to studs without sheathing, Eichler gets the strongest possible wall, while saving \$75-100 per house in sheathing materials and 20 man-hours in labor. Cost of let-in bracing is eliminated too; plywood combined siding-sheathing has ample bracing strength and fully meets F. H. A. requirements.

money on siding and sheathing? does both jobs in one step

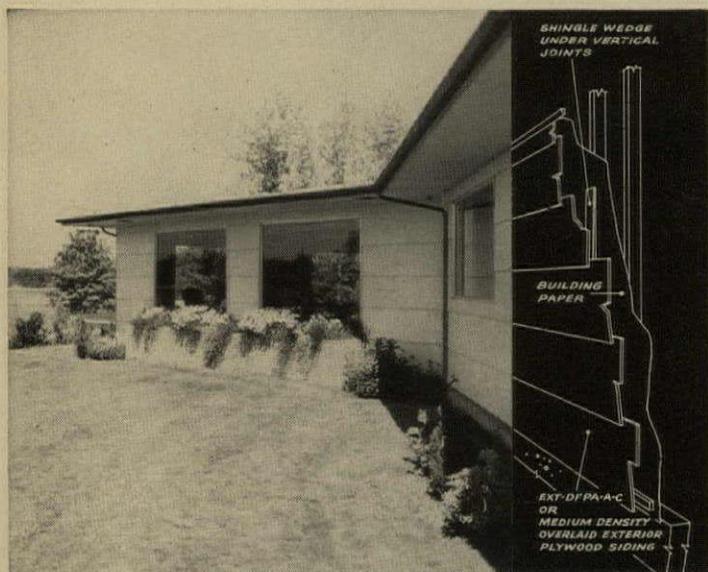
Exterior plywood siding styles vary from Japanese panel-and-batten to traditional lapped



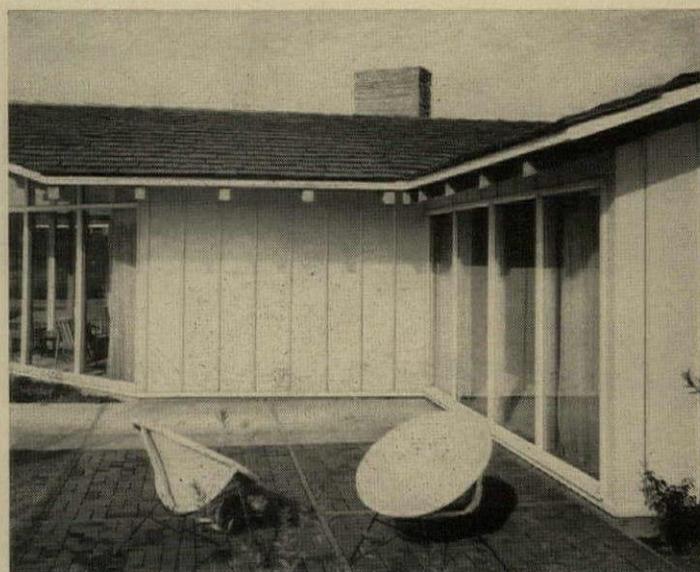
2 **Panel-and-batten** wall on Eugene, Ore. home was simply built with standard $\frac{3}{8}$ " Exterior fir plywood nailed to studs with battens at joints, and stained. With weathering, plywood checks and acquires a pleasantly textured surface. One-step wall method meant low cost: \$8.75 psf. For the smoothest siding, use overlaid fir plywood, painted.



3 **Reverse board-and-batten** effect is achieved by Smith & Kline Construction Co., Castro Valley, Calif. A single thickness of $\frac{3}{8}$ " overlaid fir plywood serves as siding and sheathing. Inch-wide, shallow vertical grooves in the plywood, 8" o.c., look like battens under joints of board siding. Overlaid plywood permitted elimination of primer paint coat.



4 **Lapped plywood siding** makes a rigid wall without sheathing. On this Olympia, Wash. home, 16"-wide courses were nailed to studs, with wedges at joints. Plywood may be regular or, as used here by designer-builder Charles Sten, overlaid for a premium paint job. It may be ripped, or purchased precut (beveled or plain) in several widths.



5 **Board-and-batten** effect on this Portland, Ore. home is Exterior fir plywood doubling as sheathing. Builder Harold Stroberger applied panels directly to studs, with battens 16" o.c. Overlaid Exterior fir plywood gave an ultra-smooth paint job. With same method and unsanded Exterior, allowed to check with weathering, a rustic board effect results.

22 WAYS TO BUILD

MORE HOUSE

FOR THE MONEY



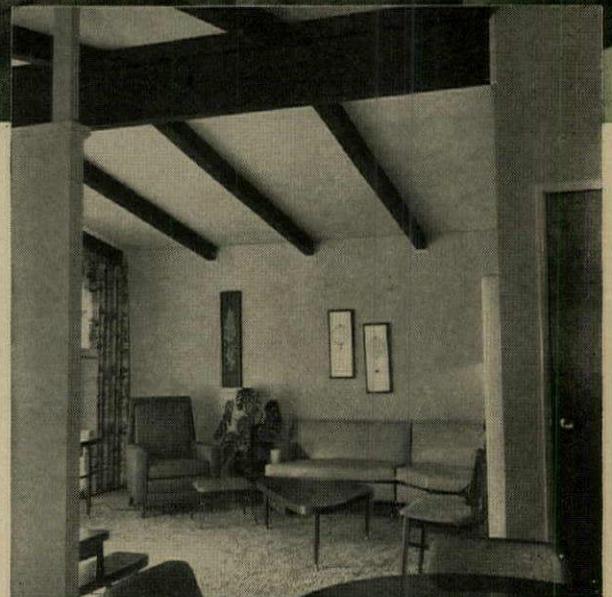
Fir plywood sheathing a quality house



6

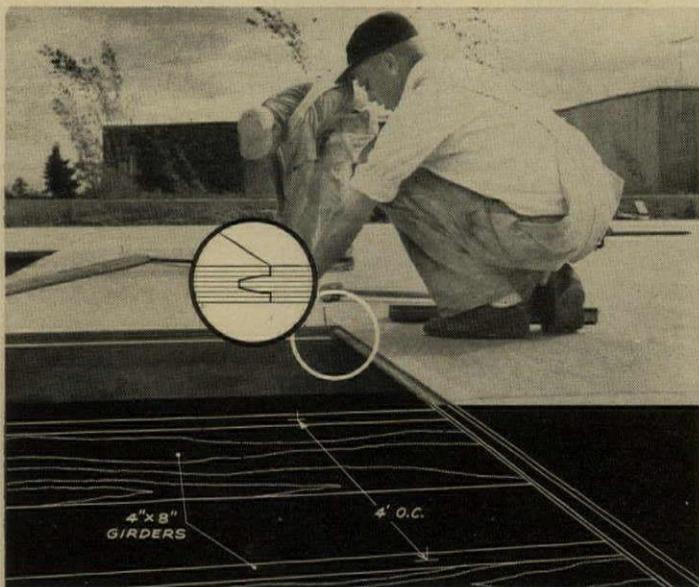
California builder's plywood roof decking makes attractive exposed-beam ceiling

A switch to fir plywood roof decking from car decking cut labor costs 15% for a volume builder in northern California. He uses tongue-and-groove $\frac{3}{4}$ " A-D Interior plywood with the "A" face down. Ceilings are given a planked effect by V-grooving the plywood 12" o.c. Instead of building soffits, he uses a starter strip of Exterior fir plywood at the beam overhangs, with furring strips to bring its level up to the insulated roof. The plywood roof system saves labor, takes less framing, practically eliminates scrap, and gives a tight, strong roof. There are no loose boards to open up, and plywood is uniform and lightweight, hence easy for workmen to handle. Two men can cut, install and nail the average roof in a day.



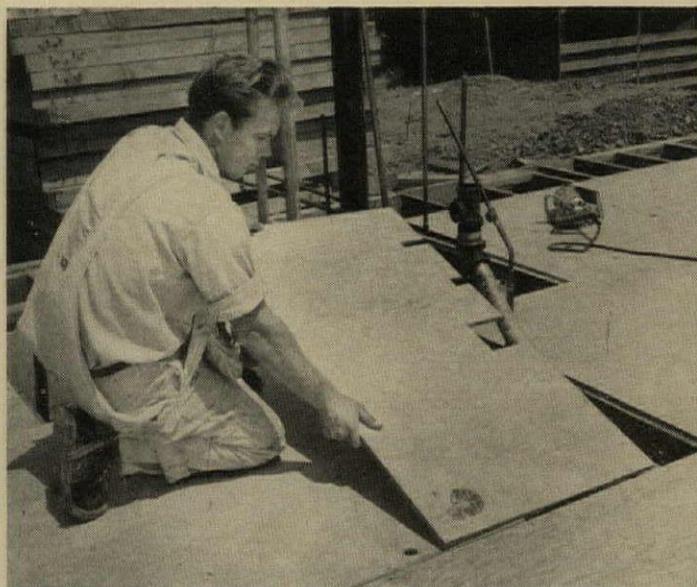
Exposed plywood-and-beam ceilings are popular with home buyers. For more information about fir plywood sheathing and subfloors, write Douglas Fir Plywood Association, Tacoma 2, Washington.

and subflooring help you build at lower in-place cost



7

New tongue-and-groove 2·4·1[®] plywood cut labor 37% for Tacoma, Washington builder R. H. Wegner. The 1 $\frac{1}{8}$ " subflooring-underlayment is now available with t&g edges to eliminate blocking. Two men can lay 1,000 square feet in four hours, handling 60% fewer pieces than with conventional joist construction.



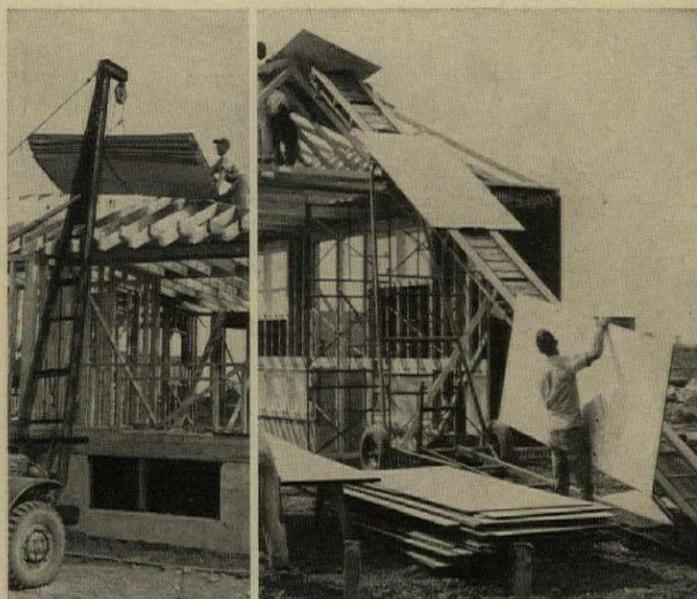
8

Fir plywood subfloors have cut floor installation costs in half for Andy Oddstad, big-volume builder in northern California. Using $\frac{5}{8}$ -inch Ply-Scord[®], one man can install the average floor in one day. It used to take two men the same time to do the job. Waste is negligible and DFPA-inspected PlyScord makes a solid base for finish flooring.



9

Tilt-up fir plywood walls mean savings of \$525 per house for Smith & Kline Construction Co., Castro Valley, Calif. They fabricate entire 40-ft. second-story walls, then tilt them up into place. This eliminates the time and cost of erecting scaffolding, and plywood's structural strength makes bracing and blocking unnecessary.



10

Mechanized handling of fir plywood roof sheathing helps cut roof construction costs. H. M. Gorelick of Long Island uses a mobile crane welded to a war surplus vehicle to lift sling loads of plywood, ceiling joists, and roof framing. Shapland Homes, Champaign, Ill., gets plywood to second-story roofs with a belt conveyor.

22 WAYS TO BUILD

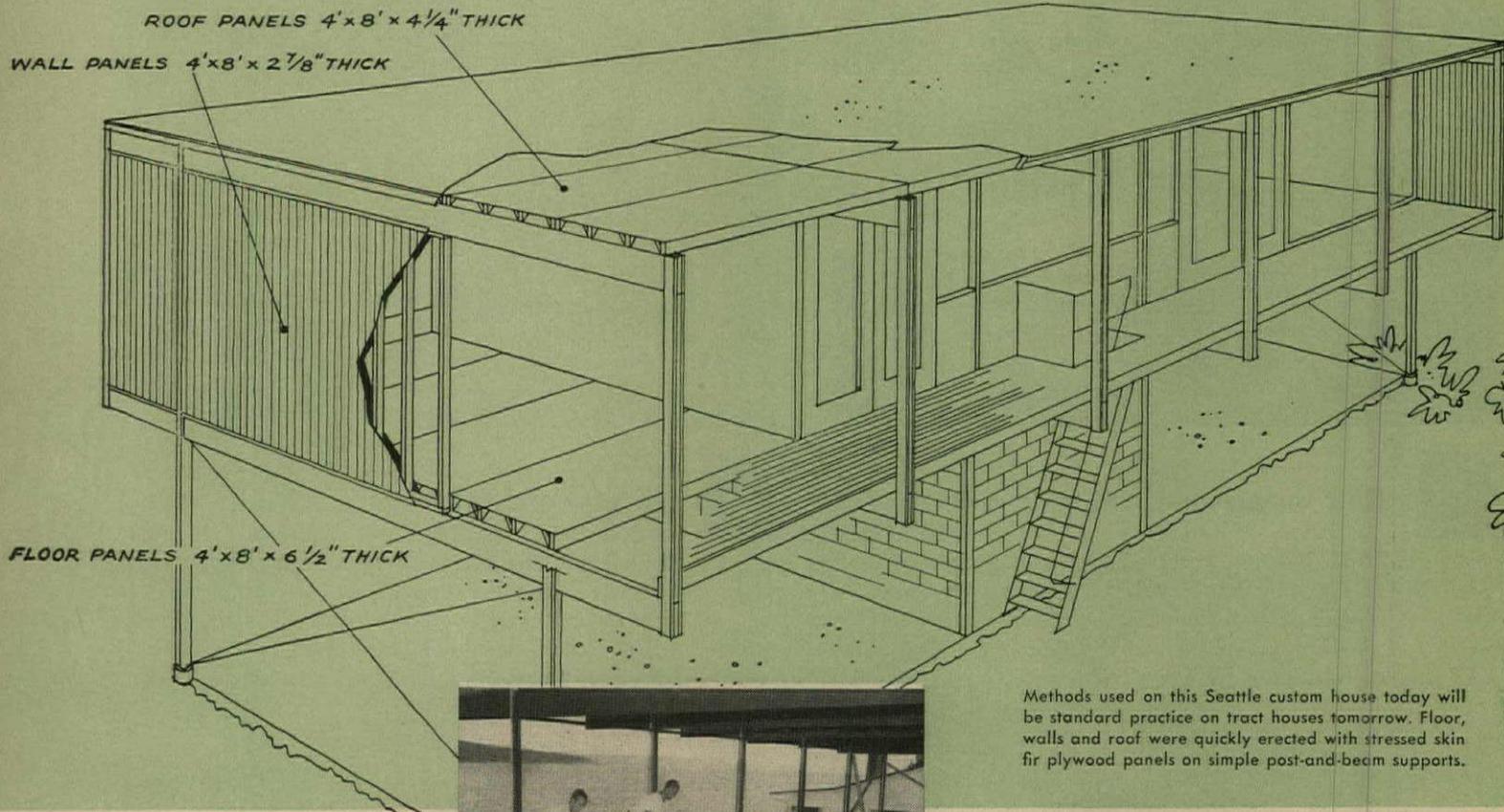
MORE HOUSE

FOR THE MONEY



Plywood components build a better

This house was assembled with big plywood components, not built with thousands of small pieces



Methods used on this Seattle custom house today will be standard practice on tract houses tomorrow. Floor, walls and roof were quickly erected with stressed skin fir plywood panels on simple post-and-beam supports.



12

Wall components, also plywood panels, took 17 man-hours to install. Outer skins served as siding; inner skins, paneling. Plywood was of two types: vertically grooved Texture One-Eleven®, which was stained; or medium-density overlaid, smoothly painted.



11

Floor panels took only 7½ man-hours to install. All components were 4x8 fir plywood “sandwiches” containing insulation and with lumber framing and stiffeners. Plywood type and lumber dimensions varied with application. Panelbild Systems of Lynnwood, Wash. was fabricator and installer.

13

Roof panels, too, cut labor because they covered 32 sq. ft. at a time, providing ceiling, roof decking in one component. Man-hours required for roof: 15. Total cost of the house was \$13,000, or \$12.50 psf. Contractor was G. A. N. Company; architect, Charles Metcalf.

cut on-site labor up to 80%, house with closer cost control

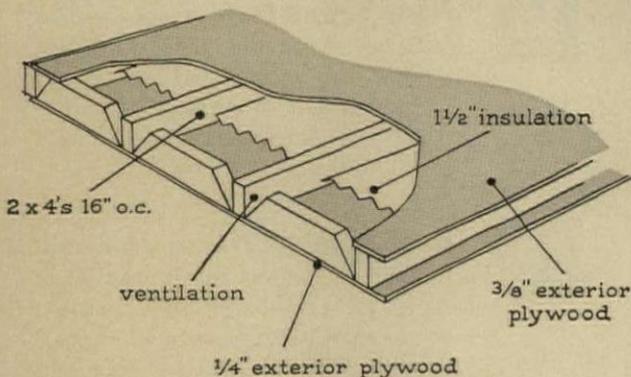
Stressed skin panels can be used for roofs of every design: folded, flat or curved

14 This unusual folded plate roof

brought crowds to Wedgwood Homes' model house in Portland, Ore. Its quick erection was as remarkable as its looks. Five men put up posts, beams, and prefabricated roof panels in five hours. A comparable conventional roof would take 12 man-days. Roofs like this, made of big stressed skin fir plywood panels leaning against each other in a series of rigid corrugations, are strong, speedily built, and permit long clear spans. Needing fewer supports, they are actually stronger than flat roofs using the same amount of material.



Cutaway shows construction of stressed skin roof panel at left



15

Flat panels can also be used on roofs of more conventional design, like this slightly pitched one in Denver. Builder Robert Harlan used 2 x 8-foot sandwich-type fir plywood panels for a 2,560-sq. ft. roof. The double-duty panels were strong, yet light enough for workmen to handle easily. Top and bottom skins were $\frac{3}{8}$ " Exterior fir plywood; framing and stiffeners were 2 x 4's. Aluminum insulation was placed inside the panel. The "A" face of the bottom skin was left exposed and painted to serve as the finished ceiling.



16

Vaulted roofs like the one on the Redi-Gas building in Parkland, Wash. are being adopted by more and more builders for home construction. Components were four-foot-wide arched stressed skin panels of Exterior fir plywood with paper honeycomb core. Lightweight, easily handled, each spans 16 feet. Component construction helped keep total cost of the building to \$8.10 psf.

For more information on fir plywood components, write Douglas Fir Plywood Association, Tacoma 2, Wash.

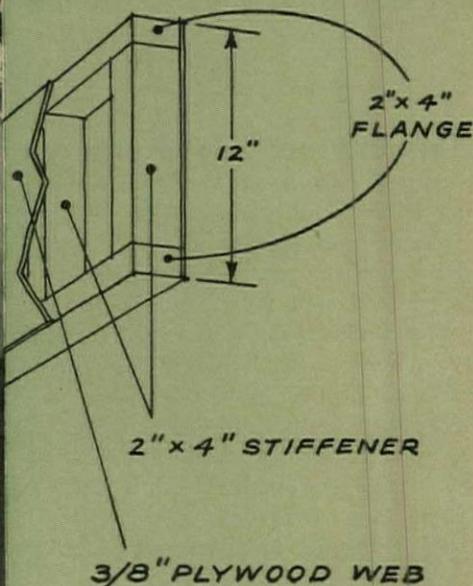
22 WAYS TO BUILD

MORE HOUSE

FOR THE MONEY



Plywood box beams high in



17

Case study house proves plywood beams "best and cheapest way to do the job"

This Altadena, Calif. house was sponsored by Arts & Architecture magazine to demonstrate new ways to build better. Fir plywood box beams as roof supports were key components. Made and installed by Berkeley Plywood Co., beams were amply strong, yet light enough for easy handling. Webs of medium density overlaid Exterior fir plywood provided a superior paint base. Since beams extend from inside to outside, durability as well as appearance of finish was important. In-place cost with this premium plywood was about what heavier lumber beams would have cost and far less than glue-lams. Architects were Buff, Straub & Hensman of Los Angeles.

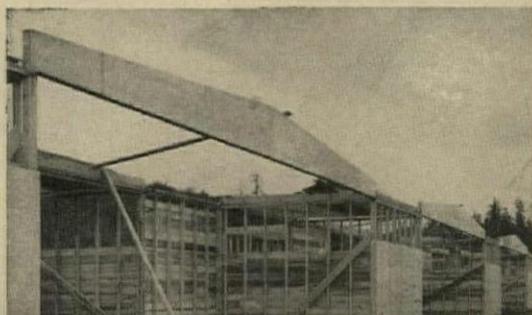


18

Floor supports in custom houses of Robert Kronenberg, Hinsdale, Ill. builder, are fir plywood box beams. He finds them strong, stable, shrink-proof. He gets longer spans than with available lumber beams.

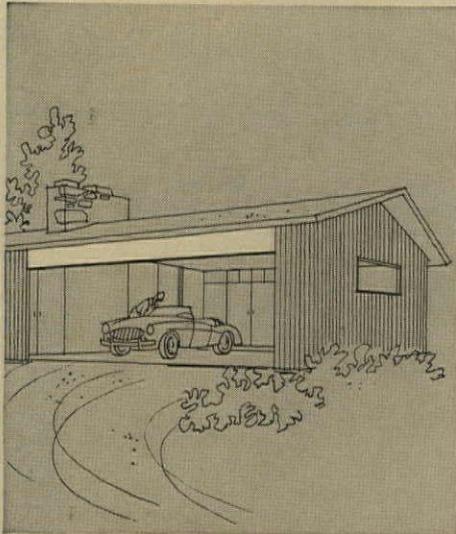
19

Door lintels of these small aircraft hangars in Tacoma, Wash. are peaked fir plywood box beams. Strong, economical beams span 40 ft. and support 375 lbs. per lin. ft. Other logical applications for similar beams: garages, marinas and warehouses.

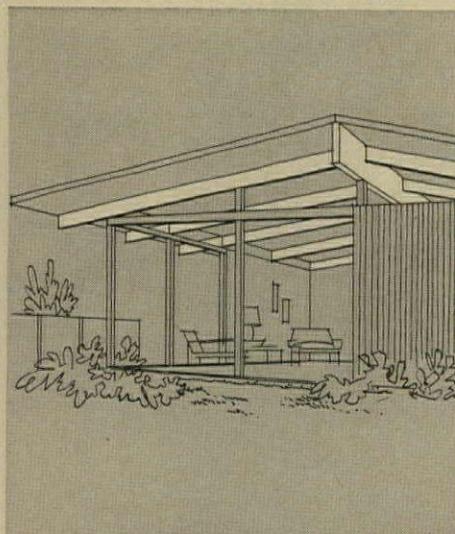


are low in weight and cost, strength, looks and stability

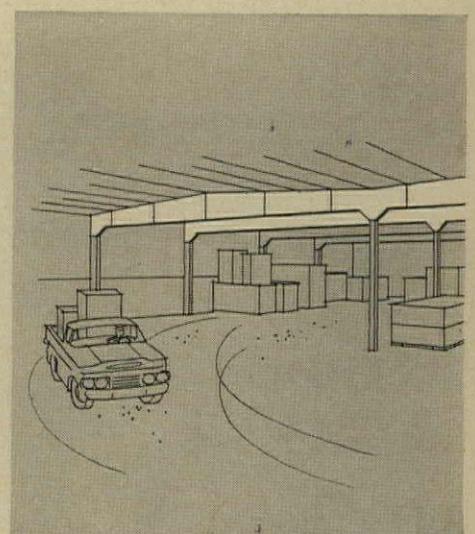
Plywood box beams can be fabricated in any length or shape, for any load or span



20 Plywood box beams for garage door openings are low-cost and good-looking. Because of plywood's high strength-weight ratio, they are easy to handle, yet amply stiff for long spans.



21 Ridge beams and exposed ceiling beams of fir plywood are smooth and attractive. Long-span beams make sense in home building because they permit maximum design freedom.



22 This warehouse illustrates use of low-cost, strong plywood beams to create a 40' x 80' clear area free of supporting posts or walls. Four peaked beams, spaced 20 ft. o.c., span 40 ft.

INSIST ON DFPA GRADE-TRADEMARKED FIR PLYWOOD

In building, you stake your reputation on the quality of every one of your houses. You can't afford to take chances with inferior materials. In plywood, you can make *sure* of quality by always insisting on DFPA grade-trademarked fir plywood.

DFPA grade-trademarked plywood is backed by an industry-wide quality control program. It's guaranteed by the integrity of the producers of 90% of the country's fir and Western softwood plywood. Continual factory inspection and rigid testing in DFPA's laboratories work together constantly to insure quality. If a mill's plywood doesn't measure up, use of the grade-trademark is withdrawn until it does.

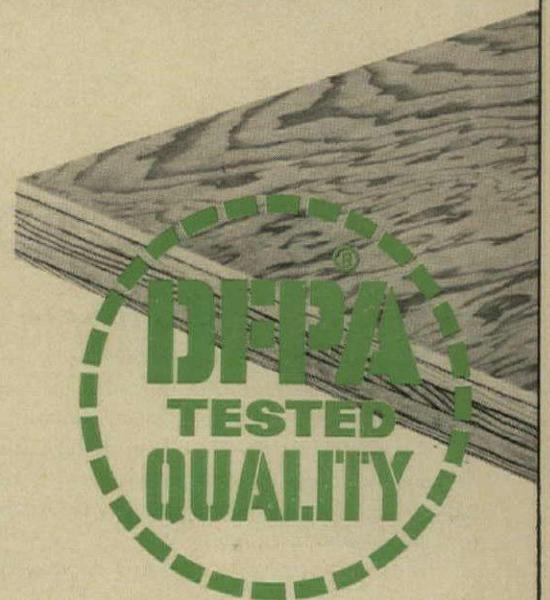
That's why today, as for more than a quarter of a century, the DFPA stamp is your assurance of quality plywood. Look for it on every panel.

DOUGLAS FIR PLYWOOD ASSOCIATION

TACOMA 2, WASHINGTON

—a non-profit association of over 125 manufacturers of fir and Western softwood plywood. Besides quality control, DFPA conducts product research and development to supply you with new ideas and building techniques. In addition, DFPA's national advertising presells your customers on the advantages of plywood construction.

Only plywood which bears the DFPA trademark is manufactured under the industry-wide Douglas Fir Plywood Association quality control program. Always look for the letters "DFPA"





Compacto 30

BUILT-IN LOOK... BUILT-IN SAVINGS!

New Caloric Compacto 30 Range

For an unusual combination of beauty and economy, base your kitchens around the new Caloric Compacto 30. This remarkable range not only looks built-in, but it saves you space and more than a hundred dollars in installation costs. It requires only one connection . . . no cut-outs. It is completely flexible . . . can be put between cabinets or even in a peninsular arrangement.

The Compacto 30 provides a maximum of cooking convenience in a minimum of space. The giant 6600 cubic inch oven (24" x 20") has a Silicone oven door seal and chrome non-tilt oven racks. There are four extra-

capacity 12,000 BTU Tri-Set top burners that are guaranteed for life. Two other years-ahead features are the Thermo-Set top burner and the new Keep-Warm oven system. And Caloric is America's easiest range to clean and keep clean!

The Compacto 30 fits right into Caloric's free kitchen color planning service by Beatrice West, the famous design and color consultant. You can order it in pink, yellow, turquoise, coppertone, black or white. And you can order matching-color Caloric sinks, hoods, and splash plates to go with it . . . to round out your fashionable, functional kitchens. Write today, or contact your Caloric representative.

Caloric®

builders Build Better...Sell Sooner!

There's Big Money for YOU in the Big

"BLUE STAR HOME" Promotion

You make your own selling easier when you get in on the nation-wide "Blue Star" home-building program. The "Blue Star" is the American Gas Association's award to quality new homes that feature the advantages of modern Gas. The coast-to-coast "Blue Star" promotion helps you put over a real sales campaign in your community.

The A.G.A. "Blue Star" home program includes: hard-hitting ads to put in your local papers; scripts for local radio and TV broadcasts or spots; plus all the "extras" to make your promotion successful! Everything from signs and banners, truck & bus cards, balloons, pennants, aprons and matches to bracelets, key rings, lighters and money-clips—all designed especially for "Blue Star" home-builders, to tie your program to the national one, so the national program pays off for you.

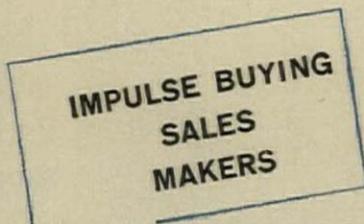
So build your sales by building with Gas. Let us help you sell your "Blue Star" homes with "Blue Star" advertising, publicity and promotion.

In the home building trade, this is the year of the "Blue Star"—This is the year you've been waiting for. Get all the facts at your Gas company, right away.

AMERICAN GAS ASSOCIATION

YEAR-ROUND AIR-CONDITIONING

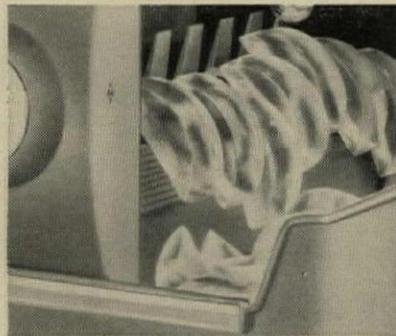
Today, 8 out of 10 new homes use dependable Gas heat! One unit heats and cools the entire house—comfortably, economically. Or air-conditioning can be added easily, economically, to a modern Gas heating system—for year-round comfort, a cleaner house, a healthier family!



Check these "Blue Star" features and build in all you can!

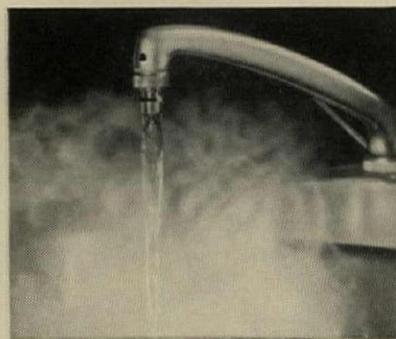
BURNER-WITH-A-BRAIN

When the lady-to-be of the house sees the amazing Gas Burner-with-a-Brain* turn itself up and down *automatically*, she'll never settle for less. Clinch it by telling her the truth—9 out of 10 restaurants use Gas for cooking, and wouldn't use anything else!



ICE CUBE MAKER

All home-buyers are thrilled by the magic ice-maker, featured in this modern Gas refrigerator. No trays to fill or spill—it's completely automatic. And it can really help *you* make the sale.

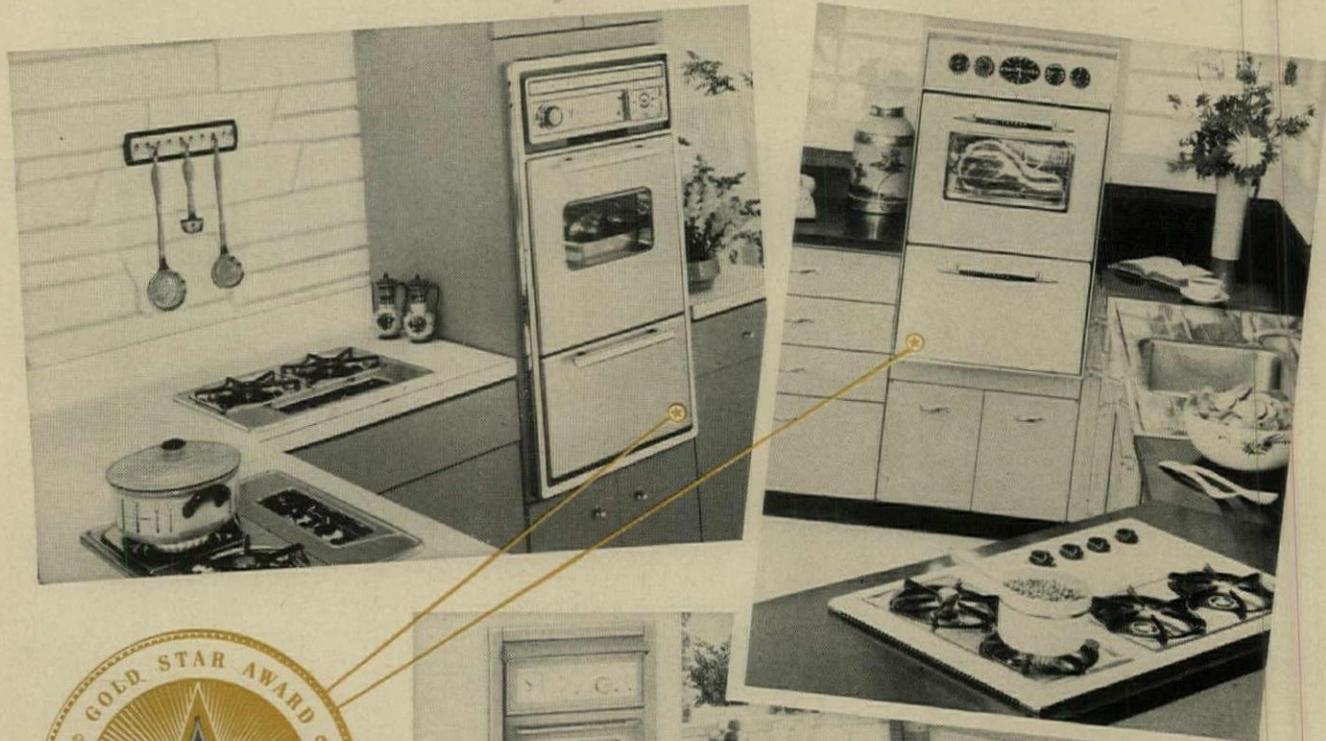


FASTER, MORE ECONOMICAL, MORE ABUNDANT HOT WATER

She'll appreciate the constant, quick hot water supply... He'll be pleased by the money that's saved when you heat water with fast, economical Gas.

much more...for so much less!

Look what Gas is building-in for you!



This is the Gold Star of Excellence! It serves as your guarantee of Quality. To win it, each range must be better in at least 28 specifications—more advanced, more automatic, more efficient, better designed. *Only the finest ranges, regardless of maker, earn a Gold Star.*



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 the American Gas Association are pre-selling Gold Star award-winning ranges to millions of Playhouse 90 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:

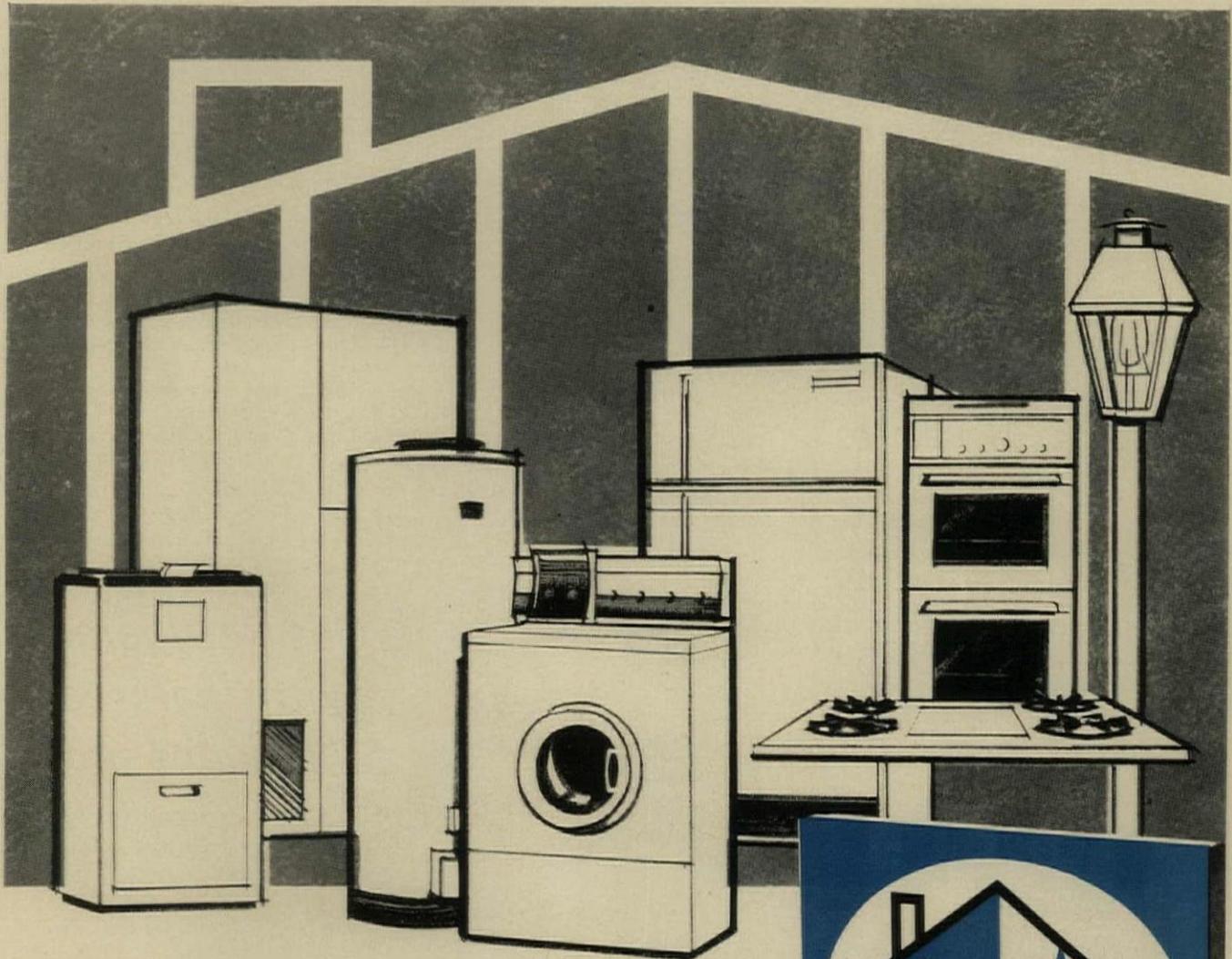
BROWN FEATURAMIC • CALORIC
CROWN • DETROIT JEWEL • DIXIE
EAGLE • GAFFERS & SATTLER
GLENWOOD • HARDWICK • MAGEE
MAGIC CHEF • MODERN MAID
MONARCH • NORGE • O'KEEFE & MERRITT
PREWAY • REAL HOST
RCA WHIRLPOOL • ROPER • SUNRAY
TAPPAN • UNIVERSAL • VESTA
WEDGEWOOD-HOLLY • WELBILT

© Am. Gas Assoc., Inc.

No wonder . . .

Today more people than ever are cooking with GAS!

To Build Sales from the Ground Up



build
BLUE STAR HOMES

with automatic Gas  *Appliances!*



... the next seven pages show how

Include a modern, automatic



The Gold Star Standards – Only the finest ranges from the world's great Gas Range Makers qualify for this coveted Gold Star Award. To meet new Gold Star standards, a range must have at least 28 advances in performance, automation and design.

*A.G.A. Mark ©Am. Gas Assoc., Inc.

a Gas Range built to Gold Star Standards

With all their marvelous improvements, Gas ranges built to wonderful Gold Star standards still cost the builder less to install, the buyer less to use. Wide choice of brands, colors and metals to beautify every kitchen. Handsome free-standing models as well as built-ins incorporate features like these to help you sell:

- Burner-with-a-Brain*
- Automatic Roast Control
- Clock-controlled Oven
- Space-saving Fold-up Burners
- Automatic Griddle
- Self-lighting Oven and Broiler
- Smokeless Broiling
- Finest Oven Insulation
- Every Inch a Cinch to Clean

Every Gold Star Feature is pre-sold for you each year by \$30,000,000 worth of advertising and promotion material by Gas companies and range manufacturers.

a Gas Refrigerator with features folks want most

Only a Gas refrigerator gives:

1. 10-YEAR WARRANTY! This guarantee on the sealed refrigeration system is twice as long as that on any other refrigerator.
2. IT'S QUIET! There are no moving parts in the cooling system to make noise. Silent, dependable Gas does all the work.
3. NO COSTLY UPKEEP! There is nothing in the cooling system to wear out, so there is no need for expensive repairs. Economical to use because it runs on Gas.
4. CONSTANT BALANCED COLD! Never any "on-off" fluctuation. Freezer and food compartment temperatures automatically stay at the exact degree that keeps food best. Frost never builds up in freezer or refrigerator compartments.
5. AUTOMATIC ICE CUBES! (*right, inset*) Makes and serves cubes without bother with trays or water.

ONLY GAS



Gas Kitchen.....



does so much more...for so much less!

Offer these instant-acting,



ONLY GAS

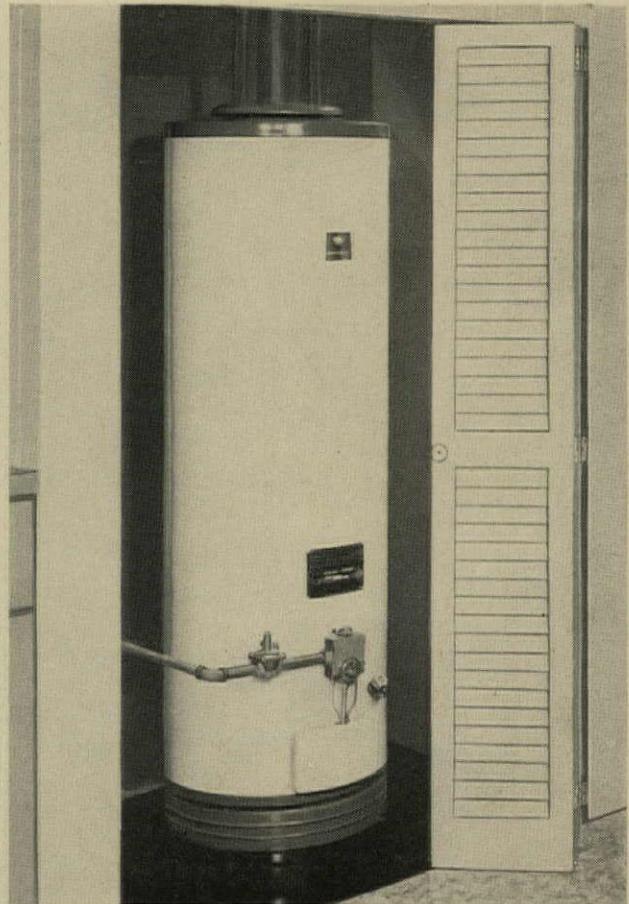


"clean house" Gas appliances

Gas Washer-Dryer... saving'est on the market!

No time wasted between washing and drying with a modern combination Gas washer-dryer. Gas starts drying instantly—no wasteful warm-up wait—wash-day chores are shortened, fuel bills are surprisingly low. An automatic Gas home laundry is a real sale-clincher—homemakers know that professional laundries use Gas, they want it too. Separate Gas dryers available, as well.

A compact washer-dryer in the bathroom or near the linen closet where it can also act as a hamper is good planning. Gas drying is so gentle there's no need to sort clothes—even the most delicate fabrics dry safely because Gas fluff-dries, never "bakes." What's more, whites stay whiter, colors brighter.

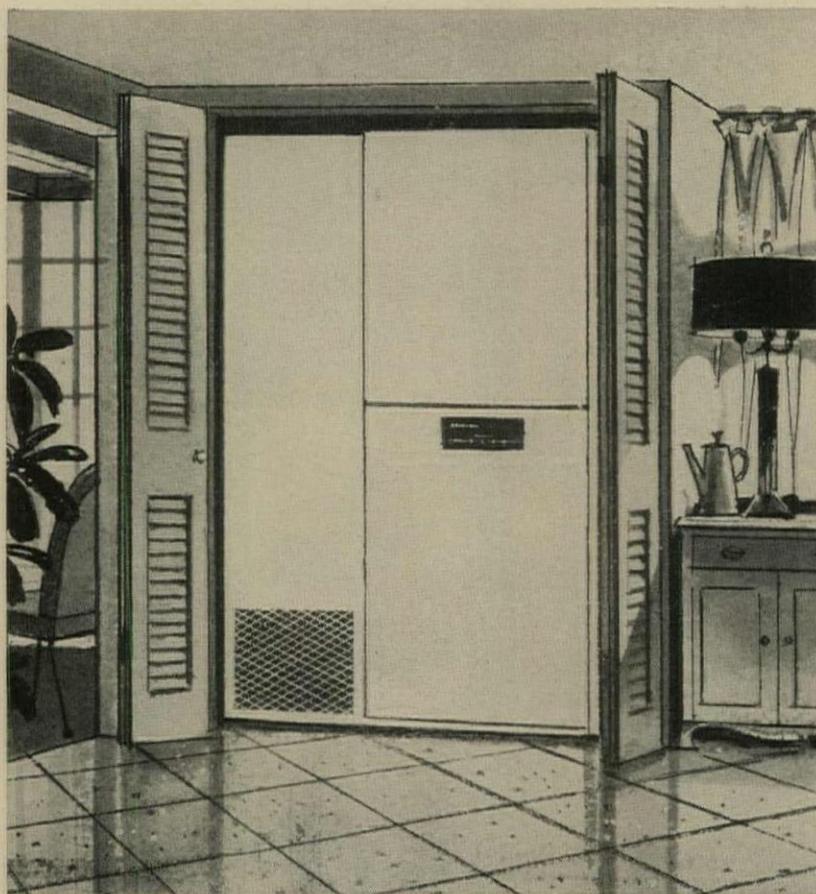


Gas Water Heater with full family-size capacity!

A Gas water heater gives instant heat. There's no waste of time while it starts warming up. The moment more hot water is needed, the Gas comes on full force—automatically—starts to heat cold replacement water as fast as it enters the tank. Then it shuts off—automatically. And Gas costs you less to install, home owners less to use. It's a fact that 8 out of 10 new home buyers insist on a Gas water heater. Economy, quick service, and the luxury of having all the hot water they want are reasons why.

does so much more...for so much less!

Build in a system to keep the house



A single unit, All-Year Gas Air Conditioner

Gas air conditioning is one of your best selling features. A Gas unit has a long life and it's economical — you can assure prospects of low monthly bills. For example, you can show a five-year warranty with this Arkla-Servel Sun Valley.* From the builder's standpoint, too, it's your best buy — you save on installation costs because this single unit heats the whole house in winter, cools it in summer.

Point out to your customers that one simple, easy-to-use thermostat regulates the temperature of the entire house all year round. Clean, filtered air—cooled or warmed to the desired degree—circulates and ventilates constantly. Even the humidity is controlled.

"Fresh-Air" Gas Heating that's clean and costs less!

Because Gas is low in cost, and burns completely, you can promise your prospects they'll save money every winter — literally hundreds of dollars over the years. In addition, they'll avoid worry over fuel deliveries — clean, dependable Gas is piped right in. You'll save, too, in initial outlay because you don't have to provide storage space for fuel. And a Gas heating unit is so compact it can be positioned to save duct work. Important selling point: a modern Gas heating installation can be converted into a year-round weather-conditioner simply by adding a gas cooling unit in the future.



*A.G.A. Mark © Am. Gas Assoc., Inc.

ONLY GAS



comfortable all year round

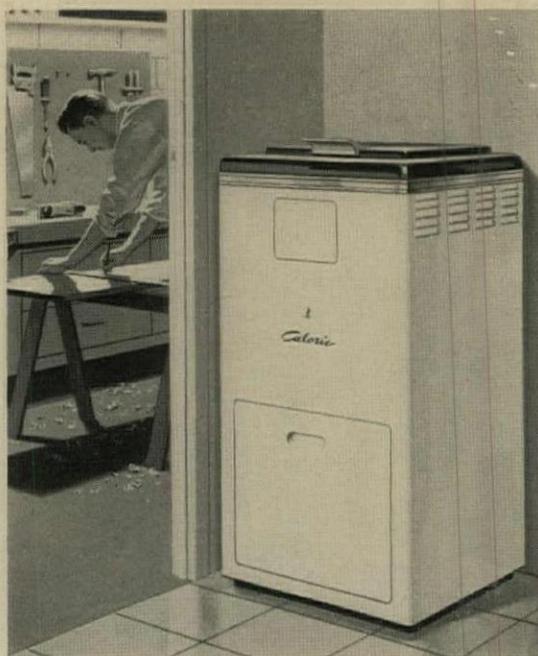


does so much more...for so much less!

Offer a
**smokeless, odorless,
 Gas incinerator**

The Height Of Luxury For Pennies A Day! Here's the cleaner, healthier living every home buyer wants. Modern Gas incinerators save prospects the nuisance of garbage carrying, lets you offer a community free from unsightly refuse piles waiting for collection day. Less danger of insect breeding, too.

A Cinch To Use! Just drop in trash, set a dial, and Gas goes to work immediately.



—the latest innovation in outdoor lighting—Gas!

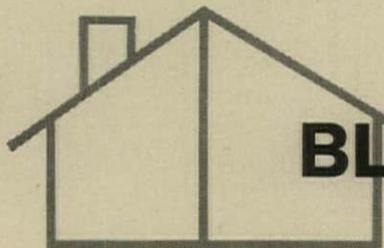
Modern outdoor lighting by Gas is picturesque and practical. The handsome posts or wall-bracket mounts are available in a choice of models to fit any architecture, to add beauty and value to a house. At night the warmth from this kind of lighting helps create a soft, hospitable atmosphere . . . another reason for prospects to buy.

Give a new look to entrances, drives, walks, parking areas, pools, patios and gardens with the soft radiance of outdoor Gas lighting. Your customers will be glad you did.

Your Gas company representative will be glad to help with planning and with any information you may want on Gas appliances and services. He'll also be happy to tell you about the national consumer advertising program and the local builder and dealer programs sponsored by the Gas company and the American Gas Association. Before you finalize plans on one more house—see your local Gas company man. He knows the home buying market, the area you're building in, and the preferences of many of your buying prospects.



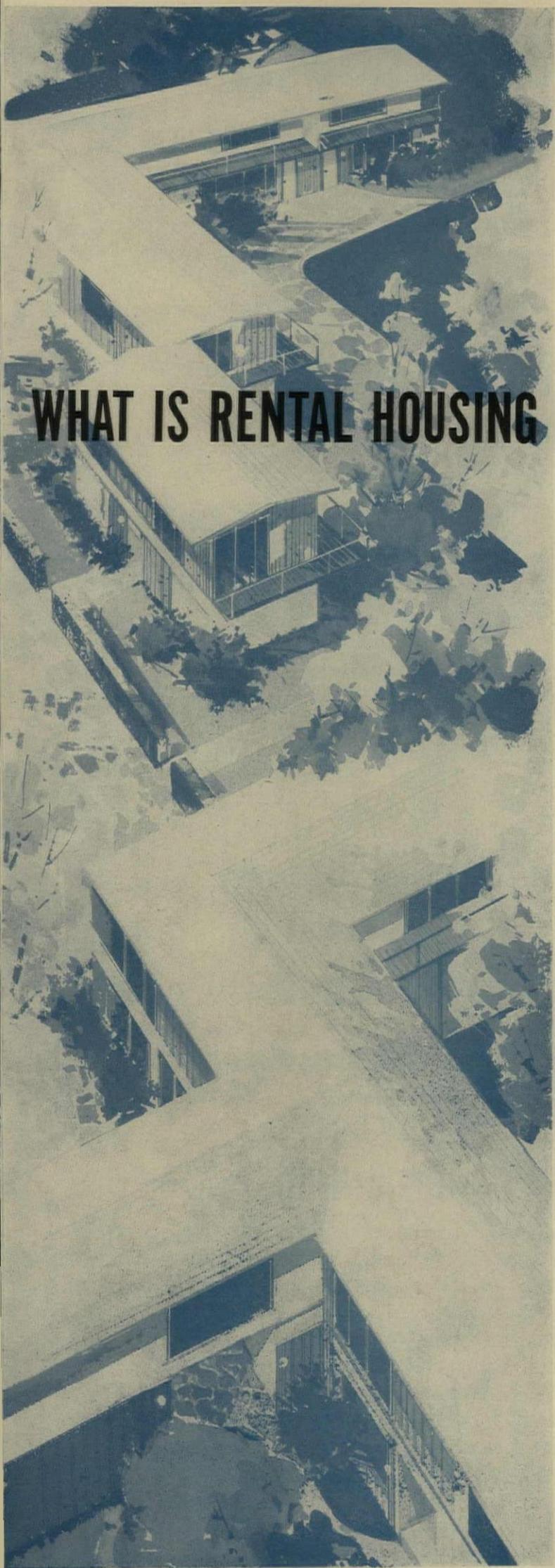
AMERICAN GAS ASSOCIATION



BLUE STAR HOMES

with automatic Gas appliances
 serve builder and buyer best!

ONLY GAS  **does so much more...for so much less!**



WHAT IS RENTAL HOUSING BUT

A HOUSE ATTACHED TO A HOUSE ATTACHED TO A HOUSE?

The step from building houses to building apartments is a short one . . . a profitable one, too. Today, more builders are discovering that the same attention-getting sales features pay off in both types of construction. For years, American-Standard products have contributed to the sales appeal of millions of quality homes. These same products, plus the respected American-Standard name, will help you make faster, more profitable apartment sales and rentals, too.

Here are features that help make apartments as desirable as single-family houses . . .

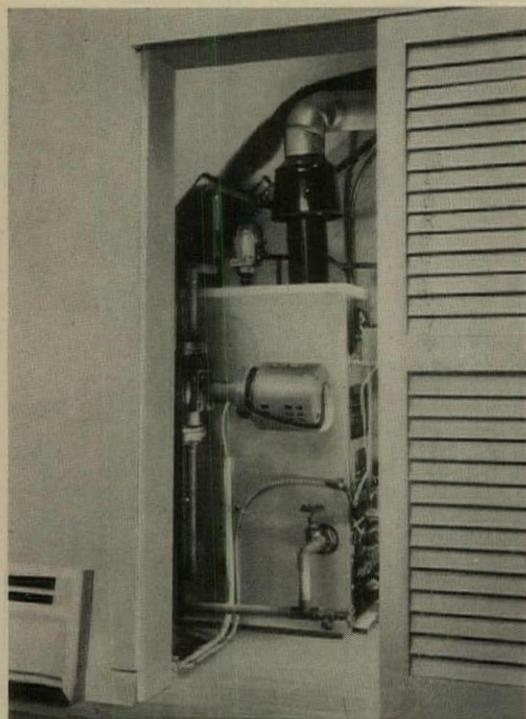
100 HEATING UNITS COST LESS THAN 1

"SOLO" HEATING FOR GARDEN APARTMENTS—SEPARATE TENANT-CONTROLLED HEATING UNITS—PROVIDES CONSTRUCTION SAVINGS, PLEASES OWNERS AND TENANTS

As the builder, you'll find many economies in "solo" heating. Individual apartment furnaces or boilers eliminate need for complex piping or ductwork. There are no vertical runs needed, only short lateral runs. Furthermore, there is no large central heating room, no heating tunnels between buildings and no chimney to be built. Inexpensive vent pipe in party walls

(one per heating unit) replaces the chimney.

As a landlord, you forget about fuel bills; each tenant pays his own. Of course, there are never any tenant complaints about lack of heat, nor can a single breakdown leave all apartments without heat. Renters are enthusiastic about "solo" heating, too. They regulate heat to suit their preferences.



Compact, easily installed heating units are available for both hydronic* and forced air "solo" installations.

◀ The American-Standard G-2 gas-fired boiler is less than three feet high and two feet wide and is approved for closet installation.

For warm air installations the American-Standard gas-fired furnace requires only three square feet of area. ▶

* Hydronics—the science of cooling and/or heating with water.



NOTHING RENTS AN APARTMENT FASTER THAN YEAR 'ROUND AIR CONDITIONING

More and more apartment houses are offering air conditioning—the one big feature that spells out "modern apartment." American-Standard equipment allows you to cool with either hydronics* or forced air.

In a hydronic system, year 'round air conditioning can be easily provided by a compact, attractive combination heating and cooling unit that can be installed through-the-wall. Cooling is provided by a self-contained refrigeration circuit that allows occupants to control the unit to suit their comfort requirements. For heating, this unit can be tied into

the hot water or steam piping system—replacing conventional baseboard panels or radiators.

In a forced warm air system, you can add on a cooling package through an exterior wall or mount a cooling coil on the furnace and connect it to an outside condensing unit. Packaged or Split-System heat pumps also provide ideal year-round air conditioning. The same ductwork is used for both heating and cooling.



AMERICAN-Standard

TENANT-PLEASING EXTRAS MEAN FASTER RENTALS, FULLER RENTALS

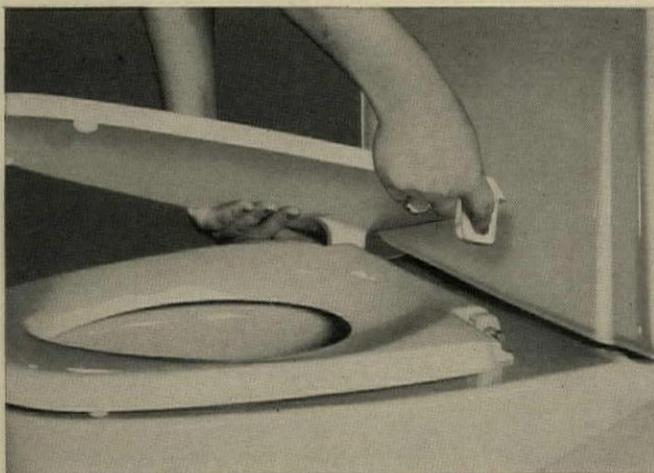
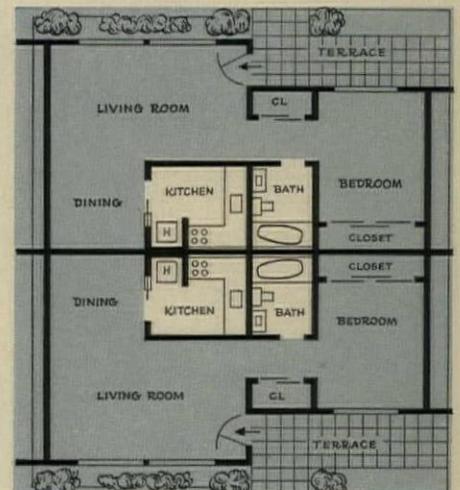
Give your bathrooms the *extra* conveniences that catch prospects' eyes. The unique design of the Contour bathtub provides extra-roomy bathing area, two wide corner ledges . . . and needs no more space than a conventional bathtub! A Gracelyn cabinet-lavatory combines a big, easy-to-clean, one-piece china top with lots of storage space . . . a "plus" feature in an apartment. The Norwall toilet illustrated is a sure eye-catcher because of its work-saving, off-the-floor design.



You can give such tenant-pleasing extras if your bathroom plans are economical. Cut costs by aligning three fixtures on one wall—save still more by placing the toilet between tub and lavatory.

CUT COSTS WITH COMPACT ASSEMBLIES

Compact assemblies are just as important in apartment building as they are in new-home construction. Place your bathrooms back to back, or back them up to kitchens to form an interior compact assembly, thus cutting piping costs—and saving valuable exterior walls for living areas.

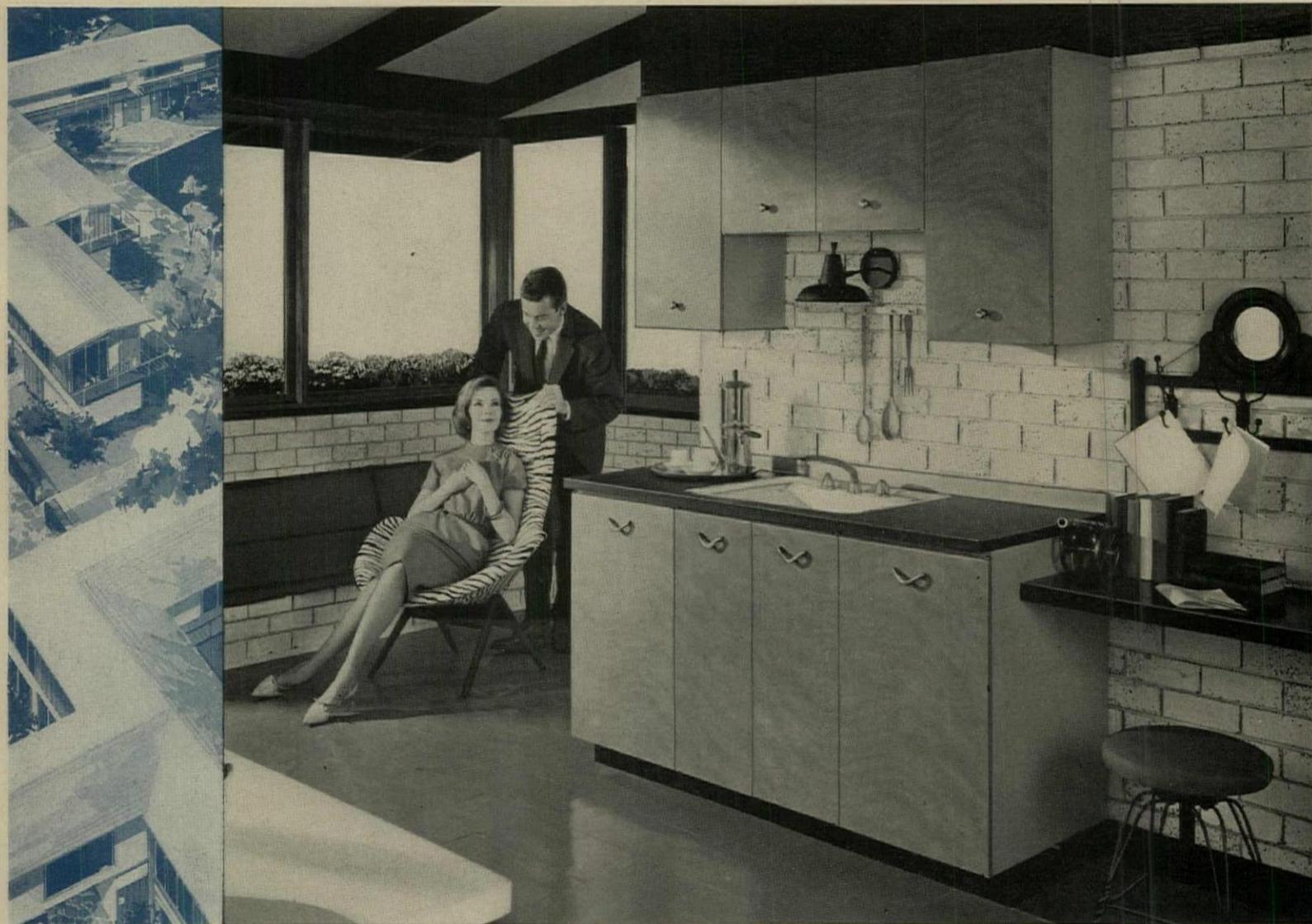


SNAP-OFF SEAT

Both the seat and cover of this Church Seat can be removed for cleaning by simply pressing a button on each side of the hinge. Seat and cover are smartly designed in high-impact plastic, available in white and popular colors.

With Youngstown "Package" Kitchens you offer tenants **STEEL** with a **PLUS**

STEEL'S STRENGTH, PLUS WOODCHARM WARMTH, PLUS LAMINATED SURFACING'S EASY UPKEEP



Look for two things when you choose your apartment kitchens:

**LONG-LASTING APPEAL FOR YOUR TENANTS
LONG-LASTING VALUE FOR YOUR MONEY**

Youngstown "Package" Kitchens offer you more of both. You can choose warm new Woodcharm laminated surfacings in Cherrywood, Provincial or Honeywood . . . or high-baked steel finishes in Star White or Monterey Beige.

You select from an unlimited number of "packages"—made up of standardized units—designed to fit any space or floor plan. You offer tenants a strikingly modern, easy-to-keep-clean kitchen that will be as appealing ten years from now as it is today.

And, regardless of the surface finish you choose, there's steel construction underneath to protect your investment. Doors won't warp, drawers won't stick. Your kitchens will last the lifetime of your building!

For more information write to:

AIR CONDITIONING DIVISION
40 West 40th Street, New York 18, N. Y.

PLUMBING AND HEATING DIVISION
40 West 40th Street, New York 18, N. Y.

C. F. CHURCH DIVISION
Montgomery St., Willimansett, Mass.

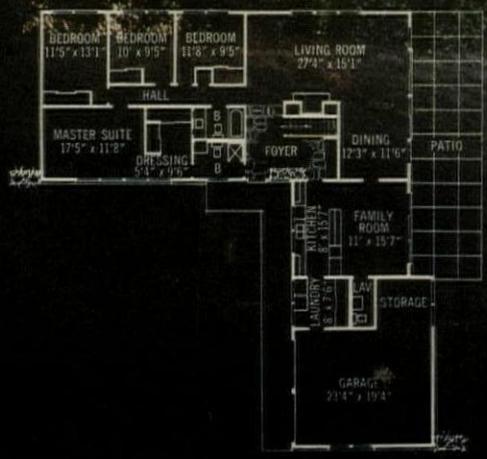
YOUNGSTOWN KITCHENS DIVISION
University Street, N.E., Warren, Ohio



American Standard and Standard® are trademarks of American Radiator & Standard Sanitary Corporation.

AMERICAN-Standard

SCHOLZ *Design*



now available...your own book of these famed designs !

... and this is the California Contemporary—Hillside . . . from the Famed Scholz Design Collection. Your own copy is now available.

Use of these famed designs have sold tens of thousands of homes in recent years . . . at the highest profit margins in their builders' experience . . . largely pre-sold from leads furnished by Scholz Homes in its continuous promotional programs.

This same world renowned distinction of design, this impeccable quality and craftsmanship can build your prestige reputation as well as provide a continuous pre-sold building program at pleasantly surprising profit levels for you.

Call or write today (coupon at right) on a franchise for your area.

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

- I would also like more complete information on the Authorized Custom Builder Franchise. ch
- I would also like information on lower priced Scholz '60 North American Homes.

NAME _____

STREET _____

CITY _____ ZONE _____

STATE _____ PHONE _____

Mail to: SCHOLZ HOMES, Inc., P.O. Box 156, Toledo 7, Ohio



HERE TO STAY...THAT'S THE BEAUTY OF ALUMINUM

For shutters outside . . . or for ductwork inside . . . you can build better, to last longer with aluminum.

■ Shutters made with Kaiser Aluminum never warp or sag, eliminate costly call-backs. With baked-on paint beauty, they're maintenance-free for years. ■ Heating and air-conditioning ducts made with Kaiser Aluminum cannot rust, and aluminum's thermal efficiency adds to heating and cooling system economy.

■ For complete information on shutters and ductwork, write today directly to: Kaiser Aluminum & Chemical Sales, Inc., Department HB-318, Kaiser Center, 300 Lakeside Drive, Oakland 12, California.



TODAY'S MOST TALKED-ABOUT NEW HOME BUILDING MATERIAL

KAISER



ALUMINUM

HOW TO BUILD ACCEPTANCE:

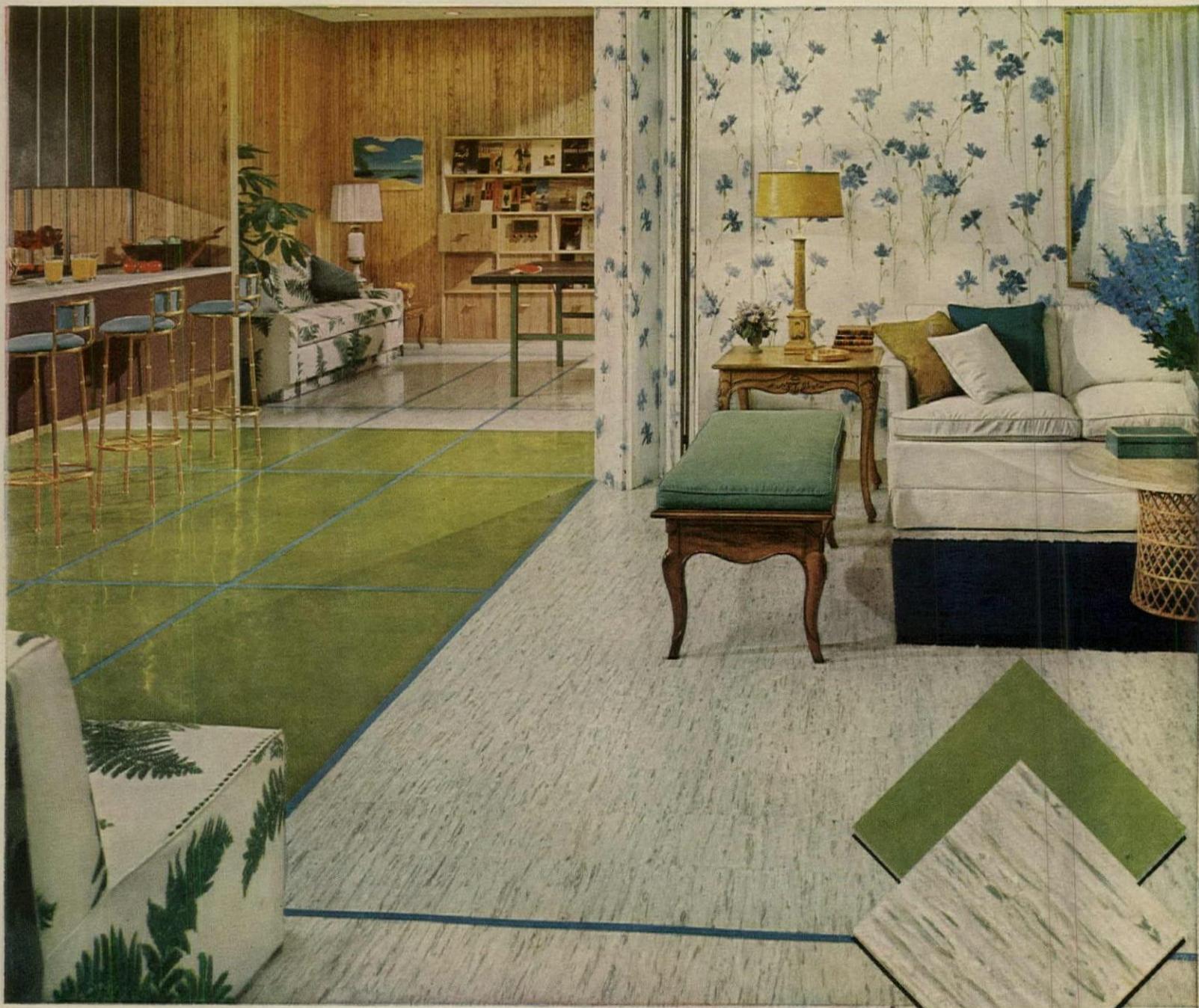
Your best prospects are included in the many millions who see steady Kentile advertising. The room below, which features Kentile Solid Vinyl Tile, appears in:

- LIFE, LOOK, SATURDAY EVENING POST
- plus 16 other leading national magazines
- plus Magazine Sections of 323 newspapers

These prospects know and respect Kentile Floors . . . are especially receptive to the homes that feature these quality floors. And, with Kentile, you can have distinctive flooring designs in each of your homes. Talk to your flooring contractor. Remember: "You Get Much More In A Kentile Floor."

SIGN OF GOOD VALUE

Get your Free Model Home Display Kit complete with signs which help you make the most of Kentile's National advertising. Write Kentile, Inc., Brooklyn 15, N. Y.



Living room, dinette and playroom areas in this home show some of the many effective uses of Kentile® Solid Vinyl Tile. Wall Base is KenCove®.

KENTILE FLOORS

Choose from over 200 decorator colors in Solid Vinyl, Vinyl Asbestos, Rubber, Cork and Asphalt Tile.

Roundup:

Is the pace of housing poised for a recovery?

Signs are increasing that the slump in housing is bottoming out. Housing starts showed a comeback in August: 120,700 private, 4,600 public for a seasonally adjusted annual rate for private nonfarm starts of 1,256,000. This is the highest annual rate since May's 1,324,000.

FHA applications on new private homes—one harbinger of starts to come—rose 17% in August (to 22,900 units). It was the first month this year when applications topped those of the same month in 1959. "A highly favorable development," enthuses FHA Commissioner Julian Zimmerman. Appraisal requests on new VA units jumped 45% (from 8,483 to 12,370).

Sales of existing homes—which improved during the summer while the rate of new house building sagged—will go up still more during the fall, predicts NAREB President C. Armel Nutter. The big reason? As mortgage yields drop,

buyers need absorb smaller FHA discounts and so they feel less frozen in to their present property. FHA applications have been running 2 to 1 in favor of existing houses in recent months. This reflects what Nutter reports.

Predicts this month's FORTUNE: "The possibility [that housing's slump might lead the economy into a recession] is remote. Underlying demand is still strong. It now appears that the decline in home construction activity will run its course in this quarter or next, and that housing starts next year will expand to perhaps 1,325,000 (nonfarm private)."

Economist Miles L. Colean's annual forecast for HOUSE & HOME (see p 130) is even more optimistic. Colean expects 1,375,000 private nonfarm starts next year and an overall total of 1,424,000. In dollars, Colean predicts 1961 will be the second biggest housing year yet, second only to the all-time peak in 1959.

NEWS INDEX

Housing policy	44
What new realty conduit tax law means	44
How the site-picketing bill stalled ..	45
Housing bill dies quietly	45
FHA	46
Fee appraisers OK'd	46
Faster debenture payoffs	46
Housing camera	47
Hurricane Donna hits trailers	47
Mortgage money	51
Onlook: lower discounts ahead ...	51
Shakeup looms for HLBB	51
Labor's mortgage investment plans	51
Mortgage quotations	55
Materials & prices	63
The foreign materials' pinch	63
Labor	63
NLRB's astonishing Kohler ruling ...	63
Stock market	58
Segregation	65
Do anti-bias laws really work? ...	65
Public housing	67
New allocations go to small towns	67
People	69
Hallahan quits HLBB	69

Why public housers cry over no housing law

Public housers are doing most of the wailing over the death of an omnibus housing bill this year (see p 45). Industry groups were satisfied to see free-spending programs they oppose go down the drain along with items they back like FHA insurance for land development loans and a central mortgage bank.

But public housers face a temporary slowdown in the rate they can expand their housing empire (which is already the nation's largest). The 1959 Housing Act gives public housing another 37,000 units for the current fiscal year. PHA has already signed up over 4,000 of these. But enough reservations have been issued or applications filed to use up the balance.

So PHA expects it will have to stop issuing planning advances and preliminary loans about the end of 1960. It would be the first time in public housing's 25 year life that the government has had to take such drastic action. It would hit hardest at small communities. The US is prepared to pay the entire bill for debt service on the construction cost of public housing. This means all operating income can go for salaries and expenses. Usually, big cities have a little left over to plan new projects. But not a community starting to build its first project.

WASHINGTON INSIDE: Seldom has FHA top brass put in so much night work as it has in recent months, responding to Commissioner Zimmerman's pressure to get kinks out of FHA operations, unwind cumbersome red tape. Results are showing up. Samples: faster payoff in debentures when a property is foreclosed (see p 46), a quick reversal of its ban on fee appraisers when processing backlogs developed.

Good news for producers of low-priced houses is a new FHA change in its Minimum Property Standards (No. 1819, dated Aug 31). From now on, FHA will permit the lower standards for Sec 203i homes to be applied to Sec 203b units where the mortgage does not exceed \$9,000. The 203i standards omit finished floors, heaters, coat closets, gutters and downspouts. They countenance drop-cord lighting, smaller room sizes, have softer interior finish and storage requirements. Most important of all, neighborhood standards are lower . . . Deputy FHA Commissioner Cy Sweet has been quietly downgraded, from \$17,500-a-year Grade 18 to \$16,335-a-year Grade 17 in civil service job classifications. Deputy Les Condon steps up from 17 to 18, reflecting his status as FHA's second-in-command. After a month off, Sweet will start an extended round of FHA field offices.

MARKET MURMURS: Montgomery Ward is mulling going into the shell house field in a big way. Talks are in progress with a New York mortgage broker. . . . Some Los Angeles builders are unhappy at the extension of VA housing for World War 2 vets. Says one: "Not many builders use VA any more. They would just as soon VA end so it would stop this [easy term] competition."

Par-3 golf courses have become one of the hottest new land-use ideas. A par-3 course will fit on 5 acres instead of 100 for a regulation-length course. And they are cheaper to build: \$1,000 to \$3,000 per hole (exclusive of land and watering system) vs. \$5,000 to \$10,000 a hole . . . Realtors are pressing VA to approve 6% commissions in areas where local boards have established that big a fee. FHA has agreed to do so, but VA still insists on a 5% ceiling . . . Builders around Washington are keeping a wary eye on a new gimmick being tried out by a disgruntled estate owner to upset a subdivision. After he failed to block the tract in court and at zoning hearings, the owner put up a highly visible sign on his 1,000-acre estate: "BETHEL VALLEY HOG RANCH. MIXED BREEDS. BOUGHT, SOLD, TRADED." Builder A. "Buddy" Yurgaitis says the sign has killed customer interest in his 149-lot project. NEWS continued on p 44

Will new realty conduit tax law tap big pool of mortgage money?

Yes, say mortgage bankers. Some see mortgage investment trusts vying for stock market money

"This is the hottest news in years for the mortgage banking industry."

Robert Tharpe, presidential nominee of the Mortgage Bankers Assn, is talking about the conduit tax law for real estate investment trusts. The legislation, adopted by Congress in the closing flurry of its post-convention session, was signed by President Eisenhower Sept. 14. It is effective Jan. 1.

The law lets realty investment trusts pass on their earnings tax-free to shareholders. Thus profits of property investment would be taxed once instead of twice. This involves the same principle that has long been accorded securities' investment trusts—a principle which made possible the astonishing growth of the nation's \$24 billion mutual investment funds.*

The law was originally talked up as a way to encourage equity financing of rental housing. But Tharpe and other mortgage men agree it will permit formation of mortgage investment trusts which should be able to tap a huge new pool of funds for housing by making it easy for average investors to put their savings in mortgages.

"This may well prove to be the most significant result of the turbulent 'rump session' of Congress," says Tharpe, "for it finally gives real estate investment a chance to develop exactly the same kind of market that has been created so effectively for securities investment. Here is an opportunity to have a direct and independent access to the whole range of investors that are outside the present institutional framework [of banks, S&Ls, and life companies]. More-

Jack Sharin



THARPE

over, the opportunity is available under conditions which entail no more involvement with government than is reasonable and necessary to protect the public. This is a real breakthrough."

Here's how it would work: A mortgage banker, or group of mortgage men, would form an investment trust. It would have to have at least 100 shareholders and it would have to get its prospectus approved by the Securities & Exchange Commission. SEC has not yet issued regulations, but mortgage investment trusts (but not realty investment trusts) will apparently be able to get exemption from the 1940 Investment Act which requires SEC review of their investment policies. SEC also seems likely to impose no minimum capital requirement on mortgage trusts (\$100,000 is usually required for other trusts). And mortgage trusts apparently will exempt from the requirement that a trust own no more than 35% of a contractor with which it does business.

The trust would have the advantage of not having to issue fixed dollar obligations. It would just pay out what it earns. So a trust might well be able to offer a higher average yield—significantly higher—than S&Ls, say some enthusiastic mortgage men.

Specifically, theorizes one expert, if a mort-

gage investment trust is averaging 5½% yield on its investments, it might pay its shareholders 4¾% or even 4%%. Why? Because servicing can be farmed out to local mortgage

men for 1/2 point and management should not cost more than 1/8. "Three-quarters of a point should cover everything," says one mortgage man who has helped set up similar organizations to woo pension fund money.

The big if is how much it will cost mortgage investment trusts to sell their shares. Chances are it will be nothing like the 10% commission many a housing and land development company has paid to underwriters to market a public stock issue. The first mortgage investment trusts are likely to be local or regional affairs. As little as \$1 million would be a workable-size trust, say mortgage men. That much money might be raised by direct sales to local investors, even if some shares are sold in packages as small as \$500 or \$1,000.

Tharpe, president of Tharpe & Brooks of Atlanta, plans to start an Insured Investment Corp of Georgia to sell mortgage participations in FHAs and VAs. Past MBA President John Hall is making similar plans in Alabama.

S&Ls and mutual savings banks lobbied against the mortgage investment bill, fearing that "little Fanny May's" would siphon off

WHAT THE REALTY CONDUIT TAX LAW PROVIDES

It is an amendment to the Internal Revenue Code of 1954 giving real estate investment trusts the same tax treatment already accorded security investment trusts and regulated investment companies. Such outfits are taxed only on retained earnings if they distribute at least 90% of their ordinary income to shareholders. Shareholders pay regular income tax on the distributions. Only income classified as "passive" is eligible for conduit treatment; profits from active operation of a business is ineligible.

What is a realty investment trust? To qualify under the law, it must:

1. Be organized under state law as an unincorporated trust or association managed by trustees.
2. Have transferable shares or certificates of beneficial interest.
3. Be a type of organization which would be taxed as an ordinary domestic corporation except for this law.

Who must own it? At least 100 persons—a requirement akin to one regulated investment companies must meet under the Investment Company Act of 1940.

The realty trust must not be a personal holding company; no five or fewer individuals may own more than half of it, directly or indirectly.

How may it earn money? A realty trust may not hold any property for sale to customers in the ordinary course of trade or business. (This would not bar the sale of mortgages held for six months, or real property held for four years). A trust must meet all three of these income limitations:

1. 90% or more of gross income must come from dividends, interest, rents from real property, gains from sale of securities and real property, and abatements or refunds of taxes on real property.
2. 75% or more of income must come from real property. This is defined to include rents, gains from realty sales, mortgage interest, dividends and other distributions from other real estate trusts qualifying under the new law, and tax refunds and abatements.

3. Not more than 30% of income may come from selling securities held for less than six months, or real estate held less than four years (except for involuntary conversions).

How may it invest? A realty trust must comply with two rules, both akin to those for regulated investment companies:

1. 75% of its assets must be in real estate, cash, and government securities.
2. Assets other than these three kinds must be diversified.

But a realty trust will not lose its status because it fails to meet these requirements in any one quarter—unless the failure is partly or wholly caused by buying the wrong kind of securities or property. Trusts get 30 days after the end of a quarter to cure inadvertent or unavoidable imbalances in their portfolios.

Can rents be on profit-sharing basis? No—neither wholly or partly. This is aimed at preventing trusts from becoming active in property management. One exception: rents may be based on percentages of gross receipts or sales, since this is customary in some realty deals.

How are trusts kept out of realty operations?

By excluding from its tax-free rental income any amounts where the trust directly furnishes services to the tenants, managers, or operators of property. The law lets management services be provided by an independent contractor. His independence must meet these rules:

1. The trust cannot receive any income from him.
2. The contractor may not own more than a 35% interest in the trust.
3. Not more than 35% of the stock or voting power of a corporate contractor, or interest in the assets and profits of an unincorporated contractor, may be held by persons with 35% interest in the trust.

How about capital gains? Capital gains (including depreciation) of the trust, if distributed, will be taxed to beneficiaries as capital gains. If the trust keeps them, it will pay only capital gains rates.

* Some sophisticated investors contend that mutual funds have now driven stock prices up so far they must turn to realty investment to keep their growth sound.

some of the savings that might otherwise wind up in their vaults. But the conduit tax bill slipped through Congress unopposed, at least this year.

Needed capital. The housing industry is already the nation's No. 1 user of new capital. When the wartime baby boom produces the next big upswing in housing demand—in the middle or late Sixties—the industry will apparently need so much more that experts have been worrying about where the money is coming from. One recent study, Tharpe notes, predicts residential mortgage debts will swell from \$145 to \$310 billion between 1959 and 1970—a 120% jump (in constant dollars). "The amount of new mortgage money needed each year to meet the coming demand may easily be 20% to 30% more than it has been during the past few years," he forecasts.

Whodunit? A group of Boston real estate investment trusts is chiefly responsible for the new law, say insiders. Realtors and mortgage bankers helped, and organized builders got into the act toward the end, too.

The problem itself dates from 1936 when the Supreme Court ruled that investment trusts must be taxed as corporations. Mutual funds, wedded to the stock market, went to work immediately on remedial legislation. They got it, in 1939. But the real estate industry was so flat on its back nobody moved.

When the US tax code was overhauled in 1954, interests led by Real Estate Investment Trust of America, Boston, hired tax lawyers to try to get the privileges other investment trusts had enjoyed for 15 years. They failed in 1954. But in 1956 they got a bill through Congress. President Eisenhower vetoed it, on the ground that it "would entirely remove the corporate income tax from much of the income originating in real estate operations" of realty trusts. By contrast, Eisenhower noted, income of regulated investment companies usually comes "from securities of corporations fully subject to corporate income tax."

By now, Boston lawyers Goodwin, Procter & Hoar were joined by Cecil Kilpatrick of the Washington firm of Kilpatrick, Ballard & Beasley and by Economist Miles L. Colean, who says: "We were able to persuade the Treasury that it was good public policy to use this way of expanding private financing of rental housing. And we were able to devise language to remove the Treasury's technical objections, and make realty operations subject to corporate income taxes." In 1958, an amendment approving conduit-tax treatment for realty investment trusts got most of the way through Congress, but was killed in conference between the two houses—the semi-final step in the legislative process.

This year, after a six year fight, the amendment finally made it. Some lobbyists credit peppery James M. Udall, last year's NAREB president, with an assist. He called on the President to discuss the bill.

Problems with FHA? The agency is planning to act fast to amend its regulations so rental sponsors can use a realty investment trust to own the project. Up to now, FHA has insisted on holding all the preferred stock in rental housing corporations—to give it control. A new form of agreement would be required.

In many states, the new law may cut the importance of syndicates for financing rental projects. The realty trust mechanism should be simpler, say experts, and its tax status is assured while Internal Revenue service often challenges the tax setup of syndicates.

Why labor experts doubt the industry can stave off site-picket bill in '61

Congress adjourned this year without passing the legislation home builders feared most—the Thompson-Kennedy bill to let unions picket, and possibly close down, their job sites if the unions have a dispute with even one contractor working there.

Skillful delaying tactics by House and Senate conservatives kept the measure bottled up in committee in both houses of Congress. But labor analysts hold little hope that the legislation can be staved off another year, barring an unexpected conservative sweep in fall Congressional elections.

The big problem is that the bill has overwhelming bipartisan support plus the sponsorship of John Kennedy, Democratic presidential nominee. Moreover—and this may be even more important—two conservatives on key committees are not running for re-election to the House. Their spots may be filled by Congressmen less sympathetic to the industry viewpoint. The two: Rep Graham Barden (D, N.C.), chairman of the House education and labor committee, whose parliamentary maneuvers kept the bill bottled up longer than even its opponents dared hope, and Rep Leo Allen (R, Ill.) whose presence on the House rules committee gives that key group its celebrated 6-6 conservative vs. liberal deadlock.

If the Democrats keep control of the House, seniority would make Rep Adam Clayton Powell (D, N.Y.), lawyer, pastor, and controversial political boss of Harlem, chairman of the House labor committee. Powell supports the bill, although he gives other items higher priority.



BARDEN

What it does. The Thompson-Kennedy bill would kill the Taft-Hartley Act's ban on secondary boycott picketing of construction sites. It would allow picketing of a site where, for example, products made by a struck manufacturer were used. NAHB has warned that its passage would mean that "open shop areas may expect to become quickly embroiled in industrial unionization campaigns. Builders in union shop areas, even though not directly involved in a dispute, could have their jobs completely closed down . . ."

The amendment was left out of 1959's Landrum-Griffin labor reform bill only after Sen Kennedy, chairman of the Senate labor subcommittee, promised building trades leaders to take it up early this year.

How it bogged down. "Last January, I wouldn't have given a hill of beans for our chances of stopping the measure," says for-

mer NAHB Labor Staffer Andy Murphy. Here's what happened:

Kennedy, confident of getting the bill through the Senate easily, waited until June to hold hearings on it. The strategy was to get it through the House first, where most analysts figured it would be almost a cinch for adoption if it ever got out of committee for a floor vote.

Barden's House labor committee began hearings in February. Opponents of the bill rallied everyone they could to testify against it. This delayed committee adoption until May. Then, even after the bill was reported to the House rules committee (which governs what legislation will be taken up in what order on the floor), Barden stalled on requesting a hearing to seek action on the measure. There was more important legislation pending, he argued. Thus, the site-picketing amendment lay before the rules committee until the even more controversial minimum wage bill also emerged from the labor committee.

Now, Barden asked the rules traffic cops which bill they wanted to move ahead on. Upshot was more delay. At one point, backers of the amendment on the labor committee were ready to adopt a motion forcing Barden to call the site-picketing measure up by a parliamentary maneuver to bypass the rules committee. They had to vote to do so. At this crucial moment, the bell rang announcing a roll call vote on the floor of the House. While committee members answered the roll call, Barden used his prerogative as chairman to reconvene the recessed committee meeting, then adjourn it for lack of a quorum. Liberals were fit to be tied.

On the Senate side, Kennedy faced the delay imposed by hearing all the witnesses opponents of the bill could muster. Then he ran into the late-June push for adjournment, and whenever he tried to continue the hearings Sen Barry Goldwater (R, Ariz.) would bring the committee session to a halt by refusing the unanimous consent which the Senate rules require for committees to meet while the Senate itself is in session.

Finally, time just ran out in both Houses. Congress adjourned before either chamber brought the measure to a floor vote.

Congress votes bare-bones housing law

Grandiose plans for a catch-all housing bill died with a whimper in Congress' four-week post convention session. But a simple resolution, adopted by a voice vote in both the Senate and House, gave the housing industry these essentials:

1. FHA's Title I repair loan program was extended a year to Oct 1, 1961. And Congress removed entirely the \$1.75 billion ceiling on it.

2. HHFA's Community Facilities Adminis-

tration was put back into the business of lending money—at subsidized interest rates—to colleges to build dormitories. Congress voted \$500 million. President Eisenhower, who wanted to junk this costly program and substitute another which would have little impact on the federal budget, signed it Sept 14 without comment.

In ten years since the Truman Administration started college housing loans, the govern-

continued on p 46

Rules committee role in killing housing bill 'exaggerated,' say experts

continued from p 45

ment has passed out \$1.175 billion—mostly for housing but also for items ranging from classrooms to student unions with beer halls. Funds had been exhausted for weeks and the backlog of applications had reached \$300 million.

3. CFA got another \$50 million to lend localities for sewer, water and gas systems and other community facilities.

Other measures. Besides the realty investment trust conduit tax bill (see p 44), the 1960 Congress adopted—and the President signed into law—this housing legislation:

FNMA stock tax: Builders and mortgage men, who must buy stock in Federal Natl Mortgage Assn as a condition of selling FNMA a mortgage loan, get long sought permission to write part of the cost off as a business expense on their income taxes. FNMA requires stock purchase equal to 2% of the amount of each mortgage. It sells the stock at 100. But FNMA stock brings only about 64 on the open market. Now, any excess of issue price over fair market value on the date of issue can be deducted. The law applies only to transactions on or after Jan 1, 1960. This leaves up in the air the question of how stock deals before that will be taxed. Internal Revenue Service has refused to permit any write-off except as a long-term capital loss, when the stock is sold. But it has lost several court cases to mortgage men who sued for permission to call the cost of buying FNMA stock a business expense.

S&L holding companies: The temporary ban on holding companies acquiring control of two or more federally insured savings & loan associations was made permanent. S&L men and the Home Loan Bank board backed the measure on the ground that S&Ls should be local businesses with local management, not controlled by distant interests who might be more concerned with profits than depositors.

Housing for the aged: The new HHFA program for direct loans to finance housing for elderly (over 62) citizens was brought to life by an appropriation of \$20 million. (The Administration asked nothing.) There is a small market here builders can tap. HHFA, under the direction of former Asst FHA Commissioner Dan Minto, will make 3½%, 50-year loans to private, nonprofit corporate sponsors. Projects must have at least eight and no more than 50 units. The \$20 million should produce about 2,000 units, HHFA figures. There is no ceiling on cost per unit, but Minto says luxury plans will be considered inappropriate.

VA extension: The expiration date for VA home loans to World War 2 veterans was extended (for the fourth time) to July 25, 1962 (NEWS, Aug).

The rules alibi. Why, with the big Democratic majorities in both houses (Senate: 66 Democrats, 34 Republicans; House: 280 Democrats, 152 Republicans), was Congress unable to adopt the kind of housing legislation that Democratic spokesmen on housing demanded? Both Sen John J. Sparkman (D, Ala.) and Rep Albert M. Rains (D, Ala.) swore repeatedly in the early months of the session that they wanted an omnibus housing bill this year, or nothing. At the last minute, neither opposed the bare-bones legislation Congress finally adopted.

The popular alibi, among public housers and "liberal" Democrats, is that the House rules

committee stymied the majority will. The Senate passed its version of a catch-all housing bill June 16, by a 64-16 vote. But in the House, an omnibus bill died in the rules committee, where conservative Chairman Howard W Smith (D, Va.) and Rep William Colmer (D, Miss.) teamed up with four conservative Republicans to create a 6-6 deadlock which prevented the committee from letting the measure out onto the House floor for a vote. "A conspiratorial coalition," cries the pro-public housing Natl Housing Conference—with more fervor than accuracy.



SMITH

Both Sparkman and Rains have also criticized the Administration for creating a hostile climate by threats of vetoes.

Some industry spokesmen argue that Rains himself contributed to the impasse by his stubborn insistence on loading his catch-all bill with items repugnant to conservatives of both parties, like no-down-payment on FHA loans up to \$13,500.

Rains did nothing to enhance his stature as a housing statesman with his "emergency" bill to give FNMA another \$1 billion of mortgage money to lend at a subsidized par price—about 5 points over the market for FHAs and 8 or 9 points over the market for VAs. His bill passed the House, 214-163, in the early spring after much whip-cracking by the Democratic leadership. House Minority Leader Charles Halleck (R, Ind.) scornfully labeled it "political payola."

The Rains' bill was quietly pigeonholed by the Senate banking committee. Out of deference to his onetime college roommate, Sparkman did not condemn the bill publicly. But he made it clear he thought it was entirely unnecessary.

Rains, who had dourly predicted a slump in housing, turned out to be more right than Administration spokesmen. But for the wrong reason. Evidence piled up before the Senate banking committee that builders are having a hard time selling the homes they have already built. So why should they build more,

FHA fee appraisers

FHA has canceled its ban against the use of fee appraisers in areas where realtors were complaining that processing backlogs were hurting business.

In mid-September, the agency allocated 1,680 fee appraisal cases to 14 offices for September through November. More offices are expected to be added to the list. The cities and the allocations:

City	Cases	City	Cases
Buffalo	100	Greensboro	50
Wash., D.C.	200	Indianapolis	150
Baltimore	50	Detroit	100
Newark	200 (new)	Cincinnati	50
Birmingham	100	Sacramento	50
Miami	100	Reno	30
Atlanta	400 (new)	Seattle	100

In all these offices—and in a few others where FHA is still studying the problem—processing time had stretched to three weeks or more. In Newark (NEWS, Sept), the backlog had reached five weeks.

The problem arose when FHA curtailed

even with Fanny May money at par.

The truth of why Democratic plans for a big housing bill collapsed seems, in retrospect, to be that except for a few housing zealots like Rains and Sen Joseph S. Clark (D, Pa.) too few legislators felt one was necessary.

For one thing, with FHA Title I repair loans extended, no other popular programs were facing sudden death for lack of Congressional action. The leverage Sparkman & Rains have used in years past to force through a catch-all housing law—giving FHA more insuring authority for its main Title II programs—was missing. With starts dropping, FHA has enough insuring authority to keep going until after Congress reconvenes next January.

The role of the conservative coalition in the rules committee has been exaggerated. Judge Smith, say insiders, was just cutting capers to take the House leadership off the hook. When Congress reconvened in August, they say, Speaker Sam Rayburn (D, Tex.) could have broken the stalemate if he had wanted to. Instead, Rayburn told a press conference as the session opened that chances of a housing bill this year were "very remote."

One reason for such lack of enthusiasm was Rayburn's desire to avoid embarrassment on racial segregation. The Republicans offered a drastic civil rights bill echoing the Democratic platform on that subject—and Democratic leaders felt they had to stop this one in its tracks. (Chances are that an amendment prohibiting racial discrimination in all government-aided housing—notably in public housing—could have been pigeonholed in conference even if the House adopted it. The Senate-approved housing bill had no such item. But Rayburn did not want to stir up the animals in an election year.)

Backers of a freespending housing bill pinned their hopes on bypassing the House rules committee on calendar Wednesdays when the House may take up, if it votes to, legislation that has not been cleared by rules. Majority Leader John McCormack (D, Mass.) intervened. He asked that both available calendar Wednesdays, Aug 22 and Aug 31, be dropped. So an omnibus bill that neither industry nor conservatives nor the House leadership wanted finally went down the drain—for this year.

fee appraisals after Congress required that such fees must be charged against the statutory \$50 million limit for FHA field expenses. FHA had been using fee appraisers to cope with temporary peak loads.

Faster FHA payoff

FHA has adopted a new setup to cut from six to three months the time the agency needs to issue debentures to settle mortgage insurance claims. The new regulations are effective December 1.

FHA is scrapping the first half of its debenture process, under which lenders must submit formal advance notice of intention to convey title of defaulted property. Thus lenders will have to make only one title search instead of two. Under the new plan, a lender will simply write the local FHA office that he is going to convey a defaulted property for debentures. The office will mail him forms to be filled out—most of them to account for the lender's expense in casualty insurance premiums and other reimbursable outlays since the property went into default. The lender will have 30 days to fill in the forms and send FHA evidence of title.

HOUSING CAMERA:

Bill Kuenzer, Miami Herald



Jack Ramsdell, St Petersburg Times



Hurricane Donna hits hardest at trailers—which aren't subject to building codes

Hurricane Donna gives builders fresh evidence to back up their notion that trailers should be made subject to building codes. As Donna's 100-mile winds cut a 425-mile swath through Florida before whirling up the East Coast, they tortured hundreds of mobile homes into junk like one south of devastated Ft Myers (photo right) which was worth \$6,000 to \$7,000 new. Homes where building codes are seriously enforced generally escaped with only superficial damage.

Thus the storm—Florida's first major blow in ten years—focused new attention on trailers' weird immunity from building codes as well as property taxes. Florida's 85,000-plus mobile homes are legally vehicles, not structures, and so escape building codes which generally require wind resistance of 25 psf, roughly equal to an 80 mph wind. Moreover, owners don't anchor

trailers down lest they become subject to property taxes. And most trailer lots are too small to allow emergency rigs for anchorage.

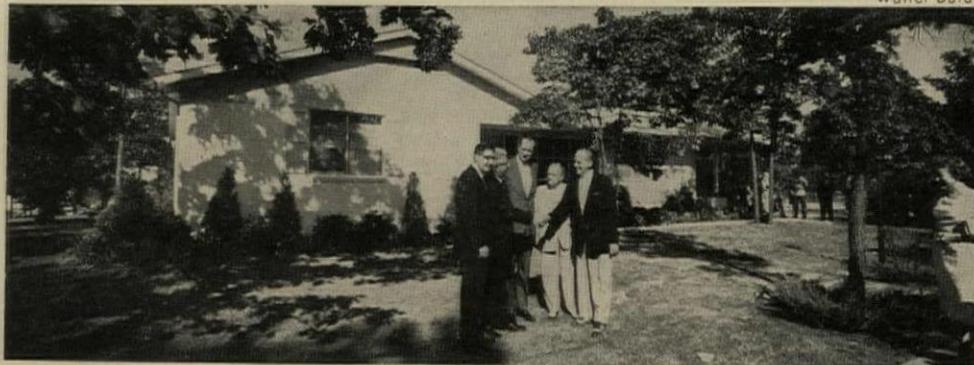
The upshot at Ft Myers, for example, was that more than 50% of the trailers in the area were damaged or destroyed. At Page Mobile Home Park, only three trailers of 160 were left standing, and some were blown as much as a half-mile, even though Donna set no records for wind and rain.

Around Miami, Dade County building code and subdivision regulations paid off. The hurricane tore screening from aluminum and wood patio enclosures, but hardly a roof was lost in the county. Builders Sid Mank and Ira Hotchkiss report they made two sales the day after the storm and didn't give a single deposit back to the dozens of buyers who came out to see how high the water was in their tract off the Tamiami

Canal. (Behind Miami, Florida turns swamp and officials have imposed subdivision drainage standards stiff enough so builders often squawk.)

The Florida Keys will pay a long time for Monroe County's carelessness with building inspection. Roofs flew like cardboard. Windows and doors blew out. Old frame houses, cross-braced, stood up as shoddy concrete block houses fell apart. A well-built chicken coop 100' long came through almost unscathed, but a two-story cooperative apartment at Marathon looked as though it had been bombed, as did the Phil Sadowsky development (photo, left), where apartments were built on pumped-in sand.

Before Donna, two-thirds of Florida's 67 counties had no building code. The experience in the Keys and on the Gulf Coast promises to change all that.



Walter Daran

NAHB's London House gets US sendoff from top brass

Last spring, NAHB and the National Housing Center scored a hit with Britons at London's Ideal Home exhibition with a 3-b/r, 2½-bath brick-and-frame model (News, Apr).

Now, some 40 builders across the US are erecting similar models, including this one by Past NAHB President Carl Mitnick at Somers Point, N.J. Mitnick teamed up with the Natl

Housing Center and the Natl Design Center, New York, to produce a showcase interior. For the opening, Mitnick was host to more than 100 guests, including (l to r): FHA Commissioner Julian Zimmerman, Mitnick, NAHB President Martin Bartling, HHF Administrator Norman Mason and Somers Point Mayor Fred W. Chapman.

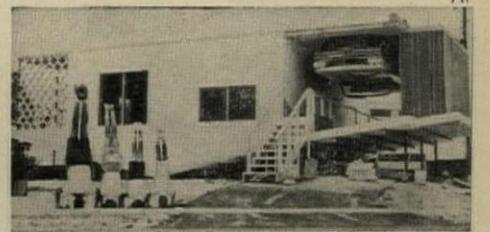


Reni

They roasted the Home Loan Bank Board

These three members of a House government operations subcommittee are making life hot for the Home Loan Bank Board: (l to r) Reps Neal Smith (D, Iowa), Chet Holifield (D, Calif.), and Chairman John E. Moss (D, Calif.). At hear-

ings, Holifield and Moss, have repeatedly accused the board of failing its duty to set up guidelines for S&L management, indicate they will call for a sweeping reorganization of the HLBB next year. (For details, see p 51.)



AP

Upside down house draws 40,000, sells 63

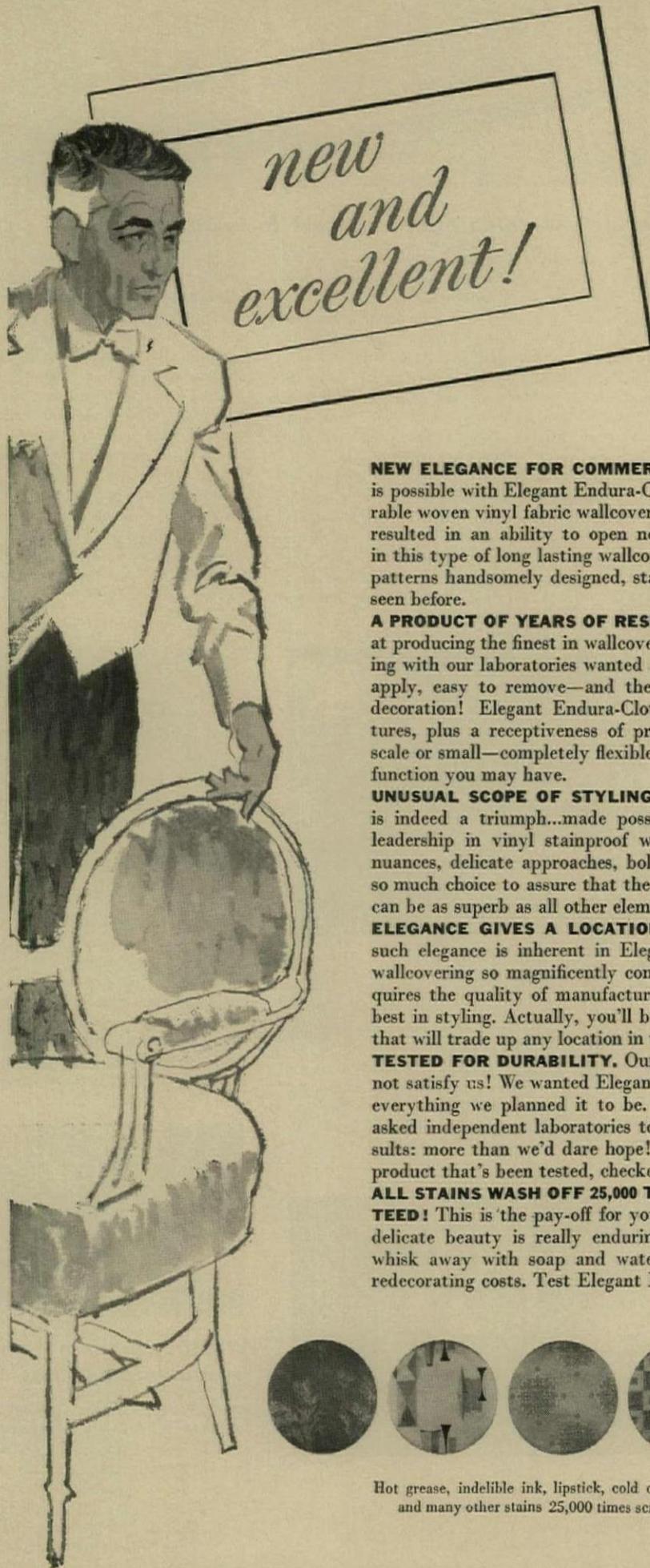
Hurricane Donna didn't do it. Builder Norman Johnson built this \$10,745 house upside down as a promotion stunt at Ft Lauderdale, Fla. In four weeks it drew 40,000 viewers, "but it's the quality of our homes that produced 63 confirmed sales," says Johnson. Prices: from \$8,995 for 2 b/r, 1 bath, without carport; \$12,995 for 3 b/r, 2 baths. Financing: 80% conventional first mortgage at 6½% for 24 years, plus a second.



Art Moyer

Wartime housing project becomes plush hog farm

In World War 2, the US spent over \$1 million to build a 350-unit concrete-block-and-stucco housing project for 1,150 people at Ordnance, Ore. Early this year, with the Ordnance depot closed, the government sold the project—complete with 100,000 gal. water tank and sewage disposal plant—for \$30,300. Ranchers Stafford and William Hansell have converted it into a hog farm. The pigs will have more space than the people. Plans call for a top population of 1,000 swine.



...the ultimate in

NOW—

NEW ELEGANCE FOR COMMERCIAL ESTABLISHMENTS is possible with Elegant Endura-Cloth, an amazing new, durable woven vinyl fabric wallcovering. Years of research have resulted in an ability to open new design and style vistas in this type of long lasting wallcoverings. You'll choose from patterns handsomely designed, startlingly unlike any you've seen before.

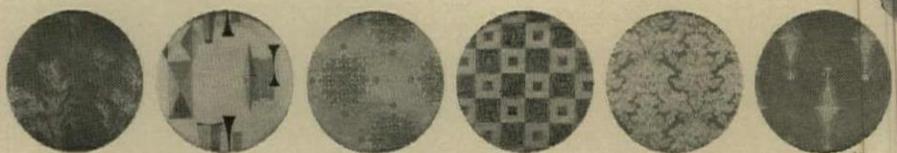
A PRODUCT OF YEARS OF RESEARCH which was targeted at producing the finest in wallcoverings. Our designers working with our laboratories wanted a product that was easy to apply, easy to remove—and the ultimate in durable wall decoration! Elegant Endura-Cloth combines all these features, plus a receptiveness of product for designs of large scale or small—completely flexible and versatile to cover any function you may have.

UNUSUAL SCOPE OF STYLING in Elegant Endura-Cloth is indeed a triumph...made possible through our years of leadership in vinyl stainproof wallpapers. Subtle designs, nuances, delicate approaches, boldly brilliant—never before so much choice to assure that the walls of any establishment can be as superb as all other elements.

ELEGANCE GIVES A LOCATION MORE "WORTH"—and such elegance is inherent in Elegant Endura-Cloth. For a wallcovering so magnificently conceived and constructed requires the quality of manufacture to be symbolized by the best in styling. Actually, you'll be amazed at the versatility that will trade up any location in which you use it.

TESTED FOR DURABILITY. Our own extensive testing did not satisfy us! We wanted Elegant Endura-Cloth to be truly everything we planned it to be. To check our findings we asked independent laboratories to run durability tests. Results: more than we'd dare hope! Now we bring you a new product that's been tested, checked—and proved!

ALL STAINS WASH OFF 25,000 TIMES—THAT'S GUARANTEED! This is the pay-off for you. For what appears to be delicate beauty is really enduring magnificence. All stains whisk away with soap and water—slash maintenance and redecorating costs. Test Elegant Endura-Cloth today!



Hot grease, indelible ink, lipstick, cold cream, crayon, furniture polish, and many other stains 25,000 times scrubbable—that's guaranteed

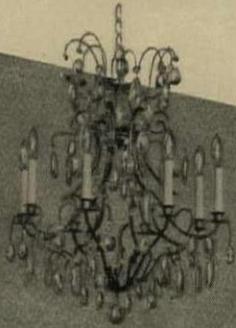
DESOTO CHEMICAL COATINGS, INC.

vinyl stainproof wallcoverings is here!

A STRONG WOVEN FABRIC WALLCOVERING...GUARANTEED

TO WITHSTAND UP TO 25,000 SCRUBBINGS...STYLED TO BRING

ELEGANCE AND ENDURING BEAUTY TO YOUR PROJECT



Illustrated: Elegant Endura-Cloth Beauvais #70074

Mail coupon today for FREE testing sample and AIA file information folder—no obligation.

DeSoto Chemical Coatings, Inc. Dept. HH-10
3101 South Kedzie Avenue
Chicago 23, Illinois

Gentlemen: Please send me free testing sample and detailed information on Elegant Endura-Cloth. I'm interested for possible use in:

- | | | |
|---|----------------------------------|--------------------------------------|
| <input type="checkbox"/> hotel sleeping rooms | <input type="checkbox"/> lounges | <input type="checkbox"/> auditoriums |
| <input type="checkbox"/> hotel commercial rooms | <input type="checkbox"/> clubs | <input type="checkbox"/> hospitals |
| <input type="checkbox"/> private homes | <input type="checkbox"/> offices | <input type="checkbox"/> other _____ |
| <input type="checkbox"/> restaurants | <input type="checkbox"/> motels | |

NAME _____ TITLE _____

COMPANY _____

ADDRESS _____

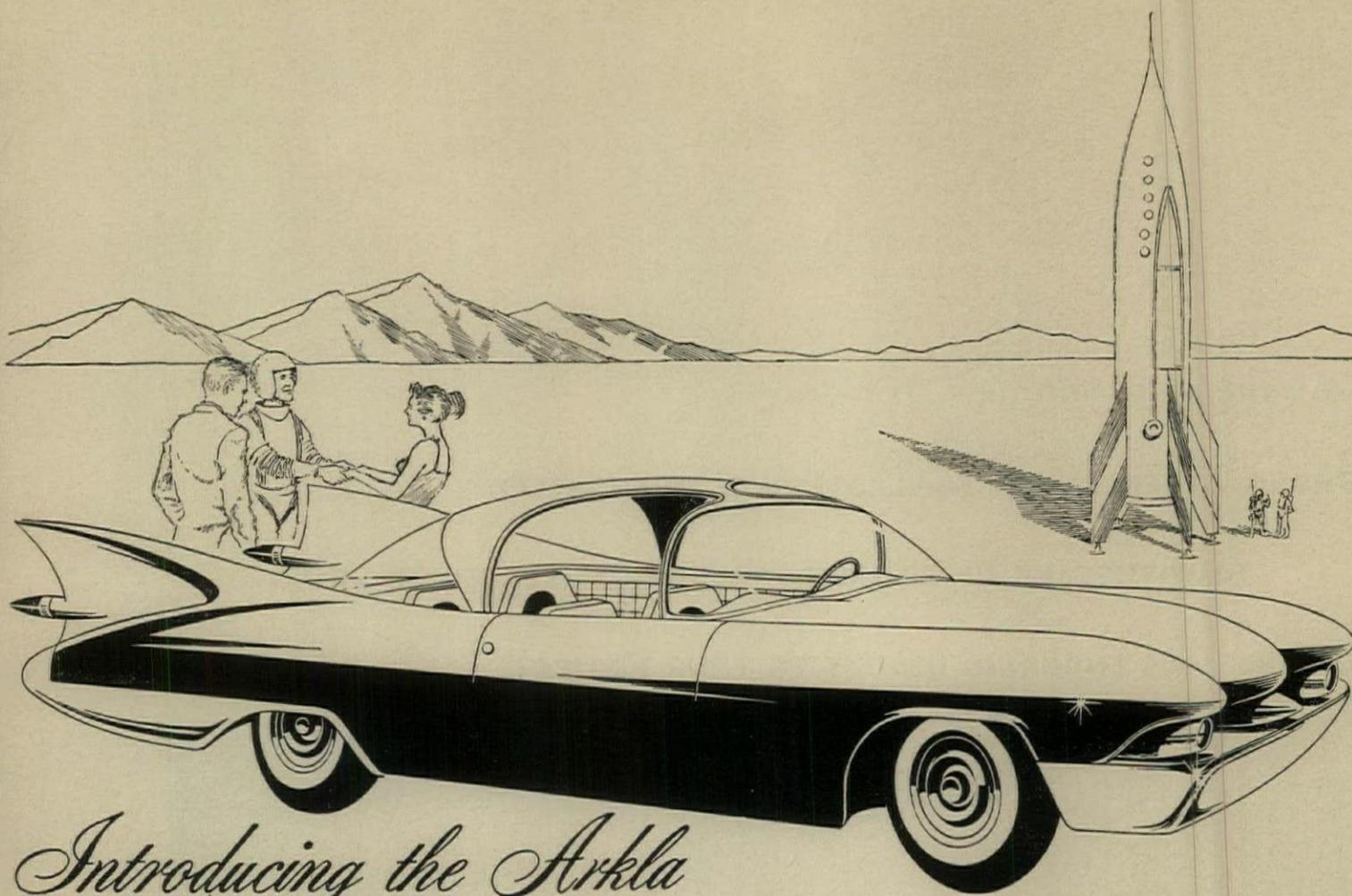
CITY _____ ZONE _____ STATE _____

Elegant Endura-Cloth

ENDURING VINYL BEAUTY WITH STRONG CLOTH FOUNDATION

3101 SOUTH KEDZIE AVENUE • CHICAGO 23, ILLINOIS





Introducing the Arkla

VAPORGLIDE

Arkla-Seruel proudly announces a design and engineering vehicle which:

1. Gives $\frac{1}{3}$ rd more power without pistons or valves.
2. Provides lowest ownership cost... full 5-year warranty.
3. Is vibration-free... never needs a tune-up.
4. Has double and triple normal life expectancy, because there are no moving parts to wear out.
5. Won't lose capacity or jump operating costs with age, because it has no efficiency-robbing friction.

No, that's not a space age automobile... it's the Arkla-Seruel Sun Valley All-Year gas air conditioner, as it compares to conventional electric central system air conditioners.

Building this kind of satisfaction into your homes is the best way we know of assuring future sales and stopping profit-robbing recalls at the same time.

If you find the comparisons above a bit hard to believe, we respectfully invite you to talk to your local gas company, or write Arkla Air Conditioning Corporation.



MAGIC **GAS** AIR CONDITIONING



ARKLA AIR CONDITIONING CORP • SHANNON BLDG. • LITTLE ROCK, ARK.

MORTGAGE MONEY:

Slow sales should shrink discounts more by next year, predict experts

Builders and homebuyers will probably find mortgage money growing still cheaper this fall.

The outlook, agree mortgage bankers, lenders and economists, is for FHA and VA discounts to continue dwindling gradually for the next few months. Conventional loan rates have already eased and this should continue.

Talk of a recession (are we in it already, or is it just ahead?) dampens buyers' enthusiasm. Despite easier money, house sales are lagging. So investors' demand for mortgages is outrunning the supply of immediate-delivery paper. Surprisingly, mortgage yields have remained high while bond yields have fallen. The spread, now biggest in years, gives prophets of improving mortgage prices a good case. Predicts President Tom Coogan of Housing Securities, New York: FHA and VA prices will move up (and discounts down) as much as a point in the next 30 days. President Ray Lapin of Bankers Mortgage Co of California looks for only a slight increase in prices this fall but still more improvement in early '61 if business doesn't snap out of its slump. Forecasts Lapin: VAs at 94, FHAs at 98 by the first quarter in San Francisco.

Will the US Treasury's new advance refunding (offering holders of \$12.5 billion in 2½% World War 2 bonds a chance to convert to 3½% bonds maturing in 20 to 38 years) drain the mortgage market? Consensus: it won't hurt much. Says President Bob Tharpe of Atlanta's Tharpe & Brooks: "There's enough excess money in the market now so it won't be like last fall's Magic 5's. It might delay price improvement, but it won't stop it."

FNMA's ½ point boost in secondary market purchase prices—second hike in two months—has stiffened builder resistance to big discounts by giving them a higher floor to bargain from.

In fact, says Ray Lapin: "Builders are hanging onto loans for dear life. They're learning that timing is important in the mortgage market. They're hoarding loans where they can, paying the construction loan longer." To lure futures

into his fold, Lapin offers to commit at a floor price (currently 92½-96½), and then, if the market improves before delivery, to split the improvement with the builder. Lapin hedges against a price drop with standbys.

The decrease in FHA-VA discounts last month was the most widespread so far this year.

Since the bottom last spring, prices have edged up from 1 to 1½ points, a few cities at a time. Last month, almost all of the cities in HOUSE & HOME's survey reported smaller discounts.

FHA minimum down immediates moved up thus: in *Atlanta*, from 96-97 to 96½-97½; in *Cleveland*, from 96½-97½ to 97-97½; in *Denver*, from 95-97 to 96-97½; in *Detroit*, from 96½-97 to 97-97½; in *Honolulu*, from 95-96 to 95-96½; in *Houston*, from 96½-97 to 97-97½; in *Jacksonville*, from 96-96½ to 96½-97. In *Los*

Angeles, from 96½ to 96½-97; in *New York*, from 97 to 98; in *Oklahoma City*, from 96-96½ to 96½-97; in *Philadelphia*, from 98 to 99; in *San Francisco*, from 96½ to 96½-97; in *Washington*, from 97 to 97-97½. *Boston* savings banks pegged out-of-state purchases at 96-97, up from 96-96½.

Will FHA cut its interest rate on 1- to 4-family mortgages from 5¾% to 5½% soon?

Commissioner Julian Zimmerman hints strongly that it will. He told a Los Angeles newsman he "hopes" the rate can be cut this fall. Zimmerman has been disappointed that home financing costs haven't dropped faster.

NAHB President Martin L. Bartling, Jr. got in the act last month with a blast at "greedy" lenders. He wrote: "For years now the mortgage lender has enjoyed a sort of under-the-counter payola in the form of discounts on mortgage money." If mortgage costs don't move into line with other interest charges, warned Bartling, "the only recourse left to the industry and the public for protection is legislation."

Talk grows among savings and loan men of dividend rate cuts early next year.

A month earlier, most S&L spokesmen pooh-poohed the notion of cutting interest paid to shareholding depositors. But in mid-September, at the annual convention of the New York State Savings Association League, dividend cuts were a top topic of corridor talk. Slack demand and resulting lower interest rates for mortgage money are squeezing S&L profits, S&L men complain. "I'd look for a dividend cut early next year," predicts Managing Director Kenneth G. Heisler of the Natl League of insured Savings Assns, but he adds: "It probably will not be very extensive."

MORTGAGE BRIEFS

HLBB comes under fire

The House subcommittee probing the Home Loan Bank Board's seizure of Long Beach (Calif) Federal S&L is aiming at a drastic shakeup of the board that would affect the entire savings & loan industry.

The subcommittee has labeled the seizure "arbitrary and unlawful" (NEWS, Aug). Now, resuming the investigation, the congressmen have made it plain they are after bigger game. Expected to emerge from the subcommittee's probe are sweeping recommendations for the next session of Congress to revise the HLBB's organization and methods, including proposals to 1) curtail the board's powers of seizure and 2) require the board to spell out more specific rules to guide S&Ls.

The subcommittee has been especially critical of the Board's failure to issue uniform regulations on what constitutes unsafe or unsound practices. Contrasting the HLBB with its counterparts in banking, Rep Chet Holifield (D, Calif) told HLBB Chairman Albert J. Robertson: "They [banking officials] have written regulations—books of them—and they have tried to give the banks of this country uniform rules and regulations to go by. They haven't left it up to the judgment of one man as to what is prudent and what is not . . . I say the board is indicted by its failure to adopt the rules and regulations—the stop signs that have been suggested to you [by board staffers]."

The subcommittee singled out the lack of rules establishing how much of its assets an S&L can safely put in short-term construction loans. An HLBB spokesman testified that the board was considering such a regulation. Subcommittee Chairman John E. Moss (D, Calif) retorted that the subcommittee may well have ideas of its own. (For photo, see p 46.)

Union pension funds

AFL-CIO plans to channel \$8 billion of pension and welfare funds into FHA and VA mortgages may turn out to be a mixed blessing for builders.

The union aim is threefold: 1) to pour so much money into housing that mortgage discounts disappear; 2) to stimulate construction and thus provide more jobs for the building trades; and 3) to boost the return on union investments.

But unions will also insist that all the housing built with their mortgage money use only union labor, even in right-to-work law states. "If builders want our money," says blunt-spoken Joseph D. Keenan, secretary of the International Brotherhood of Electrical Workers, "they will have to sign an agreement to use union labor exclusively in spite of right-to-work laws."

What about areas where home building is entirely open shop? "All we need to do is bring in a union builder from somewhere else," threatens Keenan. "If the builders on the scene want to change their minds, it's okay."

Would unionized builders have trouble matching the costs of non-union builders? "Production-wise we can offset them," Keenan contends. "With the unions giving us better men, we will be able to show that good men can do twice as much work in a given time and do it better."

Keenan's IBEW has invested some \$4 million in FHA and VA mortgages in recent

continued on p 55

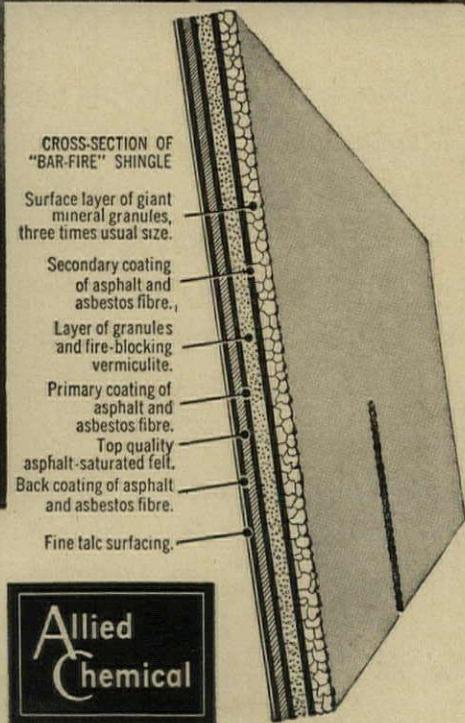


**BARRETT BAR-FIRE[†] ...
the
only
shingle
supported
by
all
three!***

***1. 300# weight, 2. class "A" fire rating, 3. surfacing of triple-size granules. Patented asphalt-asbestos-vermiculite, multi-layer construction assures long life, top weather protection. Top Underwriters' fire-rating. Rich, lustrous, massive**

†Trade Mark Allied Chemical Corporation

Offices in: Birmingham, Boston, Charlotte, Chicago, Cleveland, Houston, New York, Philadelphia, St. Paul.



appearance. Don't forget we have built-up roofing, insulation board products, gypsum, aluminum siding, plastic panels, protective coatings.

BARRETT DIVISION

40 Rector Street, New York 6, N. Y.



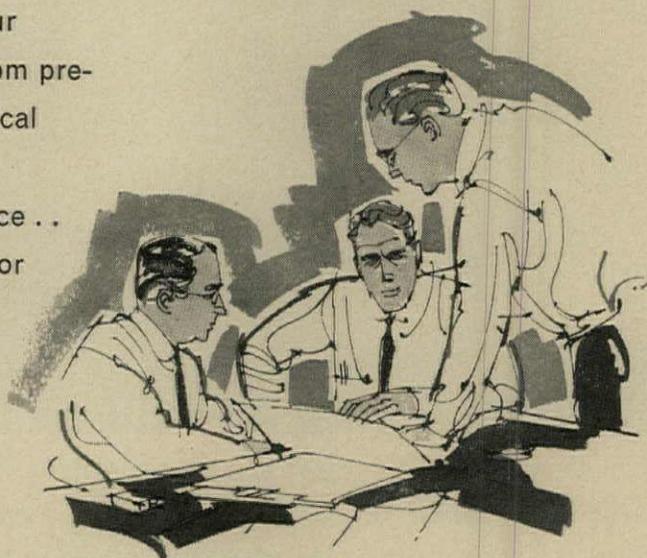


*The outlook is always the best
with Qualitybilt Wood Windows*

Qualitybilt
WOODWORK®

Here's a window line so complete that it's bound to suit your requirements. The Qualitybilt Wood Window line ranges from precision-crafted, slimline Casements to the versatile, economical 4-Ways . . . includes the novel Gliders, Double-Hung, and Picture Units. If it's quality you want . . . at a reasonable price . . . then investigate this full line! There's a Qualitybilt Distributor near you with complete details. See him TODAY, or, write us for full information.

See our catalog in Sweets Architectural and Light Construction Files!



FARLEY & LOETSCHER MFG. CO.
DUBUQUE, IOWA

Entrances / Doors / Frames / Sash / Blinds / Casements / Glider Windows / Sliding Doors / Screens / Combination Doors / Storm Sash / Garage Doors
Mouldings / Interior Trim / Sash Units / Louvers / Kitchen Cabinet Units / Cabinet Work / Stairwork / Disappearing Stairs / "Farlite" Laminated Plastics

years. "We won't buy mortgages where the discounts are too high," Keenan notes. "We have instructed our brokers that 6 points on a VA mortgage is all we will take." Result: IBEW is not buying many VAs.

Keenan's views carry big weight with Big Labor. He dominated the three-man subcommittee which just persuaded the AFL-CIO executive council to set up an investment department to teach its affiliates how to invest in mortgages.

The bulk of union welfare money is now invested in government bonds paying about 3½%. Unions hope mortgage money will net their pension funds about 5%. Union pension and welfare funds now total some

\$28 billion. The Keenan subcommittee urges each fund to put up to 30% of its reserves in mortgages.

If they do, the flood of money could well make profound changes in the mortgage market. But neither the AFL-CIO nor the individual unions control the pension funds. Independent trustees picked by union and management administer them. And most trustees lean to the bond market. The AFL-CIO would hire "prominent" investment men to persuade the trustees to regard mortgages more favorably.

Keenan figures it will take 2½ or 3 years to get his program rolling.

NEWS continued on p 58

CUT COSTS, AFL-CIO TOLD

Labor could do more to boost home sales by cutting labor costs 10 to 20% than by pouring "billions of dollars" into mortgages.

So contends Chairman Morton Bodfish of First Federal S&L, Chicago. "Discounts such as Meany talks of are . . . a factor in only about one out of every 20 mortgages in the US," Bodfish notes.

"Mr. Meany and his unions could well take the lead in reducing the cost of homes and home repairs by 10 to 20%. All that would be necessary would be the elimination of restrictive labor practices, featherbedding, and the costly, union-inspired parts of building codes."

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending Sept 16, '69.

FHA 5¾s (Sec 203) (b)						VA 5¼s						Conventional Loans		Construction loans* Interest + fee
FNMA Scdry Mkt sv	New Construction Only		Existing* Min Down 25 year Immed	City	FNMA Scdry Mkt sv	New Construction Only		5% or more down 20-25 year Immed Fut	Comm. banks, Insurance Cos.	Savings banks, S & Ls				
	Minimum Down* 30 year Immed	10% or more down 20-25 year Immed Fut				No down 30 year Immed	Fut							
97	96½-97½	96½-97½	97-98	97	96½-97	Atlanta	93	92½-93½	92½-93½	"	"	5¾-6	6-6½	6-6½+2½
98	par-101°	par-101°	par-101°	par-101°	par-101°	Boston local	94	98	98	98	98	5½	5½-6	5½-6
—	96-97	96-97	96-97	96-97	—	out-of-st.	—	92-93	92-93	92-93	92-93	—	—	—
97	97-98	96-97½	97-98	96-97½	97-98	Chicago	93	91½-92½	91½-92½	91½-92½	91½-92½	5¾-6¼	5½-6¼	6-6¼+1½-2½
97	97-97½	96½-97	98	97½	97-97½	Cleveland	93	92½-93	92	92½-93	92	6-6¼	6-6¼	6+1-1½
96½	96-97½	95-97	97-98	97-98	96-97½	Denver	92½	92-93½	91-93	91-93	91-93	6-6½	6-6¾	6½+1-2½
96½	97-97½	97	97½	97	96½	Detroit	92½	93-93½	92½	93½	93	5¾-6	5¾-6	6+½
96½	95-96½	95-95½	96-97	95-97	96-96½	Honolulu	92½	92½ ^b	"	"	"	6½-7½	6½-7½	6½+1½
97	97-97½	97-98	98	98	97-97½	Houston	93	93	93	"	"	5¾-6¼ ^e	6-6¼	6-7+1-2
97	96½-97	96-96½	96½-97	96½-97	95½-96½	Jacksonville	93	92½-93	92-92½	92½-93 ^b	"	6-6¼	6-6¼	6½+1½
96½	96½-97	96-96½	97	96½	96-96½	Los Angeles	92½	92½-93	92-92½	"	"	6¼-6½	6½-7	6+1½ ^e
97½	97½	98	97½	97½	97½	Newark	93½	"	"	"	"	6 ^f	6 ^f	6+1
98	98	98	98	98	98	New York	94	94-95	94-95	94-95	94-95	6	6	6+1
96½	96½-97 ^l	96-97 ^l	97½-98 ^b	"	96-97 ^l	Okla. City	92½	92½	91½	92½	91½	6-6¼	6-6½	6½+1-2
97½	99	99	99	99	98½-99	Philadelphia	93½	"	"	"	"	5¾-6 ^e	5¾-6 ^e	6+1-2
96½	96½-97	96½-97	97	97	96	San. Fran.	92½	92½-93	92½	"	"	6¼	6¼-7.2	6-7+1½-3 ⁿ
97	95-97	94-97	95½-98½	95-98	95-98	St. Louis	93	"	"	"	"	5¾-6½	6-6.6	6-6½+1-2½
97½	97-97½	97-97½	97½	97½	97-97½	Wash., D.C.	93½	93½	93½	93½	93½	6	6	6+1½

*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, Harry N. Gottlieb Jr, asst 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, Harold Finney, exec vice pres, Citizens Mortgage Corp; Honolulu, Gordon Pattison, vice pres, Bank of Hawaii; Houston, Donald McGregor, exec vice pres, T.J. Bettes Co; Jacksonville, George Dickerson, vice pres, 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, M.F. Haight, first vice pres, American Mortgage & Investment Co; Philadelphia, W.A. Clarke, pres, W.A. Clarke, Mortgage Co; St. Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington, 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 prices in metropolitan areas; discounts may run slightly higher in surrounding towns or rural zones.

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

Footnotes: a—no activity, b—very limited activity, c—commercial banks do very little mortgage lending in Texas, e—S&Ls charging 6-6½ plus 2½-3½ point fees, f—occasional loans available at 5¾%, g—50% loans at 5½%, j—highest price for better quality loans only, n—fees showing weakening tendency, o—at 5½%, w—six-month construction loans unless otherwise noted, x—FNMA pays 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.

FNMA PRICES effective Aug 19, 1969

For immediate purchase subject to ½ point purchasing and marketing fee and 2% stock purchase. Mortgage ratios involve outstanding balance of loan to 1) purchase price (excluding closing costs) or 2) FHA or VA valuation—whichever is less. FHA prices cover Secs. 203b, 222 and 213 individual mortgages.

NOTE: If remaining term of an FHA Sec. 213 individual mortgage exceeds 30 years, the price shown is reduced by ½% for each 5-year period (or part thereof) above 30 years.

States	FHA 5¾s		FHA and VA 5¼s		VA 4¾s		
	Loan to Value Ratios:	90% or less	over 90%	90% or less	over 90%	90% or less	
Conn. Me., Mass., N.H., N.Y., R.I., Vt.		100	99½	96	95½	92	91½
Del., D.C., Md., N.J., Penna.		99½	99	95½	95	91½	91
Ala., Ark., Fla., Ga., Ill., Ind., Iowa, Ky., Minn., Miss., Mo., Neb., N.C., N. Dak., Ohio, Ore., S.C., S. Dak., Tenn., Tex., Va., Wash., Wisc., Puerto Rico		99	98½	95	94½	91	90½
Ariz., Calif., Col., Hawaii, Ida., Kan., La., Mich., Mont., Nev., N.M., Okla., Utah, W. Va., Wyo., Virgin Is.		98½	98	94½	94	90½	90

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 5¾s	VA 5¼s
Immediates: 96½-97½	Immediates: 92-93½
Futures: 96-97	Futures: 92-93

FHA 5¾ spot loans
(On homes of varying age and condition)
Immediates: 93-95

Prices for out-of-state loans, as reported the week ending Sept 16 by Thomas P. Coogan, president, Housing Securities Inc.

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

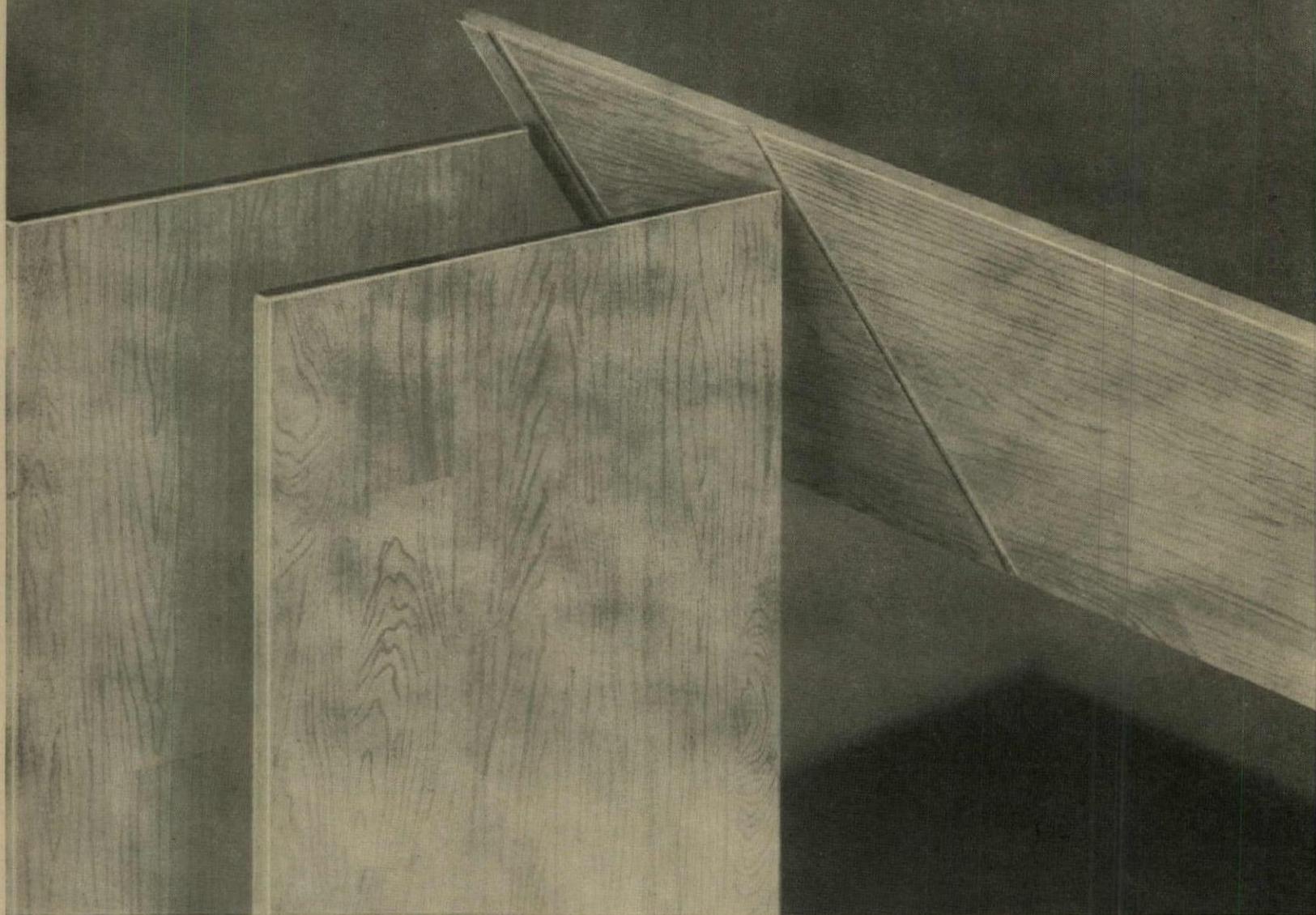
FNMA STOCK

	Month's		Month's	
	Aug 10	Sept 13	low	high
Bid	59¾	64*	57¼	64*
Asked	61¾	66*	59¼	66*

*Dividend increase from \$2.76 per annum to \$3.24 per annum announced Sept 9.

Quotations supplied by C. F. Childs & Co.

HINES



MAKES A CLOSET WALL

Most versatile new wood product since plywood!

Hines Widewood fills certain material needs better than any other wood product. Better than lumber because it comes in wider widths and with less tendency to warp or twist. Better than plywood because you can nail or screw into the edge and the edge needs no special finishing. Easier to saw, too. It's the ideal material for closet walls, counter tops, cabinet ends, platforms, soffits, cornices, fascia, shelving...or any use where a warp-free, extra-wide board is desirable. Its possibilities chal-

lenge the imagination. Widewood can be made any size up to 54" wide, 24' long and 4" thick...and 100% clear if you want!

In manufacturing Hines Widewood, selected pieces of top quality kiln-dried Ponderosa Pine are electronically bonded with water-proof glue. Pieces are joined end to end with a special precision-cut joint that, when glued, is stronger than the wood itself. Panels are sanded smooth at our mill, ready for finishing. Choice of standard grades and sizes. Special sizes to order.

Hines Knotty Pine Paneling...pre-cut, sanded and packaged!

Kiln-dried Ponderosa Pine paneling at its best in an easy-to-use form. Sanded satin smooth, cut to convenient lengths and packaged to protect its beauty. Choice of patterns. Here's the enthusiastic response of one dealer, A. Vander Stoep, of the Plainfield Lumber Co., Grand Rapids, Mich.:

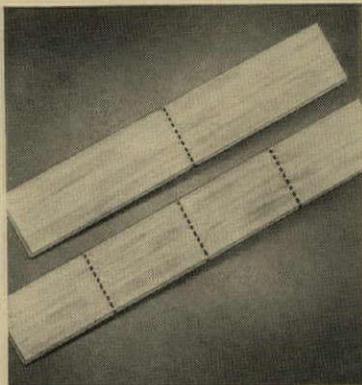
"We stock Hines Knotty Pine Paneling exclusively. The selective

grading at Hines mills gives us a product that brings our customers back asking for more. It stays straight and lies flat. And they like the smooth surface that takes conventional or the new color finishes equally well. Incidentally, we find it convenient to restock Hines Paneling because there are so many other Ponderosa Pine items available from Hines mills to help fill out a car."

WIDEWOOD



WITH FOUR SAW CUTS



To make closet wall units, the Hager Manufacturing Company of Mankato, Minn., buys Hines Widewood 24" x 1" in 16' lengths, clear grade. Sawing one piece in half makes the sides. Three cuts in a second piece yield the top, bottom and shelves. Sides are rabbeted to hold shelf ends.

Send for free samples today!
Just call or write the man from **HINES**

Edward Hines Lumber Co. Sawmills at Hines, Westfir, Dee and Bates, Oregon.
Other plants: Plywood, Westfir; Harbord, Dee; Millwork, Baker and Hines, Oregon.
Engineering and Development Division: Hood River, Oregon.

Dept. 110

Edward Hines Lumber Co.
200 S. Michigan Avenue, Chicago 4, Illinois

Please send me information and free samples of

Widewood Knotty Pine Paneling

Both

Name _____

To get your free samples, just clip this panel, sign your name, attach to your letterhead and send to the address above.

CANADA:

Mortgage money eases; down payment cut seen

The mortgage market has made a sudden turnabout. Conventional rates have dropped to 7%. There is much more NHA money than takers at 6 3/4%. This just a few weeks after builders were calling loudly for more government loans (NEWS, Sept).

"Interest rates have been artificially high for six months," says President J. A. Lowden of the Canadian Assn of Real Estate Boards. Lowden, manager of Manufacturers Life mortgage department in Montreal, explains: "A readjustment was necessary to bring mortgage rates into line with bond yields" (the McLeod, Young, Weir & Co 40-bond average fell to 5.42% Sept 1, from 6.24% six months earlier).

The price of money has been depressed by an influx from the US. Mortgage men call the amount substantial.

What will this mean to next year's homebuilding? Even optimistic Works Minister David Walker admits his 120,000 estimate for 1960 won't be met; most experts are now predicting 100,000 to 105,000 starts. Because some kind of recession is expected and unemployment is high, Ottawa will presumably want to pump up housing. But, says a CMHC economist: "It is evident now that present NHA terms will just not support 130,000 starts a year. . . . The active demand seems to be from higher income families; it shows up in the steady demand for conventional loans."

Insiders are predicting this change of attitude (from emphasis on low-cost housing) may mean substantial changes in the Housing Act next spring. Most likely: lower down-payments, bigger loans plus possibly package mortgages (with a premium on quality) and extension of NHA loans to older homes. With changes like these, 1961 could still turn out a boom year for housing.

HOUSING MARKET:

Federal appeals court upholds damages to buyer in negligent FHA appraisal

FHA must pay home buyers damages if they suffer a financial loss from relying on a faulty FHA property appraisal.

The Federal Circuit Court of Appeals in Ashville, N. C. has just handed down this tradition-breaking decision in the first suit of its kind to go before an appellate court.

FHA officials consider it bad news for the agency. It may turn out to be bad news for builders, too (see below). The government has until mid-November to decide whether to appeal to the US Supreme Court. Indications are it will do so.

The case arose when an Alexandria, Va. couple paid \$24,000 for a used house (including an \$18,800 FHA mortgage) in July, 1957 after learning that an FHA staff appraiser had found it in good condition and valued it at \$22,750. Several days after they moved in, substantial cracks appeared in interior walls and ceilings and in the cinder-block walls of the basement. FHA inspectors then found cracks in exterior walls. And the sun porch began separating from the east wall of the house. Says the circuit court

ruling: "These conditions were found to have been caused by the character of the subsoil, which contained a type of clay that quickly disintegrates when exposed to water." Mr. and Mrs. Stanley S. Naustadt sued for \$8,000—the cost of repairs.

In sustaining the original decision (NEWS, May), the circuit court ruled that the 1954 amendment to the Housing Act which requires sellers to give buyers a copy of the FHA appraisal* "imposes on the US the duty to appraise the property with ordinary care and diligence . . . and that neglect of this duty makes the US liable to the purchaser."

If the decision stands, it will probably produce these new problems for builders:

1. FHA is expected to tighten up its inspections and appraisals.
2. This, in turn, will mean builders and

* This was intended to give homebuyers a gauge of whether the price was fair.

Housing stocks firmer, trading slows

Prices of housing stocks are firming up. But the recovery from their mid-August low (down 6.63% from June) is slight: 0.3%

"There wasn't too much interest in the housing field during the past month," explains one Wall St. analyst.

In mid-September, only realty investment stocks stood above their mid-July level on HOUSE & HOME's index. Building and land companies showed a recovery from August, but failed to recapture their earlier peak.

After bouncing back 0.3% from August, H&H's housing stock index was still off 4.9% from July. Dow-Jones' industrial average, by comparison, was 3.3% behind July and 1.3% behind August. The National Quotation Bureau's average of 35 industrial over-the-counter stocks rose 1.7% from August to September (from 103.29 to 105), overcoming a drop the month before.

HOUSE & HOME averages, combining clos-

ing prices for listed stocks with bid prices for over-the-counter issues:

3. Some of the advantages of FHA mortgages—with their bigger-than-conventional loans—will be lost.

4. FHA may clamp down on building jobs that are apt to produce squawks from buyers (eg homes on filled land, innovations in materials and construction methods).

5. One former FHA commissioner ventures that FHA might even be moved to require builders to put up a bond—which would boost the price of homes.

One thing seems sure: Congress will not repeal the 1954 amendment that ended FHA's traditional stand that it is answerable only to lenders, not to the public. "Who," observes one Capital Hill expert, "would want to say, 'Let's stop making FHA protect the consumer and tell it to confine itself to the interests of the lender?'"

ing prices for listed stocks with bid prices for over-the-counter issues:

	July 15	Aug 10	Sept 21
Building	5.79	5.30	5.60
Land	8.08	7.71	8.08
Finance	19.10	17.63	17.27
Realty	8.56	8.28	8.69
Prefab	10.59	10.50	9.89
TOTAL	10.42	9.88	9.91

Fanny May stock jumped 5 points (to 64 bid, 66 asked) after the government mortgage agency boosted its monthly dividend from 23 to 27¢ a share. The new dividend hikes its yield to 5.1%, since dividends are paid on a 100 par basis.

FHA 608 debentures, paying only 2 1/2-2 3/4% interest, have climbed to 95-6 (from 94). They can (as always) be used at par to pay FHA insurance premiums—but only on 608 mortgages.

HOUSING'S STOCK PRICES

Company	Offering Price	July 15 Bid	July 15 Ask	Aug 10 Bid	Aug 10 Ask	Sep 12 Bid	Sep 12 Ask
BUILDING							
Elehler Homes .. e	6 1/8	6 1/2	5%	6 1/4	6 3/8	6 3/8	6 3/8
First Natl Rlty & Const (pfd) .. 8	9%	10	9%	9%	8 3/4	8 3/4	8 3/4
First Natl Rlty & Const (com) .. 2	2 3/4	2%	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
General Bldrs .. e	4 1/4	4%	4%	4 1/2	4 1/2	4 1/2	4 1/2
Kavanagh-Smith .. 5	7 1/4	7%	6%	7 1/4	7 1/4	7 1/4	7 1/4
Levitt	10	5 1/2	5%	5	5	5	5%
US Home & Dev. .. e	3	3 1/2	2	3	2 3/4	3 1/4	3 1/4
Wenwood	e	2%	3 1/4	2 1/2	2%	2 1/2	3
Wise Homes	e	10%	11 1/2	10	11 1/2	11 1/2	12 1/2
LAND DEVELOPMENT							
All-State Prop .. e	4 3/4	4%	4 3/4	4%	6%	6%	6%
Arvida	e	8 1/4	8%	9 1/4	9%	8 1/2	8%
Cons Dev (Fla) .. 5	5%	5%	5 1/2	6	5 1/4	6	6
Fores City Ent. .. 10	12 1/2	12 1/2	11%	12 1/2	13%	14 1/4	14 1/4
Garden Land	6 1/4	6 1/4	6%	6%	6 1/4	6 1/4	6 1/4
Gen Dev	e	14 1/4	12 3/4	14%	14%	14%	14%
Grt Southwest .. 18	13	14	12%	13 1/2	12	12%	12%
Laguna Niguel .. e	12	12 1/2	10%	11%	10%	11 1/4	11 1/4
Lefcourt	e	4	3%	3%	3%	3%	3%
Major Rlty	e	2%	3	2	2 1/2	2	2 1/2
Pac Cst Prop .. 10	8%	9%	8	8 1/2	7%	8 1/4	8 1/4
United Imp & Inv .. e	5%	5%	5%	5%	5%	5%	5%
FINANCE							
Calif Fin	e	20 1/4	21	18 1/2	19 1/4	20	20 1/2
Emp Fin	e	10 1/2	11	10	10 1/2	10	10%
Fin Fed	e	47 1/2	48 1/2	50 1/2	51 1/2	54 1/2	56
First Chtr Fin .. e	24 3/4	25 3/4	25 3/4	25 3/4	25 3/4	25 3/4	25 3/4
First Fin West .. e	10 1/4	10%	9%	10%	9%	10%	10%
Gibraltar Fin .. e	22 1/4	22%	21 1/2	22	21	21 1/2	21 1/2

Grt Wstrn Fin .. e	60%	33 1/2	29%	33 1/2	33 1/2	33 1/2	33 1/2
Hawthorne Fin .. e	9 1/4	9 1/4	8 3/4	9 1/4	8	8 1/2	8 1/2
Lytton Fin	e	13	13 1/2	14	14 1/2	12 1/2	13
Mdwstrn Fin	e	8%	7 1/4	8	7 1/4	7%	7%
Palomar Mtg	e	7%	8 1/4	7 1/4	7%	7 1/4	7%
San Diego Imp. .. e	8 3/4	7%	7%	7%	7%	7%	7%
Trans Cst Inv .. 15	b	b	b	13%	14	13%	14
Trans World Fin. .. 8%	8%	9 1/4	8 1/4	9	8%	8%	8%
Union Fin	e	15%	15%	18 1/2	19	13%	14%
United Fin of Cal	10	17 1/4	17%	18 1/2	19	19 1/4	20
Wesco Fin	e	22%	23 1/4	22%	23 1/4	22	22%
REALTY INVESTMENT							
Gt Amer Rlty	e	1 1/4	1 1/2	7%	1%	7%	1 1/16
Kratter A	e	20 1/4	21	21	21	21	21
Rlty Equities	e	5%	4%	5%	5%	4%	5%
Wallace Prop	e	6	8	9	6	7 1/2	7 1/2
PREFABRICATION							
Admiral Homes .. e	2%	2%	2%	2%	2%	2%	2%
Crawford	13	11%	12 1/4	11	11 1/2	10	10 1/2
Harnischfeger .. e	26	26	26 1/2	24 1/2	24 1/2	24 1/2	24 1/2
Inland Homes .. e	9	8 1/4	8 1/4	8%	8%	8%	9%
National Homes A	e	10 1/2	11	11	11 1/2	10 1/4	10%
National Homes B	e	10 1/4	10%	10%	11%	9%	10%
Scholz Homes .. e	4 1/4	4%	4%	4	4 1/4	3%	4 1/4

a not traded that day; nearest day price
 b stock not yet marketed
 c closing price (American)
 d closing price (New York)
 e stock issued before Jan 1, 1960
 f reflects two-for-one split Aug 1
 Sources: New York Hanseatic Corp National Quotation Bureau; American Stock Exchange; New York Stock Exchange.



we couldn't
decide which
house
to buy



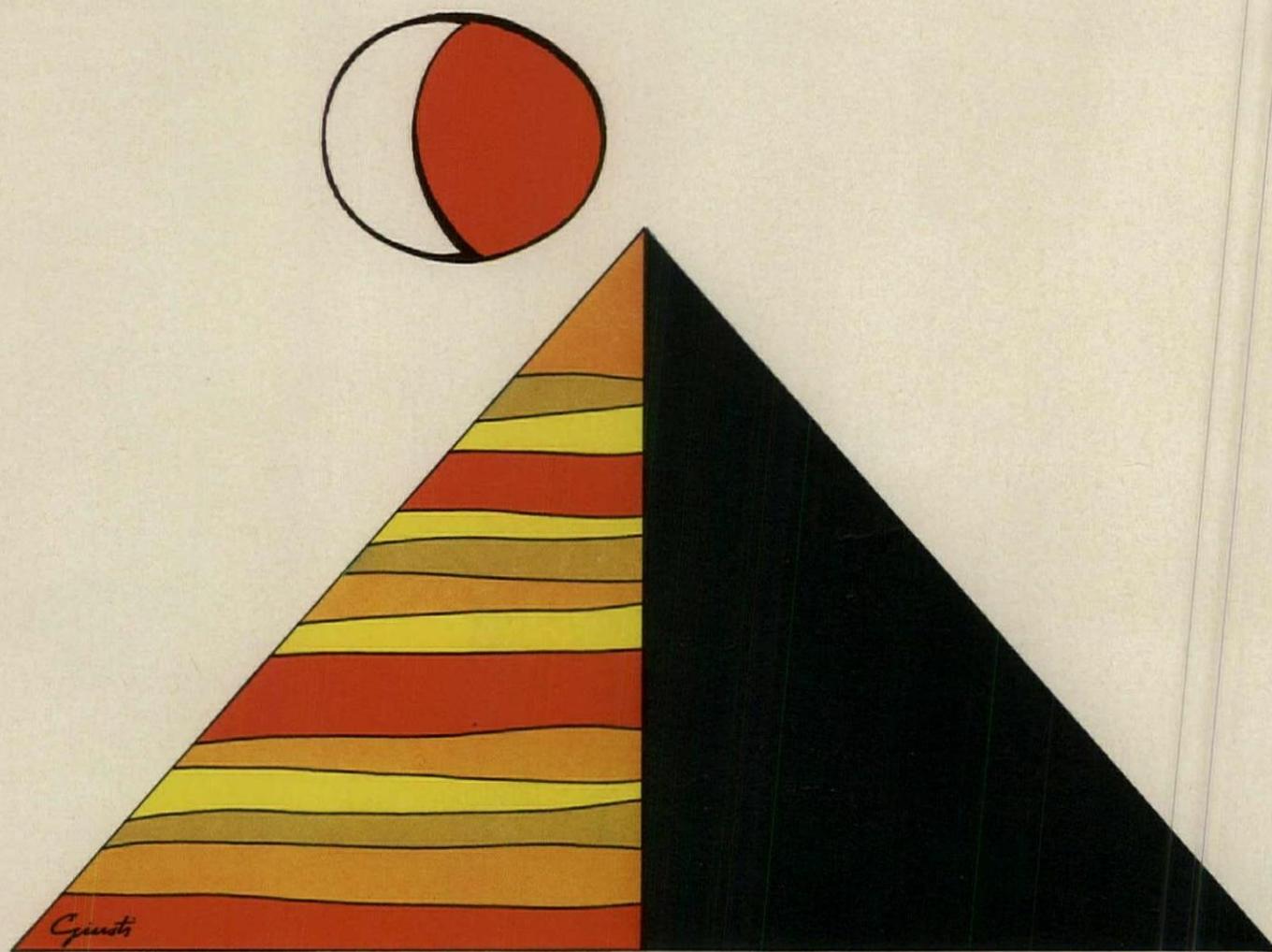
until we saw
luxurious
Crown Vinyl
floors!

Dazzling Crown Vinyl floors have been known to hypnotize a lady prospect. Beautiful patterns do it—Comtessa, Electra, Invicta, Taj Mahal, new Lido (shown)... add a breath-taking 3-dimensional look to every room. And, Mr. and Mrs. Prospect know that heavily advertised Crown Vinyl never needs scrubbing. An exclusive new vinyl formula makes it extra tough in high traffic zones—around sinks, stoves, in halls and entrance-ways, 12-year guarantee. Close the sale with Crown Vinyl. By the makers of famous Sandran. Sandura Co., Benson-East, Jenkintown, Pa.

LUXURIOUS CROWN VINYL FLOORS



When they're home-hunting... nothing says "built to last" like brass. That's one good reason why more and more of today's model homes are showcases for all the things that brass does better and more beautifully than any other material. You'll increase sales appeal with solid brass hardware and fixtures. And the finest brass products start with **Western Brass** — the "tailor-made" metal that's alloyed and rolled to your suppliers' individual requirements.



M OLIN MATHIESON • METALS DIVISION • EAST ALTON, ILL., NEW HAVEN, CONN.

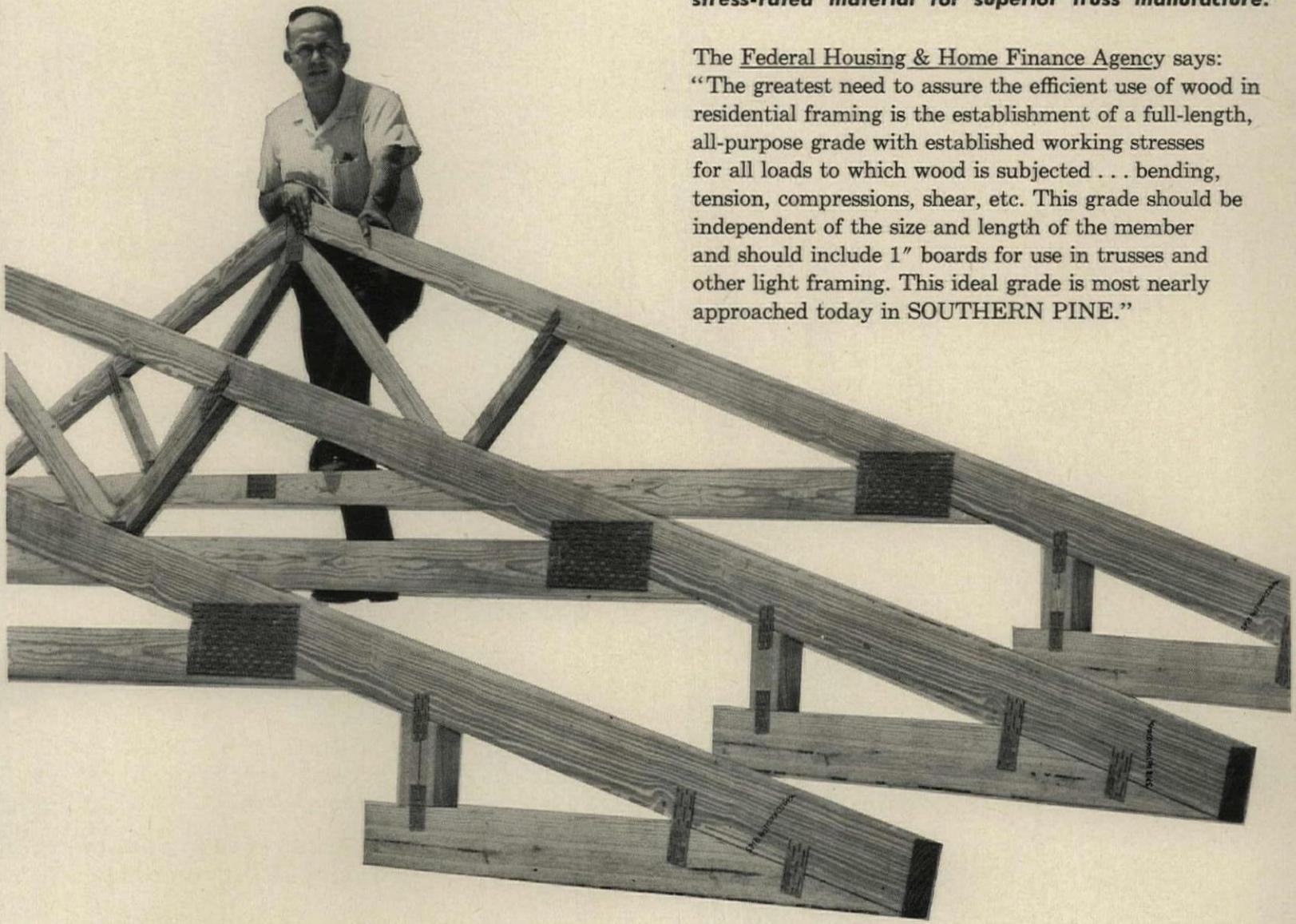
 **Western** BRASS

"SOUTHERN PINE meets
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."



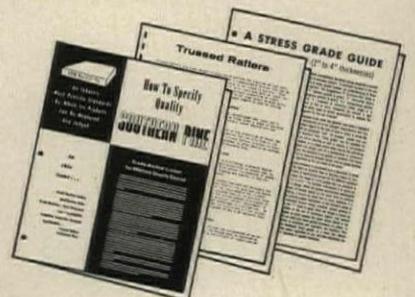
DRY SOUTHERN PINE OFFERS THESE ADVANTAGES:

- Uniform grading throughout its length permitting simple beam, cantilever, continuous or tension-loading design.
- Uniform size because it's properly seasoned.
- Superior gripping power for nails and other fasteners.

Write today for these **FREE** bulletins!

- Stress Grade Guide
- Trussed Rafter Data
- How to Specify Quality Southern Pine

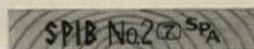
SOUTHERN PINE ASSOCIATION
P.O. Box 1170—New Orleans 4, La.



The same superior qualities that make Southern Pine "the ideal stress-rated material" for trussed rafters are yours for any other structural use when you insist upon grade-marked, trade-marked

SOUTHERN PINE

FROM THE MILLS OF THE SOUTHERN PINE ASSOCIATION . . . IT'S DRY





**\$14⁹⁷ extra profit
on every closet
you build with**

FLOAT  **AWAY**
METAL CLOSET DOORS

For bigger figures in your profit column...write now for details on these facts.

FACT: \$14.97 extra profit per closet with the Float-Away method.

FACT: 50% increase in customer closet convenience.

FACT: Gain 25% more storage space with Float-Away Metal Closet Doors.

FLOAT-AWAY DOOR COMPANY
1173 Zonolite Road, N. E.
Atlanta 6, Georgia

Dept. H-10

Name _____

Address _____

City _____ Zone _____ State _____

MATERIALS & PRICES:

Mosaic tile, plate glass hardboard producers seek help to fight imports

For many US materials manufacturers, the invasion of lower-priced foreign products has caused growing concern. For some, it has become downright alarm. Items:

- The ceramic mosaic tile industry has appealed to the US Tariff Commission for relief at a "peril point" hearing. Cheap imports, mainly from Japan, have captured 33% of the US market and now threaten to destroy the industry here, cries President Norris E. Phillips of Associated Ceramic Mosaic Tile Manufacturers.

- In a similar appeal, Vice President Robinson F. Barker of Pittsburgh Plate Glass told the commission that the domestic sheet (window) glass industry in this country is in jeopardy. Imports have taken over 23% of the US market.

- The hardboard industry is starting a campaign, aimed chiefly at builders, contractors and dealers, to promote domestic hardboard. Imports, mainly from Sweden, have captured 11.6% of the US market, say American Hardboard Assn officials, may take 25-35% in the foreseeable future.

Why it hurts. The volume of imported materials has jumped sharply in the last decade, with some of the sharpest increases coming last year. For many US producers, the pressure of foreign competition is felt more keenly now because the slump in homebuilding has shrunk their markets and sharpened the scramble for business. Among other industries feeling the pinch: cement, hardware, lumber, copper pipe and tubing, plastic laminates.

A major complaint of American manufacturers is that they spend big money on research to pioneer new materials, develop markets. But once they've succeeded, foreign competitors climb on the bandwagon, flood the market with cheaper imitations. And due to low US tariffs, say US producers, foreign companies enjoy an unfair competitive advantage through much lower costs for labor, raw materials and water transportation. A Japanese tile worker, for example gets 20c/hr, compared to the US worker's \$1.90-\$2/hr. As a result, Japanese mosaic tile wholesalers here at anywhere from 20c to 40c/sq ft ("less than it costs us to make the stuff," notes a US tile man glumly) compared to domestic tile prices of 56c-58c/sq ft.

No help foreseen. Because US foreign policy leans toward free trade, few domestic producers expect tariff increases from the 33-nation General Agreement on Tariffs & Trade (GATT) negotiations which just began in Geneva. Most seek only to hold the line by having their materials taken off the list for possible further US concessions. The mosaic tile industry would like to see import quotas established. The hardboard industry, which would like to see their product reclassified as wood instead of pulp (and thus made subject to a 5 to 6% higher duty), is pinning its main hopes on its promotion campaign which will stress the advantages of domestic products, including more availability, quicker delivery, higher production standards. For many US industries, anxiously eyeing the inroads of foreign competition, this may be the readiest tack, over the long haul, in dealing with a problem that promises to get knottier.

MATERIALS BRIEFS

Plywood bounces back

Propped by curtailed output at Northwest mills, plywood prices have perked up.

After plummeting to a post-World War 2 low of \$60 msf during the summer, 1/4" sanded stock bounced back to \$68 at mid-month. The price recovery was paced by giant Georgia-Pacific. But many mill men had their fingers crossed. With prices back above \$64, which many contend is the break-even point, some mills may start to boost production again, bring back the glut which caused such havoc in the market during the summer.

Transit cars (cont'd)

After a year-long battle to keep the ICC from banning free hold-time and diversions for lumber shipments, western US railroads have turned about and voluntarily cancelled transit privileges.

Canadian rail lines first announced they would cancel hold-and-diversion privileges for cars originating in the US. They proclaimed a cut from 15 to 7 days in free holding-time for Canadian cars. Then the Canadian roads reversed themselves and restored full transit privileges.

For many US lumbermen, it was a double blow. Mills and wholesalers who use transit shipping as a form of warehousing on wheels while they seek buyers now must find other ways to delay their shipments en route. One possibility: circuitous routing. But, says President Hal Saltzman of the Western Lumber Marketing Assn: "Circuitous routing certainly isn't something we can use as easily and economically as the 15-day delay we

lost." Meanwhile, cry lumbermen, Canadian shippers with transit privileges will have a competitive edge over US producers. "This will turn more people to Canadian lumber," cries Saltzman. President Johnny Helm of Cascade Pacific Lumber Co., a leading spokesman for the firm-order mills opposing transit shipments, doubts that US producers will be affected. Canadian producers are already the heaviest transit shippers, he says. At midmonth, the industry was still waiting to see who is right.

Air conditioning boom

Sales of central air conditioning are up 15% this year, while house sales are falling. By the end of the year, estimates the Air Conditioning & Refrigeration Institute, more than 1 million of the nation's 60 million homes will have central cooling. That is double the 1957 mark. Most of the increase has gone into medium priced (\$12,000 to \$15,000) homes, says ACRI. It predicts this will continue.

Carrier says its own sales are running 25% above a year ago despite a four-week strike in March. C. A. Olsen Co, Westinghouse subsidiary which makes central units up to 5 tons, reports sales 76% ahead of the year before for the first half of 1960. Adds Westinghouse Vice President R.N. Campbell: "We're looking forward to 1961's volume exceeding even 1960's, which is exceptionally good."

Mild summer weather crimped sales of room air conditioners. But President Paul Augenstein of Chrysler's Airtemp Division predicts: "Sales might bounce back as much as 15-20% in 1961." He adds: "People who have had room air conditioners will buy central air conditioning in their new houses."

LABOR:

NLRB's astonishing Kohler verdict

In a ruling with far-reaching implications, the National Labor Relations Board has finally made its decision in the nation's longest labor dispute, the six-year-old struggle between Kohler Co and the United Auto Workers.

The decision: Kohler was guilty of prolonging the strike through unfair labor practices. NLRB, upholding Trial Examiner George A. Downing, ordered the company to 1) rehire all of the original strikers who ask for their jobs back (except 78 fired for strike violence) and 2) bargain with the union in "good faith."

The company promptly asked US Circuit Court to review the finding of unfair labor practices. The union appealed too, demanding that the company be forced to rehire the 78 the NLRB held guilty of misconduct.

Meanwhile, Kohler has offered to reinstate some 1,400 of the strikers. Several hundred had already returned to work during the long fight. Many have moved away or found other jobs. Some have retired. Only about 130 are listed by the union as still being jobless. The company declines to estimate how many eventually will ask for their jobs back (by midmonth, three weeks after the NLRB decision, less than 50 had done so).

Under the NLRB ruling, the company would have to fire present employees to make room for returning strikers, if necessary. A spokesman said Kohler "hopes" to absorb the returning workers without layoffs.

For Kohler, the country's second largest manufacturer of plumbing fixtures, the NLRB ruling was a bitter climax to the long dispute which the company had won despite a \$10 million union campaign involving bloodshed, terrorism, intimidation and coercion. In reversing the company's victory and handing it to the union, the NLRB has also raised some searching questions about the future of management in labor disputes.

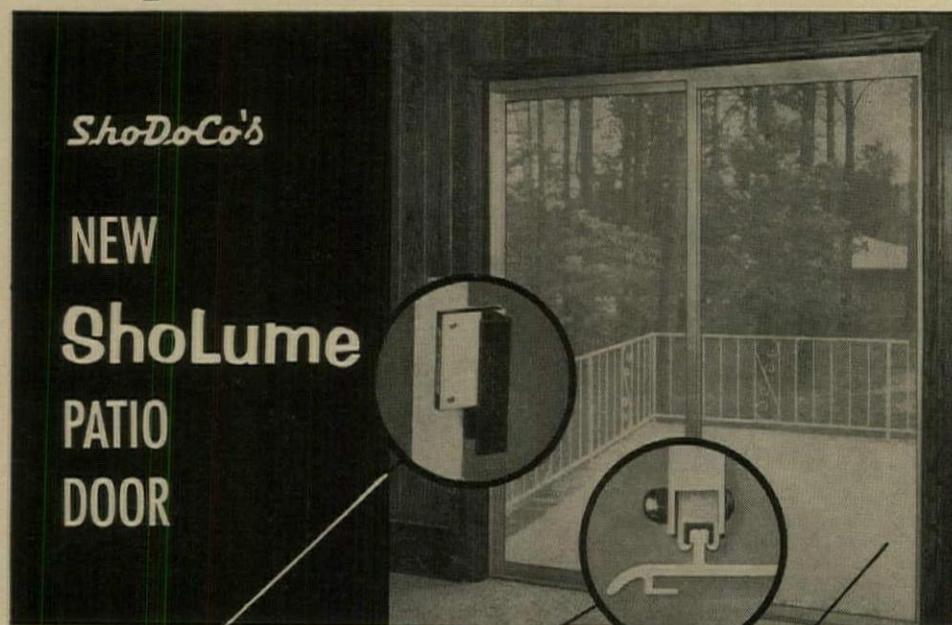
The Kohler strike began in April, 1954, after the UAW demanded compulsory union membership in the company's Sheboygan plant. Herbert V. Kohler, the company's individualistic and determined president, rejected the notion. Said he: "We do not believe that people should be compelled to become or remain members of a union." The union countered by surrounding the plant with thousands of strikers, shutting Kohler down for 54 days by illegal mass picketing. City, county, and state authorities refused to intervene, but the Wisconsin employment relations board finally ordered the union to stop the mob picketing. Kohler resumed production, hiring outside workers and strikers who elected to come back. To scare off non-striking workers, the union resorted to beatings, threats, vandalism, acid and paint-throwing, and bombs. An elderly worker died after a union goon broke his neck. Sheboygan became a battleground where

continued on p 64

if you can find another patio door...

... with these three exclusive
sales-clinching quality features
... and priced to go to the builder
for around \$100 ...

buy it!



ShoDoCo's

NEW

ShoLume

**PATIO
DOOR**

LUCIEN HANDLE

Effortless fingertip action. New turn-indicator-type handlelok clicks up and down to lock and unlock at a flick. Retractable latch prevents accidental lock-out.

BIRON CLIP

ShoDoCo's Biron Clip (pat. pend.) positively prevents fine "Scotsman" screen from ever jumping track.

ALL-POINTS WEATHERSEAL

Silicone treated heavy Schlegel wool pile gives overlapping "All-Points Weatherseal."

EXCLUSIVE BONUS FEATURES

- (A) All ShoLume panels are REVERSIBLE, install as either XO or OX
- (B) Single Glazing or $\frac{5}{8}$ " Dual Glazing
- (C) 6' ShoLume door, glazed with $\frac{3}{32}$ " sheet and with Screen
PRICED TO GO TO BUILDER FOR AROUND \$100
- (D) Available either KD or completely glazed and assembled.

Write for details on ShoLume
Patio Doors and the world's
finest lines of shower enclosures ...



"WORLD'S LARGEST MANUFACTURER OF SHOWER ENCLOSURES"

Can unions lose strikes?

Continued from p 63

friend turned against friend, brother against brother, father against son.

Failing to shut the company down, the union sought to cut off raw materials by picketing cargo vessels carrying vitreous clay and then to ruin the company by a nationwide boycott of Kohler products. Despite the harassment, the Kohler company kept up production and built up a force of 2,500 production and maintenance workers (compared to the pre-strike force of 3,300). A big reason for employee loyalty: Kohler policy provides continuous employment to its workers by trimming prices in tough times to maintain production, avoid lay-offs.

No forced unionism. The company did not refuse to bargain with the union, and Herbert Kohler offered to take back many of the strikers. But he stuck to his guns in refusing compulsory unionism. The union was equally adamant.

Cried President Walter Reuther: "The Kohler Co. has not recognized either the letter or the spirit of the law ... Management must recognize the right of its employees to choose their own bargaining agent." He accused company negotiators of meeting with the union "not to settle the strike [but] to break the strike in order to break the union."

As the fight dragged on for six years, it was clear that Kohler had bested the UAW—until the NLRB stepped in.

The crux of the board's ruling is that the company, after it resumed operations following the 54-day shutdown, granted two wage increases to non-striking workers without getting permission from the union—and this, argued the NLRB, created "serious impediments to settlement" of the strike and constituted unfair labor practices.

For Kohler officials, the board's reasoning was doubly stunning because UAW never raised the issue of the wage boost in any of its charges against the company. Says Kohler Executive Vice President L. L. Smith: "It's like being indicted for robbery and acquitted but then being convicted of a murder not even mentioned in the indictment."

What is 'unfair'? NLRB criticized Kohler Co. for hiring detectives to watch strikers. It lambasted the union for improper picketing methods and mob demonstrations around the homes of non-striking workers.

About the only solace for the company in the NLRB ruling is the provision that strikers responsible for violence against non-striking workers do not have to be rehired, a point on which Herbert Kohler has been determined.

For labor analysts, the astonishing Kohler decision poses these questions:

- Once a union calls a strike, are all wages in the struck plant frozen at the pre-strike level unless the striking union consents to a raise?

- Since Kohler did not refuse to bargain with the union, does negotiating in "good faith" with a union really mean concessions by management?

Editorialized the *Chicago Tribune*: the philosophy underlying the decision is that "no company is permitted to win over any union in an open fight. Walter Reuther's UAW was licked, and licked decisively at Kohler ... In any labor-management controversy, it is the union which must win. It is an unfair labor practice for a company to triumph."

SEGREGATION:

How open should open developments be?

Legislation prohibiting race bias in housing can hinder, instead of promote, efforts to build stable, racially integrated neighborhoods.

Instead, "benign quotas" administered by private developers (a la Morris Milgram) seem to produce better results.

These ideas were aired last month at—of all places—the Natl Urban League's 50th anniversary conference in New York City. Significantly, they came from a business executive who has labored hard to stop the growing concentrations of Negro families in blighted neighborhoods. Said J. Stanley Purnell, assistant to the president of T. Mellon & Sons of Pittsburgh:

"From our experience, I am convinced that legislation should be flexible enough to assist, rather than hinder men of good will who are attempting at great personal effort to solve the housing problems of all people . . . If such laws must be enacted, they should be state-wide rather than only city-wide.* However, I doubt the wisdom of such laws. On a city-wide basis, they only tend to drive whites to the suburbs, and thereby sharpen what Dr. Morton Grodzins calls 'the urban-suburban racial and class schism.' I believe the solution is not in legislation, but in private individuals, groups, and housing corporations going ahead, building housing, and then selling and renting on a planned integration basis . . ."

Leonard Schugar



PURNELL

In Pittsburgh's Spring Hill Gardens, (NEWS, Dec), an FHA 221 project with rents from \$77.50 to \$97.50 a month for one- to three-bedroom apartments, "our goal was to have 80% white occupancy with two or three Negro families in each of the 19 buildings," Purnell related. He added: "Many of our present white tenants would not have moved in without assurances that we would do all in our power to maintain an 80-20 balance."

" . . . Two qualified Negro applicants recently filed complaints with the Commission on Human Relations simply because they were asked to postpone their move-in date until there were sufficient white applicants to maintain the established balance—the quota. After consultation, the commission ordered us to take the Negro applicants in immediately. We did so."

"We have been able to comply without upsetting or 'tipping' the development. But we know our community, and we know Pittsburgh. If this law [Pittsburgh's anti-bias ordinance] is to be used to force us to accept more and more Negro tenants until the percentage reaches 30 or 40 or more, then Spring Hill Gardens will be on the way to becoming a segregated development. A panicking neighborhood might result; and the cause of race relations, housing, and urban renewal will all be considerably harmed." So quotas, Purnell said, "run a bit contrary to our ideals, but derive strong support from our experience."

Redeveloper James Scheuer, a panelist on the same forum with Purnell, agreed that "in striving for integration, balance is an absolute necessity." But he scoffed at Purnell's implication that the tip-point is 30% or 40% Negro occupancy. In New York, Scheuer asserted, it is more like 20% or 25%. He argued for the "right to discriminate against an individual for the right of maintaining balance of a project." Panelist Oscar Cohen, of the Anti-Defamation League of B'nai B'rith, called quotas "hateful—but necessary now" in private developments.

State orders realtors to sell to Negroes

The Massachusetts Commission Against Discrimination, in its first order under state laws prohibiting racial bias in private housing developments, has directed two realty companies to sell homes to Negroes.

The order was issued against Campanelli Builders Inc, Middlesex Homes Inc, and President Frank Equi of Middlesex. A Boston Negro electrical contractor, Ulysses G. Marshall, complained that he was refused a house in Woodvale, a 300-lot development at Danvers, 20 miles north of Boston. Campanelli Builders, one of New England's biggest residential construction concerns (1959 total: 1,135 starts), is the owner and builder of Woodvale, Middlesex Homes is the sales agent. The houses are priced from \$14,900 to \$22,000.

Campanelli, Middlesex and Equi were found guilty of illegally refusing to sell Marshall a house at the first public trial in a housing case held by the commission since it was created in 1946. The commission invoked two statutes, adopted in 1957 and 1959. One prohibits discrimination in private housing built with FHA assistance, the other, discrimination in private developments of ten or more lots.

NEWS continued on p 67

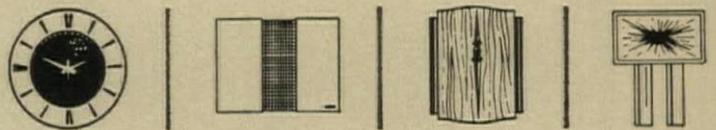
*Purnell's Pittsburgh adopted what is considered the country's stiffest anti-bias law in December 1958. It bars discrimination in private housing by real estate brokers, salesmen, agents and lenders, as well as owners. It applies to groups of five-or-more units under one ownership. Violators face \$100 fine or 30 days in jail.

RITTENHOUSE
CHIMES...

give your homes a
**SOUND
TOUCH!**

A complete line of easy-to-install Door Chimes for homes of every price range. Rittenhouse two-note Chimes and Combination Clock-Chimes that feature designs to match any decor . . . Rittenhouse four and eight-note Chimes in the luxury "Master" series . . . all models furnished with the famous Rittenhouse lifetime floating striker, separate volume control and shut-off on each chime, plus heavy-duty transformer.

Another of the Finishing Touches from Emerson Electric . . . pre-sold packages of quality electrical accessories that add *instant* sales appeal to your homes.



EMERSON ELECTRIC
BUILDER PRODUCTS GROUP

EMERSON
ST. LOUIS, MO.



PRYNE
POMONA, CAL.
KEYSER, W. VA.

IMPERIAL
LATROBE, PENN.

RITTENHOUSE
HONEOYE FALLS, N. Y.

Write Dept. B42, Emerson Electric • 8100 Florissant • St. Louis 36



Here's Western Pine Association dependability for you—grading proved 97.3% on or above

Using the published standards of the Western Pine Association, 32 inspectors traveled more than a half million miles to member mills last year to check-grade nearly 51 million feet of shipping-grade lumber. They found that better than 97% had been graded on or above standard.

That's the kind of grading control you can expect with every shipment of Western Pine Region woods — top dependability, too, in sizing and shipping. And... there are eleven kinds of woods from this region for your customers to choose from... soft-textured, straight-grained, ideal for many, many interior and exterior applications.

For more information write to Western Pine Association, Yeon Building, Portland 4, Oregon.

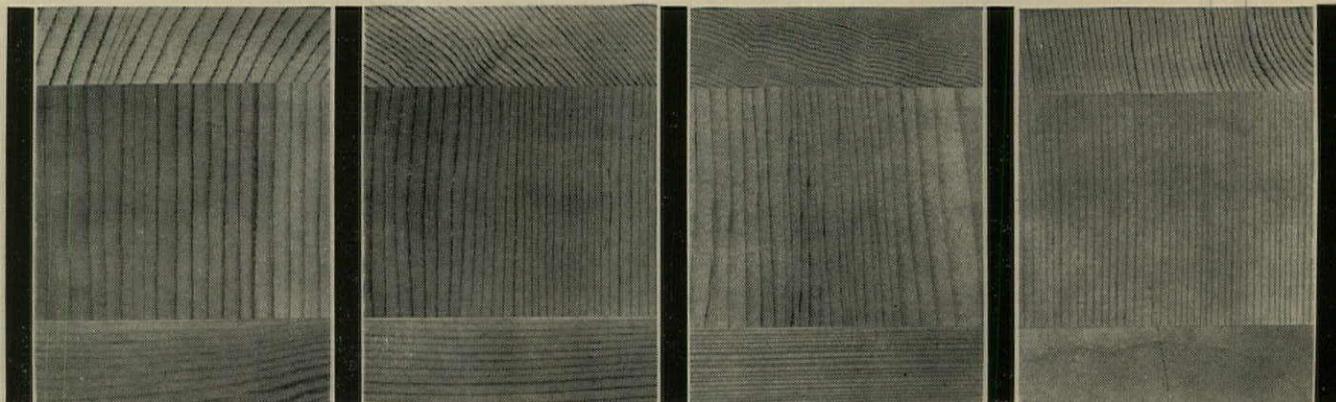


Western Pine Association

member mills manufacture these woods to high standards of grading and measurement... grade stamped lumber is available in these species:

Idaho White Pine · Ponderosa Pine · Sugar Pine · White Fir · Incense Cedar · Douglas Fir · Larch · Red Cedar · Lodgepole Pine · Engelmann Spruce · Western Hemlock

TODAY'S WESTERN PINE TREE FARMING GUARANTEES LUMBER TOMORROW



PONDEROSA PINE—this wood combines excellent insulation with firm nailholding power. It handles easily and mills accurately. For sheathing, light framing, paneling, millwork and siding.

DOUGLAS FIR—tough, straight-grained wood for interior trim, millwork, and applications requiring stiffness and nailholding power. In stress grades, it offers exceptional strength for framing.

WHITE FIR—strong and lightweight for framing, roof decking, paneling and moulding, it is easy to cut, saw and shape. Popular, too, for interior and exterior trim and many industrial uses.

ENGELMANN SPRUCE—lightweight, whitest of Western woods, it is fine textured, works and nails superbly. High insulation value for sheathing and siding. Beauty for paneling.

STATISTICS:

Where public housing will be built

Since the end of June, PHA has allocated 7,620 units of public housing. Of these units, 3,677 (or 48%) went to communities with populations under 25,000. This points up a trend toward spreading new public housing into small towns. Most big cities have a backlog of units under contract but unstarted, often because local authorities cannot find sites where the neighborhood is willing to accept public housing tenants (ie, Negroes). Of the 81 communities listed below—the most recent to receive PHA allocations—36 have no public housing so far.

A total of \$646,250 was loaned to 42 communities for planning projects not yet certain of construction. This provides a \$646,250 fund for architects to draw, at government expense, plans that may or may not be built.

CITY	POPULATION ¹	NO. OF UNITS	AMOUNT OF LOAN ²	EXISTING UNITS OF PUBLIC HOUSING ³
Patterson, La.	2,852	30	\$419,297†	0
Newton, Mass.	91,584	125	23,750*	0
Rochester, Pa.	5,938	50	10,000*	0
Norwich, Conn.	38,476	75	15,000*	75
Ringgold, Ga.	1,305	30	397,745†	0
Manchester, Ga.	4,102	20	4,000*	50
Vicksburg, Miss.	28,977	350	40,000*	0
Lineville, Ala.	1,609	16	3,200*	24
Ariton, Ala.	681	10	2,000*	0
Susquehanna Tshp, Pa.	17,426	30	6,000*	0
Rodeo, Calif.	6,000	250	3,496,442†	0
Elizabeth, N.J.	107,377	250	3,678,578†	828 (250 C)
Cairo, Ill.	9,070	50	10,000*	396
Lawrence, Mass.	70,545	300	47,500*	500 (137 C)
Pineland, Tex.	1,241	40	8,000*	0
Mayfield, Ky.	10,708	140	26,000*	0
Franklin, N.J.	3,621	30	524,960†	50
Lackawanna, N.Y.	29,572	150	27,500*	271
Lake Butler, Fla.	1,297	30	6,000*	0
Irvington, N.J.	59,151	60	12,000*	125 (48 P)
Trenton, N.J.	114,015	350	52,500*	1,287 (152 P)
Edison Tshp, N.J.	45,578	100	1,663,242†	60
Fulton, Mo.	11,099	80	16,000*	0
Carteret, N.J.	20,475	50	10,000*	(76 P)
Red Bank, N.J.	12,470	50	10,000*	(40 C)
Atlanta, Ga.	484,825	500	34,000*	7,494 (1000P)
Meigs, Ga.	1,224	12	2,400*	46
Stuart, Fla.	4,659	40	8,000*	0
LaFayette, Ala.	2,595	50	10,000*	0
Terre Haute, Ind.	71,786	500	67,500*	0
Harlem, Ga.	1,425	30	6,000*	14
Magnolia, Miss.	2,081	60	12,000*	0
River Rouge, Mich.	18,127	100	20,000*	200
Dierks, Ark.	1,280	26	5,200*	0
Mineral Springs, Ark.	615	8	1,600*	0
Swainsboro, Ga.	5,910	100	20,000*	100
Kockmart, Ga.	3,896	25	5,000*	65
Carrabelle, Fla.	1,142	12	2,400*	0
Booneville, Miss.	3,493	60	737,875†	50
Stockton, Calif.	85,452	200	3,061,466†	700
Cullman, Ala.	10,869	85	944,393†	140
Rahway, N.J.	27,706	48	810,094†	76
Danbury, Conn.	22,833	60	12,000*	150
Woonsocket, R.I.	46,890	40	581,427†	600
LaFollette, Tenn.	6,168	100	1,404,443†	100
Meridian, Miss.	49,320	90	1,191,917†	658
East Hartford, Conn.	43,845	50	639,987†	100
Kansas City, Kans.	121,344	35	7,000*	0
Superior, Wis.	33,058	60	12,000*	353
Nocona, Tex.	3,126	22	4,400*	0
Gloster, Miss.	1,374	34	6,800*	0
Americus, Ga.	13,348	100	1,203,220†	296
Camilla, Ga.	4,742	50	687,277†	100
Newman, Ga.	12,119	45	508,598†	155
Albertville, Ala.	8,272	80	966,419†	70
Childersburg, Ala.	4,865	30	437,404†	40
Opp, Ala.	5,581	60	722,542†	80
Sylacauga, Ala.	12,691	60	847,442†	394
Mt Vernon, Ill.	15,640	150	27,500*	0
Crystal City, Tex.	9,027	20	4,000*	50
Muskegon Heights, Mich.	19,516	200	35,000*	0
Woodbridge Tshp, N.J.	76,393	60	12,000*	150
Palmer, Tex.	614	10	2,000*	0
West New York, N.J.	35,341	100	1,270,640†	280 (36 P)
Brewton, Ala.	6,309	80	930,367†	0
Boaz, Ala.	4,639	60	779,625†	100
Brent, Ala.	1,869	70	954,294†	0
Clanton, Ala.	5,650	128	1,536,036†	0
Collinsville, Ala.	1,157	20	271,159†	20
Greenville, Ala.	6,852	140	1,743,607†	0
Mobile, Ala.	191,393	500	6,357,588†	3,768
Northport, Ala.	5,255	100	1,370,033†	0
Ozark, Ala.	9,479	100	1,255,714†	100
Columbia, Tenn.	17,457	140	1,890,661†	0
Franklin, Tenn.	6,944	16	224,807†	78
Lawrenceburg, Tenn.	8,356	60	855,188†	0
Waverly, Tenn.	2,892	34	436,569†	38
Dublin, Ga.	13,772	100	1,221,146†	200
Lincolnton, Ga.	1,434	30	405,236†	38
Sparta, Ga.	1,918	24	330,369†	0
Villa Rica, Ga.	3,440	40	489,658†	38

¹ Population as of April 1, 1960, based on preliminary reports by Census.
² Asterisk (*) indicates planning loan made under preliminary contract. Dagger (†) indicates estimated total development cost of project. Under an annual contribution contract, PHA may lend 90% of this cost to a local authority in addition to making annual contributions to help keep rents within means of low-income families.
³ Figures in parentheses indicate additional units either in preliminary construction (P) or under construction (C).

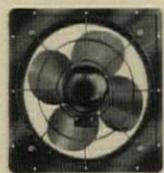
NEWS continued on p 69

EMERSON ELECTRIC...

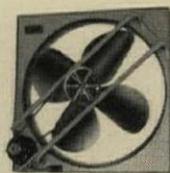


ATTIC FANS give your homes a COOL TOUCH!

A complete line of Attic Fans... one- and two-speed models for horizontal or vertical discharge. Easy to install and quiet operating... fan frame has rubber channels which rest on wood framing above ceiling opening. Available in 24", 30", 36", 42" and 48" models. Ball bearing, sleeve bearing and direct drive attic fans meet the need for low-cost cooling.



Direct Drive Fans



Belt Drive Fans

Another of Emerson Electric's Finishing Touches... pre-sold packages of quality electrical accessories that add instant sales appeal to your homes.

EMERSON ELECTRIC BUILDER PRODUCTS GROUP

EMERSON
ST. LOUIS, MO.
Imperial
LATROBE, PENN.



pryne
POMONA, CAL.
KEYSER, W. VA.
Rittenhouse
HONEYE FALLS, N. Y.

Write Dept. B17, Emerson Electric • 8100 Florissant • St. Louis 36



RUBEROID gives you quality where it will be seen!



OLIVER L. PARKS, East St. Louis, Illinois: "To me, specifying RUBEROID siding and roofing on a new house is just like putting out a big sign saying **QUALITY**. In fact, it's better than a sign when we figure in the handling and application costs. We find we're actually saving money using RUBEROID products. In many cases RUBEROID's unique product features have aided sales and established

good future customer relationships at the same time that they're cutting our costs. RUBEROID certainly helps us build new homes and new sales."

RUBEROID[®]

500 FIFTH AVENUE • NEW YORK 36, N.Y.

PEOPLE:

H&H staff

Vincent A. Finnigan



HALLAHAN



WILLIAMS

New overseer for S&Ls

Ailing (stomach ulcers) **William J. Hallahan** has resigned from the Home Loan Bank Board. President Eisenhower immediately named **Joseph J. Williams Jr.**, Virginia lawyer, legislator, and savings & loan official to replace him as the lone Democrat on the three-man board.

Hallahan's ailment (which began while he was an Army major in World War 2) worsened in recent months as the HLBB came under heavy fire from a House subcommittee investigating its seizure of Long Beach (Calif.) Federal S&L (NEWS, Aug). After being hospitalized, Hallahan finally quit on the advice of his doctors to undergo surgery and a long convalescence.

For S&L men, Hallahan's departure is a matter for keen regret. Young (43), stocky, affable Bill Hallahan has long been regarded by the industry as a key man in the HLBB's important decisions and one of its ablest members. A native of Corning, N. Y., and a graduate of Syracuse University and Georgetown University Law School, Hallahan was appointed clerk and counsel of the House banking committee in 1946. Eisenhower appointed him to a four-year term on the HLBB in 1955, reappointed him last year. As the only Democrat (under law, no more than two members of the board can be from the same party) Hallahan was inclined to be more independent than his two older Republican colleagues, Chairman **Albert J. Robertson**, 67, and **Ira Dixon**, 69, say S&L men. Dixon, who can't speak above a whisper since an operation for throat cancer, is well regarded, but Robertson has come in for criticism on two grounds: 1) as a former banker (senior vice president of the Iowa-Des Moines National Bank) he is not always sympathetic enough with savings & loan problems and 2) he has not kept the board as independent of general Administration fiscal policies as he could.

Williams, 55, a conservative Democrat, will fill Hallahan's term which expires July 30, 1963. S&L men generally view his appointment with favor. A native of Cold Harbor, Va., and a graduate of the University of Richmond, Williams

has practiced law since 1930 and has been a director and counsel of the Franklin Federal S&L of Richmond (assets \$40 million) since it was founded in 1933. He has served in the Virginia House of Delegates since 1937. Says one S&L man: "With his background, he could turn out to be the strongest member the board has had for some time."

Boss to leave FHA

FHA Commissioner **Julian Zimmerman** will become president of Lumberman's Investment Corp, five-year-old mortgage concern operated by Texas lumber dealers, when the Eisenhower Administration ends next January.

Zimmerman was offered — and accepted—the \$35,000-a-year post in late summer. The White House persuaded him to stay in his \$20,000 government job for the rest of Eisenhower's term. When word leaked out that Zimmerman might be leaving, several self-designated candidates on and off FHA's staff had begun bucking to succeed him. Administration higher-ups were unhappy over such turmoil.

LIC, owned by nearly 700 retail lumbermen throughout Texas, has originated some \$14 million in FHA and VA mortgages plus \$7½ million in home improvement loans. Now, it is planning to expand nationwide.

H&H staff



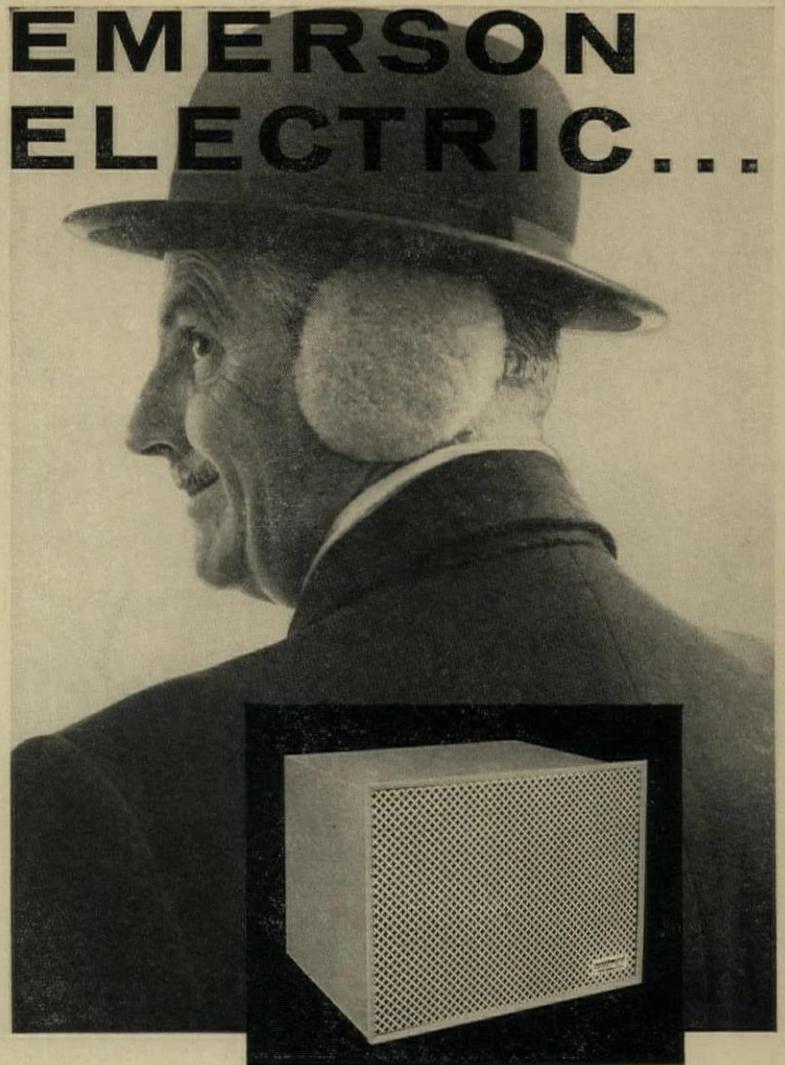
ROSENBERRY

Deputy quits HHFA

Walter Rosenberry, 52, resigned last month as deputy HHFA administrator to become a management consultant in Washington. Rosenberry came to the top housing

continued on p 71

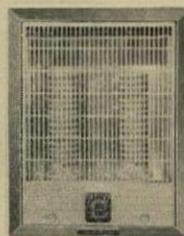
EMERSON ELECTRIC...



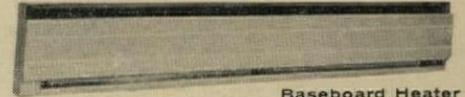
ELECTRIC HEAT gives your homes a WARM TOUCH!

Emerson Electric Electric Heat... baseboard heaters gently circulate heat throughout the room *without a fan*... Emerson Electric ceiling cable assures uniform comfort... Emerson Electric Heaters recessed in the wall silently provide clean, safe heat. A full line of electric heat bearing the Emerson Electric guarantee of quality.

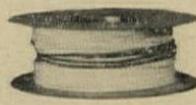
Another of Emerson Electric's Finishing Touches... pre-sold packages of quality electrical accessories.



In-the-wall Heater



Baseboard Heater



Radiant Heat Ceiling Cable



Infra-red Convection Heater

EMERSON ELECTRIC BUILDER PRODUCTS GROUP

EMERSON
ST. LOUIS, MO.



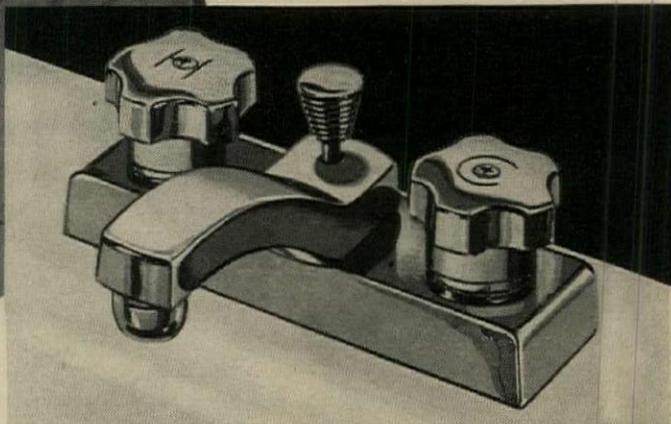
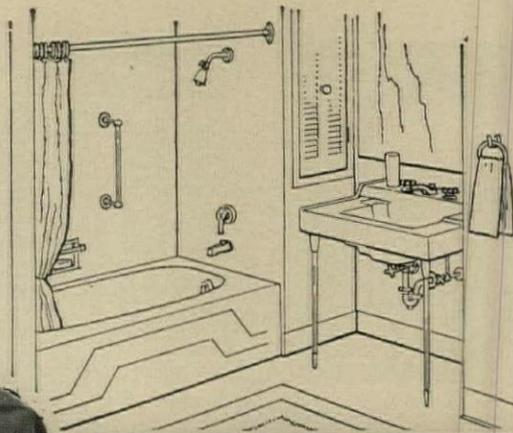
pryne

POMONA, CAL.
KEYSER, W. VA.

Imperial
LATROBE, PENN.

Rittenhouse
HONEOYE FALLS, N.Y.

Write Dept. B67, Emerson Electric • 8100 Florissant • St. Louis 36, Mo.



Kohler Centra Constellation lavatory fitting, K-7400.

“Kohler Fixtures and All-Brass Fittings

will cut your apartment maintenance costs!”

“That’s mighty important!”

“It sure is . . . as builder-owner you’ve got a long-term investment in this apartment house . . . As your architect it was my job to protect it.”

“Right! . . . But how do I save on maintenance?”

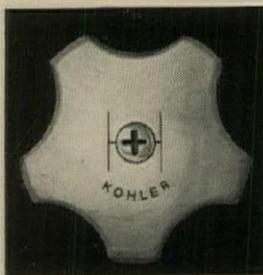
“For one thing, you’ll have far fewer repairs and replacements with Kohler All-Brass Fittings.”

“Why?”

“Because genuine brass resists wear and corrosion. Also takes and holds chrome finish better than any other metal.”

“Sounds fine! . . . Now tell me—”

“Wait! There’s more . . . Every Kohler fitting has the Valvet unit that works with a smooth piston-like movement . . . Eliminates the grinding action that wears out washers so fast in conventional faucets.”



“Do these faucets work easily?”

“At a finger-touch . . . and easy shut-off means no dripping—less rough handling.”

“I’ll tell my tenants these are Kohler—”

“They’ll know anyway . . . All Kohler fittings have the Kohler name on the handles . . .”

“Kohler fixtures certainly deserve Kohler fittings—the finest.”

“Of course! . . . Kohler fixtures are outstanding for looks—for durability . . . Installing them with matching Kohler fittings was one of the two smartest things we did.”

“What’s the other?”

“Specifying two Kohler bathrooms for all three-bedroom apartments . . . Extra bathrooms are the biggest trend in today’s apartment and home building because there’s no greater modern convenience!”

KOHLER Co. Established 1873 KOHLER, WIS.

KOHLER OF KOHLER

ENAMELED IRON AND VITREOUS CHINA PLUMBING FIXTURES • ALL-BRASS FITTINGS • ELECTRIC PLANTS • AIR-COOLED ENGINES • PRECISION CONTROLS

agency in January 1959 when **Norman Mason** moved up from FHA commissioner to HHFA administrator. Rosenberry had been Mason's special assistant at FHA for a year and a half before.

At HHFA, Rosenberry, a jovial and story-loving teetotaler, served as a trouble-shooter, notably in liaison with Capital Hill last year when President **Eisenhower** twice vetoed housing bills. Minnesota-born Rosenberry married **Sarah Maud Weyerhaeuser** after graduating from Dartmouth ('30). He went to work in the Weyerhaeuser lumber empire and became, at 25, general manager of 30 yards. After a divorce, he organized his own lumber company in Billings, Mont., and Spokane.



Bob McIntyre

ROBERTS

URBAN RENEWAL: Asst Urban Renewal Commissioner **Martin Millsbaugh**, 34, is resigning Oct 15 to become deputy general manager of Baltimore's \$127 million Charles Center Renewal project. The post will pay \$17,000. Millsbaugh will replace \$24,000-a-year **Dennis Durden**, who is rejoining the consulting firm of Larry Smith & Co after a leave.

Hal Colling wins vote of confidence from ICBO

The squabble between Past President **Gil Morris** of the International Conference of Building Officials and ICBO Managing Director **Hal Colling** has apparently ended with a victory for Colling.

At its 38th annual meeting last month in Colorado Springs, the powerful regional code group adopted a resolution of confidence in ICBO's management and officers.

Morris, who just retired as Los Angeles' building superintendent, had charged ICBO management with "extravagant and unwise expenditures" and meddling in the group's politics (NEWS, Aug.). "ICBO should be run for the benefit of the cities, the building officials, the construction industries, and not for the benefit of management," he declared. In his blast at ICBO management, Morris cancelled Los Angeles' \$250-a-year membership. But his successor, **John Monning**, said in Colorado that the city's dues for the current year have been paid. Morris did not attend the convention.

The resolution was adopted after only token discussion. But the meeting also voted Morris (and three other men) an honorary life membership in token of services to ICBO.

Philip M. (for McRee) Roberts, 55, chief building inspector of Boise, was elected ICBO president. He succeeds **Cassatt D. Griffin**, assistant chief deputy engineer for Los Angeles County. Chattanooga-born Roberts, a lean six-footer with a professional air, worked for an Idaho construction company for 20 years before becoming building chief in 1946.

Another 33 cities, towns, or counties adopted ICBO's Uniform Building Code and became ICBO

members during the fiscal year, Colling reported. ICBO, a non-profit California corporation, took in 48% of its \$289,797 income for the year ended June 30 from publishing (28½% from book sales, 19½% from its monthly magazine). Only 18¼% came from membership dues, according to reports to ICBO members.

RETIRING: Ailing (high blood pressure) **James Ring**, 59, director for the last eight years of the Natl Capital Housing Authority in Washington, D.C. Ring joined NCHA in 1934 when it was still called the Alley Dwelling Authority. Since then, the authority has built 7,713 units, has plans for 1,000 more.

Tyler Stewart Rogers, 65, technical consultant for Owens-Corning Fiberglas. A noted expert and author on thermal design and insulation, Rogers has set up practice in Westport, Conn. as consultant in the development and use of building materials.

DIED: **Douglas G. McNair**, 67, vice president and general manager of Temple Lumber Co, Houston, Tex., Aug 8, at Houston; **Alvin Hayman**, 77, real estate developer and builder of thousands of homes in San Francisco area and one of first presidents of the local homebuilders association, Aug. 17, in San Francisco; **Robert P. Etienne**, 47, San Francisco area land developer, in an auto crash, Aug. 23, in San Francisco; **Arthur O. Edwards**, 84, British-born engineer who developed many tracts and built hotels in Florida, Aug. 24, at Villanova, Pa.; **Donald H. Aiken**, 44, treasurer of the Greenwich Savings Bank, New York, and former (1951-54) first deputy superintendent and counsel of the New York State Banking Department, Aug 25, in New York; **Charles F. Haring**, 77, builder and developer in New York's Westchester County, Aug 26, in New York; **Richard W. Fechtenburg**, 64, realtor and chairman of the Bucks County (Pa.) Planning Commission and former (1956-57) president of the Pennsylvania Realtors Assn, of a heart attack after being stung by a swarm of yellowjackets while mowing his lawn, Aug 27, near Langhorne; **Meyer Rcsenberg**, 60, San Francisco contractor, after being beaten by thugs who invaded his office and took \$7,000, Aug 29, in San Francisco.

EMERSON ELECTRIC...



FINISHING TOUCHES

in planned packages

save you money!

Here's how! From one quality source you get ventilating fans and hoods, chimes and intercoms, recessed and decorator lighting and electric heating and air conditioning equipment. Just *one* dependable supplier... Emerson Electric... is responsible for guaranteeing quality, for billing your order and for shipping. You save not only the hidden costs in time spent ordering from many different suppliers... but you also save *money* in initial costs because you are an important quantity buyer!

EMERSON ELECTRIC

BUILDER PRODUCTS GROUP

EMERSON
ST. LOUIS, MO.



pryne
POMONA, CAL.
KEYSER, W. VA.

Imperial
LATROBE, PENN.

Rittenhouse
HONEOYE FALLS, N.Y.

Write Dept. B10, Emerson Electric • 8100 Florissant • St. Louis 36

MASONITE ASKS:

what's in a name...for

realistically priced

exceptional dent resistance



HANDY HINTS

to help you name your way
to beautiful Hawaii

Here are some clues that may help you find a name for this new, prospect-pleasing siding made with special X-90 fibre formula:

extra-wide exposure—
deep, attractive
shadow line
(size 12" wide up to 16' long)



two identical edges—
cuts waste



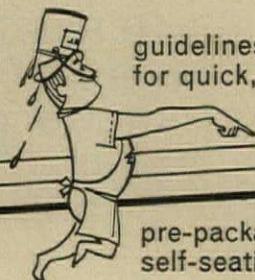
excellent weatherability—
superior stability

prime-coated and back-sealed

super-smooth surface
won't check,
splinter or split—
takes and holds paint beautifully



guidelines top and bottom
for quick, accurate alignment



pre-packaged with rust-proof,
self-seating nails

*just
name
this
all-new*

MASONITE
"X"-Siding!

with exclusive X-90 wood fibre formula

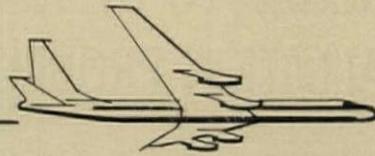
All you have to do is name this all-new Masonite "X"-Siding to win a trip for two to Hawaii! Actually, you can win two ways:

1. name it and win a free vacation;
2. use it on your new homes for terrific sales appeal. Get the full details on this exciting contest from your lumber dealer or Masonite representative today. Use "X"-Siding now—name it while you nail it!

"X"-Siding is another quality hard-board product of Masonite research.



you?



a FREE TRIP to HAWAII for TWO!

OTHER PRIZES, TOO! *You don't have to be top winner to earn a prize! Just look at these enviable awards for the ten best entries:*

1. Hawaiian Trip—
Bonus of \$250.00 expense money if winning builder uses "X"-Siding on 1 or more homes
2. Motorola "Declaration" 3 Channel Stereophonic Console with FM/AM Radio
3. Magnavox "International Modern" 23" Television Console
4. Philco "The Concerto" Custom Stereophonic High-Fidelity Console with Convertible Speaker System
5. Zenith "The Plaza" 19" Portable Television
6. Philco "The Music Maker" Portable Stereophonic Phonograph
7. Philco "The Congress" All Transistor Portable Radio
8. Zenith "Royal 710" All Transistor Portable Radio
9. Magnavox "Sportsman" All Transistor Portable Radio
10. Motorola "X19" All Transistor Pocket Portable Radio with Carrying Case



MASONITE CORPORATION

©Masonite Corporation—manufacturer of quality panel products for building and industry.

MASONITE CORPORATION
Dept. HH-10, Box 777, Chicago 90, Illinois
Please send me an entry blank, plus all other collateral material on the Masonite Name the "X"-Siding contest.

Name.....
 Firm.....
 Address.....
 City..... State.....
 Zone..... County.....



AT LAST! A THROUGH-THE-WALL AIR CONDITIONER

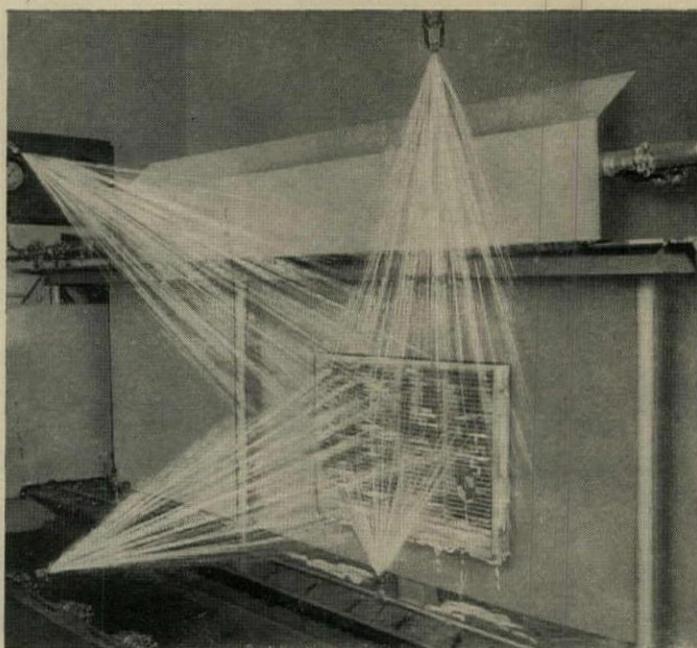
NEW WIND 'N WATER BARRIER SLEEVE DESIGNED TO OVERCOME WALL INSTALLATION PROBLEMS

It takes more than good workmanship to install equipment that must be open to the weather on one side...and to living areas on the other...in the wall of a building. Wind and rain and all the unforeseen extremes of weather that will occur during the lifetime of a building, will circumvent the most painstaking installation procedures. Real protection from wind and water can be achieved only in the basic engineering design of the equipment itself. That's where you'll find it in the new WIND 'N WATER BARRIER sleeve which Fedders has just perfected for its through-the-wall air conditioners.

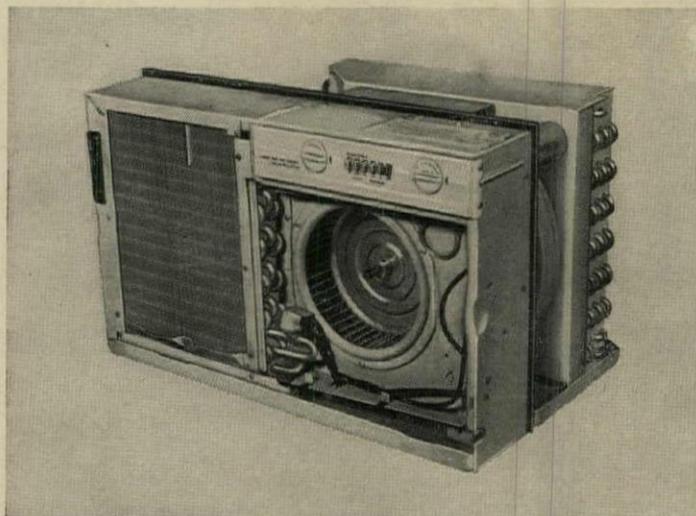
PROTECTION AGAINST WATER: Perfect side-to-side and front-to-back leveling of the air conditioner chassis, which is so necessary for proper drainage of condensate and infiltrated rain, is assured by two chassis levelers built into the new sleeve. In addition to the sump and water disposal systems in the chassis base pan, the new sleeve incorporates its own overflow drainage system—a wall-to-wall water barrier that leads overflow water through cleanable drainage channels to the outdoors. Under Fedders' brutal Wind 'N Water test (see illustration), this newly engineered system disposed of every drop of water. Even water introduced into the indoor grille to simulate extreme humidity conditions, was completely expelled.

PROTECTION AGAINST WIND: Three flexible rubber gaskets, built into Fedders' Wall-Fit chassis as an integral part, hug the sides and top of the sleeve. A similar gasket on the bottom of the sleeve seals out wind on the fourth side. Metal seals on the decorative indoor grille provide additional protection from drafts. Even the small amount of wind that can infiltrate through the drainage outlet holes is diverted and rendered harmless through widely spaced ports. Temporary front and rear sealer plates are provided as standard equipment to prevent drafts before the chassis is installed.

When you specify Fedders Wall-Fit Air Conditioners, this step-by-step engineering solution to through-the-wall installation problems ends water damage and wind leakage in your new building.



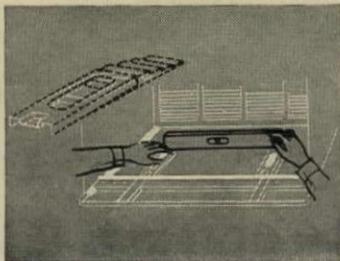
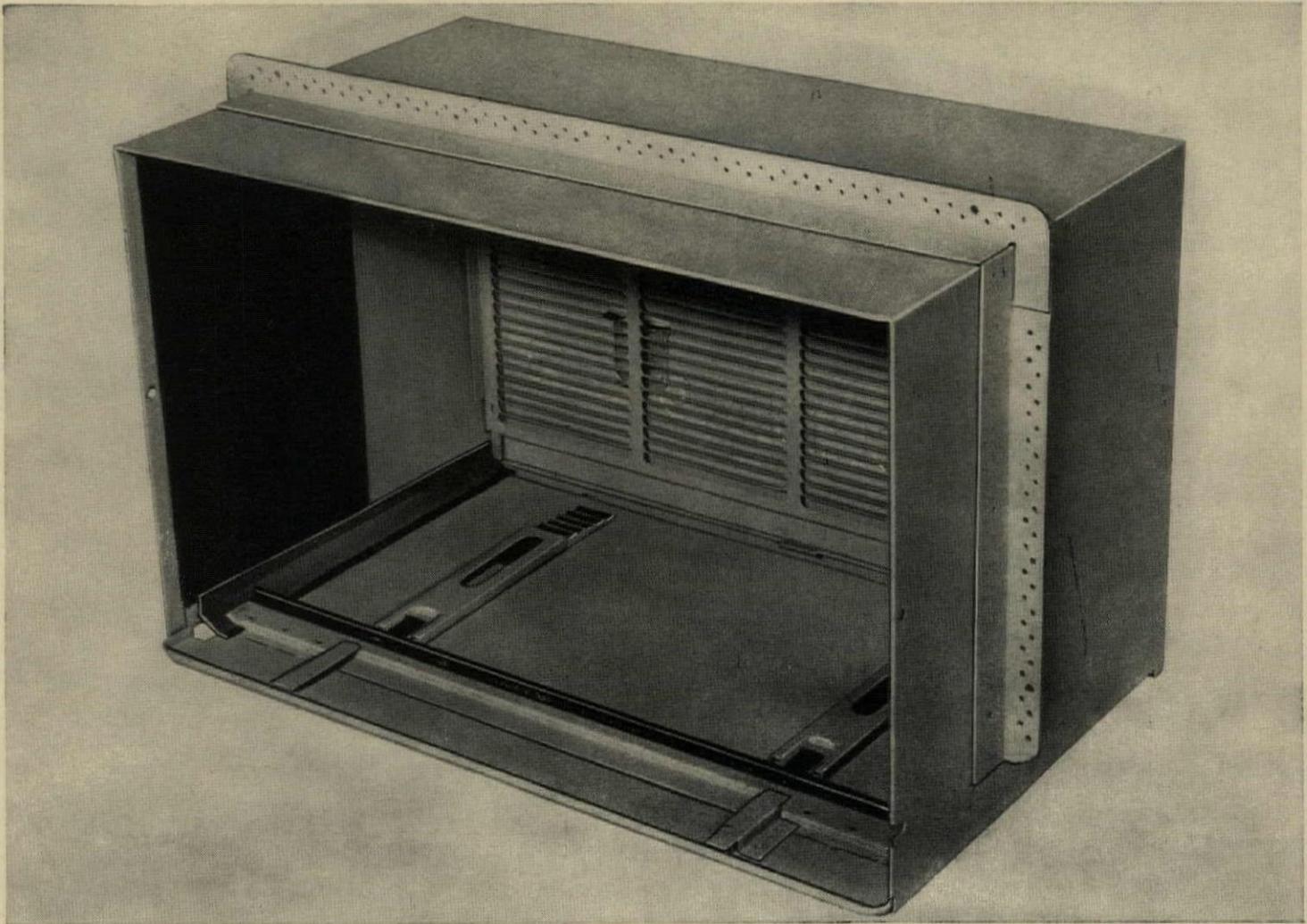
AMAZING WIND 'N WATER TEST: In a special test chamber, the equivalent of 15 inches of rain was driven from all directions against the outdoor louvers of the Wall-Fit sleeve...with gale force of 50-mile winds. Hour after hour, the brutal test went on. Results—no moisture leakage indoors or into walls.



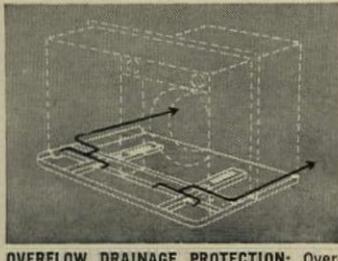
MODELS FOR EVERY REQUIREMENT: To meet the special requirement for efficient through-the-wall air conditioning which makeshift window air conditioners cannot cope with, Fedders builds 20 different Wall-Fit Air Conditioners. Models that heat as well as cool...models for every size room...for every type of current...for every type of wall construction.

FEDDERS

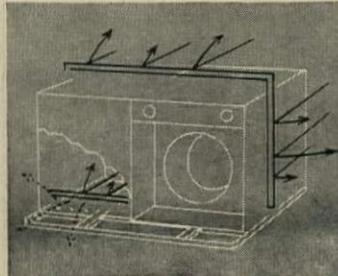
SPECIALLY ENGINEERED TO KEEP OUT THE WEATHER!



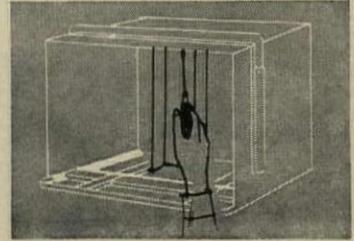
EXCLUSIVE CHASSIS LEVELERS: For perfect chassis alignment necessary for good drainage, two built-in leveling devices in the sleeve permit adjustment side-to-side and front-to-back in increments of .06 inch.



OVERFLOW DRAINAGE PROTECTION: Overflow from chassis drainage system moves through special channels to well at bottom rear of outdoor louvre. Overflow condensate is trapped inside leading edge of sleeve which extends beyond chassis underneath the front grille.



TRIPLE WIND BARRIER: Gasketing on chassis and bottom of sleeve, seals off drafts on all four sides. Wind infiltrating through drainage holes is diverted and dispersed through separate ports.



FOUR SQUARE STRUT: Heavy metal structural member supports top of sleeve at point of greatest stress during construction. Removable in minutes before installation of the chassis, it assures tight but smooth fit. Eliminates possibility of leakage through warped sleeves.

WALL-FIT AIR CONDITIONERS

FEDDERS CORPORATION DEPT. HH-10, MASPETH 78, NEW YORK

Please send full details on Fedders Wall-Fit Air Conditioners, including architect's specifications ; Have representative call

NAME _____

FIRM _____

ADDRESS _____

STREET _____

CITY _____

COUNTY _____

STATE _____

3 problems in 2-STORY MOTELS: Fire-Proofing, Noise-Control, Space Savings...and 3 practical Gold Bond solutions!

Architects and owners of two-story motels know how difficult it is to make effective use of living space and still keep control of noise between units. Here are three special Gold Bond Construction Systems that protect the motel guest from noise next door and increase usable living space with good fire protection. Save this ad for handy reference on your next motel job. For complete structural details see your Gold Bond® Representative or write Dept. HH-1060 for free samples and literature.

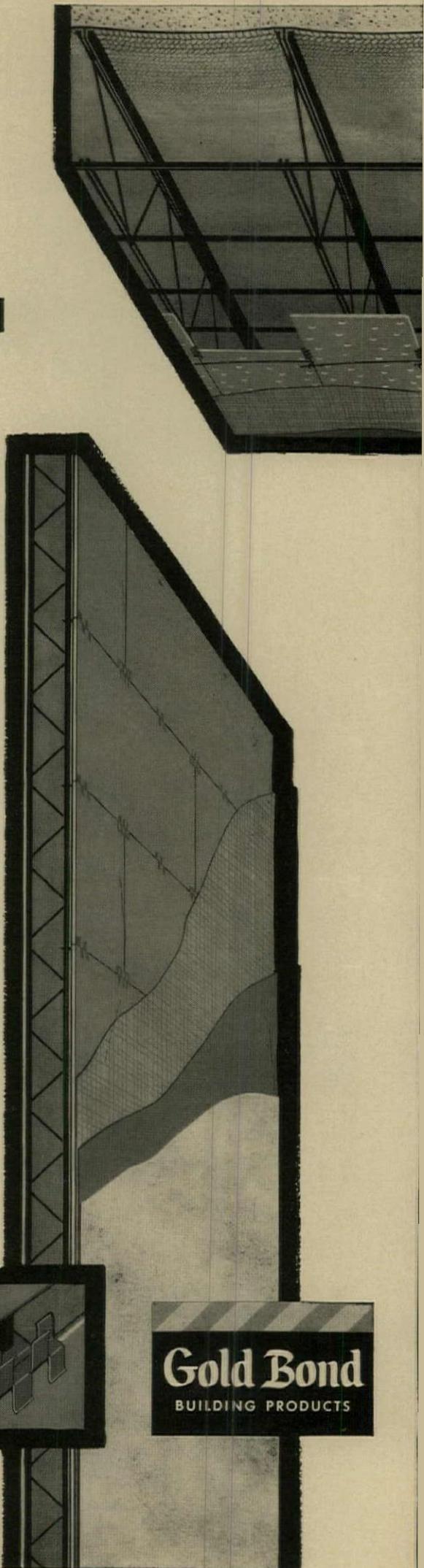
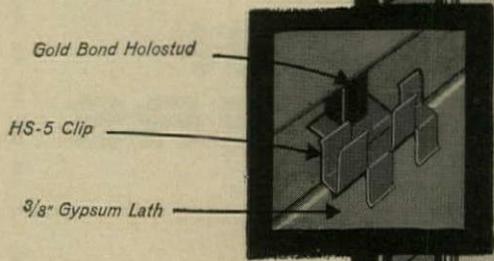
NATIONAL GYPSUM COMPANY, BUFFALO 13, NEW YORK

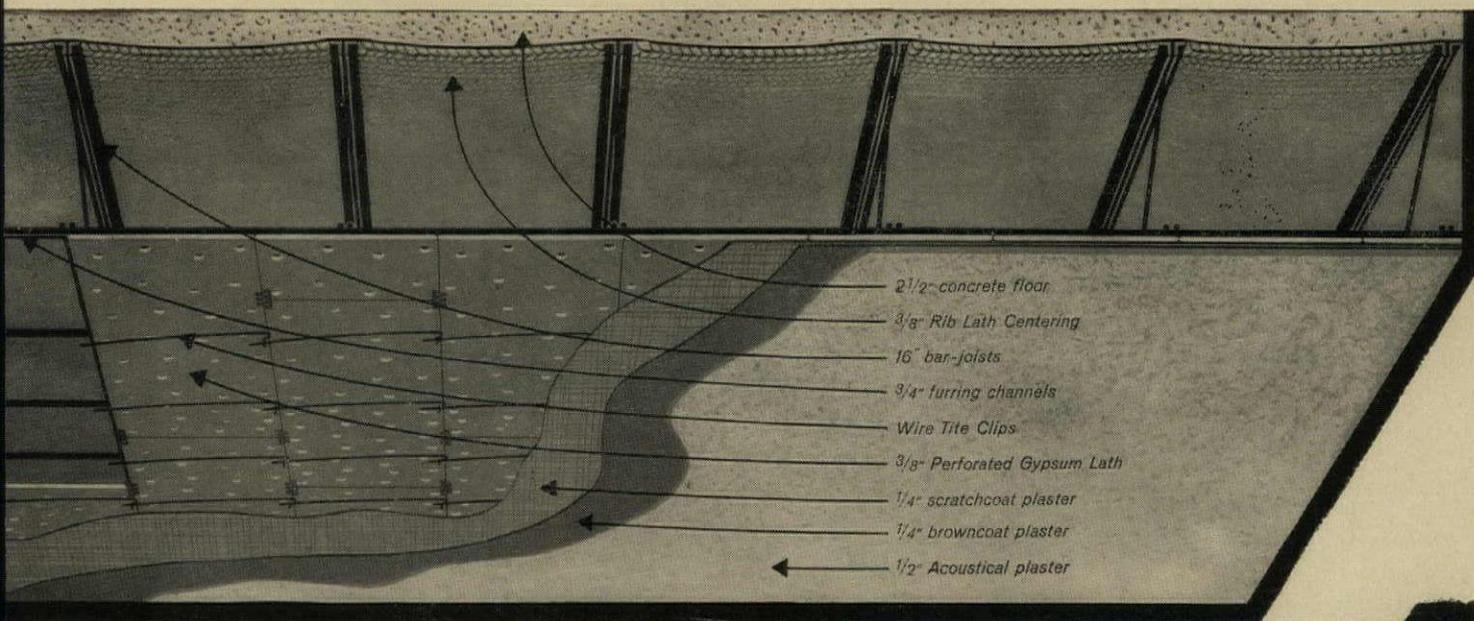
PROBLEM: NOISE BETWEEN UNITS

SOLUTION: GOLD BOND HOLOSTUD, RESILIENT CLIPS, LATH AND SANDED PLASTER PARTITION



This non-load-bearing Holostud® Partition is a superior isolator of inter-unit noise. Gold Bond Gypsum Lath is attached with resilient clips which hold the lath from the Holostuds, reducing sound transmission and minimizing plaster cracking. Recognized Laboratory Sound Transmission Loss Rating Average is 46 db. Large open spaces in studs leave plenty of room for plumbing and other utilities. This system has a 1-hour fire rating.





PROBLEM: FIRE-PROOFING

SOLUTION: GOLD BOND WIRE-TITE CEILING, GYPSUM LATH, GYPSOLITE PLASTER AND ACOUSTICAL PLASTER

This unique Gold Bond Ceiling System combines excellent fire rating (1 to 4 hr. fire endurance) with acoustical treatment. All at low cost. Perforated Gypsum Lath is attached to furring channels with Gold Bond Wire-Tite Clips. Gold Bond Sprayolite Acoustical Plaster adds an acoustical NRC of .60. Structural system consists of bar-joists and concrete floor with Rib Lath Centering.

PROBLEM: INCREASE USABLE LIVING SPACE

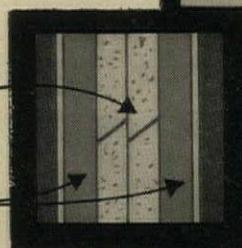
SOLUTION: GOLD BOND 2" SOLID LATH & PLASTER PARTITION WITH 1" CORE



This non-load-bearing, structurally strong, space saving partition system (only 2" thick) increases floor area by approximately 1 sq. ft. for every 4 lineal ft. of partition compared to conventional construction. Partition has a one-hour Fire Endurance Rating and adequate Sound Transmission Loss (approx. 37 db). No bracing is required up to 8 ft. This speeds erection and reduces in-place partition costs.

Gold Bond 1" patented interlocking gypsum lath core

Gold Bond 1/2" gypsum sanded plaster each side



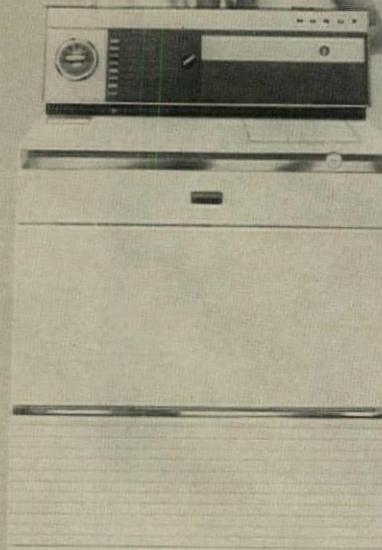
NO OTHER GAS DRYER HANDLES ALL OF TODAY'S DRYING JOBS!



What Buyers of Norge-equipped Homes Tell Their Friends:

ONLY NORGE GAS DRYERS HAVE ALL 4 WAYS OF DRYING

- 1 Tumble-dry with heat
- 2 Tumble-dry with air
- 3 Heat-dry, no tumble
- 4 Air-dry, no tumble



Nylons, cashmeres, all of today's most delicate fabrics—Norge dries every washable beautifully.

ONLY NORGE GAS DRYERS

have two extra no-tumble cycles for the many things that dare not be tumbled

This is a great selling story to every woman who does her own laundry. Norge makes her entire job easier and faster because Norge alone, of all dryers, dries or air-fluffs the most fragile pieces—even furs! There's much less ironing, too, because wash 'n wears dry practically wrinkle-free. Install Norge—and let Norge help you sell.

5-YEAR WRITTEN WARRANTY
on all Norge Dryers—1-year motor warranty

NORGE...the only complete line of gas kitchen and laundry appliances!

- Ice-maker Never-D-Frost Gas Refrigerators
- Built-in and free-standing Ranges • Dryers
- Washer-Dryer Combinations • Water Heaters

EXCLUSIVE 3-POSITION HAMPER-DOR



PARTLY OPEN
it's a clothes chute



HALF-WAY OPEN
it's a sort 'n stack shelf



ALL THE WAY DOWN
for basket-loading



Distributed in Canada by Moffats, Ltd., Weston, Ontario

Letters

Licensing remodelers

In the article "Push for Remodeler Licensing Grows" (NEWS, Aug) . . . you certainly covered a tremendous subject in a few short words! You will no doubt want to elaborate further on this.

NERSICA is the oldest (est 1933) and largest national association devoted to the interest of the home improvement contractors and to the public. The association's primary objective is to raise the ethical standards of the industry and to protect the trade from unjust, burdensome legislation and regulations along with advocating beneficial laws.

RICHARD R. WHITE, *field secretary*
NERSICA Inc
New York City.

Land issue

The issue [Aug] was a superb contribution on an important topic.

STEPHEN SUSSNA, *planning & zoning consultant*
Trenton, N.J.

We have heard many fine comments about this editorial and although we may disagree with some of the theoretical conclusions, nevertheless, it is one of the finest reporting jobs on the major problem facing our industry that we have seen.

ROBERT S. HUNT, *exec vice president*
Building Contractors Assn
Los Angeles.

Your issue bringing up to date the body of information on land, its problems and potentials, deserves hearty congratulations.

HENRY S. BINKERS, *chief planner*
Boston City Planning Department

It is a wonderful article and should be disseminated to our local legislators.

JACK STRUBEL, *executive director*
Hawaii HBA

You are to be congratulated on your August issue. It is excellent and worthy of being required reading for every builder

W. DEWEY KENNEL, *builder-designer*
Sarasota, Fla.

I had been looking forward to the August issue and I wasn't disappointed. Your treatment of land is by all odds the best yet—timely, provocative, and enlightening. You covered the subject in depth. I should like a desk copy and three or four to put on reading reserve for my classes. Congratulations on a job well done.

CLYDE BROWNING, *assistant professor*
School of Business Administration
University of Oregon.

One of the greatest jobs ever performed.

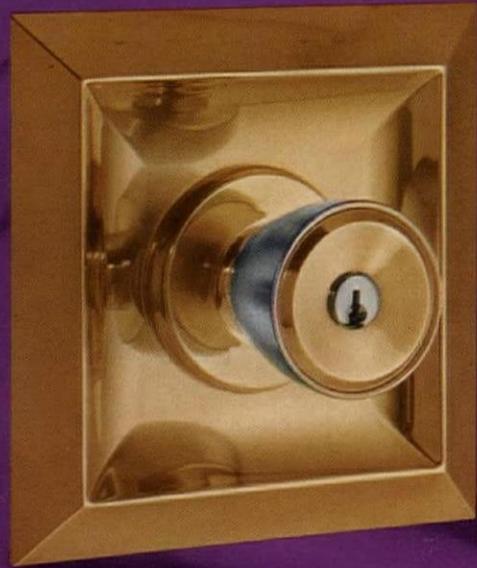
JAMES W. PEARSON, *exec vice president*
Washington D.C. HBA

I hope we are not too late in getting in our order for 25. It is a very worthwhile and timely article.

CHARLES A. TAYLOR, *exec vice president*
Building Contractors Assn
San Diego.

All our members who are subscribers have been most favorably impressed by the issue. It was discussed at some length at our recent Board of Directors meeting.

M.C. HORNER, *executive director*
Tidewater (Va.) Assn of Homebuilders



THE FINEST COSTS SO LITTLE

When you consider the small difference in cost between so-called economy locks and finest quality Weiser, it becomes obvious that it is false economy to use anything but the best. Weiser manufactures one quality only...the finest. With Weiser, there is no quality compromise for the sake of a few pennies in price.

WEISER LOCKS

WEISER COMPANY • SOUTH GATE, CALIFORNIA



THIS SEAL IS YOUR ASSURANCE OF CENTRAL AIR-CONDITIONING PERFORMANCE



Here's how to be certain that the air-conditioning equipment you install in your new homes will satisfy your buyers:

Make sure it bears the ARI Seal of Certification. This Seal is the symbol of an industry-wide program of testing, rating and certification supported by 51 manufacturers who produce more than 90% of all central air-conditioning equipment sold.

NEW SAFEGUARD FOR HOME BUILDERS: To be granted this Seal by the Air-Conditioning and Refrigeration Institute, these manufacturers have agreed to rate their equipment by one uniform standard, in Btu per hour—misleading terms such as “tons” and “horsepower” have been dropped. This rated capacity is subject to checking and verification in an independent testing laboratory under adverse conditions, with emphasis on wilting heat and high humidity. Any model failing to deliver rated capacity must be brought up to standard or be withdrawn from sale.

WHAT DOES THIS MEAN TO YOU? When you install ARI-certified central air-conditioning equipment in your new homes, you can have complete confidence in its performance. Simply look for the ARI Seal: It assures you of flexible design, laboratory ratings, reliable performance and the best chance for complete customer satisfaction.

Consult your local air-conditioning contractor and specify equipment bearing the ARI Seal of Certification in the next homes you build.

For free explanatory booklet and Directory of participating manufacturers, write to: Chief Engineer, Dept. R-1003, Air-Conditioning and Refrigeration Institute, 1346 Connecticut Ave., N. W., Washington, D. C.

Manufacturers participating in this program as of July 1, 1960: Airtemp Division, Chrysler Corporation • Amana Refrigeration, Inc. • American Furnace Company • American-Standard Industrial Division, American Radiator and Standard Sanitary Corporation • Arkla Air Conditioning Corporation • Armstrong Furnace Company, Division of National Union Electric Corporation • Bryant Manufacturing Company • Carrier Corporation • Cleveland Steel Products Corporation, Toridheet Division • Cobell Industries Incorporated • Coolerator Division, McGraw-Edison Company • Crane Co. • Curtis Manufacturing Company • Day & Night Manufacturing Company • Florida Warren Corporation • Fraser & Johnston Company • Friedrich Refrigerators, Incorporated • Gaffers & Sattler • General Electric Company • Goettl Bros. Metal Products Inc. • Holly-General Company, Division of The Siegler Corporation • International Metal Products Division, McGraw-Edison Company • Janitrol Heating and Air Conditioning, Division of Midland-Ross Corporation • John Zink Company • Laurel Products, Inc. • Lennox Industries Incorporated • Lincoln Air Control Products, Inc. • The Mathes Company, Division of Glen Alden Corporation • Miami Products Incorporated • Mission Appliance Corporation • Mueller Climatrol, Division of Worthington Corporation • National Thermatic Corporation • The Payne Company • Peerless Corporation • Perfection Division, Hupp Corporation • Pioneer Industries, Division of Almar York Co., Inc. • Rheem Manufacturing Company • Round Oak Division of Peerless Corporation • Southwest Manufacturing Company • Stewart-Warner Corporation • Therm-Air Manufacturing Company • The Trane Company • Typhoon Air Conditioning Division, Hupp Corporation • United States Air Conditioning Corporation • Welbilt Air Conditioning and Heating Corp. • Westinghouse Electric Corporation • Williams Oil-O-Matic Heating Company • Worthington Corporation • Wright-Temp Manufacturing Company, Inc. • York Corporation

According to the FHA: “Within a few years, any house that is not air conditioned will probably be obsolescent.” In many areas, air conditioning is already as important as central heat. It provides more than comfort: central air conditioning makes any home cleaner and healthier, helps cut laundry and house-

cleaning bills. It silently suggests that the builder has omitted nothing to provide the finest home for the money. As the FHA suggests, central air conditioning will add increased resale value to your homes—a persuasive selling feature for your prospects.

OCTOBER 1960

House & Home

Published by TIME Incorporated

EDITOR-IN-CHIEF HENRY R. LUCE
CHAIRMAN, EXECUTIVE COMMITTEE ROY E. LARSEN

CHAIRMAN OF THE BOARD ANDREW HEISKELL
PRESIDENT JAMES A. LINEN
EDITORIAL DIRECTOR HEDLEY DONOVAN
ASSISTANT DIRECTOR ALBERT L. FURTH

EDITOR & PUBLISHER

P. I. Prentice

MANAGING EDITOR

Robert W. Chastaney Jr

EXECUTIVE EDITOR

Carl Norcross

ASSISTANT MANAGING EDITORS

Gurney Breckenfeld

John F. Goldsmith

Walter F. Wagner Jr

ASSISTANT EXECUTIVE EDITOR

Edward Birkner

ART DIRECTOR

Jan V. White

ASSOCIATES

James P. Gallagher, John L. Gerfin

Maxwell C. Huntoon Jr

David R. Kerr, Robert W. Murray Jr

Richard W. O'Neill

Richard Saunders (Washington)

Natalie F. Siegel, Clifford S. Smith

ASSISTANTS

Joan D. Finch, Marcia Frank

Cecile G. Steinberg, Olive F. Taylor

Jenepher Walker, Cornelia Wooldridge

CONSULTANTS

Carl Boester, Miles L. Colean, FAIA

Thomas P. Coogan, Ruth Goodhue

James T. Lendrum, AIA

Leonard Haeger, AIA, David C. Slipher

BUSINESS MANAGER

Lawrence W. Mester

CIRCULATION MANAGER

John E. Pflieger

ASSISTANT TO THE PUBLISHER

Walter R. Browder

DIRECTOR OF MARKETING

Arthur S. Goldman

ADVERTISING DIRECTOR

Richard N. Jones



Volume XVIII, No. 4

HOUSE & HOME is published monthly by TIME INC., Time & Life Building, Rockefeller Center, New York 20, N. Y. Yearly subscription payable in advance. To individual or firms (and their employees) engaged in building—design, construction, finance, realty; material distribution, production or manufacture; government agencies and supervisory employes; teachers and students of architecture and trade associations connected with the building industry; advertisers and publishers: U.S.A., Possessions, Canada, \$6.00; elsewhere, \$9.50. Single copies, if available, \$1. All copies mailed flat. Please address all subscription correspondence to **HOUSE & HOME**, Time & Life Building, Rockefeller Center, New York 20, N. Y. When ordering change of address, please name the magazine and furnish an address label from a recent wrapper, or state exactly how the magazine is addressed. Both the old and the new address are required. Allow four weeks for the change. © 1960 by TIME INC. All rights reserved.

TIME INC. also publishes **TIME**, **LIFE**, **FORTUNE**, **SPORTS ILLUSTRATED** and **ARCHITECTURAL FORUM**. Chairman of the Board, Andrew Heiskell; Chairman, Executive Committee, Roy E. Larsen; Chairman, Finance Committee, Charles L. Stillman; President, James A. Linen; Executive Vice President and Treasurer, D. W. Brumbaugh; Senior Vice President, Howard Black; Vice President and Secretary, Bernard Barnes; Vice Presidents, Edgar R. Baker, Clay Buckhout, Arnold W. Carlson, Allen Grover, C. D. Jackson, J. Edward King, Arthur R. Murphy, Ralph D. Paine, Jr., P. I. Prentice, Weston C. Pullen, Jr.; Comptroller and Assistant Secretary, John F. Harvey; Assistant Treasurer, W. G. Davis; Assistant Comptroller and Assistant Secretary, Charles L. Gleason, Jr.

APARTMENTS

- 90 *Building good new apartments is the best way anyone with money can make more money*
- 99 *Checklist to help you study your proposed apartment site*
- 100 *Today's good new apartments: what makes them good?*
- 114f *How to make money building apartment houses—and how to keep most of it after taxes*

LANDSCAPING

- 122 *How to transplant big trees—and give your new development the ten-year-old look on opening day*

INDUSTRY FORECAST

- 130 *1961 will be a big year for housing, reports Economist Miles Colean*

GAS IN TOMORROW'S HOUSE

- 133 *The comeback of gas*
- 134 *Round Table report on the use of gas in tomorrow's house*
- 140 *How gas utilities are helping new-house builders sell*
- 153 *Four all-gas houses*

NEW WAYS TO BUILD BETTER

- 159 *Index*
- 188 *New concrete could slash wall construction costs*
- 197 *Look how far you can go with built-ins*
- 218 *Look what's new in gas appliances*
- 284 *Reviews of technical literature*

NEWS

- New law promises to spur mortgage investment trusts*
- Mortgage money outlook: cheaper in the winter*
- NLRB's astonishing ruling in the Kohler strike*
- 43 *Index to these and other News reports*

DEPARTMENTS

- 78 *Letters to the editor*
- 290 *Advertising index*

COVER

Drawing from a proposal by Architects Angus McSweeney, Donald Beach Kirby, and Loubet & Glynn for San Francisco's Golden Gateway project sponsored by Utah Construction & Mining Co and C. Beck Co.

COMING NEXT MONTH

61 houses for '61



Building good new apartments is just about the best and easiest way anyone with money can make more money

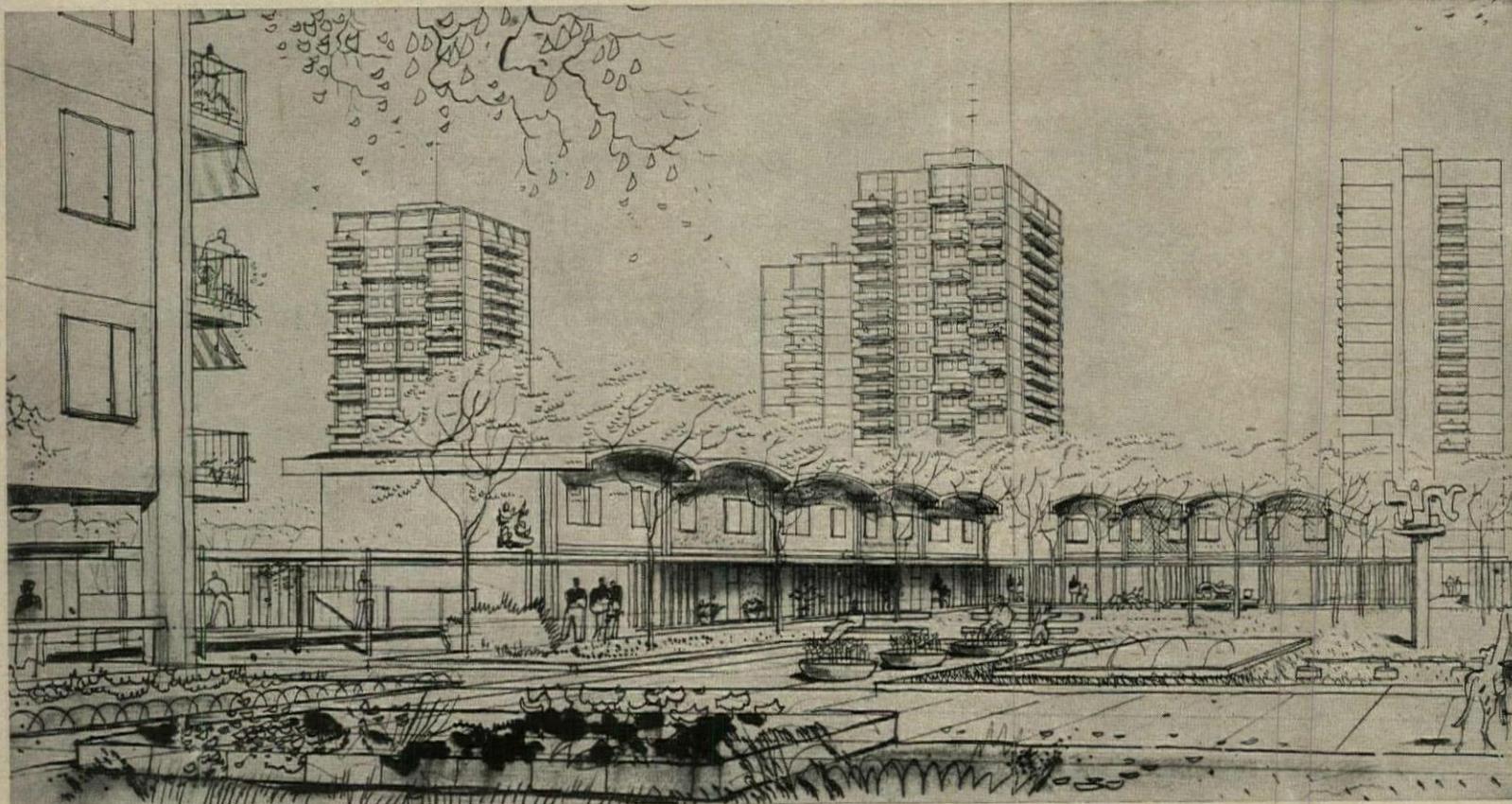
because . . .

- 1 The market for good new apartments is growing even faster than the market for good new houses;
- 2 There are so many good new ways to make new apartments more livable and more rentable than yesterday's apartments;
- 3 There is nothing to stop tenants in yesterday's apartments from moving whenever they can find something they like better. Most tenants can move any time they like, and most of them do. The average tenant stays put for less than three years;
- 4 Apartments should cost much less per sq ft to build and much less per unit for land;
- 5 Apartments for rent get a much better tax break than houses for sale.

but Building anything but a really good new apartment is a very risky business. It can prove the quickest and easiest way to send your money down the drain, because . . .

You will start losing tenants as soon as somebody else offers something better. Mediocre apartments will be sitting ducks as soon as supply catches up with demand in the rental market. You can see this happening wherever the rental shortage has been eased. You will see it in more towns next year and still more towns the year after. Better apartments will always siphon tenants out of less desirable units, leaving their owners stuck with high vacancies to face decelerating depreciation and accelerating amortization.

Last year, HOUSE & HOME warned its subscribers to build their apartments to live like the best houses if they wanted the apartments to rent and stay rented. Since then there has been a real revolution in apartment planning and design. Many of the apartments built in the last twelve months are far more livable and far more homelike than any apartments ever before built in quantity. And the market is eating these good new apartments up.



PRIZE-WINNING DESIGN for San Francisco's urban renewal project combines low- and high-rise. Architects: Wurster, Bernardi & Emmons; DeMars & Reay.

The demand for apartments is almost sure to grow because . . .

1. The number of people who normally live in apartments is growing at a faster rate than the nation as a whole

For the next ten years, the number of young people who can't yet afford houses and older people who no longer need houses will grow faster than the number of people in the home-buying, family-raising ages. According to Economist Miles Colean, by 1970 we will have six million more "war babies" in the 20 to 24 year bracket, and seven million more people 55 years old and over. By 1970, these two groups will make up 13% more of the total population than they do today. (See Colean's 1961 forecast, p 130.)

2. People are moving back to the city, where apartments are almost the only kind of housing that can be built

"We are cashing in on the flight from suburbia," says L. F. Niles of Boston's Niles Realty Co. "Older people are fleeing the responsibility of lawns that need mowing, snow that needs shoveling, and old furnaces that break down."

Adds Stephen G. Cohn, president of Chicago's Greenbaum Mortgage Co, "There is a distinct trend back to the city by middle-aged couples whose families are grown. "These are the best candidates for the new middle- and upper-income apartments along the city's lakefront." And John L. Waner, Chicago FHA director, adds: "In one such apartment, 30% of the tenants came from the suburbs."

This trend towards recentralization is making a strong impact on the vacancy rates in some areas. In Buffalo, some suburban apartments are having trouble holding tenants in competition with newer apartments closer in. And in Sacramento, a builder reports that "far-out apartments are being clobbered by units recently built closer to the center of town."

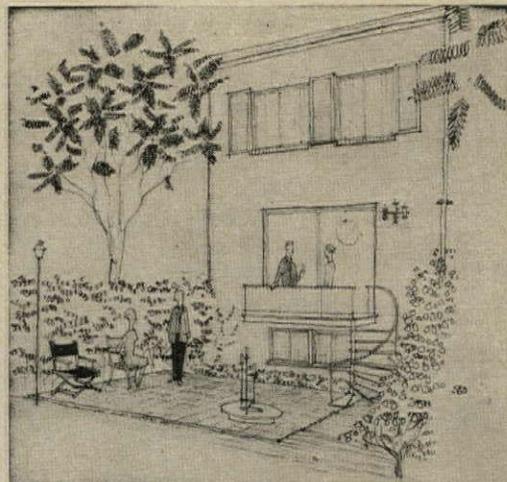
3. Nearly six million housing units, mostly apartments, are hardly fit for habitation and should be replaced

According to the Census Bureau, nearly 30% of all today's apartments are dilapidated or lack a private inside bath. The replacement of these substandard (to say the least) units should be a primary aim. Yet the US, with a population expansion of three million a year is building only about 200,000 apartments a year. (England, with an annual population expansion of only 200,000, is building apartments at close to a 75,000-per-year rate so that its substandard units can be replaced.)

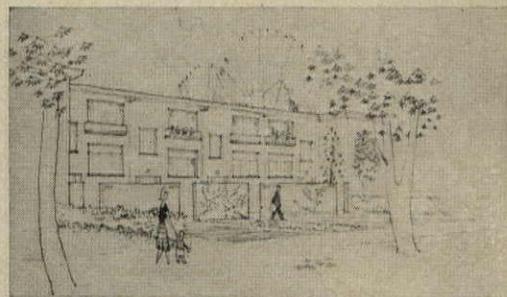
All these pressures will almost certainly produce a big growth in apartment construction over the next decade. Economist Colean expects the apartment portion of the total housing market to rise from 15% now to 20% in 1965 and to a whopping 25% in 1970. This means some three million new apartments would be built in the next ten years. But it does not mean that just any apartment will be a sound investment. On the contrary . . .



LUXURY APARTMENTS (Willow Creek) in Palo Alto rent as fast as tenants sell their old houses.



REAR TERRACE and balcony are open to garden at Capitol Park, Washington. Architects: Satterlee & Smith.



FRONT TERRACES at Capitol Park are behind walls.

The best and only sure way to make money in this market is to build the very best new apartments you can, because . . .

1. Really good apartments are still hard to find almost everywhere

"There's always a need for really good new apartments—particularly ones that are well located," says a Bank of America official in San Francisco. "We'll always have financing available for that kind of apartment."

In Los Angeles, where high vacancies are becoming a serious problem, Architect Carl Maston (who both designs and owns apartment buildings) says, "I don't think there are any really good apartments vacant. Those with something to offer are always filled up. The really good old timers are holding their own too."

In virtually every market across the country (see p 96) the report is the same: full houses and waiting lists for well planned, well equipped apartments, especially those in the middle and upper rental brackets.

2. People are no longer looking for shelter—they want the kind of living possible in really good apartments

"Mere living space is not the answer any more," says Atlanta Builder Lewis Cenker. "Present day apartment dwellers want all the luxury and all the extras they can get."

What features do tenants want? "Location is still number

one," says Robert Harrison, vice president of Henry G. Beaumont Co, a Los Angeles building management company. "But beyond that people want a swimming pool and air conditioning. And they want good kitchens, large rooms, and large closets. It's the woman who usually decides on the apartments, and she looks at the kitchen and closets first. The higher the rental, the more important these things are."

And Dallas Builder Leo Corrigan adds, "No one I know of is building apartments without pools or air conditioning. They're just as important as bathrooms and telephones."

A striking example of the need for extras is offered by Valley View Apartments, owned by Martin L. Adams & Son of Louisville. This is a cluster of four-unit buildings, with 56 apartments in the \$85 to \$90 a month range, and it was built without a swimming pool.

"Our vacancies were running close to 30 per cent at the start of this year," says Joshua Adams. "So we put in a swimming pool (it opened about June 1) and now we have a waiting list. From now on, anything we build will have recreation facilities."

For a detailed look at the features of today's fastest-renting new apartments, see p 100.

3. People have the money to pay higher rents, and they will spend it to get a really good apartment

"People have a wide choice of apartment rentals today," says Realtor Edward N. Adourian, of Philadelphia. "And

continued

although the rents in the good new apartment buildings are higher, we find a lot of people willing to pay these higher rents." (A survey of apartments considered "luxury types" in Philadelphia shows that the majority of tenants have incomes below \$10,000 a year, and that a third of them make less than \$6,000.)

Says San Francisco Builder Clarence E. Minnerly: "People here don't want an apartment just as a temporary place to hang their hat. They want the advantage of a permanent home without the responsibility of a permanent home. And they're willing to pay as much or more than homeowners to get what they want."

"We find that a lot of single people, who really need only efficiency apartments, are taking one-bedroom apartments just for the added comfort," says Gerrold Wexler, partner in the Chicago real estate firm of George S. Lurie & Co. "They are perfectly willing to pay the increased rent."

4.

The rental market is fluid; tenants can and will move as soon as someone offers them a better apartment

"We see many vacancies in apartments built seven or eight years ago which were once filled," says Building Management Executive Robert Harrison of Los Angeles. "New apartments with desirable features like wall-to-wall carpets, drapes, private patios, etc. are drawing tenants out of older buildings which offer none of these things."

In Philadelphia, District FHA Director William A. Kelley made a study of the tenants moving into Park Towne Place and Ambassador Towne House, two big new luxury apartments. He found that half the tenants came from other apartments, mostly older mid-city units built in the 1920s.

"People are constantly looking for something more and

better for their money," says Jack Garner, assistant vice president of Houston's T. J. Bettes Co. "If you give them a better new apartment, they'll move to it, leaving their old apartment behind and vacant."

5.

In some rent ranges, mediocre apartments will be hurt by new house competition when financing costs drop

Says Builder Lewis Censer of Atlanta: "This is particularly true in lower-price rentals. As soon as money eases so houses can be financed with almost no points, a lot of my lower-rent apartments will start to empty." J. D. Carringer, vice president of Fidelity Bankers Trust Co of Knoxville, agrees: "Rentals have not been as good in older apartments as in new ones. Old apartments are competing with homes that people can buy without paying anything down."

Apartment Builder Arthur Radice of White Plains, N. Y., finds the toughest competition from houses in the middle rental range. "We can rent all the apartments we have under \$35 a room," says Radice, "and also those over \$50 a room. But in the ranges between we get the rising young executive, and he usually wants a house. He's hard to hold."

In Philadelphia, low-priced rowhouses are a big inducement to the young family. "They give apartments rough competition," says William Clarke, president of the Wm. A. Clarke Mortgage Co. "When a buyer can get a good six-room house with everything he needs for \$85 a month, why should he pay \$125 a month for just three or four rooms?"

And says Karl H. Smith of Smith-Bisschop, Detroit property managers, "You must make your apartments attractive. Remember, people can go out and buy a house for \$500 down. You've got to compete with that."

So . . . although even mediocre apartments are still full in some markets today, it just doesn't make sense to build them. As soon and as fast as the supply of good new apartments catches up with demand, the mediocre apartments will be in trouble. Their owners will lose their tenants and lose their shirts.



THIS MEDIOCRE APARTMENT in Los Angeles has continuous 10% vacancy rate—much higher than city average.



THIS GOOD APARTMENT in Los Angeles has no vacancies. Its good location, off-street parking,

private patios and balconies, and big rooms attract and keep tenants. Architect: Carl Maston.

Don't worry too much about high vacancy rates until you know what is vacant and why because . . .

1. In most cities, the vacant apartments are poorly located and lack distinction

"We call these 'mine-run apartments,'" says Jim Downs, chairman of the Real Estate Research Corp, Chicago. "They are built in an area simply because that area is zoned for apartments, or perhaps because the builder had a piece of land and didn't know what else to do with it. Well located suburban apartments are doing well, and we think that 're-centralization luxury apartments' close in to cities are the most promising market of all. But the 'mine-run' apartment is the first to get in trouble. It's a bad apartment because it's usually in a bad location."

Says William P. Snethen, secretary of the Indianapolis Apartment Owners Assn: "Most of our vacancies are in older buildings in changing neighborhoods, and in older houses converted to apartments during the postwar shortage. These are generally substandard apartments, and they don't hold tenants when something better is available."

And a New Orleans apartment owner says that although the number of vacancies in that city is growing, "the chief losers are the marginal properties—old homes that were divided up into apartments and allowed to deteriorate during the years when anything would rent. Most of the 'apartment for rent' signs are on side streets."

2. In many cities, the vacant apartments are mostly in the lower rent category

In Boston, a city with an acute apartment shortage (see page 96), the only vacancies are in the bottom of the mar-

ket—\$25 to \$35 units being abandoned by young couples who upgrade to a better apartment as soon as they can find one.

In Detroit, a city with a serious vacancy problem, the majority of these vacancies have been in low-rent apartments; a soft market has made better units available for only slightly more rent, and tenants have moved upwards.

"In Atlanta, our hardest hit market is the low-rent market," says Builder Lewis Cenker. "It's too close to low-down payment houses."

And says Management Executive Robert Harrison: "In Los Angeles we have fewer vacancies in the really high-priced luxury rentals than in the less costly brackets."

3. In many cities, high vacancy rates are the result of special local conditions

In Seattle, where Boeing Aircraft production is down, apartment vacancies are up (FHA rate: 10.2%, compared to 3.1% last year).

In Fort Worth, one whole 608 project is empty; it was built with the only plumbing materials available right after the war, and the plumbing has collapsed. This accounts for much of the city's 22.8% FHA vacancy figure.

In California, a long, dry Fall last year extended the building season, so apartment builders, working deep into the winter months, produced too many apartments in some areas.

Special conditions can work the other way too. In Jacksonville, Fla. George Dickerson, vice president of Stockton, Whatley, Davin & Co, reports that vacancies are down, possibly as low as 5%, compared with 15% estimated at the beginning of the year. The reason: the Atlantic Coast Line has just moved its home office to Jacksonville, bringing in some 900 new families.

4. A high apartment-construction rate can create a high (and misleading) vacancy rate

Many new apartments are fully rented on opening day, but between the time they are completed and the time renters move in they show up as vacancies, even though they will be filled in a couple of months.

By the very act of moving into these new apartments, tenants create a vacancy in the apartments they leave. Even though another tenant may move in very soon, a vacancy can be recorded.

Finally, a high construction rate pulls tenants out of marginal apartments, such as converted dwellings, and even though these houses may never be occupied again, they are carried on the books as vacancies for a long time.

5. And since 30% of all apartments are not fit to live in, it would be a good thing if they were vacant

Julianne Warren



HIGH VACANCIES IN CONVERTED HOUSES like this one in Cincinnati distort the overall vacancy rates.

For a market report from 25 cities, turn the page



**Here are
apartment market reports
from 25 cities
(and in almost all,
the good apartments
are renting best)**

ATLANTA

Apartments have boomed but the pendulum seems to have swung too far. Consequently, vacancies are high in almost all categories.

Says C. Buck LeCraw, president of the Southland Investment Corp: "We are staying out of the \$135 to \$200 a month range. It's overbuilt." But LeCraw has a waiting list for his newest two-bedroom apartments with "all the extras," including swimming pool and tennis courts, for a \$107.50 top. Most apartments of this quality rent for around \$140.

"Location is a big factor," says Builder Lewis Cener. "In one apartment we offer two-bedrooms for \$70, have a 10% vacancy. In another, better located unit we have one bedroom for \$80, and no vacancies."

BIRMINGHAM

Apartment construction is down; most being built are garden walk-ups. There seems to be a small surplus, and people are moving out of older units into more modern ones. Location is important; apartments in good neighborhoods, or close to shopping centers, are doing well.

Few apartments are in serious trouble. An exception: apartments in outlying smaller communities, where people are showing their preference for houses.

BOSTON

There is a severe shortage of good apartments here, and little being done about it. Two factors have kept building down: rent control, which only ended in 1956, and real estate taxes, which have run as high as 45% of gross income.

Says A. Donal Deluse, manager of the Real Estate Board's rental-housing division: "About 4,000 units are under construction now (about double last year's rate) but it would take 25,000 units to saturate the market."

Says Banker Robert Morgan: "The lower end of the luxury level—\$85 to \$105—is the easiest to rent."

Says Realtor L. F. Niles: "I'd shoot for the upper-middle income bracket, offer big rooms. You can spruce up apartments over the years, but you can't make them bigger."

Good apartments are full in virtually every price range.

BUFFALO

The demand for apartments is quite high, particularly within the city limits.

"The most profitable kind of apartment to build is definitely the luxury type," says Charles Peacock, president of the Niagara Frontier Builders' Assn. "There's a decided shortage of them."

CHICAGO

The supply is well behind the demand. Vacancies are running about 3%, and mostly in older buildings—some of them 45 years old—in the west part of the city.

Biggest market: luxury apartments along the lake front. "We are returning to the apartment hotel of the twenties,"

says Realtor Gerrold Wexler. "People want all hotel services for their apartments."

Only slow rentals: the top floor of three-story walk-ups. But owners are doing little rent-cutting and rent these units sooner or later anyway.

CINCINNATI

A prospective tenant can be choosy. Vacancy rates are between 5% and 7%, not considered alarming. Rents on older apartments have not dropped, and the big reason for vacancies seems to be the change caused by a major downtown slum-clearance project.

George Turner Jr, whose family operates some 500 apartments, gives this advice: "Get a good location, don't skimp on room and storage space. Build so you don't have to get the top rent dollar, and air condition the entire building."

CLEVELAND

This city is underbuilt and there is little competition to remedy the situation. The result is that mediocre apartments are being built. They are renting today, but they may well be in trouble in a few years. Says one observer, "Cleveland is suffering from a lack of imagination in apartment design. There's a sameness about the ones being built that is terrifying. You can't tell whether they were built in 1945 or 1960."

Furnished efficiency apartments offer a good market. "Somebody's going to do well if he builds efficiencies," says a leading builder.

DALLAS

Apartment construction is booming and vacancies are normal—around 5%. There will be 2,500 to 3,000 units built in Dallas County this year, about half within the city.

"Most will be two-story garden apartments," says FHA Director Ellis Charles, "but there seems also to be a big demand for high rises." There is enough land in Dallas, much of it on former estates, to build a lot of them.

Everyone agrees air conditioning and pools are musts. "They're as important as indoor plumbing," says one builder.

DENVER

Although construction is up almost 50% over a year ago, finding an empty apartment is still hard. The only type with vacancies, according to Phil E. Berg, executive director of the Board of Realtors, is "low class units, many of them in converted houses." Everything else is full.

The reason: Denver is a fast-growing town, boomed by such installations as Martin Aircraft (makers of the Titan missile). No one sees any easing of the tight market soon.

DETROIT

The apartment situation is split into two definite parts: 100% occupancy in the new semi-luxury high-rise units (most of them downtown along the riverfront), and up to

90% vacancy in changing neighborhoods. The average vacancy rate—9%.

Says Dwight Hamborsky, FHA district director: "There is a huge market in luxury high-risers here, and it's demonstrated by the way they're filling up." Co-ops have been most successful, many of them sold out before the buildings are completed.

Some owners of "depressed" older apartments are re-decorating, landscaping, adding new appliances and swimming pools, bringing their projects back to 100% occupancy.

HARTFORD

Apartments are in short supply, and the situation has been worsened by demolition for major urban-renewal projects. Result: apartments with ordinary amenities are renting quickly.

Banker James E. Bent says better apartments are needed but no one is building them now. "There are a few projects with better kitchens, more and bigger rooms, and air conditioning," says Bent. "And before long they should become standard."

HOUSTON

Vacancies are high—around 12%—but are concentrated in older units. The newer the apartment, the more it is in demand. People seem willing to pay higher rents to find something they want.

Says Mortgage Banker Jack Garner of T. J. Bettes Co: "I think the demand will rise. We're going to get lots more people who don't want houses—older people, younger people, and transients."

INDIANAPOLIS

Quiet. There are few vacancies—some estimates are as low as 2%—but construction is slow.

Albert Johnson, FHA director, says he believes there is a good market for new luxury apartments, but other housing leaders in town are skeptical. A sure bet is the efficiency apartment. One 390-unit efficiency project has a constant waiting list, is described by Johnson as "105% occupied."

JACKSONVILLE

Despite a high vacancy rate (reported at 10% to 15% early this year) and a generally soft market, there is a shortage of bigger, higher-priced apartments with two baths, two to three bedrooms.

Says Mortgage Banker George Dickerson: "There are a lot of converted apartments in older houses that are in trouble. They can't compete with new apartments, or with new houses. And new houses are the standard by which apartments here are judged."

LOUISVILLE

Vacancies are relatively low, averaging under 5% and occurring largely in converted houses. Many people feel Louisville is not an apartment town, but it is hard to find a good apartment in a good location.

A recent survey showed a need for 1,500 to 1,800 apart-

continued

ments in the downtown area. Some are already scheduled, including a luxury high rise and one being built by the Methodist Church for elderly persons.

LOS ANGELES

Vacancies are still high—7.2% for the metropolitan area—but appreciably lower than last year's 8.7%. Highest-vacancy areas: West Hollywood, San Fernando Valley.

According to Banker Dan Duggan, a few speculative builders are making concessions to fill their apartments, but most investors are not. "Investors know that this sort of thing seldom gets them the kind of tenant they want," says Duggan.

Furnished apartments seem to be in shorter supply than unfurnished ones. In general, rentals from \$95 to \$150 do well if they're well located. And there is also a good market awaiting the builder who can afford to build luxury units for a maximum of \$500 a month.

MIAMI

The key to renting apartments here is not price, but quality. Modern, well designed apartments with air conditioning, patios and pools are in great demand.

Example: "We took over a 30-unit apartment house two years ago," says Realtor John Basie of the Keyes Co. "Efficiencies rented for \$65 with maid service. We redecorated, recarpeted, built a pool, added air conditioning. Rents are now \$100 with no maid service, and we've raised the occupancy from 50% to 90%."

MILWAUKEE

Starts are up more than 50% over 1959. And although some housing professionals are nervous about overbuilding, vacancies are holding at 6% or less.

Here's the kind of apartment that is being snapped up in an area about 30 minutes from downtown Milwaukee: rent \$120 to \$150 a month plus utilities and heat, two bedrooms, separate dining room, kitchen with all appliances, good closets, good landscaping, janitor service, air conditioning (optional), and free parking.

NEW ORLEANS

The apartment boom started late here (there was almost no apartment construction before 1950) and supply has only recently begun to close in on demand. Vacancies are low; rents are holding firm in almost every part of the city. Several high-rises are planned for the downtown area (mostly luxury class). Two-story walkups with all the extras being built further uptown are doing well.

Proof of the value of location is offered by the famous French Quarter. Some owners there have modernized their apartments, put in pools and air conditioning, get as much as \$300 a month. Others make only minimal repairs, get as little as \$50 a month for a studio apartment. Both types are full.

NEW YORK

There is a big demand for apartments, but there are still many apartments for rent. Many of the new apartments are undistinguished or downright bad, and some owners are giving up to three and four months rent concessions to fill them.

"Most apartments here are poorly designed, inadequately equipped, and too small," says an apartment-wise housing professional. "And most of them are exact copies. The few builders who do a good, imaginative job are having no trouble at all finding and holding tenants."

PHILADELPHIA

The city has approached apartment construction cautiously, and the result is a strong and apparently healthy market. Vacancies are very low (the only exception: older converted houses) and rents are holding firm.

Says Mortgage Banker William Clark: "There's a big demand for luxury apartments, both in and out of the city. I know of three big 207 projects in the suburbs that aren't finished yet, but are 100% rented. And I checked back over three big 608 projects we refinanced last year, found just one vacancy in 1,000 units."

And says FHA Director William A. Kelley: "It is awfully hard to see where the saturation point is."

PITTSBURGH

This is one of the few cities in the country where apartment construction is at a virtual standstill. Although there are plans for some half-dozen big urban-renewal projects in the next few years, the only units built over the past two or three years have been luxury apartments renting for \$175 and up.

PORTLAND, ORE.

With apartment construction running some 25% ahead of last year, the supply has passed the demand here.

"We seem to be at the saturation point," says Sam Plunkett, secretary of the Oregon Apartment House Assn. "A year ago, good new apartments were filling in 45 days; today it may take months."

The best market right now seems to be in the suburbs, where \$135-up units with pools and all the extras are nearly all full.

SAN FRANCISCO

This is a luxury market. While the \$90 apartment is not unrentable (vacancy rate about 15%), it is in such slight demand that almost none are being built. Instead, the \$125 to \$150 units with pools, fireplaces, and all the kitchen extras are getting most of the attention.

Says Apartment Builder Clarence Minnerly: "In one of our projects we had units renting from a low of \$100 to a high of \$135. The high-priced ones were the first to be fully occupied."

The "motif" idea has caught on strongly in San Francisco, and the Hawaiian look and the South Seas look have proved especially effective in bringing in tenants.

SEATTLE

The apartment construction rate is off considerably from last year, and vacancies are up, although not so seriously as to cause any rent cutting. Apartments close in are doing well enough—the trouble seems to be in suburban areas, particularly near the slowed-down Boeing Aircraft plants.

Another reason for the present apartment surplus: like New York City, Seattle had an impending zoning change which went into effect the first of this year, and builders rushed to get under the wire.

/END

Say the experts: One of the biggest mistakes an apartment investor or builder can make is to build an apartment on land just because he happens to own it or just because it happens to be zoned for multi-family dwellings. Before you commit yourself much further than an option on a piece of land . . .

Use this checklist to study your proposed apartment site

Does the area need more apartments?

- Do Census figures show the area has grown since 1950?
- Is the expansion in the direction of the site?
- Is the number of potential renters increasing?
- Are new businesses moving in, local firms, colleges, or hospitals expanding? Is there a growing number of young marrieds or retirees in your town?*
- Have good new apartments in the area rented fast?
- Do realtors or rental management firms report a shortage of any particular type, size, or price of apartment?

Have you studied vacancies in the area?

- Are there less than 5% vacancies in the good new apartments?
- Are there fewer vacancies than there were a year ago? . . .
- If the vacancy figure is high, is it misleading because:
 - most vacancies are in old and obsolete apartments? . . .
 - many vacancies are in just-built apartments that will soon fill up?
 - some vacancies are in remodeled but still mediocre buildings with high rentals?
 - some vacancies are in buildings suitable only for seasonal occupancy?
- Have you analyzed the local market to learn which size unit (1-br, 2-br, efficiency, etc) has the most (and least) vacancies?
- Are there more vacancies in one part of town than another?

Have you checked the zoning of your proposed site?

- Is it zoned for multi-family use?
- If not, are you positive you can get the zoning changed?
- Can you build economically within the zoning density? . . .
- If zoning density is too low (12 units per acre, for example) could you convince zoning officials that a higher density in higher buildings would provide better living and more open space?
- Are you sure that zoning of car parking, interior streets, setbacks, and lot coverage permit you to build the kind and size of buildings you are planning?
- Has an experienced realtor, lawyer, or other specialist searched the zoning laws for hidden restrictions? . .

Do you have the best possible location in the area?

- Does the street have a good name?
- Is the approach pleasant?
- Are surrounding streets safe at night?
- Are nearby apartments successful?
- Is other nearby land zoned for apartments?
- Are water, sewers, gas, electricity, and telephone service available?
- Is public transportation available?

- Will local mortgage brokers (and FHA, if necessary) approve the location?
- Is the site close to shops, churches, schools, recreation? . . .
- Does the site have a view (or can you create one)?
- Is it convenient to a fast route to downtown?
- Is the site easy for prospects and future visitors to find? . .
- Is there enough space for a swimming pool and other outdoor recreation facilities?
- Is there enough space for offstreet parking?
- Is the location as good as that of existing apartments in the area?

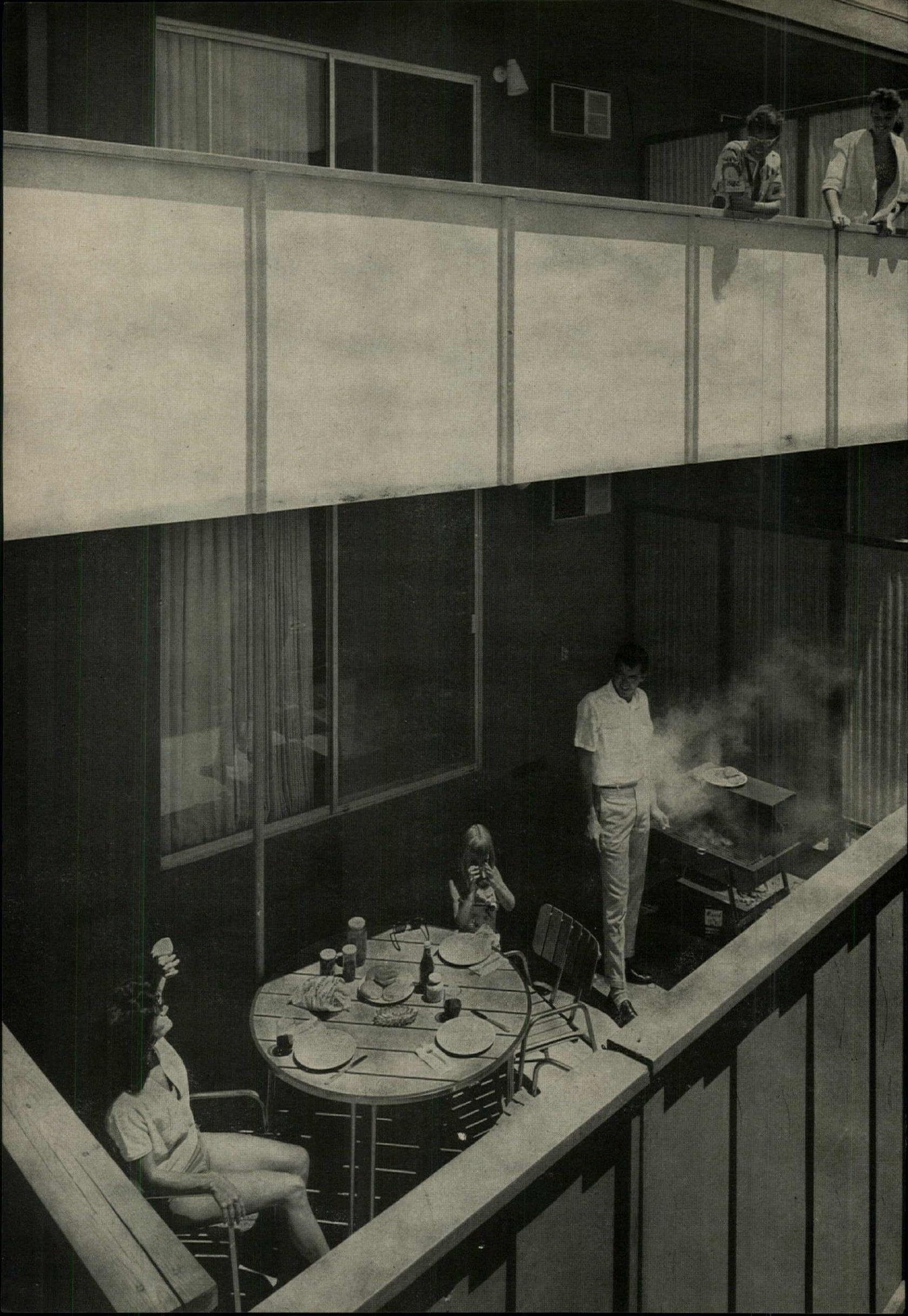
Have you studied your potential market?

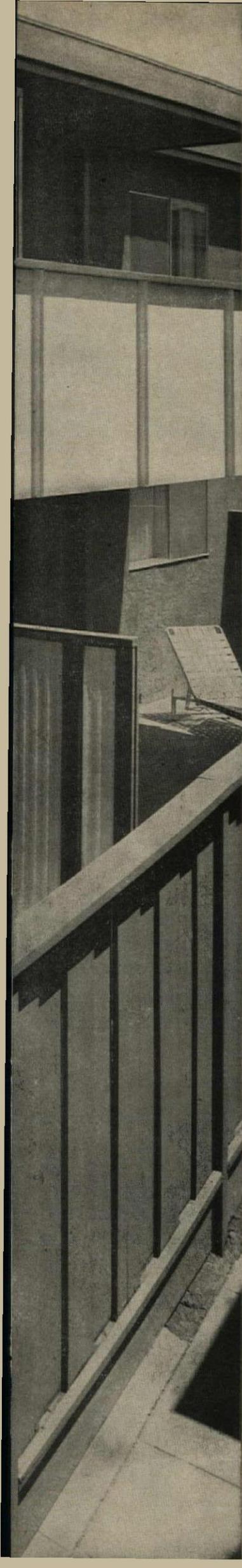
- Have you gathered basic data such as incomes, family sizes, ages, occupations (which may reveal, for example, a large retirement market)?
- Have you interviewed tenants in new apartments in the area to find out why they moved?
- Have you interviewed tenants in competitive apartments to find out what they like and dislike about their present apartments?
- Have you studied local apartments with vacancy rates over 10% to avoid the mistakes they made? . .
- Have you studied local apartments with vacancy rates less than 3% to find ideas you can use?
- Have you discussed renter preferences with local realtors and apartment managers?

Here are the best sources for the information you need:

. . . suggested by James F. Neville, director of NAHB's Rental Housing Department (who suggested many of the above questions).

- Experienced apartment-house architects
- Local banking institutions
- Savings & Loan associations
- Mortgage lenders
- Real estate management firms
- Local building department
- Planning commission
- School principals or superintendents
- Unemployment commission
- Homebuilders associations
- Owners and managers of apartments
- Related trade associations
- Chamber of Commerce
- Federal Housing Administration
- Public Housing Administration
- Redevelopment agencies
- Real estate department of chain store organizations
- Owners of shopping centers
- Census Bureau
- State department of commerce
- Local church groups
- Public utilities companies
- Real estate editors of local newspapers
- Local universities





**TODAY'S
GOOD
NEW
APARTMENTS:**

**here is what makes them
attract and hold tenants**

The apartment shown opposite has a vacancy rate of less than 1%. The reason: like all of today's good new apartments, it offers a better and more pleasant way of life than all but a very few apartments ever offered before.

While today's good new apartments vary widely in design and size and price range, they have much in common. That became clear as HOUSE & HOME's editors talked with hundreds of apartment-house builders and architects, and to the lenders who financed apartments and the realtors and renting agents who rented them.

On the next 18 pages you will see what they have in common; what makes them good places to live—and good business opportunities.

Private ground-floor patios and second-floor balconies are a big attraction at Perma-Bilt Homes' Villa Cordova apartments near Oakland, Calif. Photo: Darrow M. Watt.

Today's good new apartments use land and landscaping to their fullest potential

Good land use can make all the difference between building just another mediocre apartment and creating a really pleasant place where people will want to live—and more and more apartment builders are realizing it.

Good land planning is the cheapest way you can attract new renters and then hold them for a long and profitable stay. In building apartments to live like houses, nothing is more important than following these basic rules:

Save existing trees or move some in. Big trees are as important in renting apartments as in selling houses. If you have trees on your site, do everything possible to save them: site your buildings around and among them, protect them from damage by contractors' crews. Never be satisfied with a first site plan, especially if it forces you to sacrifice trees. If you have no trees, or not enough, the cost of moving some in may be less than you think (see p 122).

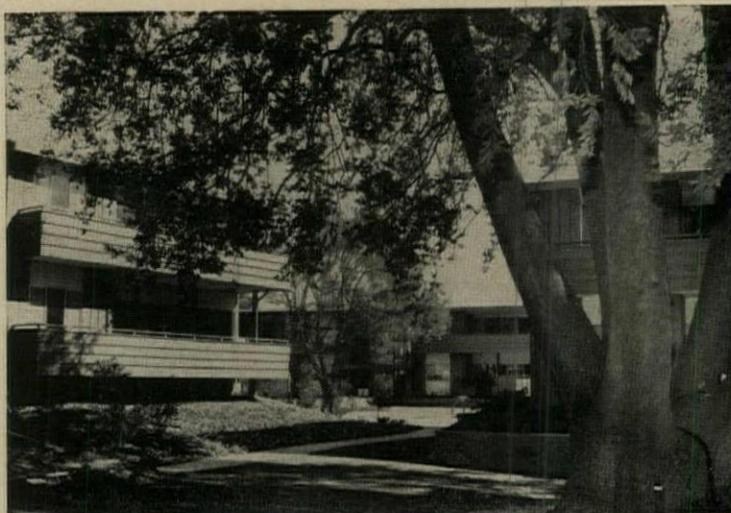
If you don't have a good view, create one. Landscaped gardens, no matter how small, give your renters something pleasant to see from their windows or balconies, make a pleasant place to walk or sit. Use a landscape architect. He will not only give you design ideas but tell you what kind of landscaping will be easy to maintain.

Don't overcrowd your site. Leave as much open space around your buildings as you possibly can. Local zoning may put you in a family-per-acre straitjacket. But in many cases careful study by an architect may show you how to satisfy local zoning and still give your renters some breathing space by concentrating the buildings and leaving more of the site as uninterrupted green space.

Take advantage of hillside land—don't fight it. Teamed with imaginative design, a rolling site lets you include more floors without elevators, provide more private patios, add more individuality. With apartments as with houses, it does not pay to bulldoze sloping land flat until an imaginative architect has seen what he can do with it.

If you have enough land, combine low- and high-rise. Combining garden apartments or patio town houses with elevator buildings adds a pleasing variety to a group of apartments and lets you appeal to different types of renters. It also allows higher densities without crowding the land.

Keep parked automobiles out of sight. No tenant wants to look out on a parking lot. So you should lay out your buildings so that cars are restricted to the perimeter, screened by trees or sloping land, or hidden away in covered carports.



ANCIENT BAY TREE was focal point around which Architect Fred Marburg grouped the half-dozen buildings of Bay Tree Apartments, Los Gatos, Calif. Builder: Trojan Construction Co.

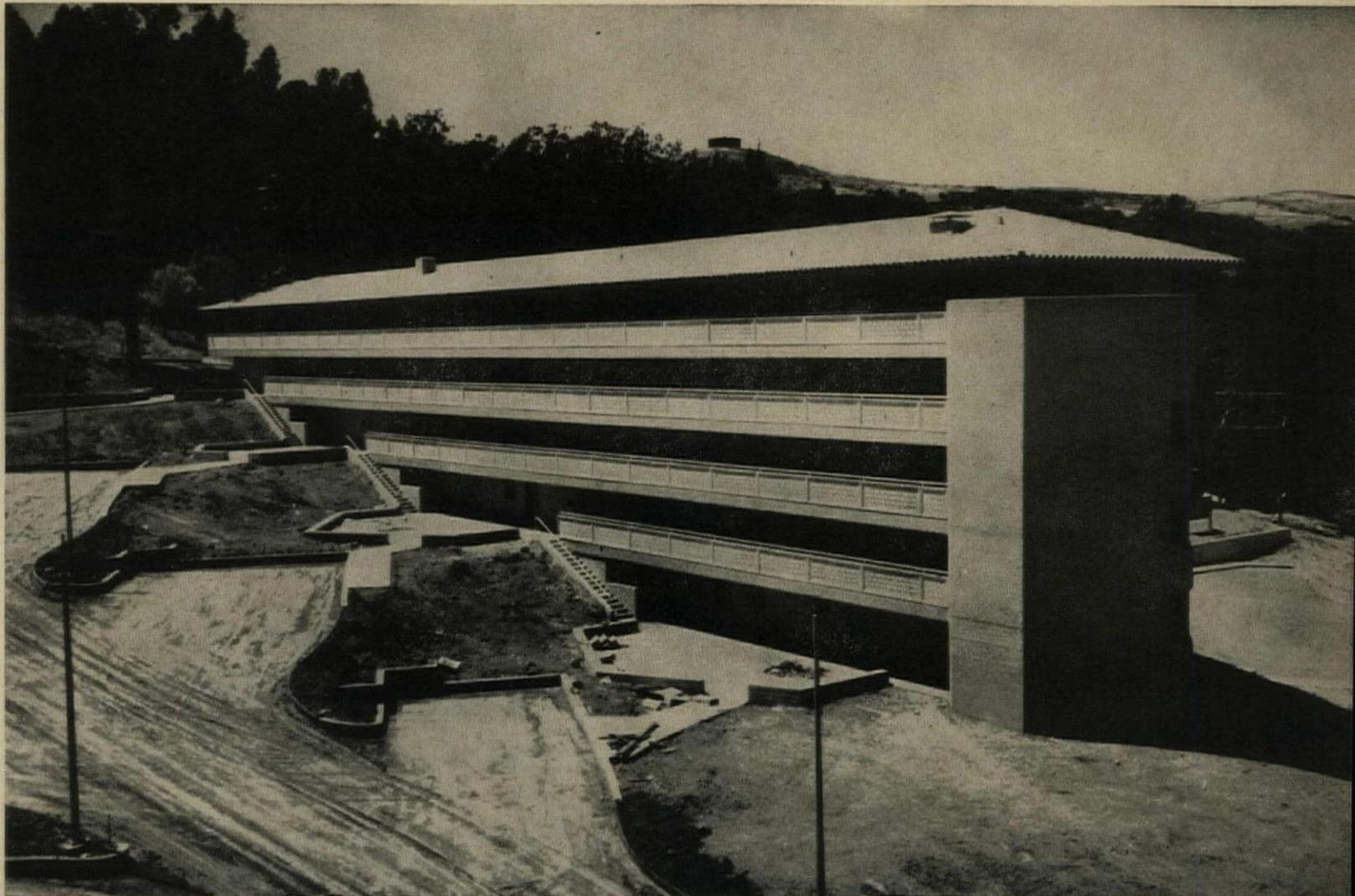
© Ezra Stoller



DOZENS OF TREES WERE MOVED IN and a beautifully landscaped garden with reflecting pool turned a wasteland site into a garden at Capitol Park apartments in Washington. (For closer view, see p 113.)

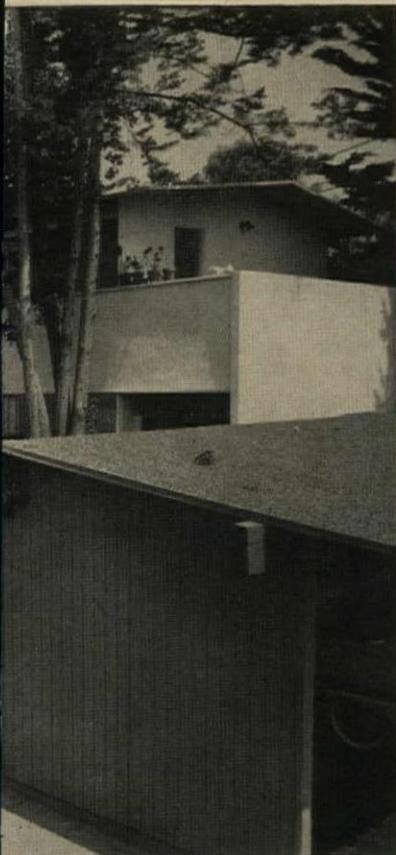
Eldon Tatch





FRESH WAY TO USE HILLSIDE LAND was developed by Architects Aaron Greene and John Warnecke for Marin City (Calif.) public housing. There is an on-grade entrance, left in photo, for each of five floors. Tenants may

drive to the level they live on, then walk along an access balcony to their apartments. On opposite side of building, each apartment has sliding glass doors opening to a private balcony. There are six buildings like this.



HILLSIDE APARTMENTS are one-story on entrance side (above), two stories on rear side (right) in Irvin Blietz's successful Carriage Hill in Glenview, Ill., on Chicago's northshore.



EASY-TO-MAINTAIN LANDSCAPING (left)—ground cover and tropical plants—creates pleasant view at Eli Luria's Alamar apartments in Santa Barbara, Calif.

Today's good new apartments have a look designed to attract a specific local market

Experienced apartment builders are selecting a relatively narrow segment of the total apartment market—then working with their architect to develop a design that will appeal to this group. The routine row of red brick boxes no longer suits many buyers—so almost all of today's most successful apartments have a fresh look.

In almost every market—even where traditional houses are still the best sellers—a contemporary look sells rental space to people who have learned to accept and admire modern design in office buildings, schools, restaurants, and stores. Many of the same people who would hesitate to invest in a contemporary house seem to enjoy renting in a distinctive building.

Here are some of the apartment "looks" that are proving successful (see also photos):

The smart downtown look. To city sophisticates, precise tiers of glass seem to have a strong appeal. Typical renters are the successful businessmen who have no children or whose children are grown, the career women, the bachelors, the people on the move, upper income families who just don't like the suburbs.

The campus look. The easy informality of this type of apartment, especially when teamed with an upstairs-downstairs floor plan, is popular with young married couples with children. They want green space around them, a place for children to play, the companionship of other couples.

The prestige look. Traditional elegance suggests to many well established couples the kind of house they love but no longer want to maintain. Solid respectability is the keynote.

The advanced contemporary look. This type of design appeals to "the sports-car drivers"—usually young married couples, career girls, junior executives.

The one-story look. Its greatest appeal is to people who want an apartment that is very much like a house—except for maintenance problems. It is especially popular in Florida, Arizona, and California.

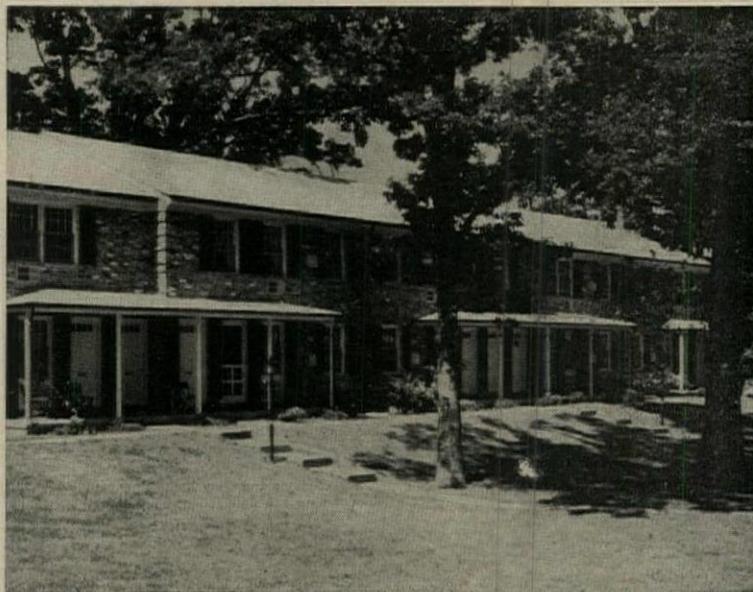
The vacation-house look. Playful design has great appeal to renters who want to live in resort areas, or near rivers, lakes, or the ocean.

The close-to-nature look. This style has the widest appeal of all, suits renters of all ages who want a pleasant place to live where there are trees and grass—and none of the cooped-up feeling of downtown living.

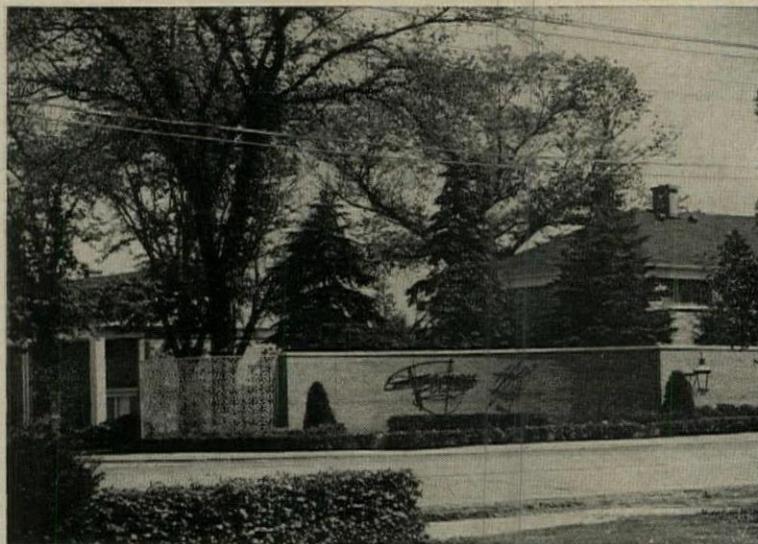


THE SMART DOWNTOWN LOOK is used in this proposal by Architect John Noble Richards for Vistula Meadows, a Toledo redevelopment project.

H&H staff



THE CAMPUS LOOK attracts young married couples, most with children, to Village Green, an apartment project near Rockville, Md.



THE PRESTIGE LOOK of Irvin Blietz's Carriage Hill is drawing older couples out of their houses along Chicago's plush North Shore.

H&H Staff

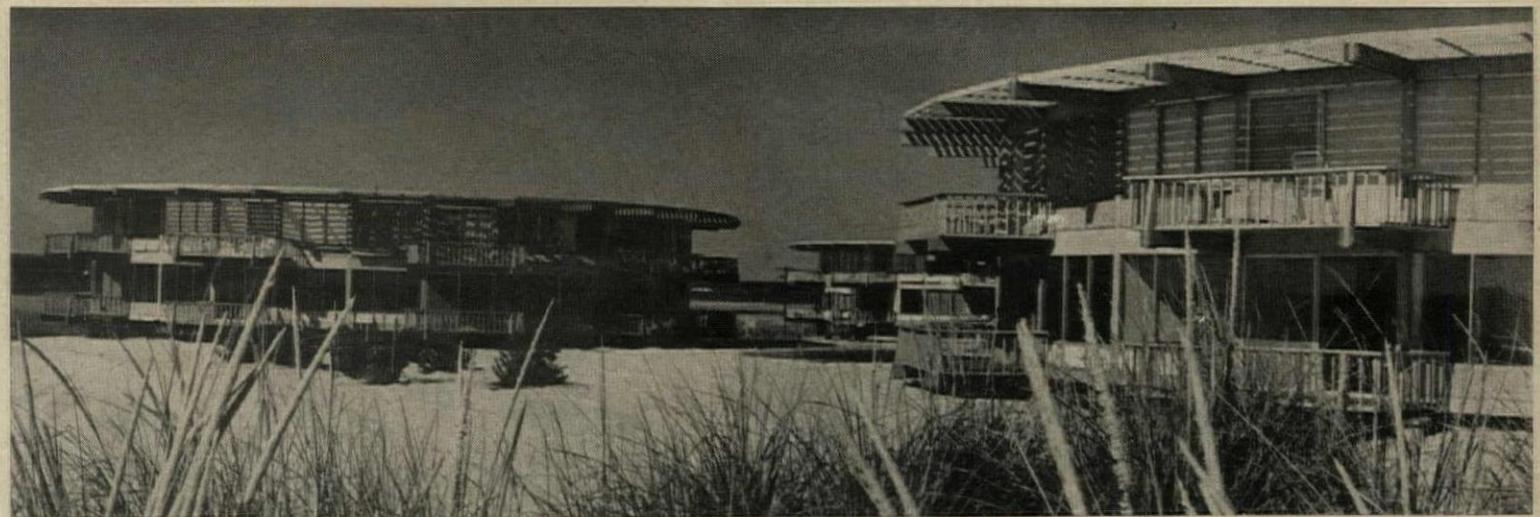


THE ADVANCED CONTEMPORARY LOOK is dramatically presented in this vaulted-roof apartment overlooking the water in Tiburon, Calif. Designed by Harold B. Reid, and built by Reid, Cahn & Richardson, the two-bedroom units have 1,400 sq ft of living space, rent for \$255 a month.

Markow



THE ONE-STORY LOOK of these Phoenix apartments by Builders Paul Staman and Edward Fields reflects their just-like-a-house floor plans. These side-by-side units are co-ops. They sell for \$22,950 to \$27,950 plus monthly maintenance charges of \$75 to \$82.



THE VACATION-HOUSE LOOK of these circular beach apartments in East Quogue, L.I. attracted so many New Yorkers that 76 units (in four buildings) sold out immediately. Architect James A. Evans designed them for Lawrence W. Snell. Each unit has 700 sq ft, including balcony.

THE CLOSE-TO-NATURE LOOK of the Greenspring Apartments in Baltimore is so popular that buildings rent before they are completed. The units were designed by Architect Irwin A. Baker for Gorn Bros. One-bedroom units rent for \$120, two-bedroom units for \$165 to \$175.

Morton Taddei



Today's good new apartments are planned to live like today's good new houses

"The test of a good apartment plan is whether a renter who is used to living in a well laid-out house can walk into one of your units, check your layout, and feel right at home."

So says successful Cleveland Apartment Builder James Flood. To make an apartment live like a house:

Plan for maximum privacy. The ideal arrangement is to provide separate entrances to every apartment, but this is only possible in garden apartments. You can provide visual privacy between adjacent patios and balconies simply by extending the heavy masonry party walls outside the building. You can be sure interiors are private by being sure no window looks out on the windows of another apartment.

Use prime space for living areas. The light, windowed areas around the perimeter should be used for living, dining, bedrooms—the places where people want and can enjoy a view. Use the core of the building for kitchens, baths, furnaces, laundry rooms.

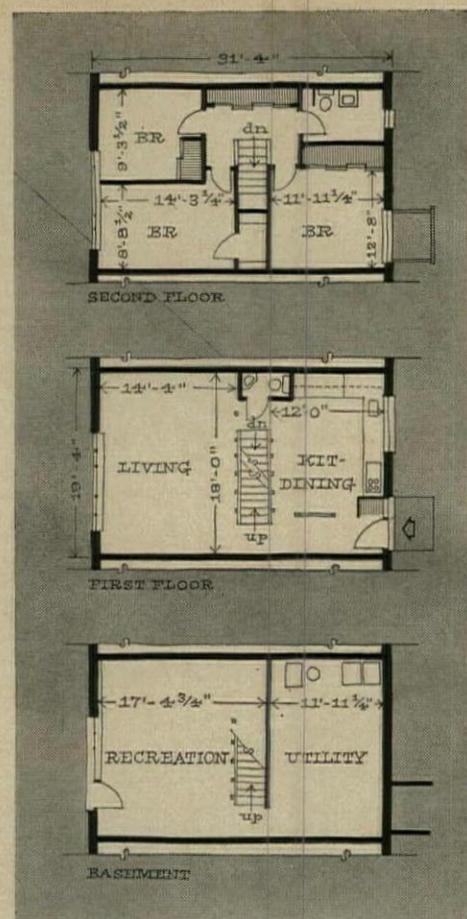
Make the most of outside walls. You only have so many feet of outside wall, and you must use this space for all the daylighting and ventilation you can get. Try to provide cross ventilation in bedrooms and give your living rooms as much window area as budget and furniture placement will allow.

Provide the best possible traffic pattern. If the living room is located between the front door and the kitchen and bedrooms, it will become a hallway and not a living room. The best arrangement has all rooms opening off a foyer. And be sure at least one bath or a half-bath opens off a hallway.

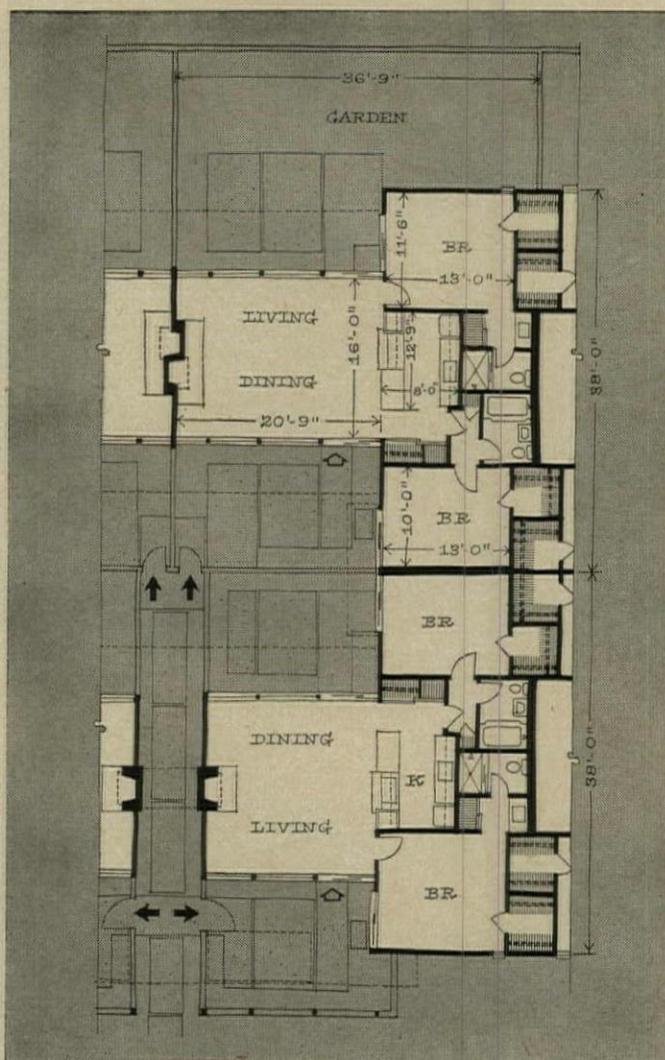
Make it easy to arrange furniture. Nothing frustrates a renter more than moving into a bedroom that is so small or has so little wall space that he can't place his bureaus and beds without making it difficult to move around in the room. In the No. 1 bedroom, allow space for two beds (or at least a double bed) and two bureaus. In the living room, plan on a sofa, two or three armchairs, bookshelves, a home music system and/or a piano.

Make your layout as flexible as possible. This is not so easy in an apartment as in a house for the simple reason that an apartment is much smaller. But try to plan your units with a big bedroom that can be divided with a folding partition, or with a dining room that can be closed off from the kitchen or living room.

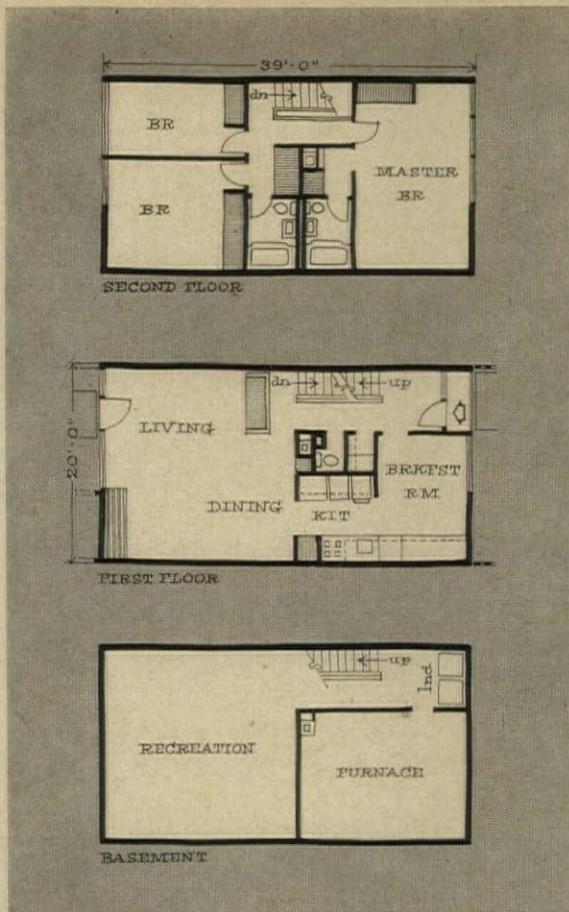
Most important of all, make your rooms and your closets as big as you can (see p 108).



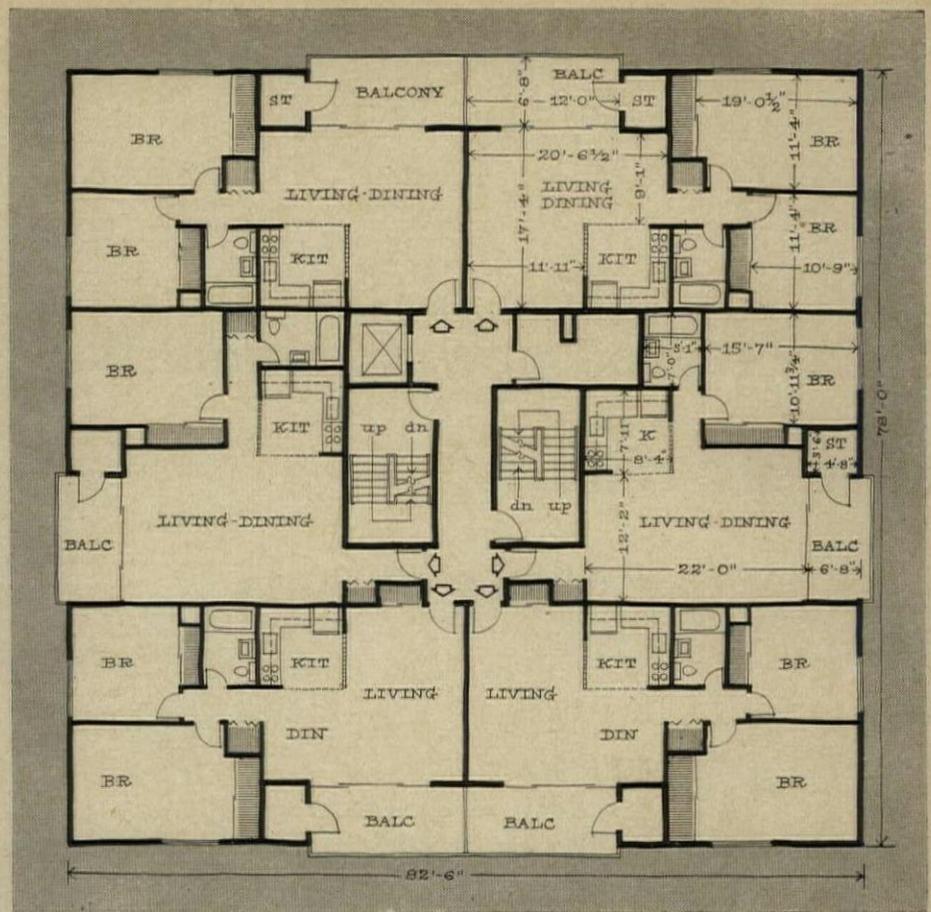
CENTER-STAIR TWO-STORY row apartment by St Louis Architects Anselevicius & Montgomery has 1½ baths, basement utility, recreation rooms.



TWO-PATIO ONE-STORY apartments by Architect Claude Oakland in Palo Alto have front and rear courtyards providing maximum outdoor living for each two-bedroom unit. Main entry hall serves four units.

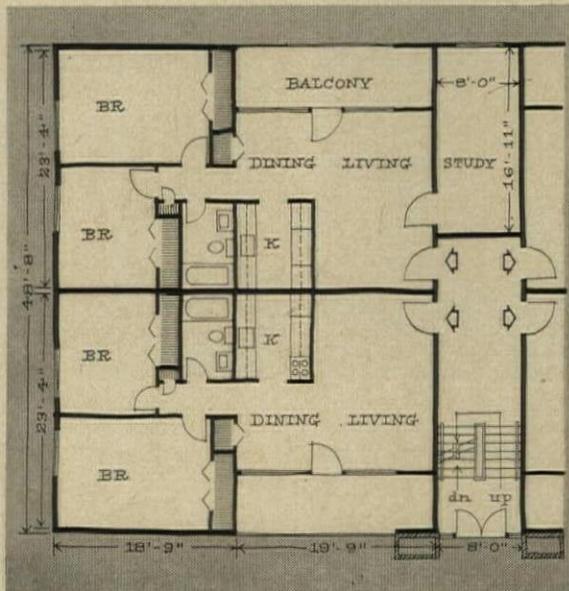


SIDE-STAIR TWO-STORY apartment by Architect I. M. Pei in Philadelphia has three bedrooms, 2½ baths, big dining area in kitchen, and a patio off rear living room.



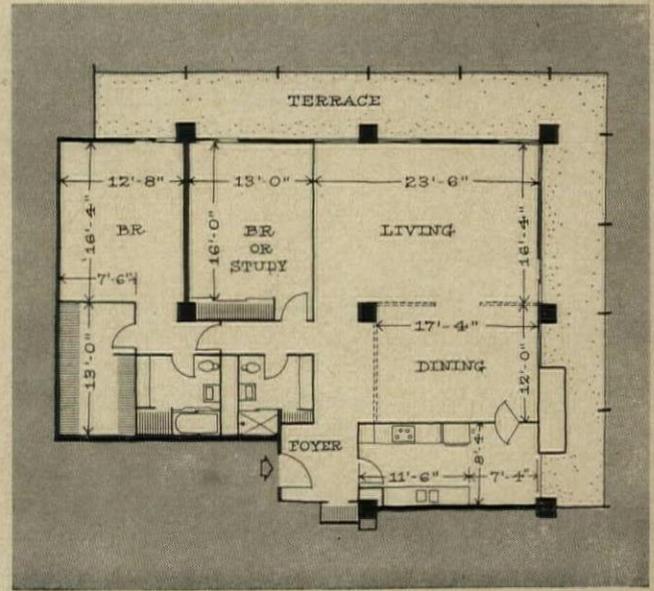
SIX-UNIT CLUSTER by Architects Collins & Kronstadt in Washington is used to get 28 units in a 4½-story building. Four plumbing

cores serve the six units on each floor. All ground-floor apartments have patios; all others have balconies.



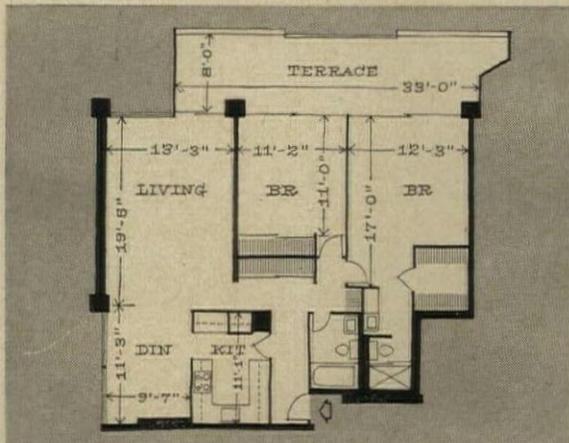
FOUR-UNIT CLUSTER

(left) by Architects Grosel & Jencen in Cleveland has living-room balcony — that neighbors cannot see — in each unit. Baths and kitchens are grouped to save plumbing costs.

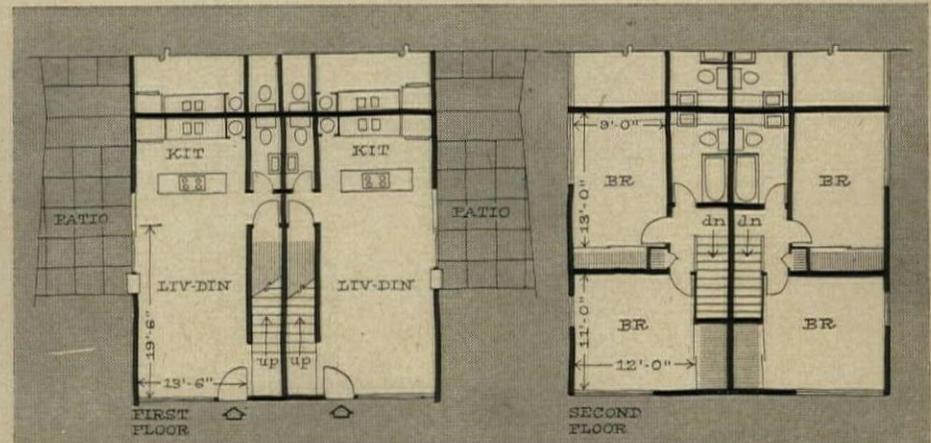


LUXURY APARTMENT

(right) by Architects Harrell & Hamilton in Tulsa is a corner unit in high-rise building. Apartment has 2,360 sq ft including terraces opening off every room except the two baths.



CENTER-HALL APARTMENT by Architects Muchow & Sachter in Denver avoids cross traffic because every room opens to hallway. Living room and bedrooms face rear balcony.



SIDE-BY-SIDE TWO-STORY apartments by Architects Palmer & Krisel in Newport Beach, Calif., have livingroom patios, private en-

trances, two bedrooms, 1½ baths. Twin units are duplicated to the rear. Baths and kitchens back on the same plumbing wall.

continued

Today's good new apartments have big rooms and plenty of big closets

"Everyone these days wants bigger rooms and more and bigger closets."

So says New York Apartment Realtor Charles H. Greenthal. He adds: "The rooms in our new apartments are at least 10% larger than those in apartments built a few years ago. And we urge builders to put in as many as eight or ten closets. We think good storage is so attractive to renters that we write the number of closets—as well as the number of bedrooms and baths—across every plan in our offices."

How large should rooms be to attract and keep renters? You can get an idea from the new apartment plans on p 106. And two experienced apartment architects—Dick Collins and Arnold Kronstadt of Washington—recommend these sizes:

	Medium rents	High rents
Living room	12'x18'6"	14'x21'
Dining room	9'x10'	11'x12'
Dining area	8'x10'	10'x11'
Master bedroom	11'x13'	13'x15'
Second bedroom	10'x11'	12'x14'
Third bedroom	10'x10'	11'x12'
Kitchen	7'6"x9'	8'x11'
Kitchen & breakfast room	9'x10'	10'x10'
Balcony or patio	6'x12'	6'x15'

You can offer tenants better storage, say apartment-building professionals, if you:

Put in oversize closets. Many apartment renters have just as much clothing and sports equipment and just as many odds and ends as homeowners. Yet apartments have no basements, attics, or spare rooms to store all these things. Observes one apartment realtor: "Apartment builders should measure the storage needs of tenants by those of their own families."

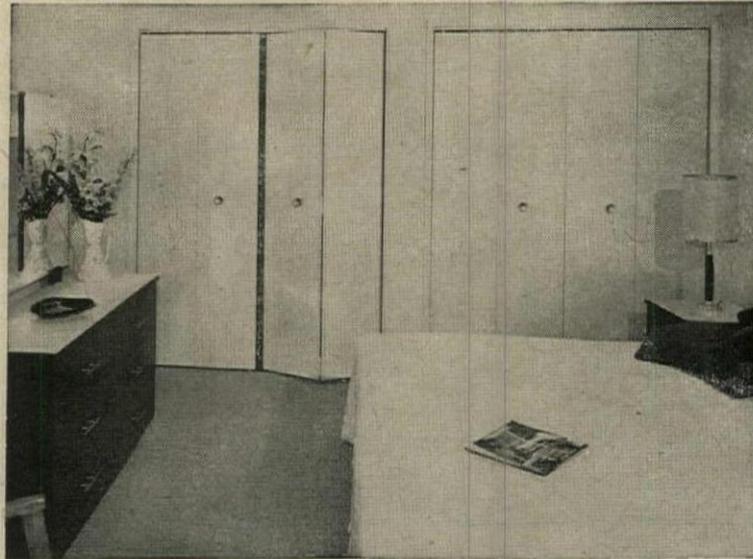
Run your closet doors to the ceiling. You will avoid the cost of furring down, give more storage space, and make it easier to get at the top shelves.

Build plenty of shelves into your closets. This is an inexpensive way of providing something every renter wants and needs. Today's good apartments have built-in shirt shelves, shoe racks, drawers, double-tiered coat racks, and other storage compartments.

Use bifold or sliding doors. They save room, are now used in most good apartments (but some builders still use swinging doors that require free floor area).

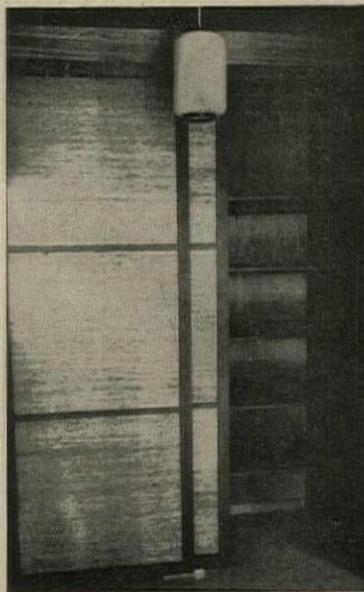
Provide a dry, convenient store room for bulky belongings like bicycles, sleds, and trunks.

Dean Vannice



DOUBLE CLOSETS have bifold doors that open full width of each closet in master bedroom at Imperial Builders' Starlite Apartments, Los Angeles. Wall-to-wall carpeting is standard in \$110-to-\$155 units.

H&H Staff



Darrow M. Watt

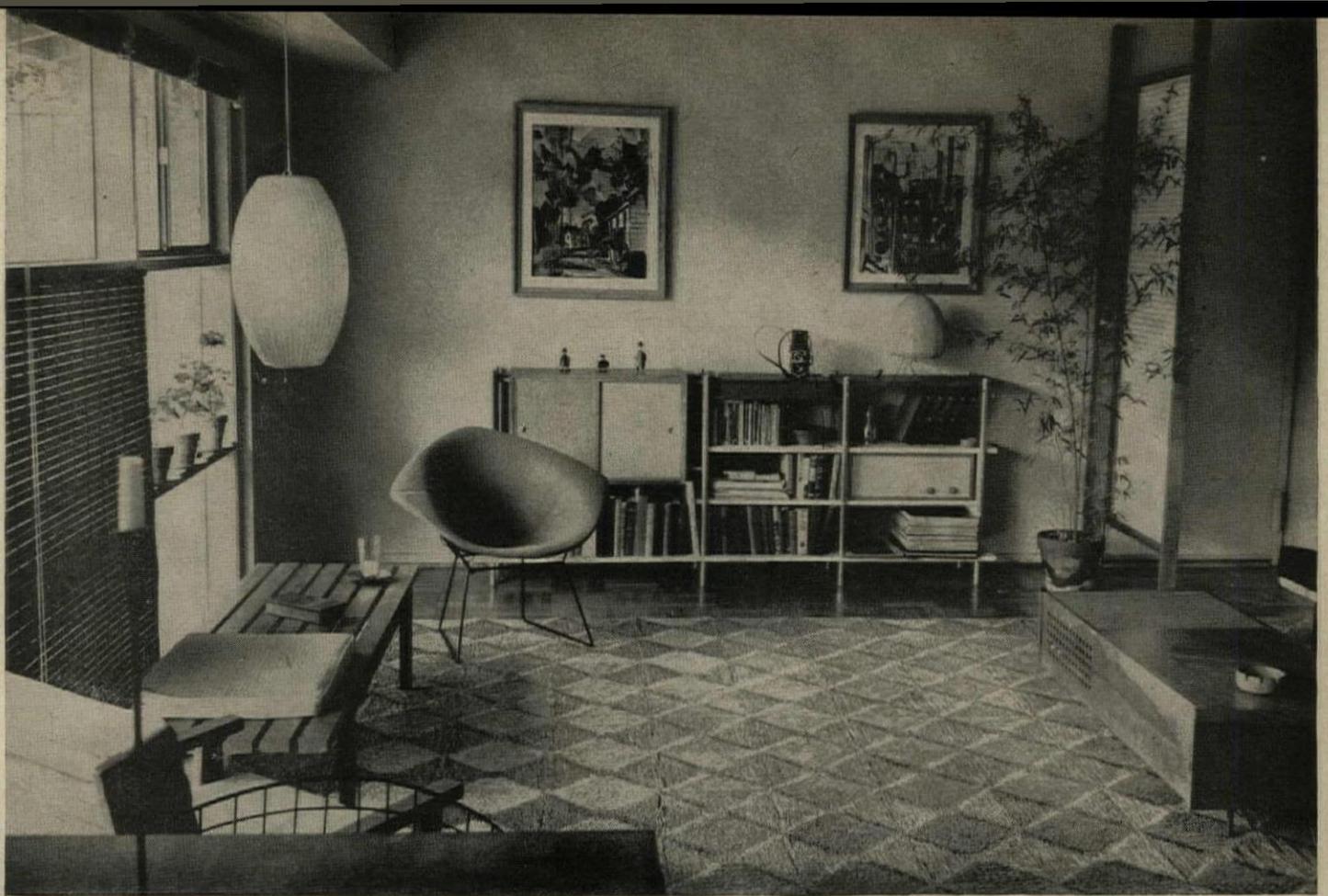


HALL CLOSETS have shelves for linens at Eichler Homes' apartment in Palo Alto and at Perma-Bilt Enterprises' apartment near San Francisco. Sliding doors of Eichler closet, left, are plywood covered with grass cloth. Perma-Bilt closet, right, has upper and lower sections.

Darrow M. Watt



OVERSIZE CLOSET has sliding doors that save floor space in second bedroom at Perma-Bilt apartment. Doors extend all the way to ceiling, so upper shelves of closet are easy to get at.

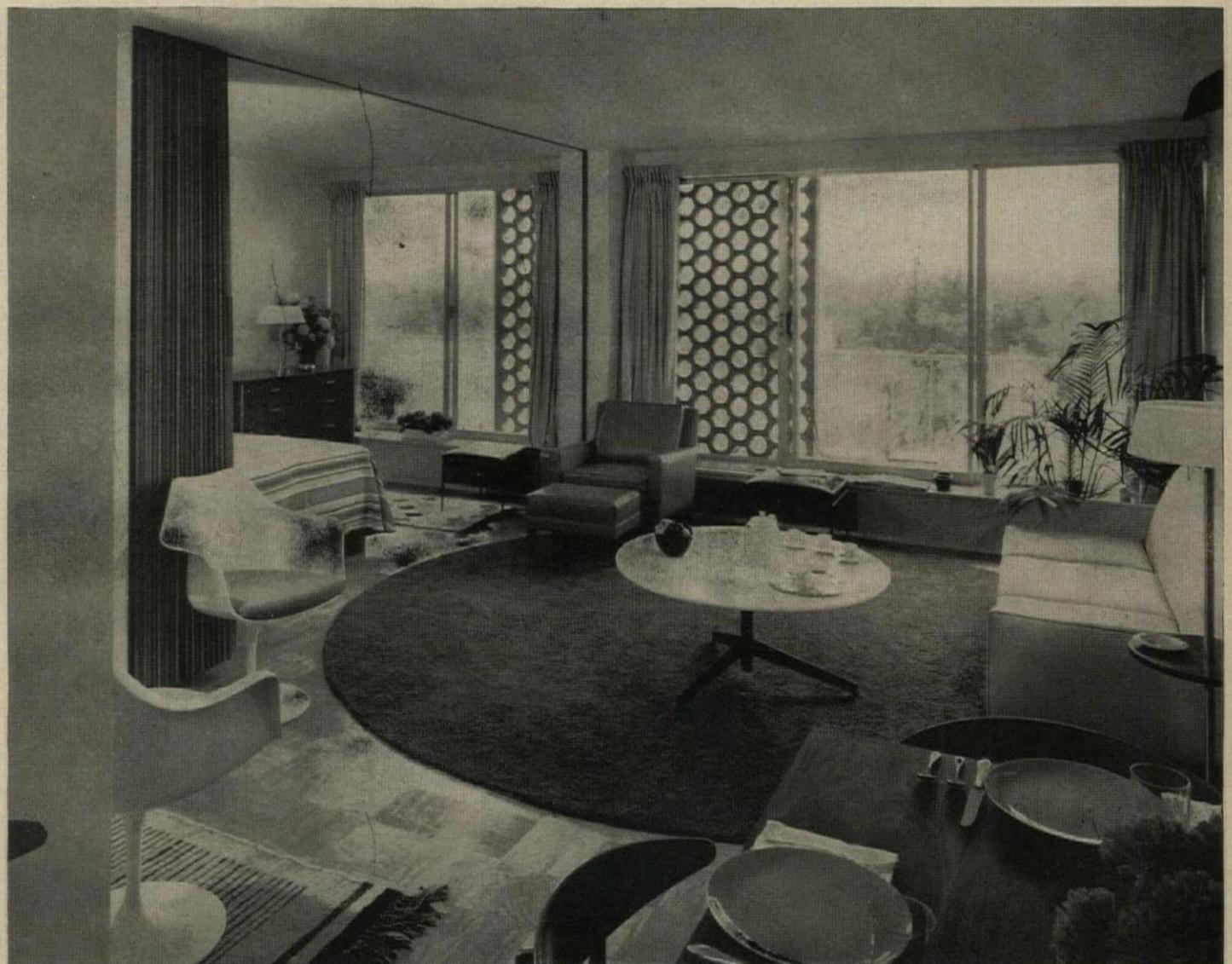


H&H staff

LARGE LIVING ROOM has window wall, left, that opens room to balcony and makes it seem even larger. Room—in two-bedroom apartment at Dreisen & Freedman's Nob Hill outside Washington—is long enough

(23') to include dining area, behind camera. Architect Richard Collins Jr, who furnished this apartment for himself, also built plastic divider to screen room from front door at right.

© Ezra Stoller



EFFICIENCY APARTMENT has folding wooden screen that opens bedroom to 12'2"x18' living room at Washington's Capitol Park, built by Roger Stevens and James Scheuer and designed by Architects Satterlee & Smith.

Other Capitol Park living rooms are 16'x18' and 13'x24'. Rents are \$105 for efficiencies, \$129 to \$162 for one-bedroom apartments, \$189 to \$230 for two bedrooms. Highest priced apartments rent fastest.

Today's good new apartments have pleasant-to-work-in kitchens and glamorous baths

Every house builder knows it is the kitchen that sells the house. Now the kitchen is beginning to play the same important role in apartments.

A few years ago women didn't expect an apartment kitchen to be very good (and generally it wasn't). But today the apartment kitchen is looking more and more like the kitchen in a well planned house. It is significant that in renting offices of New York's newest apartments, the kitchen is getting more display attention than any other feature.

So in planning your apartment kitchens, it will pay you to:

Make the kitchen big—or make it look big. The kitchen that is just a "kitchenette" is a thing of the past except in small efficiency units. New kitchens have more space and are better arranged. Some are compact but seem larger because they are open to an adjacent dining or living area.

Put in lots of storage cabinets. Many apartment kitchens today have twice the cabinet space of old-fashioned apartments. Cabinet fronts are attractive—either natural wood or enameled steel.

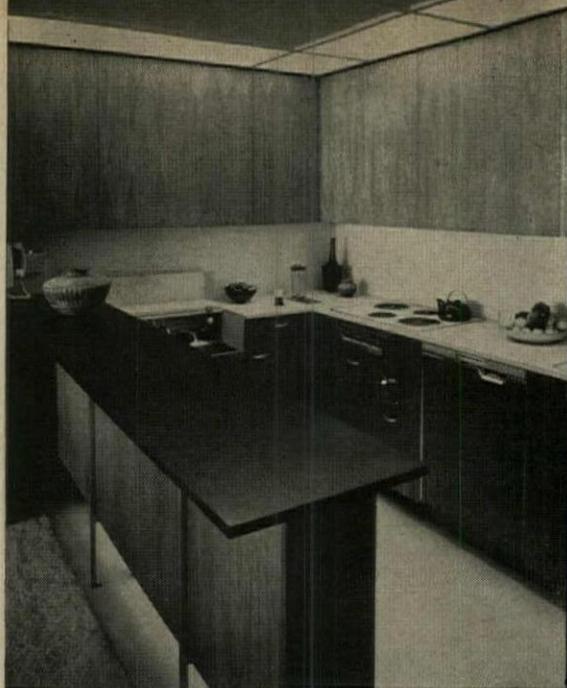
Use maintenance-free counters, sinks, and floors. In apartments—as in houses—women want durable surfaces that are easy to clean. Today's apartment builders are using quality materials like vinyl tile, plastic laminates, and stainless steel.

Make your lighting easy on the eyes. Because many of today's kitchens have no windows, designers have had to do an extra-good job of lighting. There is more light, it tends to be softer, and it covers all the working surfaces. Some builders—especially those who rent to families with children—believe that a big window is still necessary.

Install plenty of electric outlets. Renters need kitchen outlets for percolators, toasters, mixers, frying pans, broilers, etc. And, to be on the safe side, you will be wise to allow for some new gadgets not yet invented.

Don't stint on appliances. A stove, refrigerator, and an exhaust fan are necessities, and more and more stoves are built in. To meet or top competition, many builders are including dishwashers and, in garden apartments, garbage disposers.

Almost as important as the kitchen in attracting renters is the bathroom. Today's good apartments have more bathrooms (sometimes 2½) with far more eye appeal than those of a few years ago. Builders are finding a glamorous bathroom costs little more than a plain Jane. They are glamorizing their baths with color, wallpaper, large mirrors, good lighting, and separate shower stalls.



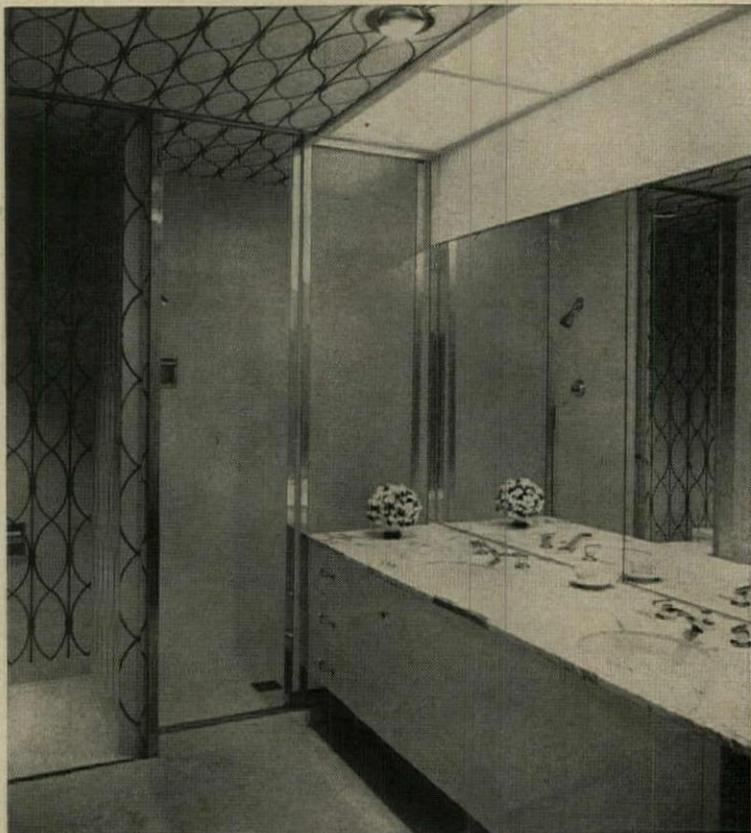
Skelton

INTERIOR KITCHEN is made attractive with built-in ceiling lights and natural-finish cabinets at Comstock Apartments in San Francisco.



STAINLESS STEEL SINKS and countertops are used at Park Towne Place, Philadelphia, for "long life, cleanliness, and attractiveness," say owners.

Skelton



COMPARTMENTED BATH at San Francisco's Comstock has luxury features like marble countertop, double basins, indirect lighting, sliding door to oversize shower, lots of cabinets, big mirror.



CEILING-HEIGHT CABINETS (and lots of them) help make kitchens popular feature of Perma-Bilt Enterprises' apartments at San Leandro, Calif. Appliances include cooktop, oven, hood, disposer, refrigerator.

Julius Shulman

Hueftle Photo Service



OUTSIDE KITCHEN at Gruber Apartments in Denver opens to balcony through sliding glass door at left, has steel cabinets, built-in stove, hood, dishwasher, and refrigerator.

COMPACT KITCHEN (right) is separated from living area by curved serving bar in Sandpiper Apartments near Palm Springs, Calif., designed by Architects Palmer & Krisel. Kitchen has full set of appliances.



continued

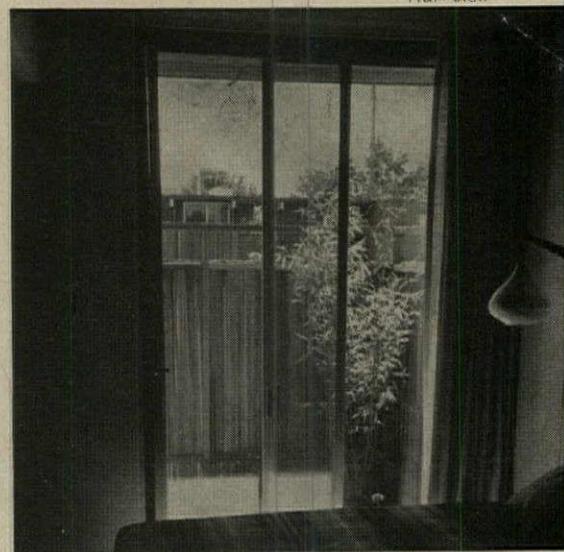
Today's good new apartments have just as good outdoor living as many of today's new houses

If there is one thing that distinguishes today's fast-renting apartments from those of only a few years ago, it is plenty of well planned outdoor living.

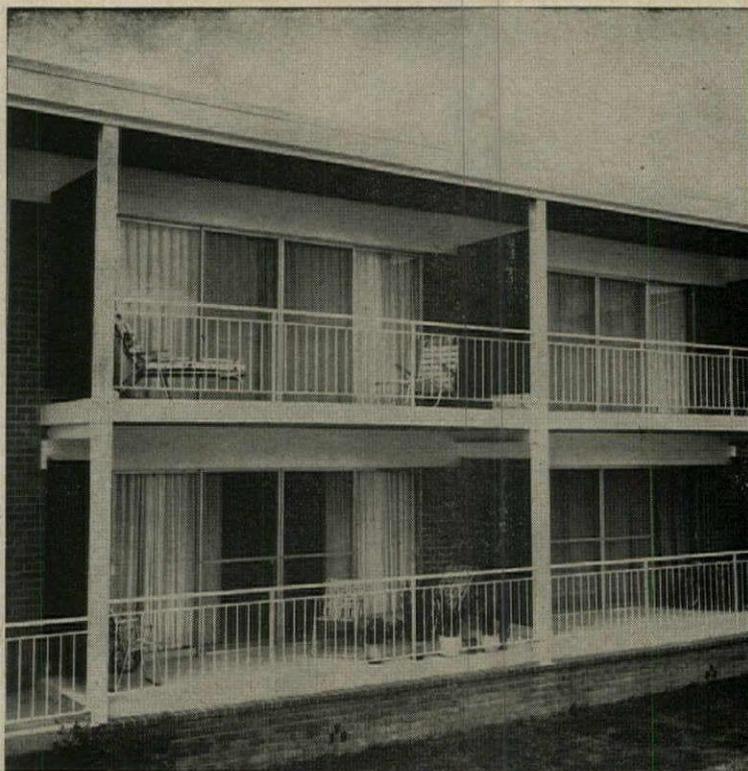
Points out one apartment manager: "More and more of our tenants are older couples who have sold their homes because their children have grown up and moved away. They grew accustomed to outdoor living in their houses. And they expect it in an apartment."

To give renters house-like outdoor living, you can:

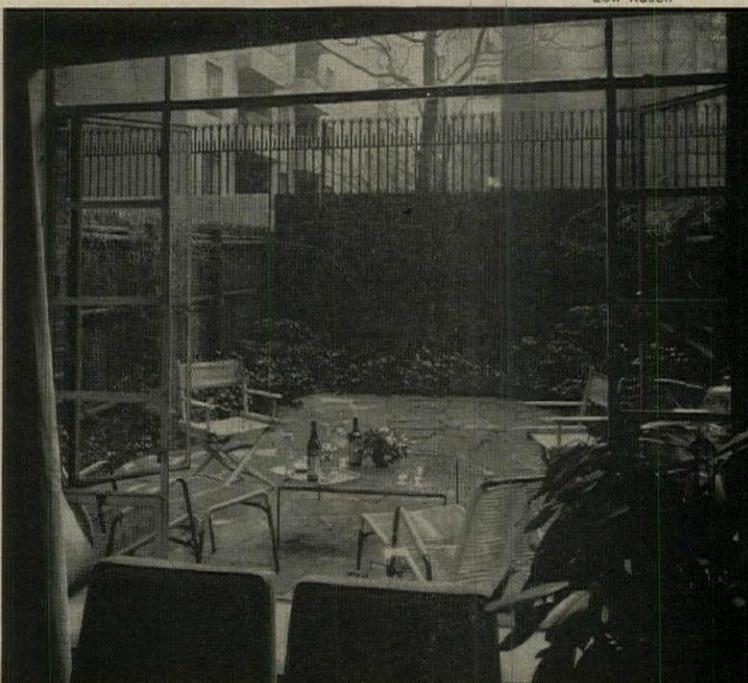
- 1 *Build balconies that are big enough to use.* A narrow runway—like those in some motels—won't do (in fact, FHA won't give credit for a balcony unless it is at least 6' x 11'9"). And be sure your balconies are private. Visual dividers like plastic or wood screens are more important than sound barriers.
- 2 *Build patios for ground-floor apartments*—and fence them in. An enclosed patio not only provides private outdoor living but also lets you open up living and bedrooms with more light and air. It is one of the best ways to turn hard-to-rent ground-floor apartments into premium space.
- 3 *Set aside outdoor space for landscaped gardens.* Renters feel cooped up when a building covers every bit of ground. So many of today's new apartments have tree-shaded walks and gardens. Newest man on the apartment builder's team: the landscape architect.
- 4 *Make it easy for tenants to hold cookouts.* More and more apartment owners now build barbecues which tenants can reserve for private parties. Others encourage the ownership of portable barbecues by permitting their use on private balconies and providing storage space for them.
- 5 *Make play areas more than barebones playgrounds.* For years apartment owners have been catering to families with children by providing swings, slides, and sandpiles. Now they are making their play areas attractive to mothers—with benches and more shade trees, grass, and landscaping.
- 6 *Install a landscaped swimming pool.* Once considered a luxury by apartment owners, pools are now a "must" in many areas. Today's new apartment pools, unlike those built a few years ago, are no longer simply places to swim. Attractively landscaped and often lighted at night, they are now the centers of informal outdoor living whether tenants swim or not. And, builders point out, there is nothing better than a pool to use some of the open space every good apartment needs.



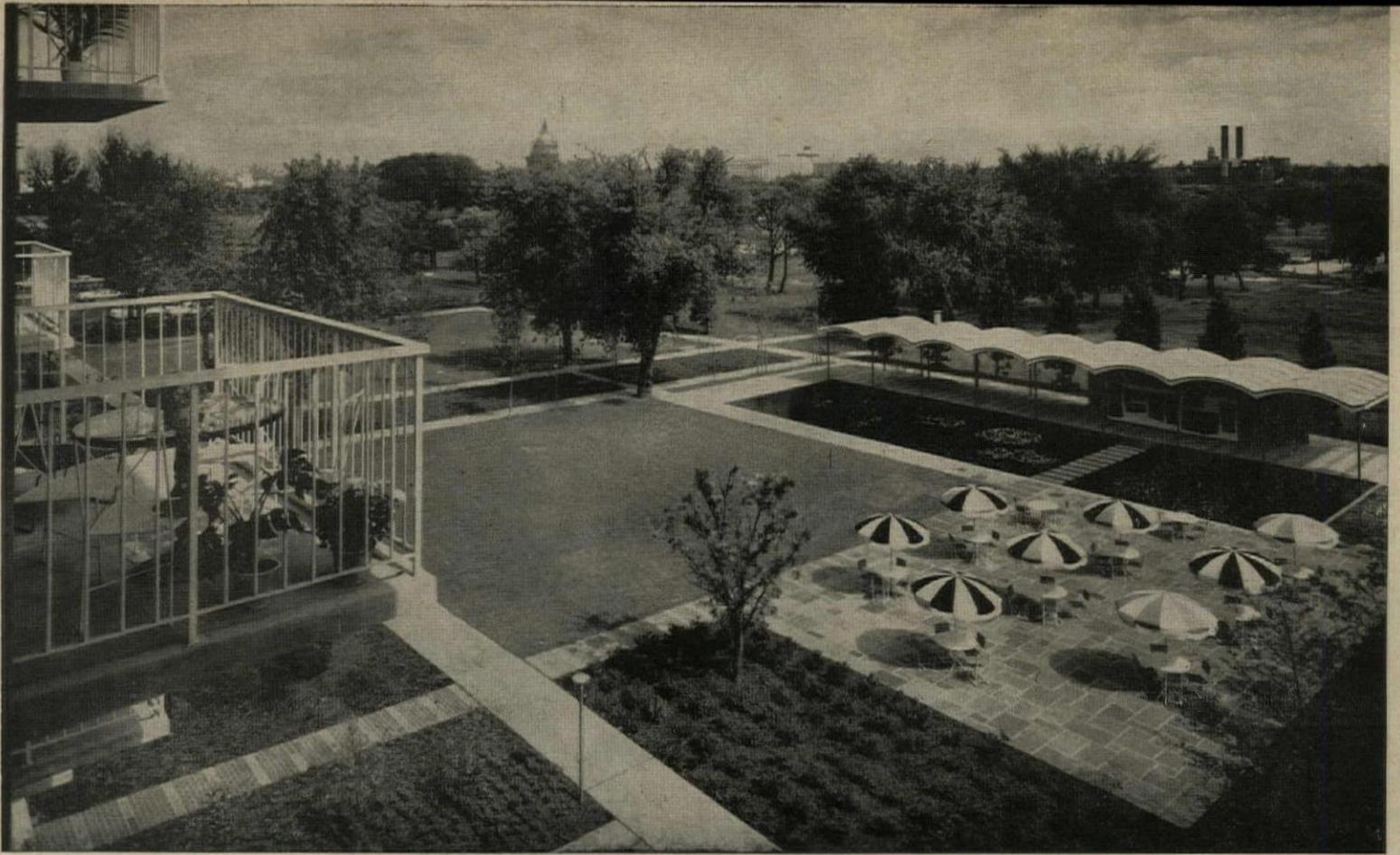
BEDROOM PATIO with every apartment helped Eichler Homes get 100% occupancy in 17 one-story units in Palo Alto in three weeks.



PRIVATE BALCONIES give every tenant outdoor living at Eig & McKeever's apartments in Silver Spring, Md. Architects: Collins & Kronstadt.



© Ezra Stoller



LANDSCAPED GARDEN behind Capitol Park apartments in Washington transformed slum area rubble heap into pleasant private park. Architects Satterlee & Smith designed lily pools and barbecue sheltered by arbor with vaulted

roof. Builders Roger Stevens and James Scheuer built paths and stone terrace, moved in trees and other landscaping. Half of Capitol Park's apartments overlook garden and have balconies large enough to use for outdoor living.

Markow



OUTDOOR BARBECUE—a communal feature at more and more new apartments—has big fieldstone grill designed by Architect Charles G. Polacek at Staman, Fields & Co's Maryland Park West in Phoenix.

H&H Staff

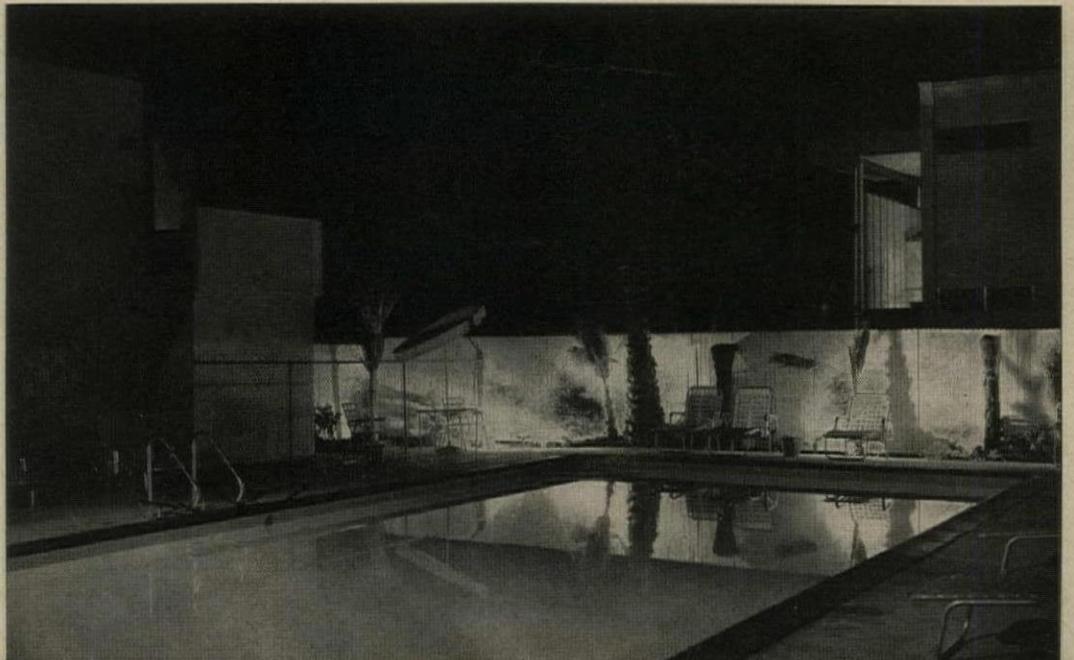


CIRCULAR WADING POOL, with sprinkler in center and benches for mothers, is popular play area for small children, also keeps them away from adults' swimming pool at Rock Creek Forest near Washington.

LIVING-ROOM PATIO (left) makes rear ground-floor apartment—usually slow to rent—fastest renter in midtown New York building managed by Realtor Charles H. Greenthal.

Scott Phillips

NIGHT-LIGHTED SWIMMING POOL (right) in center of courtyard, is big factor in attracting tenants to Paul Robertson's Bayside Villa at Newport Beach, Calif.



continued

Today's good new apartments are as noise free as most single-family houses

Muffling noise in apartments is far more complex than in houses.

So say many homebuilders who are now also building apartments. For instance: you can protect a house from neighbors' noise simply by the way you site it. Not so an apartment—where noise reduction must be built in.

But, builders also point out, the benefits of noise control are far greater in an apartment than in a house. Most people expect noise in an apartment—even though they don't like it. Offer them a quiet apartment, and they are pleasantly surprised, more inclined to sign a lease, and more apt to stay put once they have moved in.

How do you reduce noise? Here are some suggestions from successful builders and architects:

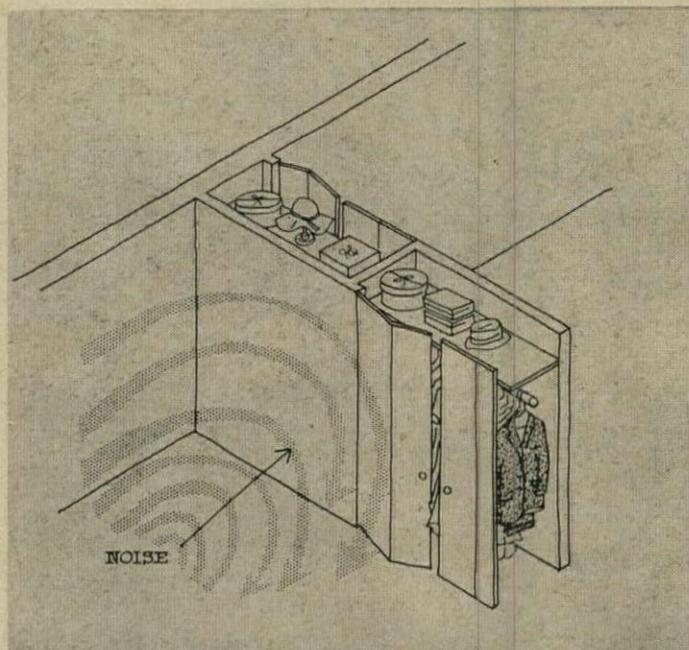
Isolate your apartments from street noise. If your view is to the street, place your building as far back on the site as possible, and build walls at least 4' high around all front patios. If your view is away from the street, face your apartments to the rear of the site, and use hallways, baths, and utility rooms as sound buffers on the street side. No matter where your view is, plant trees, shrubs, and even a high hedge between the street and the building.

Cut sound transmission between apartments. Best way to do it: with solid masonry walls. They cost less than double-framed walls (also effective) and have decibel-reduction ratings up to 60 (the level at which shouting or a loud radio is reduced to a murmur). Use resilient clips for fastening drywall.

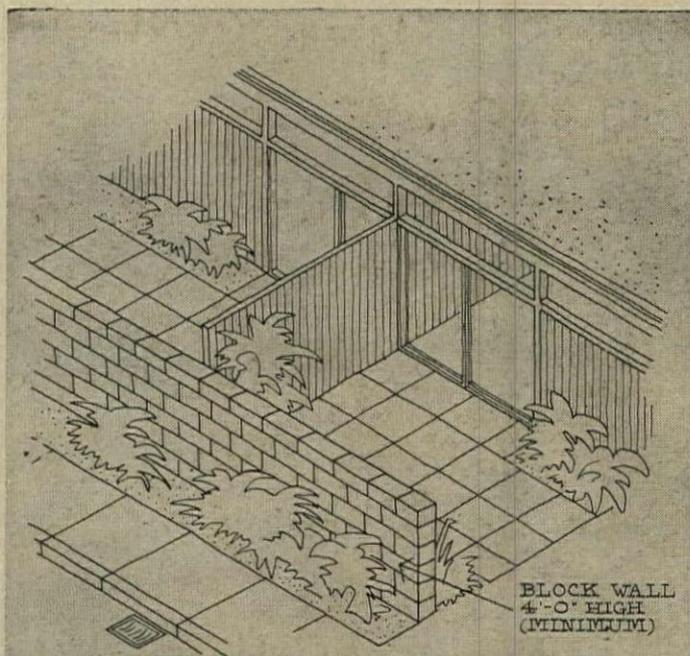
You can also cut sound transmission by putting fireplace walls and closet walls between apartments.

Keep your hallways from being sound boxes. Voices and footsteps in a hallway can reverberate through a whole building. To prevent this, use carpeted concrete or double-construction floors and textured (rather than smooth) walls.

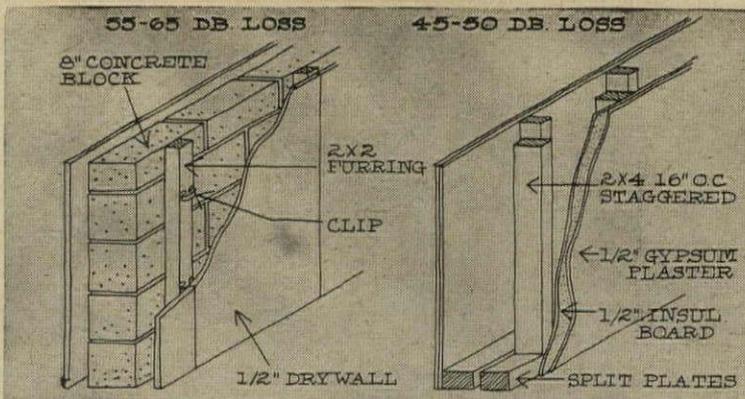
Isolate or muffle mechanical noise so it cannot travel. Best way to do this is to isolate noise at its source and prevent it from moving out over ducts and pipes and through the building structure. All mechanical equipment should be mounted on anti-vibration mounts of neoprene or felt. All ducts should have canvas sleeves separating them from equipment. Pipes with water under pressure (the only pipes that make noise) should be wrapped with soundproofing where they go through walls or ceilings. Sound-producing equipment should always be mounted so airborne sound travels away from apartments.



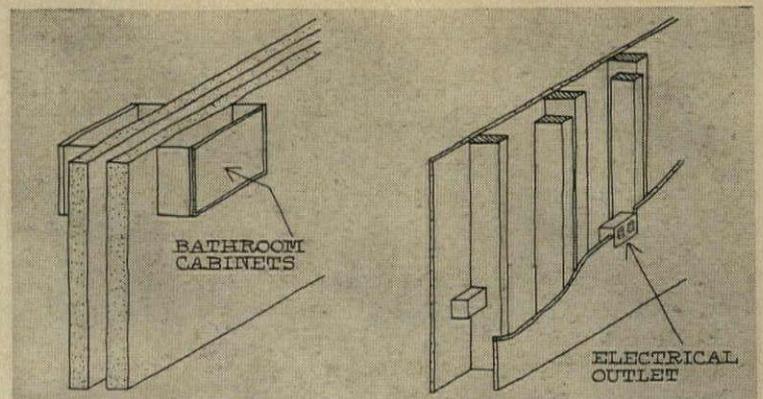
CLOSET WALLS make effective sound barriers between apartments. Full of clothes and with solid (not louvered) doors shut, a closet reduces sound transmission in the same way as a partition of many separate layers.



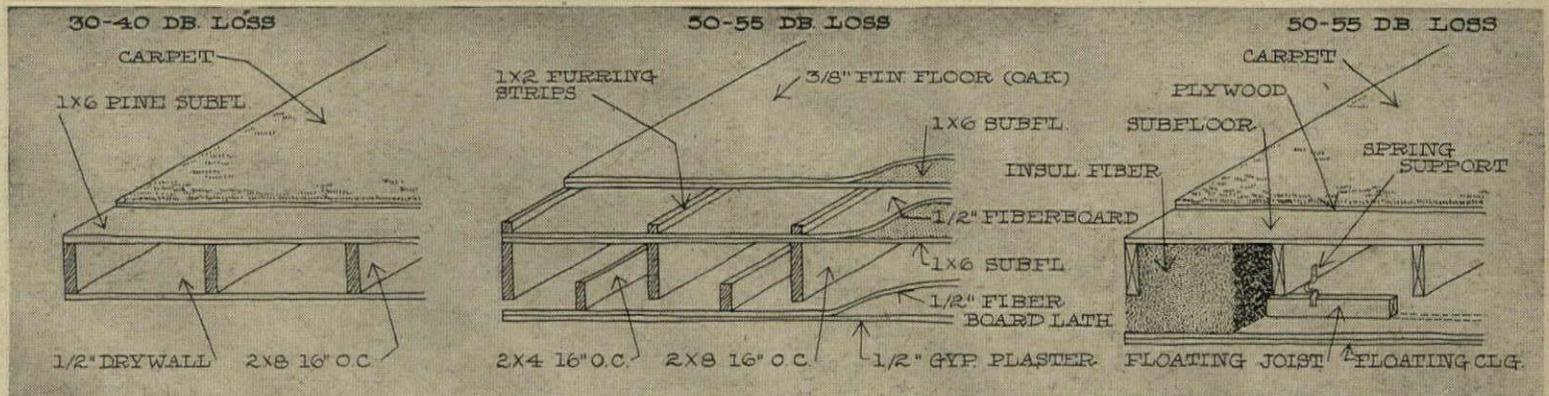
PATIO WALLS on street side of garden apartments reduce street noise on patios and inside apartment as well, also provide visual privacy from street and neighbors. Walls should be solid masonry at least 4' high.



PARTY WALLS (between apartments or between apartments and halls) do the best job of reducing sound transmission when they are solid masonry (decibel-reduction rate: 55 to 65). But double-framed walls work well, too.

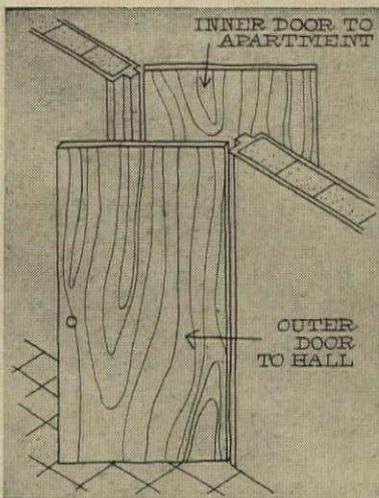


TO PREVENT SOUND LEAKS IN PARTY WALLS, medicine cabinets in back-to-back baths should be surface-mounted—not set into walls. And electrical outlets in neighboring apartments should not be placed opposite each other.



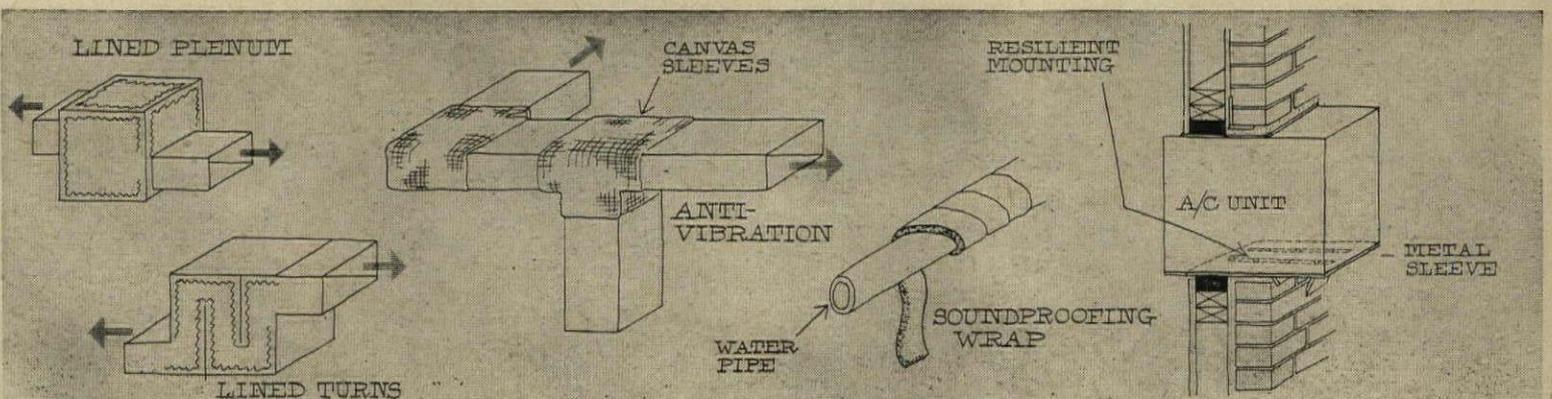
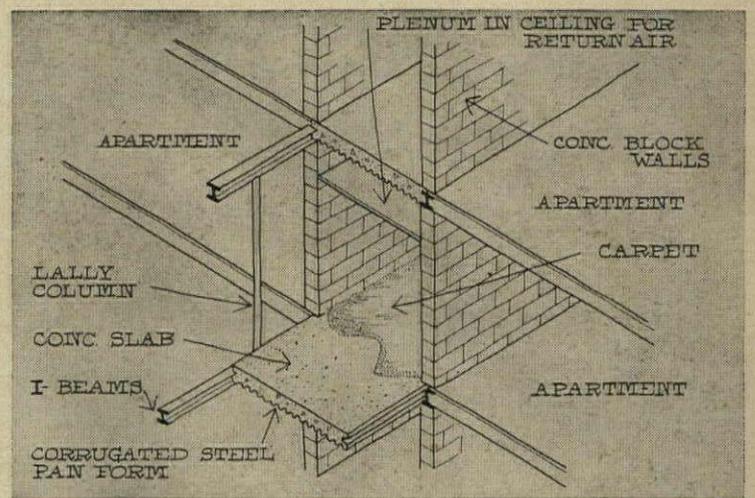
PARTY FLOORS (above other apartments) should not reverberate to footfalls. Minimum floor at left must have carpeting to avoid drumming action that can annoy people below (even with carpet, radio can be heard clearly through it).

Triple-framed floor, center, is as soundproof as a poured concrete deck (shown below for hallways). Floor at right has resilient clips for hung ceiling, and, with carpeting, is almost as soundproof as triple-framed floor.



HALLWAY DOORS (left) to apartments do best soundproofing job if they are double—air space between them acts as a baffle. Doors should be weather stripped because sounds flow through cracks.

HALLWAY FLOORS (right) of concrete poured over corrugated steel pans cut sound transmission to a whisper, and—more important—do not reverberate when people walk on them.



MECHANICAL Baffles keep equipment noise from entering apartments along ducts and pipes. Left to right: duct is lined with soft material to stop sound transmission; rigid shell of duct is interrupted with canvas sleeves to keep vibra-

tions from traveling through it; pipe carrying water under pressure is wrapped with soundproof material to muffle plumbing noise; air conditioner is mounted on vibration-absorbing pad to isolate noise at its source.

Today's good new apartments have completely controlled and odor-free air

More than ever before apartment owners are finding that a controlled indoor climate gives new apartments a distinct advantage over old ones.

Renters want more control—and more comfort—than they can get by simply opening or closing a window or turning a radiator off or on.

To give them what they want, here is what to do:

Install a thermostat in every apartment. With a central warm-air heating system, the thermostat activates a motorized damper (you can run returns in hallway ceilings, as shown opposite). With a central hot-water system, the thermostat works a motorized zone control. With individual systems—either furnaces, boilers, or heat pumps—the thermostat turns the heating unit on or off as in a single-family house. With electric baseboard heat, you will get the best results by installing a thermostat in every room.

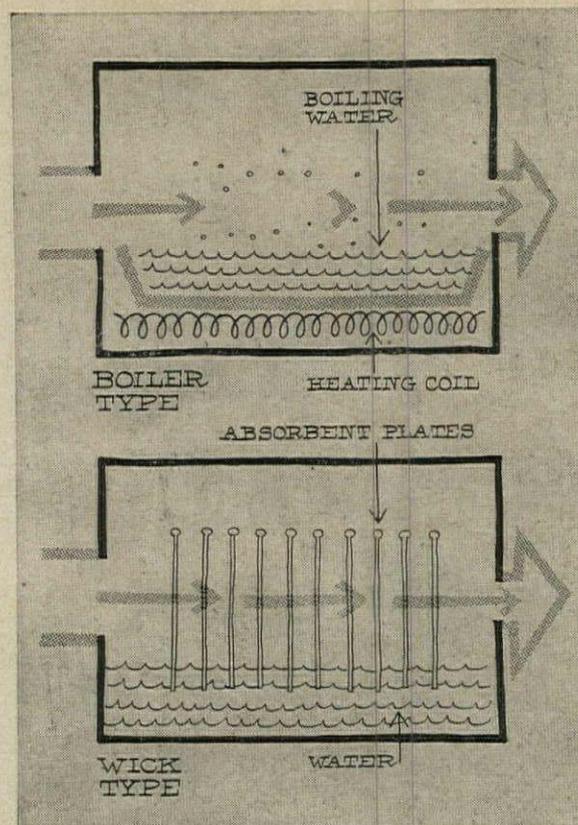
Install cooling equipment—but be sure it is not obtrusive. You can often spot an old, poorly designed apartment simply by the window air conditioners sticking out all over the facade. (Window units themselves are good, but when they are spotted over a big facade, the building looks bad.)

Builders of good new apartments keep air conditioning unobtrusive in any of four ways: 1) by using through-the-wall units mounted flush with the outside wall and sometimes centered 6'-8" above the apartment floor so cold air can drop down; 2) by placing units in a louvered closet or in a louvered enclosure on a balcony; 3) by mounting condensers in a concealed air shaft (see drawing, opposite); 4) by placing a central absorption unit in the basement and a water chiller on the roof.

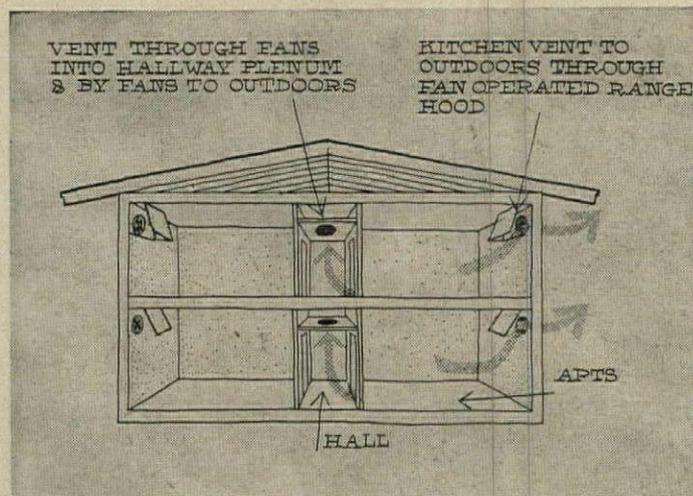
Install vent systems to get rid of smells. In your kitchens, use range hoods with fans, and be sure to vent directly to the outdoors. You can also pick up bathroom odors with your kitchen vent systems. In your hallways, mount registers, ducts, and big fans to draw air up and out of the building. Allow for a clean air supply from the lobby or outdoors so that your system will not tend to draw apartment smells into halls by getting its air supply from the apartments.

Install filters to keep out dirt, pollen, and smoke. You can use an electronic filter with either individual or central warm-air systems. Filters keep an apartment so much cleaner that they save up to \$1,000 in maintenance costs over ten years.

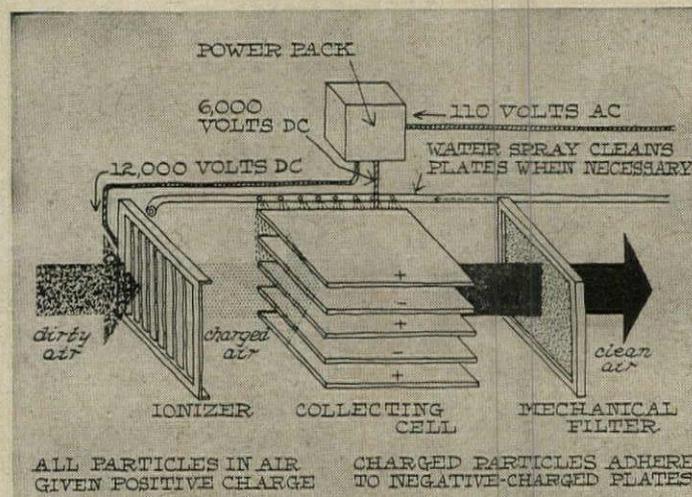
Install humidifiers to dampen the air. Humidifiers are an important talking point with prospective renters because they reduce colds in winter (too-dry air causes as many colds as wet cold air).



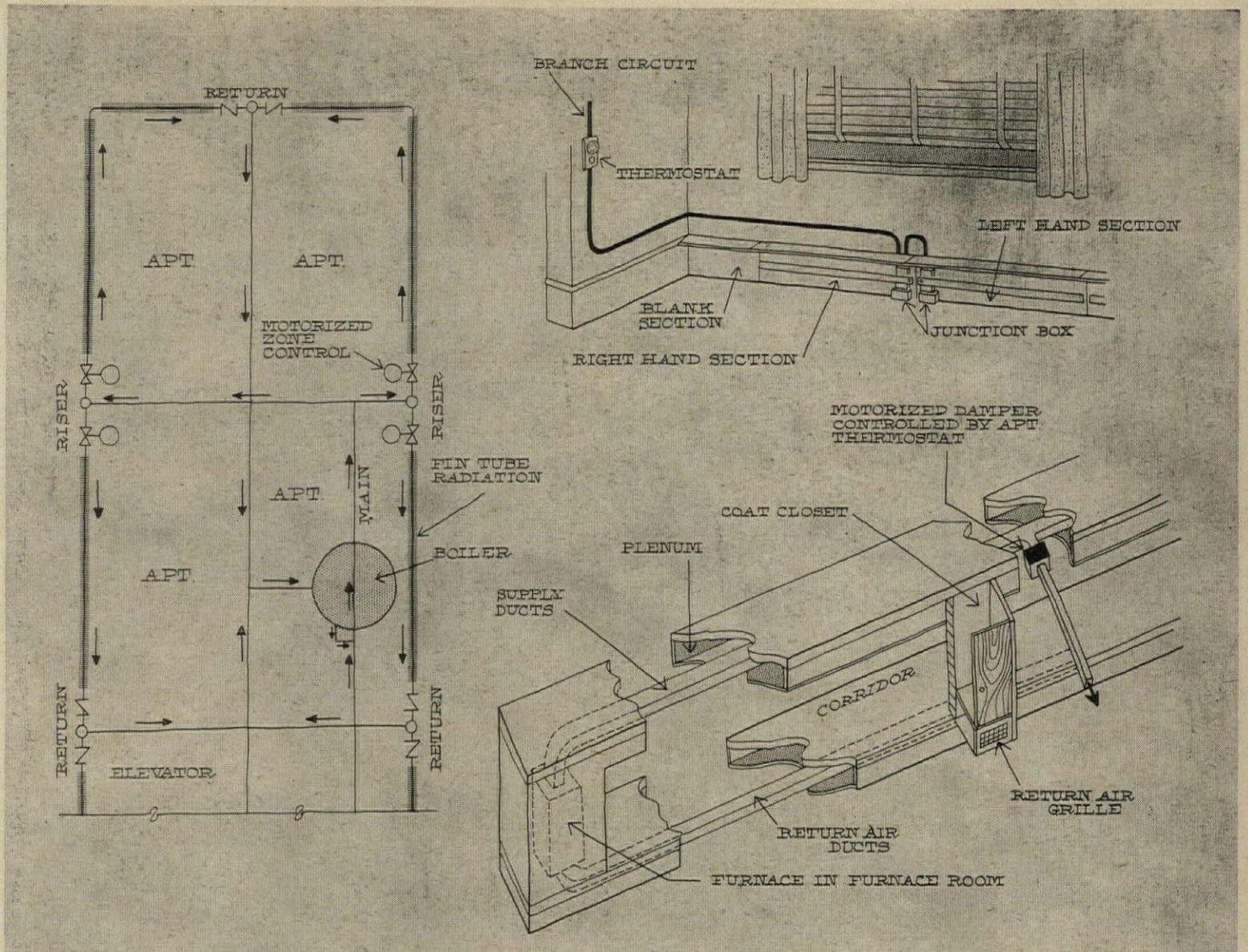
HUMIDIFYING in winter with special systems like this—added at or just ahead of warm-air plenum—reduces winter colds. Humidistat activates system by sensing moisture levels.



VENTILATING like this rid's today's apartments of kitchen smells. In kitchens, range hoods exhaust hot moist air outdoors. In hallways, another fan system draws air up and out of building.

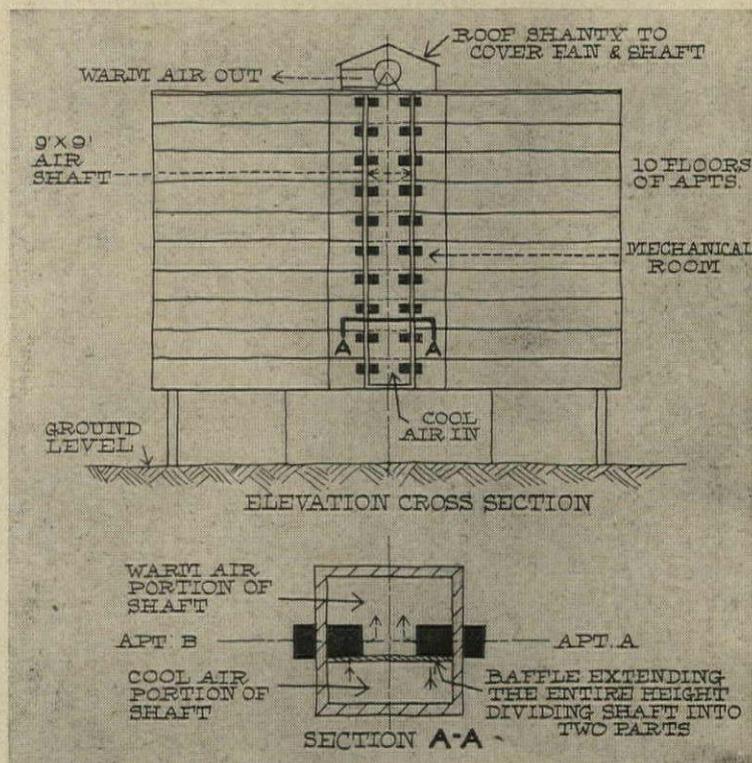


FILTERING with an electronic system like this can keep 90% of all air-borne dirt, dust, pollen, smoke, and bacteria out of apartments. Filter is installed on the return side of warm-air system.

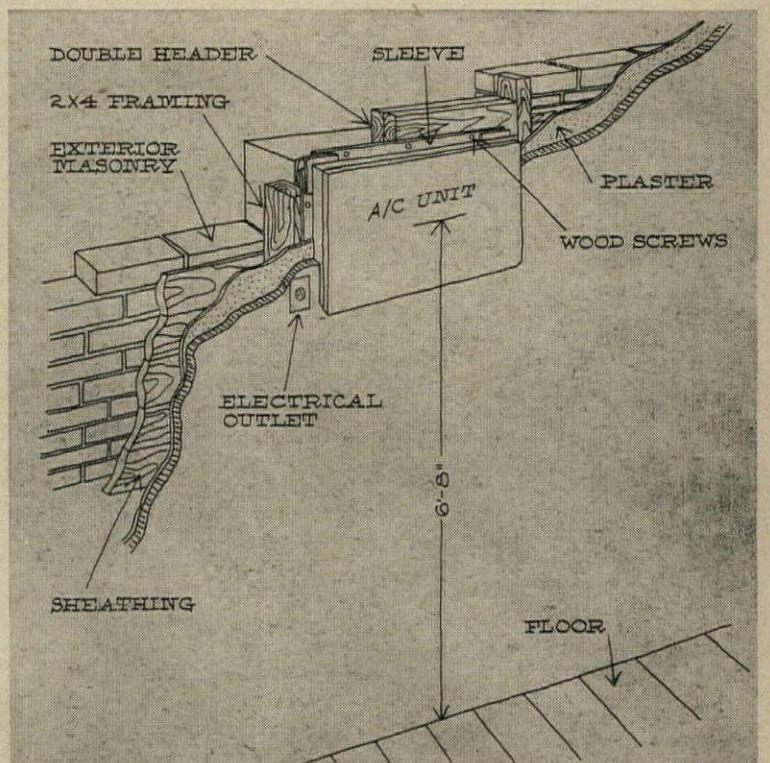


HEATING with hot water, left, or warm air, lower right, can be done with central systems or individual boilers or furnaces. Electric baseboard heat, upper right, is automatically individual. There is no rule for choosing between central

and individual systems: With central equipment, owners defray operating costs with a low increment added to rents; with individual units, tenants pay higher heating costs, slightly lower rents.



AIR CONDITIONERS IN AIR SHAFT do not deface apartment facade. In this system—worked out by American Standard and Detroit Edison—condensers stick out into concealed air shaft that runs up through center of building.



AIR CONDITIONER NEAR CEILING is less noticeable inside apartment and more efficient because cold air drops. Through-the-wall unit is also less noticeable outside because it is mounted flush with exterior wall.

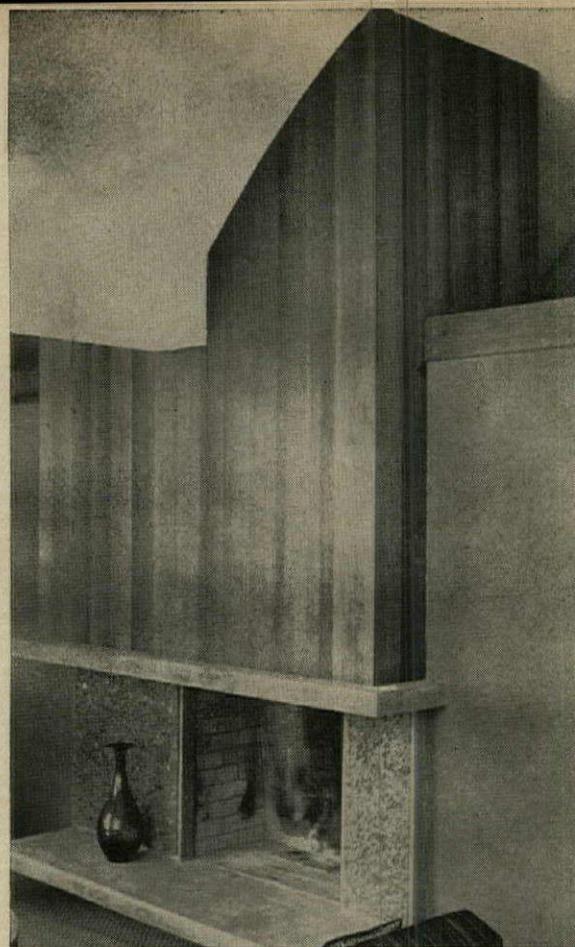
Today's good new apartments offer all these other attractions for more pleasant living

Smart builders are including more and more of these attractions—not only to lure tenants out of undistinguished apartments but also to make sure the tenants will stay when still newer apartments are built nearby.

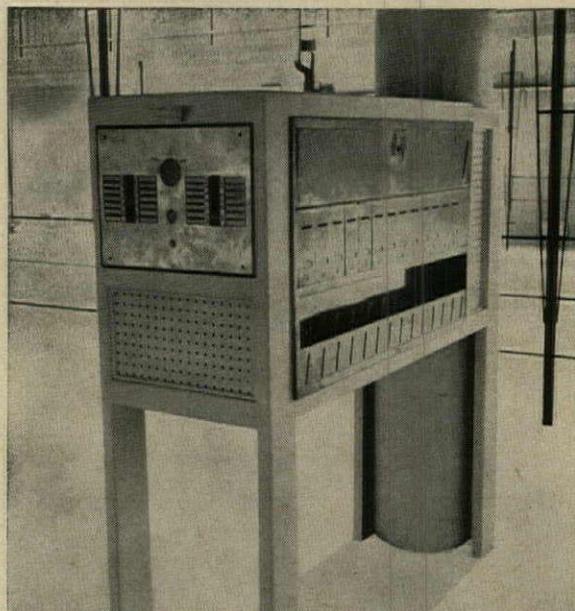
Here, they say, are some of the things you can do now to insure 100% occupancy in the future:

- 1 *Build in wood-burning fireplaces*—they have even more sales appeal in apartments than in houses. Test their appeal in your area by building in a few to see if renters will pay more rent for them.
- 2 *Install intercoms in the lobby* so guests can call in to announce themselves. Intercoms are standard in most high-rise buildings but are still rare enough in walk-ups to be a good selling point.
- 3 *Make your windows large.* One of the chief advantages of new apartments over old-fashioned ones is big windows that let in lots of light.
- 4 *Include carpets and curtains*—now practically a “must” in many cities. One of California’s most attractive apartments is slow to rent because it is neither carpeted nor curtained. Renters hesitate to spend their own money for carpets and curtains when they are not sure how long they will stay.
- 5 *Panel your living room walls.* Wood paneling—in a living room or an extra bedroom that can be used for a den—costs little extra, adds a lot of warmth, and that makes an apartment look like a house.
- 6 *Provide covered parking for tenants’ cars.* But be sure your carport is a visual asset, not an eyesore. There is a vast difference between a well designed carport and one that looks as if it had been designed by a do-it-yourselfer. Also, plan enough outside parking for guests’ cars.
- 7 *Plan an efficient laundry in a convenient spot.* A year or two ago it was enough to put a couple of coin-operated laundries in any unused corner. Now you need clean, well lighted, well ventilated space—often with cabinets for soap and supplies.
- 8 *Set aside a party room* to be used for tenant get-togethers or rented for private parties. Rooms like this—now included in more and more apartments—help new families become acquainted, build goodwill for the apartment owner, and are of major importance if many renters are elderly or retired.

Hang an art show in the lobby. Unusual ideas like this stir up favorable talk. And they please renters who like a building with a distinguished lobby.



STONE AND REDWOOD FIREPLACE helps rent apartments in year-round cool climate at Tiburon near San Francisco. Builders: Reid, Cahn & Richardson Inc (exterior view, p 105).



LOBBY INTERCOM lets guests and delivery men announce themselves in the Gales Apartment built and owned by Charles Gerlach, Jr in Albuquerque.

Vincent Juliano



WINDOW WALL across end of living room lets in lots of light at Colonnade Park in Newark, N.J. Glass-walled, 22-story building was designed by Architect Mies van der Rohe.



WOOD PANELING and exposed beams in living room of La Vista Apartments, Albuquerque, are house-like features that attract renters, say Builders Jim Cox and Stan Haberman.

Del Carlo



FLOOR-TO-CEILING DRAPERIES, fireplace, bookshelves, and cabinets are standard equipment in Clarence Minnerly's one-story, triplex apartments in Santa Clara, Calif. Two-bedroom apartments have 900 sq ft of living area.

Photos: H&H Staff



BASEMENT GROCERY STORE, a great success with tenants, was added at Capitol Park Apartments in Washington when a promised nearby shopping center was delayed.



BASEMENT LAUNDRY ROOM is well lighted and well ventilated, has chairs, table, soft-drink dispensing machine. It is in Capitol Park, built by James Sheuer, Roger Stevens.



WIDE CARPORTS at Baytree Apartments, Los Gatos, Calif. make it easy to get in and out of large cars. Builder James Barber also provided big turnaround area. Carports and apartments were designed by Architect Fred Marburg.

Markow



ART DISPLAY in lobby of Executive Apartments, New York City, is "unusual lobby feature we strive for," says Rental Manager Charles Greenthal, who controls many apartments.



RECREATION BUILDING at Staman, Fields & Co's Maryland Park West cooperative apartments in Phoenix has stone fireplace, cooking and dishwashing facilities, air conditioning, furniture and outdoor barbecue. /END

How to make money building apartment houses

—and how to keep most of the money after taxes

By Robert W. Murray Jr

Almost anybody can make money building rental housing—and make it faster and easier and keep more of it after taxes than he can building one-family houses.

But nobody should expect to make money building apartment houses today unless he knows exactly what he is doing—far more than he needs to know to build houses.

Almost anywhere you go today you can find many kinds of apartment houses with many kinds of financing that are paying sponsors' profits of 10% to 100% a year, much of it taxfree.

But you can also find well located, well designed new apartments whose backers have made very little money, or actually lost money, because they did not know the ropes on financing and did not know the angles on taxes.

It is easy to make money building apartment houses only . . .

IF you have enough money to start with (especially the first time you try it).

IF you have a topflight tax consultant (either a tax CPA or a tax lawyer).

IF you have an apartment-wise architect (who knows what the lenders want).

IF you have a good mortgage banker (who can tap the right lenders at the right time).

IF you have a syndicate ready to buy you out (or agree to a sale-leaseback arrangement)

Building apartments for today's changing market is no game for the lone amateur and no place for the shoestring operator. But even a newcomer to the rental market can make his first project a success if he takes advantage of the competent professional help available to him at reasonable fees.

Most of today's new apartments are being built by men who have reached a high-income, high-cash position and want to take advantage of the special tax advantages that apartments offer.

Now hundreds of present and former homebuilders who have heard of the tax opportunities are planning to get in on the boom. NAHB's new rental housing committee has drawn standing-room-only audiences at the five regional meetings it has held this year.

Says James Neville, NAHB's one-man rentals staff: "More homebuilders come to me every day for advice. I tell them to start by hiring an expert on all the tax angles."

On the next nine pages you will see:

1. How much equity you need to build apartments and how to get it (below and page 114h).
2. How to depreciate your new property to avoid big tax bites (page 114h).
3. How the tax laws can let you keep more profits after taxes (page 115).
4. How syndicates are set up to build and buy apartment projects (page 116).
5. How FHA is doing more to encourage rental construction (page 118).



How to get the equity money you need

Most apartment builders start with a nest egg of equity money chipped in by relatives and friends.

Next they interest some business associates in joining their venture — realtors, mortgage bankers, and sub-contractors.

They raise the rest of the equity needed from local investors willing to take a small risk for a big return. The best prospects are apt to be professional men who do not need to invest their savings in their own business.

Here are eight ways to get by with less cash equity:

Cash in on your know-how: Sometimes the builder gets by without putting up any money of his own because other investors are willing to give him a share of the ownership in payment for his ability to plan, build, and finance the project.

Buy land at a bargain price. With luck or good planning, you may already own the right piece of land bought at a low price. If you can get the land appraised for three or four times what it cost you, you may be able to get by with very little equity money.

Example:

A Washington contractor owned a run-down family homestead on a 12,000 sq ft lot zoned R-10 for 1,000-sq-ft units. His elderly sister lived in the house. He tore down the house, built a 12-unit garden apartment with a mortgage that covered all but \$10,000 out-of-pocket costs. Result: his sister lives in one unit, manages the property, and nets \$400 per unit a year—a \$4,400 yearly return on his equity of \$10,000 plus lot.

Get land re-zoned for apartments. Some sponsors are mad enough or lucky enough to buy a good apartment site in an area zoned for single-family residences and get

it rezoned for multi-family use. This usually brings on a zoning fight with the neighbors but the stakes are high. Land bought for 15¢ a sq ft for houses can get a 75¢ a sq ft appraisal for apartments as a general rule. And if you lose the zoning fight, you can probably resell your land for what you paid for it.

Build on a long-term leasehold. This can cut your cash money need in half on a conventionally financed project. Says Builder George Rabinor: "In effect you get the equivalent of a second mortgage which you never have to pay off. If you figure that second mortgage money commands 8% to 12%, you can translate this into the ground rent you pay. If you can lease a \$500,000 piece of land for only \$30,000 a year, it is the same as paying 6% interest on a second mortgage."

Many lenders will put up first mortgage money for leased-land projects, and the ground rent is a tax-deductible expense. But there is one disadvantage: your chance of making a capital gain on selling or re-financing the project will be limited.

Buy land on a low down payment. This can take the form of a long-term option or a purchase money mortgage subordinated to a first mortgage. Or some land owners will be willing to settle for part-ownership in the total project.

Mortgage property you own. It may suit your long-term needs best to raise your equity by putting a second mortgage on other property you own, rather than take in partners who will share ownership. You may have to pay a stiff price for the loan, but the interest on the second mortgage is tax deductible—and your full ownership allows you to keep all the benefits of both fast depreciation and amortization of the first mortgage.

Example:

A 110-unit new Maryland garden apart-

If you are just starting out, build garden apartments

Garden apartments require less equity per unit and usually less total investment.

Moreover, they come closest to single-family-house construction. You can build them like big houses, and usually you can use the same subs you use as a homebuilder.

Most experienced homebuilders find garden apartments easier and cheaper to build than houses. Says ex-homebuilder Milton Isen, who is now finishing his first apartments in Maryland: "Garden apartments are easier to build because there are fewer structures, less sewers and streets, less dirt to move, less surveying, fewer supervisors to hire, easier scheduling of deliveries, less material losses, fewer settlements to handle, fewer costly callbacks for repairs, and fewer government agencies to deal with."

And you can make just about as much profit—before or after taxes—as you can make on high-rise apartments.

continued

ment valued at \$1 million cost \$800,000 to build. (The other \$200,000 represented the builder's \$50,000 building profit and land valued at \$150,000 which had cost him much less a few years ago.) The builder got a \$650,000 mortgage, then borrowed \$150,000 on second trusts on two buildings he owned. The trusts are at 6% interest but involved a 3-point discount. The builder will retire the two trusts in only four years by using the cash flow from his accelerated depreciation on the new project.

Keep a good credit rating. The better your credit standing and reputation, the better the terms you will get on the mortgage loans.

Build efficiently. There is no question that speed in the course of a job will free capital. It pays to hire the best subs—and they may lend their credit to you. If you finish a job three months ahead of time, you get a bonus of three months' extra rent (or four with deposits) which you can use to meet capital requirements.



How much equity do you need to finance apartment houses?

This depends on the lender, how tight mortgage money is, how much your land is worth, and many other factors.

If you finance conventionally, you will rarely get more than 70% loans. So 30% will have to represent the value of your land, about 10% may be your profit and overhead, and about 10% your cash outlay.

But some lenders will make only a \$600,000 loan on a \$1 million construction job, and do that only when you can show \$400,000 in liquid assets to cover completion of the job. And many mortgagees will hold back a big chunk of the mortgage until your project is 75% rented.

If you finance through FHA, you theoretically can borrow every penny of your certified construction cost on a Sec 207 apartment, with no equity required except your land. But don't let that fool you into thinking you can build FHA apartments on a shoestring.

The smallest garden apartment that J. Halperin & Co has financed lately is a 40-unit \$620,000 project in Westchester County, N.Y. Though 90% financed under FHA Sec 207, the sponsor needed

\$100,000 to build it. Part of this went to pay the 7 point discount on the mortgage.

You need solid capital even to build a management-type co-op under FHA Sec 213 which lets you borrow 97% and requires 3% from the co-op buyers. Says Broker Irving Wharton: "The man who builds a \$1 million co-op will have to tie up at least \$200,000 before he starts getting his money back. FHA requires a sponsor to have a net worth of about 30% of the total cost and he will have to plan his land, process it through FHA, hire an attorney, a land planner, and an architect, advertise for co-op buyers, and start construction before he can start to draw the first of his loan."

Says New York Builder George Rabinor: "On a \$1.2 million project in which the land is worth \$200,000, the builder needs that \$200,000 because it must be free and clear, and he will need at least \$50,000 more. This covers the 2% of mortgage amount which FHA requires be placed in escrow for operating capital, possibly a small deposit, or preferably a bond for off-site improvements, excavation, and overhead costs. You need little for operating capital because FHA's payments come in monthly when the foundation is under way."



Fast depreciation is the key to big tax savings

This is true of almost all apartment-house building, whether financed conventionally or through FHA. It is true whether the apartments are built by a corporation, a partnership, or an individual.

With accelerated depreciation you can set up your books to show a loss the first two years on even the most profitable apartments, but this loss won't do you any good unless you are organized so you

can offset this nominal loss against your ordinary income from something else. The higher your tax bracket, the bigger these savings will be. If you are in the 70%-or-higher income-tax bracket, this tax loss can be the most profitable part of the whole venture.

If you are a housebuilder in a high tax bracket, one of the best things you can do is build apartments, too, because you can merge the paper losses of your apartment projects with the profit of your homebuilding corporation. This means you can keep your profits in the homebuilding company, instead of having to pay them out in dividends and then being clipped perhaps 80% or 90% in taxes on them.*

After a few years you ought to sell the property because the faster depreciation in the first years leaves you less depreciation to take in the later years. If you own the property personally and want to keep it, you should sell to a corporation which you set up as a subsidiary of another corporation you own. The corporation that buys your apartment can take three-quarters of the fast depreciation that you took from it, and when the building is sold again later to another buyer, he too will be able to take 150% of the straight-line depreciation.

Ever since 1954, the Internal Revenue Service has allowed the first owner two ways to depreciate a building roughly twice as fast as ordinary straight-line depreciation. One of these is the "sum of the digits" method; the other (and usually preferable, because you can switch to straight-line depreciation as soon as it becomes more profitable, without getting the Treasury's okay) is the "double-

declining balance" method (see H&H, Oct '59).

Now you can take depreciation by items, even faster than fast

This year the courts have approved a new way to accelerate accelerated depreciation. You can now safely take your accelerated depreciation part by part. Thus only the shell of a building with a 25-year life must be depreciated over 25 years; its shorter-lasting components can be depreciated at the accelerated rates over only 5, 10, 15, or 20 years.

Here is how the components method of depreciation drastically raised a Virginia builder's cash throw-off on a big garden apartment project:

Since the \$1.4 million project was masonry construction, which the Treasury Department estimated to have a 50-year life, all the project would have had to be depreciated over 50 years if the component method had not been used. But the "useful life" was cut to less than 30 years, in effect, when each group of components was depreciated on the basis of its calculated useful life. Thus the basic structures that cost \$808,000 to build were depreciated at 50 years, but \$50,000 for painting and venetian blinds was depreciated over only five years, \$102,000 for kitchen appliances and cabinets over 10 years, \$200,000 for heating, air-conditioning, swimming pool and bath house over 15 years, \$67,000 for wiring and electrical fixtures over 17½ years, and \$176,000 for roofing, plumbing, insulation, etc over 20 years. For result, see table† at left.

* A further advantage is that as long as your homebuilding corporation is deep in debt for the apartment mortgage, the Treasury will have less grounds for insisting that it pay out its housebuilding profits in dividends taxable at high-bracket rates.

†Result:

Depreciation under double-declining balance method for first five years.

Year	Component Parts	On total cost of construction
1	\$122,400	\$56,000
2	103,670	53,760
3	89,450	51,610
4	77,260	49,545
5	71,920	47,563



Here are seven ways to save taxes

suggested by CPA Stanley Grey of Marks, Grey & Shron, New York, member of NAHB's tax studies committee and tax consultant to more than 100 apartment builders.

Buy land personally on FHA projects. This lets you deduct from your ordinary personal income right away any costs connected with the land (like taxes, demolition, eviction stipends, operating losses pending completion of the new project, and interest on whatever money you borrowed to buy the land). If you buy the land through your apartment corporation you may have to wait years to get these deductions.

Set up pensions for officer-stockholders. This lets them postpone some income until a time when their individual tax rates will probably be lower. Or you can set up the pension for a lump-sum payment which will be taxable as a capital gain at not more than half what their tax would be on ordinary income.

Waive the FHA builder fee. FHA will allow a builder's fee for profits in making its appraisal, whether the fee is actually paid or not. This fee will be taxable as ordinary income if you take it; it will not be taxed at all if you are careful not to include it in the face of the FHA note.

Trade for a new property. Under the IRS "like-for-like" exchange rules, you can make a tax-free exchange of your project for another piece of property provided no cash is paid to you. When you sell your apartment, this tax-free exchange lets you reinvest all your "sales proceeds" in the new income-producing property undiminished by a 25% capital gains tax.

Use parent-subsidiary companies. You can consolidate earnings of all corporations

continued

owned 80% or more by the parent company. You can write off losses of one company against profits of another. This device is especially useful to those who keep building and constantly create new tax losses that can be carried forward five years or back three.

Trade the land to a 207 corporation. If you personally own the land for a Sec 207 apartment, don't sell the land to the

FHA corporation because you would have to pay personal taxes on any profit you made. Instead, trade it tax-free for the common stock, long-term notes or preferred stock of the company. (No use paying taxes on a profit to yourself.)

Plan for estate taxes. When you start a new syndicate and get shares of stock at low cost, give some or all of the stock to your heirs before the stock appreciates when the building operation succeeds.



What you need to know about syndicates

"Syndicates are taking the albatross of heavy equity financing off the builder. There has been this metamorphosis: first there was just the builder, then he brought in his 'partner,' later he talked about his 'associates,' and now he talks about his 'syndicate.'"

—James Neville, director, rental housing committee, NAHB.

"Syndicates usually come in after construction has started or been completed. Why should a dentist with \$10,000 to invest—and that means pulling a lot of teeth—put money in a deal that will take a year or two to complete?"

—Mortgage Banker Irving Wharton, J. Halperin & Co.

"The trend today is toward corporate-type syndicates that can buy or build a number of projects and sell stock in smaller units."

—Mortgage Banker George DeFranceaux.

You hear more and more about syndication, "private" and "public." HOUSE & HOME recently questioned a large number of builders, realtors, and others about their interests in apartment houses and found them more interested in learning about "syndicates" than anything else. So let's take a look at syndication:

What is a "syndicate"?

The noun has so many meanings that it has become almost meaningless. The verb syndicate means delegate, so a syndicate can be any kind of incorporated or non-incorporated association by which two or more people with capital delegate the management of their investment to someone willing and able to manage it. The legal form may be a corporation, a partnership, a joint stock company, a land trust, or some other mechanism.

How are syndicates taxed?

They are taxed either as a corporation or as a partnership. A syndicate can be a partnership but be treated as a corporation for tax purposes, or it can have a corporate form yet be taxed as a partnership.* This is such a tricky business that no brief account could hope to give you just the right advice to fit your specific problem. Only a top-flight tax man

(a tax lawyer or a tax CPA) can tell you what to do.

Are syndicates regulated?

Some are; some are not. Every state has a securities law, and no two laws are the same. Federal courts have ruled that any pooling of capital with the expectation of making profits from the effort of the promoter represents "securities" just as much as stocks, bonds, or debentures. However, the Securities & Exchange Commission usually exempts "private" syndicates from its requirements when a) no more than about 25 people are offered a chance to participate, and b) no more than \$300,000 is raised by the syndicate.

What is the commonest form?

Today the trend in syndicates seems to be toward the "limited partnership" in which two or three general partners assume

* Two years ago Congress made it possible for small companies to avoid corporate taxes if no more than ten people own shares and rents total no more than 20% of receipts. In August, Congress passed the real estate investment trust bill under which these two restrictions are largely ended. See News, page 44.

all the liabilities, and the several limited partners take no liability beyond the risk of losing their investment. Benefits of depreciation can go direct to both general and limited partners without being taxable on a corporate level. The smaller limited partnerships both build new apartments or buy from builders within a few years after the project is completed. The larger syndicates tend more to buy completed projects than build them, because they must get SEC approval to undertake large offerings—and prospectuses are harder to substantiate for unbuilt, as-yet-unproved projects.

How much money does a limited partner put into a syndicate?

Sponsors usually seek "units" of participation of \$2,000, \$5,000, or more, though some will shade this and combine smaller amounts into one minimum unit in a trust form. For example, if the builder-syndicator needs \$250,000 he will try to limit the offer to units of \$10,000 for 25 people—otherwise he would probably need to clear the proposal with SEC.

What profit can a syndicate member make?

Returns to syndicate members run a wide range—from minus (if the venture fails) to 20% and up.

And the profit depends on each member's personal tax situation. If one-third of the return is tax-free, this means much more to a high-tax-bracket man than to a low-bracket investor.

Says Phoenix Builder Paul Staman: "We have returned 23% to 45% profits to limited partners who have invested in

some of our syndicates. Most of this was capital gains, taxable at 25%. Another method we are using gives limited partners 75% of the profits, and the general partners—Edward Fields and myself—get a small building fee plus 25% of the profits. The limited partners get all their capital investment back before we get any distribution of profits. All of this capital return is tax free, of course, and is paid out of the cash flow in the high-depreciation period."

Here is how one current syndication has been set up to give limited-partner investors a chance for a 20% annual gain:

Shannon & Luchs, one of Washington's top realty firms, has set up a public syndicate to buy a 268-unit high-rise apartment house financed by a \$4 million FHA mortgage by Builder Ralph Bush. William Shannon and Frank Luchs are general partners, and limited partners invest a minimum of \$3,600 for ten shares of stock in the syndicate corporation plus \$2,600 in notes bearing 4½% interest. The builder gets \$715,000 cash; the syndicate assumes the mortgage payments. Using a 150% declining-balance depreciation, the building is expected to show a tax-loss of \$29,450 the first year, though actual income before depreciation should total \$146,000. (Interest on the 4½% notes goes back to the partners before \$176,000 is taken for depreciation the first year.)

Each year the investor expects to get back \$311 on his \$3,600 investment—most of it a tax-free return of his capital and the rest in interest on his notes. By the tenth year he will have been paid off so far as his \$2,600 of notes are concerned, but by now his \$1,000 worth of stock may also be worth \$3,800 more than he paid for it because nearly \$1 million in mortgage principle will have been paid off by the tenants.



Sale-leasebacks raise your yield and release much of your equity

If you want to get your money out of a finished project to keep building more apartments, your best bet may be to sell the project and lease it back. This way you may get three-quarters of your investment back and make a much greater percentage return on the part you leave in.

New York Mortgage Broker Jack Sonnenblick of Sonnenblick-Goldman Co has arranged many sale-leasebacks and provided the two cases shown below as typical.

Says Sonnenblick: "The syndicator usually takes 1% or 2% of the lease payments for organizing the deal, and his syndicate members get about 10%. They will want the builder to keep part of his money in the project so he will be sure

to manage it properly. And it pays the builder to keep some of his money in. Otherwise his return would be much smaller dollarwise, and hardly worth the risks involved as the project manager, even though the profit was made on no investment."

Says New York Tax Attorney Mitchell Siegel: "Sale and leaseback is one of the most intriguing and beneficial developments for the builder in recent years. The present demands for investment in real property give the builder an opportunity to get most of his capital back and still get a handsome return with future value accruing to the leasehold property as a result of increased rentals."

continued

Builder Arthur Radice suggests another reason for keeping part of his investment in each apartment he builds. Says Radice: "Build pieces of property into your own organization, because the income can pay

your overhead at times when you aren't building elsewhere. Then you won't have to take on any job just to pay your overhead. You also gain because consolidated returns cut your taxes."

Here are figures on two New York apartment houses showing how sale-leaseback works:

1. *The property consist of 110 garden apartments and 25-car garage space in some 2½-story buildings on four acres:*

Investment: Value of land.....	\$ 100,000
Building cost.....	1,500,000
Total cost	<u>\$1,600,000</u>
Mortgage (at 6% for 21 years)...	1,200,000
Cash invested	\$ 400,000
Income: Rentals, etc.....	\$ 250,000
Expenses: Taxes ...	\$ 40,000
Oper. ...	50,000
Mortg. ..	102,000
Total	<u>192,000</u>
Net annual cash flow	\$ 58,000
Net on investment	14½ %
Sales price to syndicator.....	\$ 300,000
Annual lease (12% of price)...	36,000
Remaining cash invested	100,000
Remaining income	23,000
Net cash flow on investment...	23%

2. *Typical sale-leaseback data on a 20-story high-rise in New York City (including garage, shops, laundry services):*

Investment: Land	\$ 650,000
Clearing land	100,000
Building cost.....	2,350,000
Total cost	<u>\$3,100,000</u>
6% mortgage.....	2,200,000
Cash invested	\$ 900,000
Income: Rentals, etc.....	\$ 507,000
Expenses: Taxes ...	\$ 95,000
Oper. ...	75,000
Mortg. ..	187,000
Total	<u>357,000</u>
Net annual cash flow	\$ 150,000
Net on investment	16⅔ %
Sales price to syndicator.....	\$ 650,000
Annual lease (12% of above)...	78,000
Remaining cash invested.....	250,000
Remaining cash flow	72,000
Net profit on investment.....	28.8%



FHA is doing more to make rental financing easier

Two months ago Commissioner Julian Zimmerman made major changes in FHA rules so builders can get bigger mortgages to cover the added cost of building better kinds of apartment units that today's renters want.

Now FHA will allow a half-room credit (ie, from \$1,500 to \$2,125) for each full bath and a quarter-room credit for each half-bath, vs no room-count credit for any baths before. Since the room count is often the governing limit on FHA apartment financing, this means many builders will be able to borrow enough more money FHA to pay for better quality and to add features that will make their apartments easier to rent and keep rented. Zimmerman also gave a better room count for foyers and dining space, while cutting the balcony room count and tightening allowances in high-cost markets (H&H, News, Sept).

Last winter FHA also made it easier to

finance apartments by changing another of its limits on mortgages—the ratio of net income to debt service on Sec 207 apartments. In estimating net income, FHA will now consider assuming a 5% vacancy rate instead of a 7% vacancy in markets where vacancies are quite low. On a \$1 million project, this can lower the builder's equity needs by \$20,000 or more. (But builders have to press to get the change. So far, only three district offices have asked permission to cut the vacancy allowance from 7% to 5%.)

Also last winter, Zimmerman reduced the initial amortization rate from 2% to approximately 1½%, without lengthening the mortgage term on Sec 207 projects. This, says Attorney Mitchell Siegel, "has done more to make FHA projects feasible and make mortgage amounts larger than any other change FHA has made. Now an FHA mortgage costs 7¼% for interest, amortization, and insurance, compared

with 8% for conventional mortgage costs."

One of the most effective moves FHA has recently taken has so far gone unnoticed because it has been hidden within its administrations. This is the vigorous prodding by new Assistant Commissioner for Operations Edward Dee to get district directors to act under the various multiple-unit sections, especially Sec 231 for the elderly and Sec 232 for nursing homes. Both the latter, he thinks, offer excellent profit opportunities to builders and meet a vastly growing demand—and he is determined that district directors will not resist processing applications in these fields. Says Dee: "I guarantee that a number of our offices are more receptive now to apartment house applications than they were a while back."

Building under FHA has its advantages and disadvantages

Apparently the disadvantages outweigh the advantages for apartment builders as a whole, because in recent years FHA-financed apartments have accounted for only about 10% to 12% of multiple-unit starts.

But there are definite advantages:

Less equity is required.

Some builders like Arthur Radice find they can build for a lower-income market (by \$5 to \$15 per room per month less) with FHA Sec 207 financing.

Though FHA holds down rent levels, a project can be refinanced conventionally to raise rents if the demand is there.

Some FHA sections offer opportunities that can lead to great profits not obtainable with other financing. Urban Renewal Builder James Scheuer says FHA's Sec 220 lets you become a millionaire on no cash investment. You need put up only about as much cash as your builder's fee allowance. And if you hold the building until the rental income pays off the mortgage you not only own the property free and clear but stand a chance to make a substantial land profit besides—since under Title I urban renewal you got a writedown subsidy which often totals two-thirds of what the city paid for the land.

But other builders who have tried 220s are not so enthusiastic after experiencing long delays and political troubles that often arise.

And then there are the disadvantages:

Just about everyone agrees that you need an extra six months to a year to build an FHA project.

The extra points paid to obtain mortgage money at FHA's 5¼% interest limit can add 6% to 9% in financing costs, and this discount is not tax-deductible like interest.

And you can lose another 2% to 6% through higher building costs for better standards—higher architect fees for the

extra work involved, added materials requirements, and so on.

Also, FHA requires that the sponsor incorporate, so he cannot offset his depreciation losses against his high-bracket individual income coming in from other sources.

And there are many complaints that FHA makes life unnecessarily hard for builders by demanding a surety bond of ¾%, escrows of 2%, a ½% insurance premium, and untold paperwork in preparing replacement cost estimates, in cost certifications, and in processing the job.

FHA has begun to push rental units under two new sections

Sec 231: housing for the elderly.

Under this section, in effect one year, FHA has issued commitments for two dozen projects with about 3,000 rental units for people over 61. So far, almost all applications have come from church and other non-profit groups, who get loans at 100% of replacement cost. First builder to apply under Sec 231 is William Shafer, president of the Phoenix Home Builders Assn, who plans 99 units in one-story buildings in Tempe, Ariz. Sponsors building for profit get 90% commitments based on replacement costs and FNMA takeouts. "If we built under Sec 207 we would have to pay 6½ points or more, and if we built conventionally we would have to tie up too much cash." Shafer has an \$820,000 mortgage commitment on the \$913,000 project, has invested \$22,000 for FNMA and FHA fees, initial architectural fees, and office expenses, and owns the land appraised at \$65,000. This is all the equity he has tied up.

"Sec. 231 offers good opportunities to builders," Shafer says, "but it has one disadvantage. We found it hard to get a construction loan at the 5¼% interest FHA allows. Valley Bank here finally took the interim financing because we have dealt with it over the years in our home-building business."

Sec 232: nursing homes.

FHA offices have started getting applications under this section, which permits 75% mortgages based on replacement value. Two initial cases processed to commitment so far are detailed in an FHA guide now available to builders or other sponsors. In one case, FHA valued a 50-room, 92-bed nursing home at \$561,725, approved a \$421,293 20-year mortgage, and allowed builder's profit and architect's fees totaling \$53,170. Value of the land was put at \$48,900. Estimated income based on an 87½% occupancy was estimated at \$292,800, estimated costs at \$182,541 and profit at \$73,659 a year. Conceivably, a builder who could buy his land at a bargain and took no builder's profit, might be able to sponsor such a nursing home on a \$75,000 investment and come out of it with a property paying a \$75,000 yearly profit.

continued

FHA is just starting on new MPS for apartment houses

A revised edition of the present standards for multi-family buildings should be out by the beginning of February. The new Minimum Standards on apartment houses are not expected to be finished sooner than a year after that.

Neil Connor, director of FHA's architectural standards division, says that "some of the more critical" questions to be studied are:

1. Reconciling FHA standards with the varying building codes in the US.
2. Density and coverage.
3. Parking, both open and in garages.
4. Yard and court dimensions and distances between buildings.
5. Room and apartment spaces and arrangements and light and ventilation needs.
6. Fire protection limitations.
7. Heating and air-conditioning.



Here is an example of what the right architect can do

Collins, Kronstadt & Assoc in Washington are designing about 5,000 apartment units for over a dozen builders in seven cities because they offer so many services beyond basic design and engineering.

Here is how Architect Richard Collins describes a typical Washington job:

"We first hear from a sponsor after he has his land optioned. We walk over the site with him and guess at the zoning problem (there usually is one), the market possibilities, and other factors.

"Then for \$500 to \$700, we will make a preliminary study for feasibility. We study area traffic patterns, the school situation, find whether rock must be blasted or perhaps a bridge built to give easy access to the site, see if the area has been overbuilt for rental units and in which kind of apartments, check on availability of gas, electric, sanitary, and other services, and talk to planning bodies. We make sure the sponsor has a lawyer who can get the project through the zoning board. And we introduce the sponsor to a mortgage broker in many cases. After this, we draw preliminary plans, which costs him from \$2,500 to \$5,000, reflecting only our drafting costs

"We prepare a highly detailed presentation for the mortgage banker to take to the lender. We show how furniture will fit the rooms. Since some lenders don't easily understand elevations, we give them renderings, birds'-eye views, and the like. Even if only the first section is to be financed, we show how future sections will

be laid out. And we supply cubage and other data.

"Our final plans are prepared for each subcontractor's use. We also give the sponsor a complete time schedule, covering his calls for grading and paving permits, sewer connections, and so on, and later covering the specific dates each craft should be on the job.

"If costs for any sub are over our estimate, we look into it and may find the sub is overcharging or that we have over-designed. We either recommend another sub (we keep a list of subs in each trade in north Washington) or we change our specifications.

"We also help the sponsor with drawings for his ads. For one new project, we designed a small office on the plot that also doubles as the model for one of the units to be rented. This permits saving a few months renting the units."

For this service, C-K charge standard fees averaging only 2% and wait for payment in full until the builder begins getting his construction money.

Adds Arnold Kronstadt: "We can't always design the way we would like, either because the location would not support as high rentals as the better design would call for, or because lenders with available mortgage funds will not agree that the better design is worth the extra investment. For these reasons, we have turned down some plans that would have been a joy to develop."



Find the kind of mortgage banker you need—and then trust in him

Sometimes you will need one mortgage banker for several projects and sometimes you will need to see several for one project.

Sometimes you can get all the service you need from a local mortgage man, and other times you may need to consult a broker halfway across the country.

Some mortgage bankers can get loans from only one or two mortgage lenders, others deal with 50 or more institutions.

In any case, you will need a mortgage broker's guidance and you can't get along without his help if you need a permanent loan of \$500,000 or more. Even this amount is more than you could get from some major insurance lenders like Mutual of New York, which limits its loans to \$300,000.

The best mortgage banker to see about apartment loans is almost always one who specializes in such loans and deals with a

number of major institutions. (You still have a choice, for some specialize in FHA construction and others in conventionals.)

Once you go to a broker, rely on his judgment

Says Vice President George Brady Jr of James W. Rouse & Assoc in Washington: "Lenders tend to trust brokers more than sponsors trust brokers. Some sponsors throw us a set of plans, refuse to tell us what they paid for their land or even what rentals they hope to get, and rush off to show their plans to other brokers. They don't realize that the more they tell their broker, the easier and sooner he can make the right presentation to the right lender.

"We will not try to get loans on some locations, on some designs, or for some people. We know some locations cannot justify the apartments, some lenders will not accept some designs however sensible, and some sponsors simply cannot be approved on the basis of their credit or some other factor. Lenders are looking harder and harder at sponsors, because they want to be sure the property is managed right for the ten years or more they will hold the mortgage."

Each presentation prepared by the Rouse staff for lenders contains all the following in a handsome booklet:

1. Aerial photos paid for by the broker showing (with colored tabs) main traffic arteries, schools, churches, parks, and other apartment projects.
2. Several closeup photos of the site and nearby structures.
3. Photos of each nearby apartment

house, with date built, number and sizes of units, rent schedule (with or without utilities), and vacancy rate. The Rouse office also gets these data for most apartment projects around Washington.

4. A description of materials to be used in the proposed project.

5. Reduced-scale floor plans with each unit heavily outlined and marked with its area and room count.

6. A detailed analysis of each unit.

7. The cubage, and how arrived at.

8. Pages on room sizes, on estimated income, on expenses (especially how the real estate taxes were arrived at), on an appraisal, on gross annual revenues assuming a 5% vacancy, and a capitalization based on 8% of income.

9. A loan analysis showing all these ratios:

loan requested to value
loan per unit
loan per room
gross rent multiplier
loan per sq ft
building value per room
building value per net sq ft
building value per gross sq ft
value to gross
monthly income needed

10. A biography of each partner, plus a credit report on each, and a statement of financial ability.

11. An FHA report on area vacancies.

12. Newspaper clippings on new plants in the area, population trends, etc.

13. The builder's breakdown of costs.

14. A summary sheet.

Note: Rouse does all this for a 1% fee.

END





Sol Studna

1942

PRAIRIE VILLAGE IN KANSAS CITY



1956



1950

PARK FOREST, ILL.



1959

Camera Corner



1950

LEVITTOWN, L.I.



1958

Ben Schnall

It took years

(while the trees grew) to give these new communities their established look



1948

MOTT PARK IN FLINT, MICH.

Jim Rush



1947

TRESSMAR IN ROCHESTER

Rochester Aerial



1957

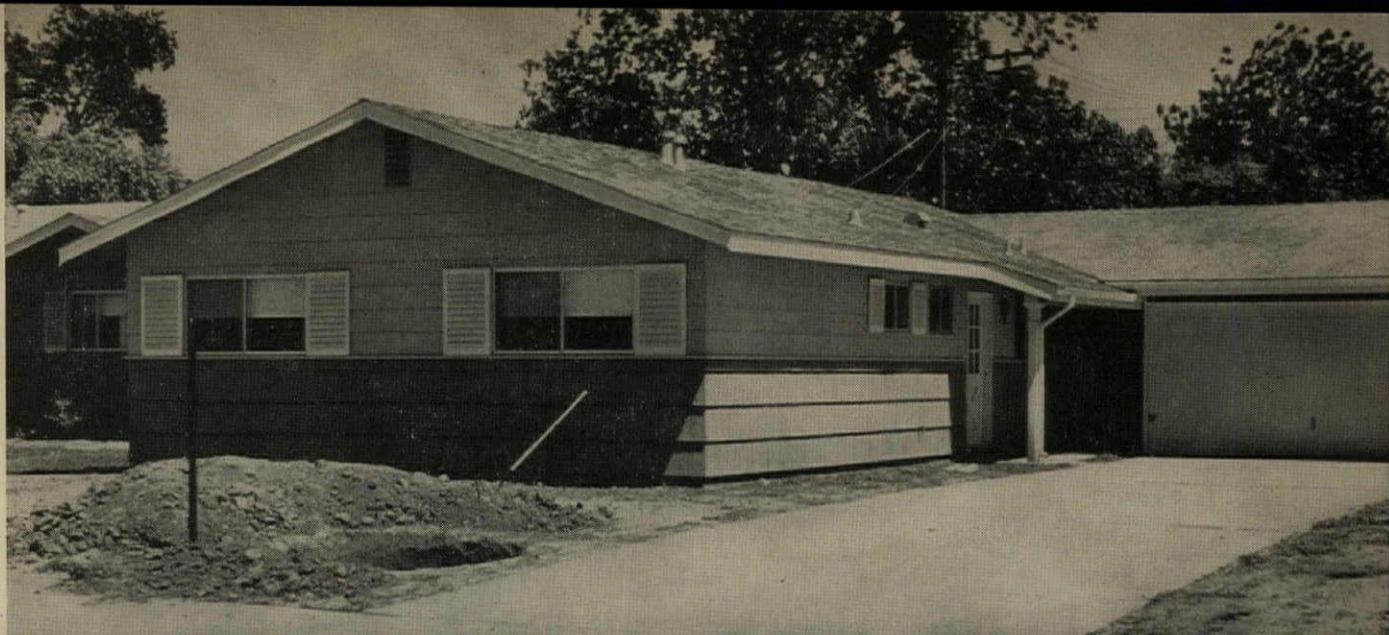
Frank Fullersin



1957

Dean E. Bell

11 AM
1 PM



RIVERVIEW ORCHARD IN SACRAMENTO



Photos: Norman Donant

It took only hours to give this house its established look

The big olive tree that transformed this newly built house was moved in fast, full-grown, and at low cost.

Moving the tree took less than two hours, cost less than \$75. And, say Builders Walker & Donant: "It made the house much more salable."

More and more builders across the country are realizing how much trees help sell new houses and are transplanting big trees—for as little as \$10 each—to give their developments a ten-year-old look on opening day.



TREE BEING TRANSPLANTED was dug up, moved 150 yards, and replanted in 58 minutes by loader with special tree-moving attachment.

Machines long used to destroy trees are now being used to transplant them

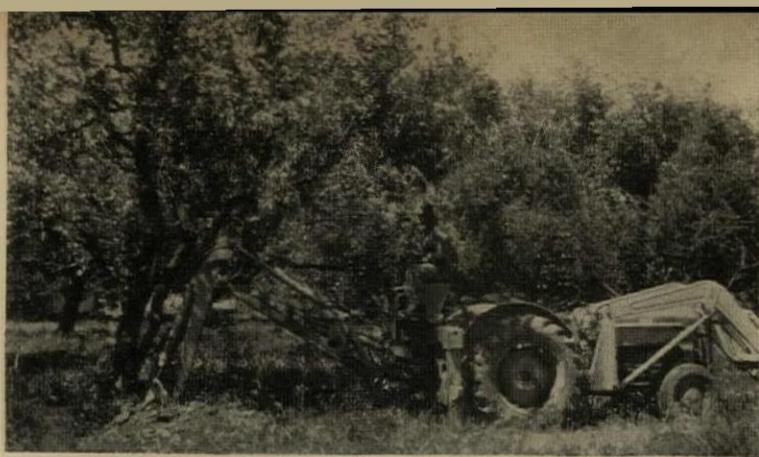
By equipping your tractor with the tree-transplanting attachment shown on this page, you can now move a tree 10" in diameter for a time and labor cost as low as \$10 (plus the cost of the tree).

This Hawk tree transplanter, designed by Edward Kluckhohn (H&H, Feb '58), can now be attached

to 17 different models of six makes of tractor (see list, paragraph 4, opposite). It can be attached in a half-hour by connecting only four pins and four hydraulic lines, the makers say. For more on the Hawk transplanter and other tree-moving equipment, see opposite.

HOW TRANSPLANTER WORKS: deep cuts are made on all sides of the tree, left; the unit lifts tree and earth ball, center; moves away, right.





Norman Donant

1. **BACKHOE** digs deep trench around tree so it can be lifted out.



J. H. Kammerstener

2. **TRACTOR SHOVEL** can dig around tree, scoop up earth ball.



3. **SMALL TREE DIGGER** on tractor can move 4" tree in 30 seconds.



4. **TREE TRANSPLANTER** on loader can handle big trees.

Here are the four basic machines you can use to do the job:

1. A backhoe can be used to dig a trench around tree roots. Once the trench is dug, it is easy for a crane to lift the tree right out. Sacramento Builders Walker & Donant, who use this method, figure the average cost per tree at \$55. For more about w&d's tree moving, see next page.

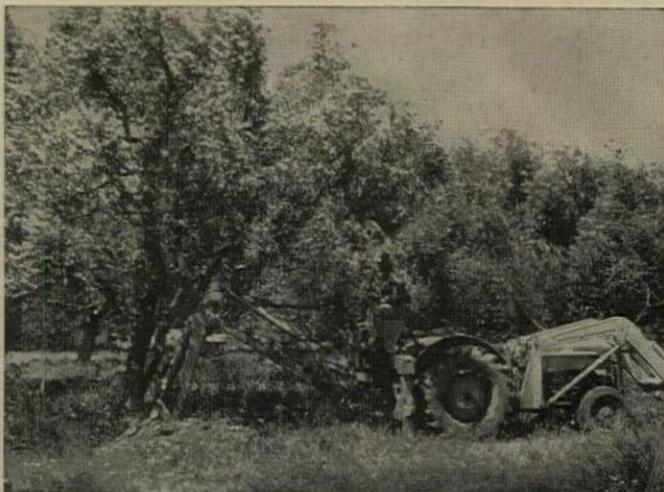
2. A tractor shovel, which usually digs no deeper than 3½', can be used to move deciduous trees 4" in diameter or less, evergreens (which have shallower roots) up to 8" in diameter. Builder-Lumber Dealer Sam Slaughter uses his 1½-yd bucket to move trees, figures average cost is \$18 per tree. For more about Slaughter's tree moving, see p 127.

3. A small tree digging attachment mounted on a tractor can handle trees up to 4" in diameter. Charles Adair Co of Chicago manufactures the unit shown. It costs as little as \$365, can be installed on a tractor in place of a shovel or dozer blade in 15 minutes. The Adair unit can be adapted to these

makes of tractor: Ford Major, Allis-Chalmers, Massey-Ferguson, Wagner, Deere, Oliver, Sherman, and Case. Builder Andy Place, who uses a small Adair digger, transplants 4" trees for as little as \$7 plus tree cost. For more about Place's tree moving, see p 128.

4. A tree transplanter, which also attaches to tractor or loader, can dig up, transport, and transplant trees from 5" to 15" in diameter, up to 68' tall. The unit shown is manufactured by Harrington-Willimon-Kluckhohn, Lewiston, N.C. Units range in price from \$3,075 for a 48" scoop to \$8,775 for an 84" scoop, can be attached to these makes of tractors and loaders: Massey-Ferguson, Pettibone-Mulliken, Hough, Michigan, Ford Major, and Caterpillar. Builder Bob Scarborough uses H-W-K unit to move 15" trees, figures it costs \$75 to move a tree that would have cost over \$350 to move without the new equipment. For more about Scarborough's tree moving, see p 127.

To see how builders use this equipment, turn the page



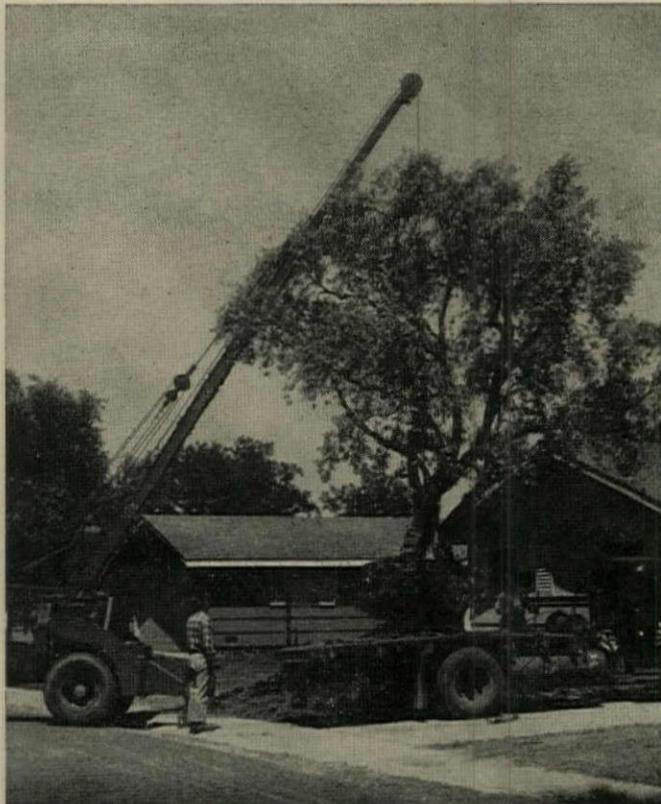
BACKHOE DIGS TRENCH around roots of mature tree in orchard.



CRANE LIFTS TREE to pull it free, loads it on flat-bed truck.



TRUCK MOVES TREE along road from the orchard to its new site.



CRANE LOWERS TREE into machine-dug hole in new-house yard.

Builders Walker & Donant move extra trees onto orchard lots



TREES IN FRONT OF HOUSES eliminate construction-site look, are a big asset in selling, report Builders Walker & Donant.

Walker & Donant, who sell more than 100 houses a year in one of today's most active and competitive markets (Sacramento), pick choice orchard land for most of their houses, then move in more trees using the system shown above.

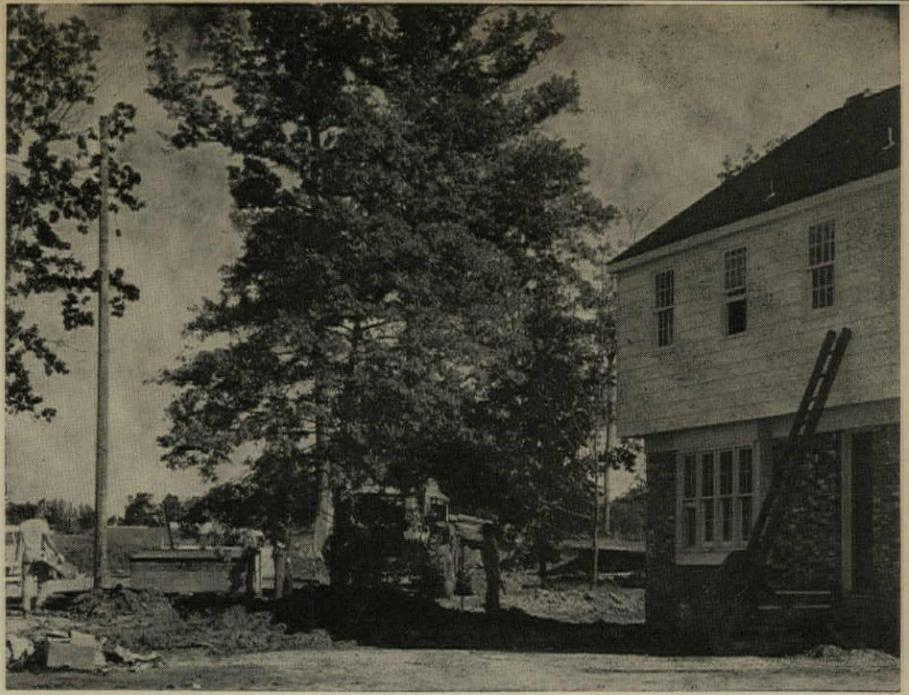
"It's worth it," says Floyd Donant, "because one sure way to establish a good reputation in a metropolitan building market is to give your communities an established look.

"Because our subdivisions don't look raw, buyer interest is greater—we have sold houses from tentative maps, without firm prices, without firm completion dates. Advertising costs are lower. FHA gives us higher valuations. And we attract lenders who are more interested in sound investments than in the size of the discount they can get on our mortgages."

To get these results, Donant reports, "We have our engineers lay out the roads to save us as many good trees as possible. Then we site our houses to disturb as few trees as possible. Finally we move in trees—many of which come from roadways that must be cleared—to fill in the blank spaces." In the several years W&D have been moving trees they have lost only two—both moved on a 104F day.



BEFORE: front yard of new house is bare and uninviting.



AFTER: transplanted two-story-tall tree enhances the house (and community).

Builder Bob Scarborough moves in big trees throughout his subdivision

The Haddonfield, N.J. builder transplants trees that often tower above his two-story houses. He brings in 35-plus footers because, he says, "the bigger the trees, the easier the sale. We give our new houses a look they wouldn't

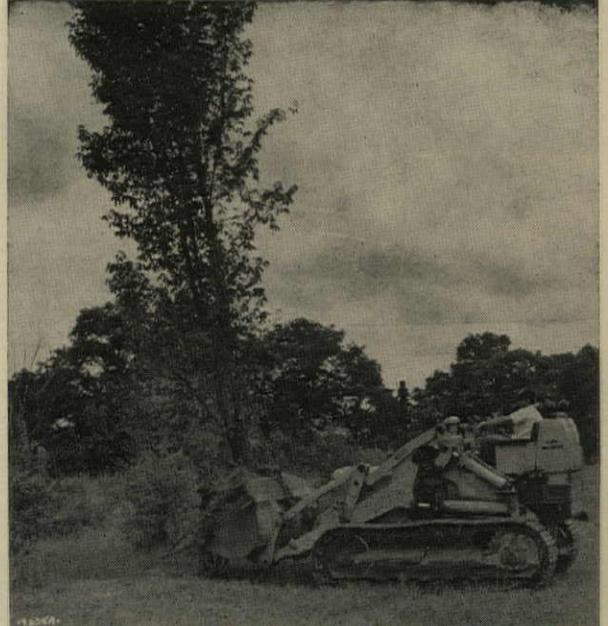
otherwise get for seven or eight years." Scarborough promotes his big trees and his tree-moving operation in all his advertising. He reports that, since he moves such big trees, about 10% die—"but we're doing better all the time."

H. A. Kammerdiener



HOUSE BUILT ON TREELESS LOT now has established look. This is Slaughter's own house.

H. A. Kammerdiener



TRACTOR SHOVEL doubles as transplanter.

Builder Sam Slaughter moved in all these trees

"Today's buyers don't want to wait five years for their house to look settled in. They want big trees—and that's what we give them." So says Builder-Dealer

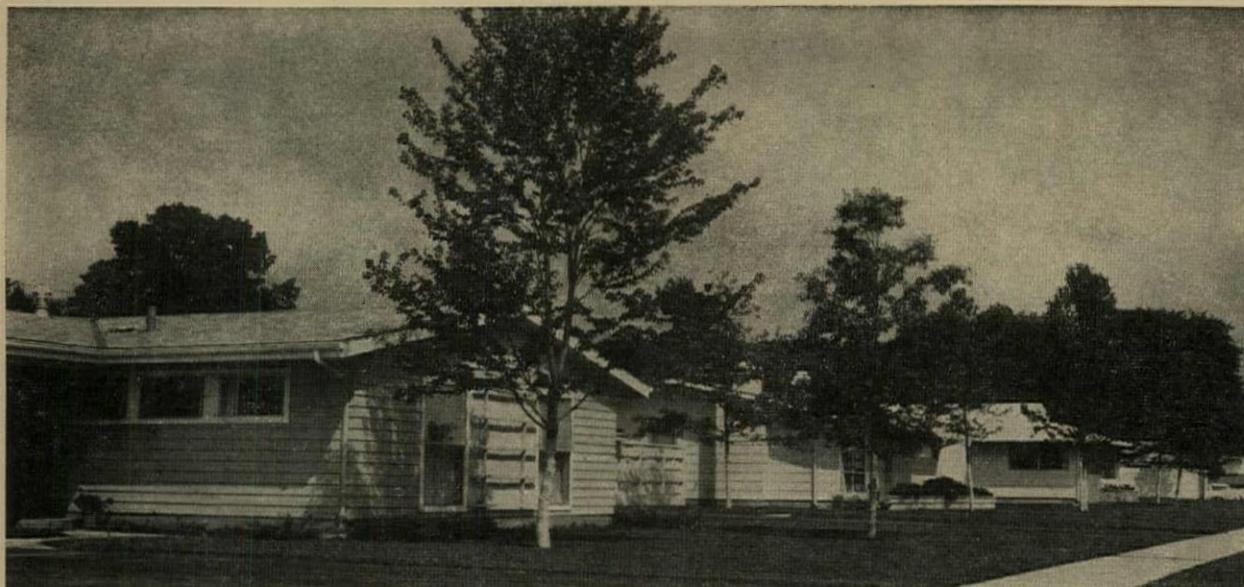
Slaughter. He advises: "Orient the big trees you transplant in the same direction you found them. We've never lost a tree since we started doing this."

Here are 12 rules for selecting and transplanting big trees

1. Select trees growing in full sun. If you pick trees growing in shade, wrap their trunks in burlap up to the first branches.
2. Dig the hole for a transplant 1' deeper, 3' wider than the earth ball around the tree roots and line it with the richest topsoil you can find.
3. Mulch the ground around the tree with leaves or salt hay.
4. Cut the branches back 20% to 30% to compensate for the smaller root ball you will take when digging up the tree.
5. Fertilize the first spring after transplanting.
6. Try to do your heaviest transplanting in spring or fall (even though machine digging lengthens the transplanting season right into the winter when the ground is frozen).
7. Use rows of trees for emphasis around street curves.
8. Use big specimen trees at ends of culs de sac, courts.
9. Use random tree groupings where grades change, around slight bends in the street or near big corner lots.
10. Place trees away from utilities so they will not cause a future maintenance problem.
11. Place identification plates on trees to create interest.
12. Establish a year-long maintenance program on all trees.

This advice comes from Landscape Architect John N. Vogley who planned Eichler Homes' "Los Arboles" (The Trees) community in Palo Alto where big trees were used to upgrade the community to match the price of the houses; and Builder Bob Scarborough who now operates a big-tree transplanting service because of the experience he gained putting big trees around his own houses in Haddonfield, N.J.

For more case studies, turn the page



CURB APPEAL in Place's communities is enhanced by transplanted trees grown by Place on his own tree farm.

Builder Andy Place moves in his own trees to create appealing streets



H&H Staff

The South Bend builder takes no chances that he won't have enough of the right size or the right kind of trees to transplant into his future communities. He plants fast-growing silver maples, Chinese elms, tulips, hardy birches, locusts, and sycamores on his own tree farm, a 5½ acre site. Says Place: "We grow them close to where we're building. This way we can get all the fast-growing trees we need—nurseries often don't stock many softwoods. We plant trees 8' on center, and that gives us plenty of space to use our tree-moving equipment."

TREE FARM is on land Place will use later for houses.

Builders Fox & Jacobs invite customers to pick their own trees



Tom W. Collins

"Giving people a choice of trees is just like giving them a choice of plans, designs, and equipment," says Dave Fox. "It helps us sell houses."

Buyers of F&J's upper-price (over \$25,000) Flair houses in Dallas select additional trees for their lots at a nearby nursery (Trees Inc) owned by the builders.

To encourage new homeowners to plant big trees, F&J quotes bargain prices if they buy several at once. Examples: three \$50 trees for \$100; three \$75 trees (up to 6" in diameter) for \$150.

Adds Fox: "The more trees our buyers plant, the better our neighborhoods look. And the better our neighborhoods look, the more new buyers we get."

/End

SALESMAN SHOWS TREES to new house buyers.

TREE ARRIVES AT HOUSE—carried with ball intact by specially equipped truck.



H&H Staff

In cooperation with LIFE and HOUSE & HOME,
THE AMERICAN INSTITUTE OF ARCHITECTS

invites

architects, builders, and homeowners
to enter a nationwide design program for

HOMES FOR BETTER LIVING

Custom-built houses

Built-for-sale houses

Garden apartments

Award-winning houses and apartments will be published in HOUSE & HOME, a selection will be published in LIFE. They will be selected in time to be displayed at the AIA convention in Philadelphia, April 24-28, 1961 and will be publicized in newspapers, on radio and television.

For the past five years AIA has sponsored regional and national Homes for Better Living Awards Programs in cooperation with HOUSE & HOME and *Sunset* (West 1956), *Better Homes & Gardens* (East 1957), LIFE (Midwest 1958), *McCall's* (South 1959), and LIFE (National 1960). Last year, for the first time, the program was nationwide, and over 500 outstanding houses were submitted.

Awards will be made in three categories:

1. *Houses designed specifically for an individual owner, divided into three classes according to size:*

a. Under 1,600 sq ft of living space; b. Between 1,600 sq ft and 2,800 sq ft; c. Over 2,800 sq ft of living space.

2. *Houses designed for a merchant builder and sold speculatively, divided into three classes according to price:*

a. Under \$15,000; b. Between \$15,000 and \$25,000; c. Over \$25,000

3. *Garden Apartments, built for sale or rent. Height shall not be more than three stories from grade. Sale price or monthly rental of units shall be indicated.*

Only houses and apartments designed by registered architects and completed since January 1, 1958 are eligible. Entries may be submitted by the architect, builder, or owner. Entry fee is \$10 for each house or apartment, and there is no limit to the number of submissions any individual may enter. There must be no limitation on publication or additional photography.

Entries in the 1960-1961 Western Home Awards Program, sponsored by *Sunset* and the three western chapters of AIA, may be resubmitted in this program provided they have been built since January 1, 1958.

Winners in each category will be selected by a jury of outstanding architects, housing industry leaders, and the editors of LIFE and HOUSE & HOME. Judges for previous Homes for Better Living Awards have included:

For custom juries: Pietro Belluschi, FAIA; John Burchard, dean of humanities, MIT; Eero Saarinen, FAIA; Percival Goodman, FAIA; Edward Larrabee Barnes, AIA; Carl Koch, AIA; Robert W. McLaughlin, director, School of Architecture, Princeton; Arthur Gallion, dean School of Architecture, University of Southern California; Vincent Kling, FAIA.

For builder house juries: Neil Connor, AIA, director of architectural standards for FHA; John Dickerman, executive director NAHB; Carl Mitnick, past president NAHB; John Noble Richard, FAIA, past president AIA; Edward Fickett, AIA; James Lendrum, head, department of architecture, University of Florida; L. Morgan Yost, FAIA; Thomas Coogan, past president NAHB.

Entry blanks must be sent in by January 27, 1961, and the entries themselves must be postmarked no later than midnight, February 24, 1961. An entry blank is printed on page 289. On receipt of each entry slip you will be sent a binder for photographs, drawings, and any other material. Full details on size and kind of photographs, written material, and drawings will be sent with the binder.

FORECAST FOR 1961:

by Miles L. Colean

Housing's No. 1 economist

1961 will be a big year for housing

In dollars 1961 should be the second biggest year yet, second only to the all-time high reached in 1959, much bigger than the two earlier peaks in 1950 and 1955.

In unit starts 1961 will rank either second, third, or fourth, depending on how much the BLS start figures for 1950 and 1955 should be corrected upwards to conform to the changed way of counting starts since housing statistics were transferred from BLS to Census (H&H, July). But the average 1961 start (like the average 1960 start) will be at least 50% bigger and 50% better equipped than the average 1950 start. It will be at least 25% bigger and 25% better equipped than the average 1955 start; and it is likely to involve a 100% bigger dollar investment in housing products than the 1950 average and proportionately more than the 1955 average; so comparing 1961 units with 1950 and 1955 units is like comparing apples with cherries.

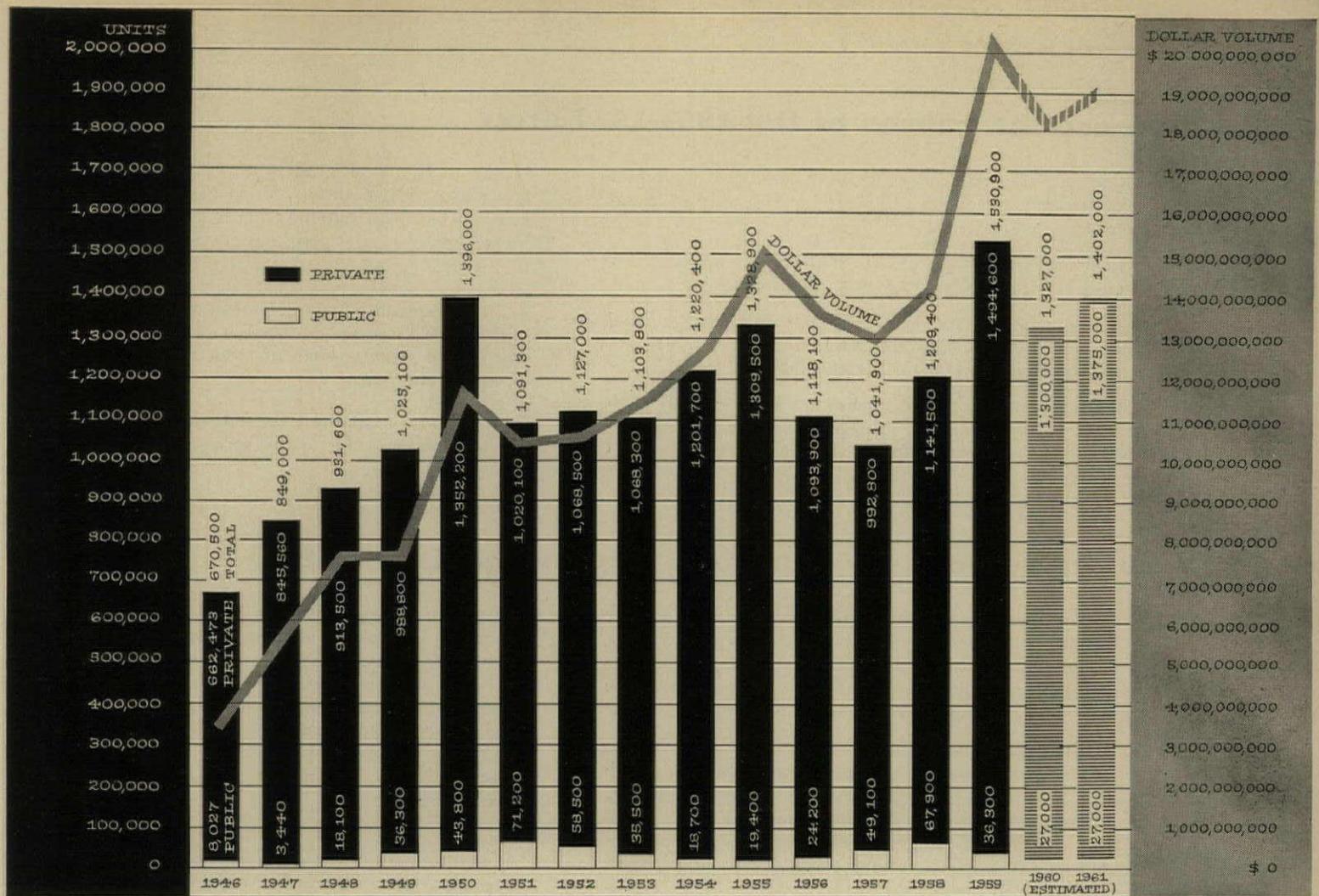
Next year should see not less than 1,424,000 housing starts, including not less than 1,375,000 private non-farm, 22,000 farm, 9,000 military, 9,000 federal public housing, 6,000 New York City public housing, and 3,000 college. This would be 75,000 more than 1960 seems likely to hit, but still 128,000—or 9.1%—short of the 1959 record.

The dollar total for new dwelling units in 1961 should hit \$19,125,000,000. This is \$900 million more than 1960 and less than \$900 million below the 1959 peak. It is 61.1% more than the BLS dollar estimate for the peak year of 1950 and 25.4% more than the BLS dollar estimate for the peak year of 1955.

Money will not be the problem

Mortgage money will be available for more than the estimated 1,375,000 private starts, because savings are up, corporate borrowing is not likely to increase, and the federal government will not be competing for funds to finance a big deficit. So the limiting factor next year will not be tight money, but how fast the homebuilders put the newly available money to work, whether or not they can cut their costs to make better housing easier to buy, and how much more livable and desirable they can make their product to compete with the values offered by other industries.

Family incomes have been rising so fast that the average family could qualify FHA to trade up to a home costing something like 71% more than the home where it lives today (see H&H, Jan and Feb).



NONFARM HOUSING STARTS WILL BE UP ABOUT 6% in 1961. Probable total: 1,402,000, of which 1,375,000 will be private starts. Dollar volume should reach \$9.1 billion—\$900 million more than this year and second only to 1959's all-time peak. '46-'59 data: Census

Bureau, US Depts of Labor and Commerce, '60-'61 estimates: M. L. Colean. ('59-'61 figures are not directly comparable with earlier years because of changes occasioned by Census' new housing-start series—revisions based on the new series were carried back only through 1959.)

So, again, the limiting factor next year will be what, if anything, the builders and their realtors do to improve their selling and their sales appeal. There are 11 million families right now who could afford to trade up to a house costing at least \$17,500. That is twice as many prospects for \$17,500 homes as there are \$17,500 homes in the housing inventory for them to buy:

1. if they wanted to spend their increased income for a better home instead of something else, and
2. if they could trade in the equity in their present home to provide the down payment needed for a better home.

Best chance to step up volume far above the level used in this forecast is in rental housing, because:

1. So many of today's rental units are so bad. Nearly a third are dilapidated or lack private inside plumbing facilities and less than a fifth offer the attractions which are fast becoming standard for new houses, like labor-saving kitchens, indoor-outdoor living, and air conditioning.
2. Renters are free to move almost any time they find a home they like better. More than 6 million renters move every year, and most of them could afford to pay much more rent if they saw something they liked enough better.

This year apartment building has been curtailed because the Treasury's magic fives in the fall of 1959 left the mutuels short of the increased deposits they might otherwise have made available for apartment mortgages. About

195,000 new apartments will be built in 1960—down 32,000 from the 1959 peak. For 1961 the conservative forecast is a rental recovery to about 210,000, but this could go very much higher if the apartment sponsors improve their values and increase their sales appeal enough to step up the rate at which good new apartments draw in tenants out of bad old apartments. The faster the better, for nearly 6 million of today's rental units are so bad that they should be taken off the market as fast as possible.

In any event, the rate of increase in apartment building is likely to be slightly more than in single-family houses. The growing availability of land in redevelopment areas, the new FHA acceptance of more small apartments, the greater availability of funds from savings banks and life insurance companies, and the increasing numbers of one- and two-person households in the younger and older age groups all portend a mounting popularity for apartment living.

Stepping up values for new houses and new apartments will be a challenge to the housing industry, because building trades union wages will probably go up about 4% (from 177% of the 1947-49 average to 184%), and building materials prices will probably rise about 2% (from 133.3% of 1947-49 to 136%).

Now that the 1959-1960 housing decline has about run its course, we can see that it was neither so great nor so long as the decline from the earlier peaks in 1950 and 1955. Private starts will probably round out 1960 with a total of little under 1,300,000—down 13% from 1959; dollars spent for new private housing in 1960 will probably be about \$17,400,000—down 9.5%. After the 1950 peak these declines were respectively 25% and 15%; after the 1955 peak, 17% and 10%.

continued

Here are the causes of the 1959-1960 drop

To evaluate the prospects of a rise in 1961, it is important to understand the causes of the 1959-1960 drop. A number of reasons stand out:

1. By mid-1959 the stimulus of the FNMA billion-dollar special assistance program was played out.
2. Tightening credit in the second half-year reduced the availability of advance commitments for mortgages and so discouraged plans for expansion in 1960.
3. The combination of high interest rates and high house prices created a sluggish market, further discouraging advance planning. Home seekers who had

hoped to trade-up from their present two-bedroom house to a three-bedroom found they could not qualify to buy what they wanted at the higher house prices and higher interest rates, so they decided to stay where they were.

4. A widespread plague of violent weather in February and March 1960 spoiled the start of the building season and caused some permanent reduction in builders' programs for the year.

5. The credit easing in 1960 was too little and too late to stimulate building in the spring and summer.

Here are reasons for expecting improvement in 1961

The steady rise of personal income in face of a greater availability and somewhat lower cost of mortgage money, relatively stable prices, and a greater attention by builders to both price and quality—these are the ingredients of the coming improvement in house-building activity.

1. Higher personal income

Incomes after taxes have been steadily rising through the year in real terms as well as in current dollars, giving homebuyers a substantial increase in purchasing power despite the bigger bite taken by higher income-tax rates as incomes rise. (Personal taxes increased 7.3% from the fourth quarter of 1959 through the second quarter of 1960, that is, almost twice the rate of increase in gross personal income.)

The increase in income and the sluggishness of the housing market during that period resulted in an unusual 13% increase in the annual rate of personal savings.

The capacity to buy or rent more and better dwellings is therefore present. What is needed is more and better inducements. These also are now showing up.

2. Mortgage funds

The trend in mortgage money during most of 1960 was toward greater ease; but until midsummer this trend was almost imperceptible. More funds gradually became available, but with little change in price. The change is now becoming more apparent and more effective as a stimulant. In contrast to late 1959, when the forward planning period found money at its tightest, in 1960 builders will be able to get assurance of financing for their spring programs.

Interest rates (or yields on discounted mortgages) will not be low by comparison with early 1958, but they will probably show an average drop of at least $\frac{1}{4}$ %.

Savings & loan associations will be more vigorous

participants in the market. Insurance companies will continue to increase their acquisitions and buy more FHA's. Mutual savings banks will also be doing better, with emphasis probably on apartment financing. A significant development during 1960 has been the rising interest of pension funds in home and apartment financing. Without a much larger expansion of corporate financing than is now foreseen, this trend will continue in 1961.

3. Prices

Notwithstanding further increases in land and labor costs, construction costs should be relatively stable. Materials prices will remain strongly competitive, although the cost of some items, such as lumber, may have mild rises with improved conditions. Builders will thus be able to make commitments with unusual confidence. They will also be facing strongly competitive conditions among themselves. It should be possible to persuade buyers that 1961 offers unusual opportunities which may not soon be duplicated.

4. The state of the market

Through most of 1960 reports of slow sales were common. The disposal of used houses was especially difficult—a factor now of great significance in the new-house market, because so many new-house buyers must obtain their equity from the sale of their present homes. The combination of rising income, high savings, easing credit, and low production in the first half of 1960 is bound to give the 1961 market a better tone.

The Census reports on vacancies show that the overhang is not serious, taking the country as a whole. Although rental vacancies in the second quarter of 1961 stood at 7.3%, or six basis points above the second quarter of 1959, no increase was shown in the vacancy percentage of single-family houses for sale.

Here is a note on public housing

As tabulated in the official statistics, public or government-owned housing consists mainly of units erected by local housing authorities with or without federal subsidy and units erected on military and defense-related establishments and financed under FHA's Title VIII (Capehart housing).

During the past several years, the military housing sector has represented a substantial part of the total. Since, up to the time HOUSE & HOME went to press, no new authorization had been given for Capehart construction in the current fiscal year, the prospect is for a decline in this

work. At the same time, an increase is expected in local authority housing in New York City, mainly under the provisions of state law.

While it is possible that the next Congress may increase allocations for federally subsidized housing, it is not likely that such enactments will materially affect construction prospects for 1961.

In view of these considerations, we are assuming a total volume of 27,000 government-owned units in 1961, or about the same number as is in prospect for 1960.

END



The comeback of GAS

A four-part report:

Round table on the use of gas in tomorrow's house overleaf

How gas utilities are helping builders sell p. 140

A portfolio of all-gas promotion houses p. 153

New products p. 218



Photos: Walter Daran, Charles Phillips

THE PANEL

For the American Gas Assn

Wister H. Ligon, *president, A.G.A.*
president, Nashville Gas Co

Lester T. Potter, *president-elect, A.G.A.*
president, Lone Star Gas Co

James J. Deely, *vice president*
The Brooklyn Union Gas Co

F. W. Batten, *vice president*
Columbia Gas Service Corp

John H. Wimberly, *president*
Houston Natural Gas Corp

Hall M. Henry, *president*
NEGEA Service Corp

Marvin Chandler, *president*
Northern Illinois Gas Co

Bernard H. Wittmann, *vice president*
The Peoples Gas Light & Coke Co

William J. Harvey, *vice president, gas operations*
Public Service Electric & Gas Co

Frederick J. Pfluke, *superintendent, gas operations*
Rochester Gas & Electric Corp

R. S. Bruns, Jr., *vice president*
Transcontinental Gas Pipe Line Corp

James A. Wilson, *vice president*
United Gas Corp

G. J. Tankersley, *president*
Western Kentucky Gas Co

STAFF

Chester Stackpole, *managing director*

S. F. Wikstrom, *director, PAR Plan*

George Segeler, *director, Utilization Bureau*

For the Gas Appliance Mfrs Assn

Wendell C. Davis, *president, GAMA*
president, Cribben & Sexton Co

Henry Russell, *general sales manager*
Air Conditioning Div, American-Standard

B. E. Harrell, *vice president*
Arkansas Louisiana Gas Co

Julius Klein, *president*
Caloric Appliance Corp

Lyle C. Harvey, *senior vice president*
Carrier Corp

Robin A. Bell, *vice president & general manager*
Janitrol Heating & Air Conditioning Div,
Midland-Ross Corp

Robert Pierson, *sales manager*
Home Products Div, Rheem Mfg Co

A. W. Beck, *vice president, marketing*
Robertshaw-Fulton Controls Co

Walter W. Stake, *commercial vice president*
Permaglas Div, A. O. Smith Co

A. B. Ritzenthaler, *vice president*
The Tappan Co

George Stevens, *merchandising manager*
Whirlpool Corp

STAFF

Harold Massey, *managing director*
Edward R. Martin, *director*
of marketing & statistics

For the Housing Industry

APPRAISERS

George Goldstein, *past president*
American Institute of Real Estate Appraisers

Gare B. Reid, *president*
Society of Residential Appraisers

BUILDERS

Alan Brockbank, *chairman*
NAHB Research Institute
past president, NAHB

Gene S. Fisher, *president*
South Florida HBA

Jacob R.V.M. Lefferts
A.G.A. gas builder of the year

INSULATION MANUFACTURERS

James D. Bettridge, *product manager*
Home Building Industry Sales
Johns-Manville Sales Corp

E. J. Detgen, *vice president*
Owens-Corning Fiberglas Corp

LIFE INSURANCE

Robert E. Benson, *vice president*
Equitable Life Assurance Society

Milford A. Vieser, *executive vice president*
Mutual Benefit Life Insurance Co

John Jewett, *vice president*
Prudential Insurance Co of America

MORTGAGE BANKERS

B. B. Bass, *president*
Mortgage Bankers Assn

REALTORS

Eugene P. Conser, *executive vice president*
National Assn of Real Estate Boards

Richard B. Morris, *regional vice president*
National Assn of Real Estate Boards

Irving Kern, *president*
Kern Realty Co Inc

SAVINGS BANKS

E. P. Clark, *president*
National Assn of Mutual Savings Banks

Samuel W. Hawley, *first vice president*
National Assn of Mutual Savings Banks

Robert Morgan, *chairman*
Massachusetts Purchasing Group

SAVINGS & LOAN ASSNS

C. Elwood Knapp, *president-elect*
US S&L League

Warren Hill, *executive vice president*
New Jersey S&L League

Eugene M. Mortlock, *president*
First Federal S&L Assn

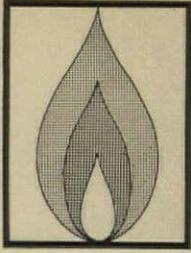
GOVERNMENT OBSERVERS

Julian Zimmerman, *FHA commissioner*

W. B. Mason, Jr., *FHA assistant commissioner*
for technical standards

MODERATOR

P. I. Prentice, *editor & publisher*
HOUSE & HOME



TANKERSLEY: Warmth is not enough. You need humidity control, air movement, fresh air, and freedom from dust, smoke, pollen.



KLEIN: We recommend putting the range against the outside wall.



STACKPOLE: Soon we're going to have small gas table appliances and convenience outlets for gas. Isn't that marvelous?



LIGON: The gas utilities give better service.



ZIMMERMAN: People should buy the quality to make the home, good and use liberal financing to amortize the cost of quality over up to 30 years.



HAWLEY: The builder and his realtor salesman should be more interested in having the appliances sell the house than in having the house sell the appliances.

Round Table report on the use of gas in tomorrow's house

Homebuilders and homebuyers both fare better where they can get real competition between gas and electric utilities and between gas and electric appliance suppliers.

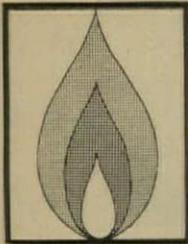
"I can't think of anything that is more in the interest of the homebuying public than this kind of competition," said FHA Commissioner Zimmerman. "The more competition develops in this wonderful free market for housing and housing products, the better we like it at FHA."

The comeback of gas in the past decade is good news for everyone concerned with better housing—good news whose importance too many housing professionals have been slow to grasp.

So HOUSE & HOME joined the American Gas Assn (A.G.A.) and the Gas Appliance Manufacturers Assn (GAMA) to sponsor an industry round table on "The use of gas in tomorrow's house." Its twofold purpose was 1) to let the leaders of the housing industry explain its fast-changing needs and markets to the leaders of the gas industry (see pages 137-139 of the Round Table report) and 2) to let the leaders of the gas industry explain to the leaders of the housing industry their fast-changing products and potentials and their plans for future progress (see page 208 and following).

To this Round Table came, among others, the FHA Commissioner and the FHA Assistant Commissioner for Technical Standards; the Chairman of the Research Institute of NAHB and two other builders; the President of the United States Savings & Loan League; the President of the Mortgage Bankers Assn; the President of the Society of Residential Appraisers; the Executive Vice President of the National Assn of Real Estate Boards; the Past Chairman of the Mortgage Finance Committee of the Life Insurance Assn; the President of the National Assn of Mutual Savings Banks; the Chairman of the New England Mortgage Purchasing Group; thirteen chosen spokesmen for the Gas Appliance Manufacturers headed by the President and the Managing Director; and fifteen chosen spokesmen for the A.G.A., headed by the President, the President-elect, and the Managing Director.

The report of the Round Table follows:



Gas Round Table

continues



MORRIS: The builder's primary interest is to plan and equip houses that will sell.



JEWETT: We are moving into a very big new market in air conditioning.



HARRELL: Gas air conditioning would fill up our summer valley.



WIMBERLY: Gas-driven engines have an amazing performance record.



REID: Good appraisers will recognize the full cost of good appliances in their valuation of a good house.



ROSSELL: The utilities were not promoting gas dryers; now they are. That's why we are selling more.

Gas is making a big comeback to fight for bigger sales for eight uses in the home

Right after the war gas was so badly outsold that some hasty critics thought gas had passed its peak and started down the same sad road the ice wagon and the coal truck had traveled. Said A.G.A.'s President-elect: "We almost let some big markets go by default."

But now gas is a "resurgent industry," still holding the lead in cooking, lengthening its lead in house heating and water heating, fighting for important new markets in refrigeration, clothes drying, and incineration, selling more outdoor gas lights than it ever sold in the gas-lit era, and answering the challenge of electric heat in winter with a surprise bid for gas cooling in summer.

The comeback of gas began with the conversion from manufactured gas to usually-less-expensive nat-

ural gas. This is supplied by a dozen giant pipeline companies who joined the 450-odd local gas utilities in A.G.A. and the 600-odd relatively small manufacturers who make up GAMA to launch a multi-million-dollar industry promotion program and a multi-million dollar industry research program.

The industry research program in turn made possible a great improvement in the appliances and the other equipment that the gas industry can offer the housing industry—improvements which will be explained briefly on pages 208 to 214 of this Round Table report.

Said the President of GAMA at our Round Table: "We know that in today's market we could not sell the appliances that were 1950's best; and we realize that today's best will not satisfy tomorrow's market."

Here are the underlying facts and figures on how fast the gas industry is growing

During the fifties . . .
Gas more than doubled its sales to 88 billion therms and \$5 billion a year.
Gas added nearly ten million more residential customers, extending its mains to a total of some 30 million homes and serving nine million more with bottled (Lp or liquefied petroleum) gas.
Gas more than doubled its plant investment to \$20 billion, fifth largest of any US industry.
Gas added a quarter of a million miles to its network of mains and pipelines.
Gas moved up to first place among residential-heating fuels.
Gas tripled its number of residential-heating customers.
Gas increased per capita consumption by residential users 81%.

Gas increased its appliance sales to nine million a year in 1959, raising the total in use to 107 million.

During the sixties, A.G.A. forecasts that . . .
Gas will add another ten million residential customers.
Gas will add 300,000 more miles of main, raising the total to 880,000.
Gas will more than double its plant investment to over \$45 billion
Gas will sell at least 50 million new appliances in the first half of the decade alone. Said GAMA's President: "The industry believes its appliance sales potential is truly tremendous; for the decade the sales potential is around 150 million, an increase 50% bigger than the total of all the gas appliances now in use."

The gas industry spends \$30 million a year to help the housing industry sell with gas

"We believe a house is easier to sell if it has a great big gold star over the gas range to let the homebuyer see at a glance that it has all 32 of the quality features we know women want."

So GAMA's Managing Director explained the quality programs on whose promotion the gas industry

is now spending more than \$5 million a year for national advertising and \$25 million for local advertising—the Blue Star program which promises good performance on all types of gas equipment and the new Gold Star program which assures the highest quality on ranges and is being considered



BELL: The life of a gas furnace seems to be almost indefinite. We've got them in 20, 30, 35 years.



RITZENTHALER: We're creating obsolescence with new styles.



VIESSER: I am shocked by what I have heard about the cheaper water heaters.



KNAPP: The savings & loans are very much interested in upgrading quality in homes.



GOLDSTEIN: As better gas appliances make the house easier to sell the house will get a higher appraisal.



POTTER: If gas gets its share, air conditioning will change the whole economics of the gas industry.



MASON: There are almost as many kinds of water heater warranties as there are manufacturers.

for extension to other domestic appliances.

In its first year 11.7% of all gas ranges sold carried the Gold Star emblem and over 85% of all gas appliances carried the Blue Star. This year the sale of Gold Star ranges is up 40% and special local promotions have shown that women are so quality-minded about ranges that the percentage of Gold Star sales can be raised well over 50%.

Said FHA Commissioner Zimmerman: "Every industry should establish adequate quality standards and make it easy for builders, appraisers, lenders, and homebuyers to identify products that meet those standards. FHA is more than pleased when a program like the gas industry's Gold Star helps consumers choose better products than our minimum standards require."

The market potential in new houses is much bigger than today's sales

The housing industry's No. 1 problem is to make its product so much more desired and desirable that consumers will want to spend more of their rising incomes to buy better houses or rent better apartments. Says Housing Economist Miles Colean: "The average family could qualify by FHA income requirement standards to buy a house costing 71% more than the house where it now lives."

A good easy-to-clean kitchen with all the labor-saving devices is one of the very best ways to make a new house or a new apartment more desirable. And the package mortgage lets homebuyers buy a \$15,000 house with all the appliances included for only a little more cash and only a little more monthly pay-off than the appliances alone would cost on three-year consumer credit.

So the housing industry wants and welcomes all the selling help it can get from the gas industry and the gas appliance industry.

The housing industry and its suppliers are all in the same boat and they all stand to prosper together

if they can make the boat bigger. If the kitchen sells the house (as many builders and real estate men say), the lumber manufacturers, the window manufacturers, the roofing manufacturers, and all the other suppliers profit too, along with the builder. Conversely, the appliance makers benefit if big windows, sliding glass doors, and a screened patio sell the house, just as they benefit if bigger rooms and better storage clinch the sale. And if an electric dishwasher and an electric clothes washer help sell the house, they may thereby also sell a gas clothes dryer and a bigger gas water heater.

Housing is America's biggest industry; it would be a much bigger industry and a much bigger market if more people were made to realize how much more livable and how much more economical a good new home can be than yesterday's best.

Gas appliances all go into homes, and 70% of all gas sales go into houses. So, in a very real sense, the gas industry is part of the housing industry that provides its principal market.

The builders' model houses offer the finest appliance show rooms

Each year 39 million different adults shop the show houses that some 4,000 merchant builders furnish and staff (at a cost to the builder of up to \$25,000 per model for getting out the crowds and handling the promotion).

Said the past president of NAHB: "Less than ten model-house builders set the standard in every market that all the other builders have to follow. What home-shoppers see in the model houses sponsored by these ten-or-less leaders will determine what they will expect every other builder to equal."

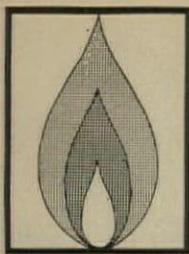
What they see there will also change their thinking about what to buy for their present homes if they decide to remodel instead of moving. What they see there will make a big difference in replacement

sales—and a big difference in what brands dealers will want to carry and sell.

So nothing is more important to the future of gas than to get gas furnaces, gas air conditioners, gas ranges, gas water heaters, and other gas appliances displayed and featured in as many good model houses as possible.

The builders are making a sizable investment in these models. It will pay the gas industry to make an investment too, selling the equipment used in the actual model at cost, providing interesting displays for the model-house showroom, and paying a competent demonstrator to help the builder and his real estate agent exploit the selling points of the gas units used.

continues



Gas Round Table
continued



HARVEY (Public Service): The gas industry is interested in quality appliances and upgrading quality.



BETRIDGE: We are still selling insulation at 1948 prices.



BASS: FHA has taken a long step forward by giving more credit for quality.



KERN: We tell all our clients that a good kitchen makes a house much easier to sell.



STAKE: Gas water heaters outsell any other type by 4 to 1.



WIKSTROM: The success of our Gold Star program proves that people will pay to get quality.

FHA's new attitude towards quality makes it easier to sell its economy

Today FHA requires no more income to buy a \$15,000-or-more home with all the appliances included than FHA requires to buy a stripped-down model of the same house without the appliances.

Today FHA requires less income to buy a house built with quality components and quality equipment (like water heaters, furnaces, etc) than to buy the same house sold for a lower price with inferior equipment—provided the manufacturer can demonstrate that the better equipment will save the homebuyer money in the long run. Said FHA's Beverley Mason: "If better equipment will cut the operating cost of a house \$2.50 a month, FHA will let the buyer qualify to pay \$350 more to buy it."

Today FHA requires no more income to cover the

operating cost of air conditioning. Said former FHA Commissioner Norman Mason (now Housing Administrator Mason): "Air conditioning frequently offers savings on health, cleaning, and other items that may well be bigger than its operating cost."

Today FHA requires only \$100 more cash to add an extra \$1,000 worth of equipment to a \$15,000 house, and allows up to 30 years to pay off the balance.

Said FHA Commissioner Zimmerman at our Round Table: "Homebuyers should buy the quality that is necessary to make the house good and take advantage of the liberal financing that is now available to amortize the cost of quality over up to 30 years."

Said A.G.A.'s Managing Director: "FHA's support on quality will be a big help."

Gas rates to consumers are leveling off leaving gas still the cheapest easy fuel

From 1950 to 1959 the BLS index of gas rates rose 32.2% for heating and 23.8% for other residential uses, but because of bigger consumption homeowners actually paid only 13.4% more per therm—9.65¢ per therm in 1959 vs 8.51¢ per therm in 1950.

This increase was partly due to higher field costs. Fifteen years ago natural gas was being flared in the oil fields just to get rid of it, so producers were glad to get any income at all for it. Said A.G.A.'s President-elect: "Gas was running out of our ears; we welcomed any chance to sell it." Today, natural gas has a good market everywhere, so the field price has risen from 6.5¢ per M cu ft in 1950 to 12.1¢ in 1958. "But the field price is not going up forever—we are getting near the stopping point."

Pipeline costs have remained almost unchanged, at about 10¢ to 15¢ per M cu ft per 1,000 miles, because the transmission companies have learned to lay bigger pipes that offset higher wage and material costs. Today's new 36" pipelines can carry 60%

more gas than yesterday's 30" at only 40% more first cost. Now transmission companies are experimenting to develop a field pipe-bender for 42" lines.

Pipelines try to operate at almost 100% of capacity, pumping gas into local underground storage or selling it at lower rates to industrial customers in the summer off-season. The average load factor of the distribution gas companies, however, is only about 65% to 70%, so fuller utilization from increased gas sales would produce lower costs for some companies.

Soon the gas companies hope the gas air conditioning will change the whole economics of gas by creating a big new summertime demand, enabling them to sell gas all year round to profitable residential customers instead of dumping gas in the slack season to low-paying industrial customers. Says Arkla's Harrell: "Air conditioning is the answer to our problem of stopping the increase in the residential cost of gas."

If gas should lose the new-house market it would lose the replacement market too

The new house sets the standard for fixing up the old, so the most suicidal mistake any industry or any manufacturer can make is to get sales-happy selling replacements into old houses and neglect the style-setting market in new homes and new apartments.

One sale in the new-house market is worth two in the old. Unless women see plenty of gas appliances when they shop the builder's new model houses and visit their friends' new homes, they will get the idea that gas is old-fashioned and try to buy something else for their own replacements.



BATTEN: This year, 1960, is the 75th Anniversary of automatic gas heating.



PFLUKE: The various interests concerned with homebuilding should know more about each others' problems and progress.



BENSON: You can't get much more through today's pipelines.



CONSER: The realtors who sell the houses have the closest contact with the customer.



MASSEY: We have spent \$35 million to help the builder sell the house with a big Gold Star on his gas range.



BROCKBANK: It is very important to the builders that oven sizes should be uniform.



HARVEY (Carrier): In too many cases we find the builders are interested only in price.

Selling more gas appliances into apartments this year will sell more gas appliances into houses in future years, for today's apartment renters are tomorrow's homebuyers. What they learn to like in their apartments they will want to find in the houses they buy.

Five new houses out of six today are merchant-built for sale. The builders of these houses are professional buyers, so there is no use expecting them to pay the kind of mark-up dealers try to get from homeowners modernizing their houses on installment credit. On the other hand, many builders are

so sure that good appliances are a big sales aid that they put appliances into the price of their houses at cost, taking no mark-up on them at all.

Suburban sprawl (H&H, Aug) is bad for the gas utilities because extending gas mains far out into wheat fields and orange groves costs much more than extending power lines. But gas mains cost much less to lay before the streets and driveways are paved than they will cost later on; and unless the gas utilities make gas available while houses are being built they will find the market is gone and there is little use extending the service too late.

The best way to sell products into houses is to enlist the housing industry's help

The housing industry wants and welcomes all the help it can get for consumer advertising that will make consumers appreciate the new products that make new houses so much better. But . . .

It is foolish and wasteful for any manufacturer to think he can afford to sell his product into the style-setting new-house market without the help of the professionals who control the market, for this much is sure: Nothing but nothing goes into a new house without the approval of the architect who specifies it, the builder who builds it, the lender who finances it, and the appraiser who sets its price.

And extra features and extra quality seldom get

built into a new home unless the realty man selling the house knows how to make the extra feature worth more than its added cost in added sales appeal. This realty salesman is the manufacturer's only face-to-face contact with the homebuying consumer. Said Builder-Realtor Alan Brockbank: "The man who plays the biggest part in helping consumers form their opinions and make their decisions is the salesman who sits with them when they get their pencils out. If my salesmen believe in a product used in my houses, I don't have any trouble selling that product; but if the salesmen don't believe in it, they won't promote it to the public and won't use that product to help my sales."

Builders would rather buy gas appliances on a one-price basis from a single source

Messiest problem in housing is the lack of a firm price for anything. Said the president of one of the ten biggest manufacturers serving the industry: "I don't know what my products actually sell for and I can't find out." Said the president of another: "I don't really care any more what builders pay for our products. We know what we get from our distributors; beyond that it's up to them to quote prices that will get the order."

This price chaos is bad for everybody, including homebuyers.

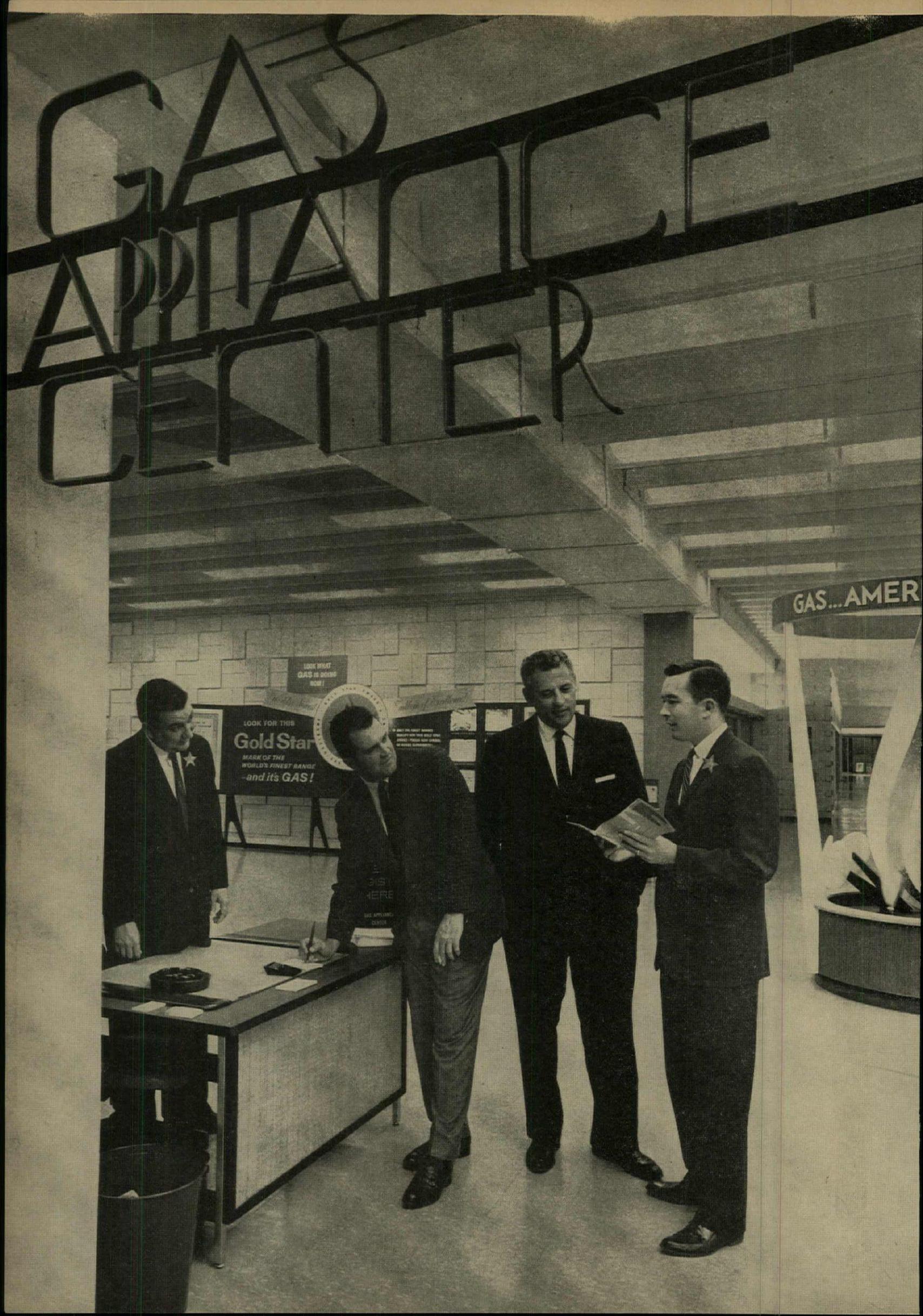
It is bad for builders, because it makes them waste countless hours shopping around for prices if they are to do their job right as purchasing agents for the homebuilding industry and the homebuying public. Says FHA Commissioner Zimmerman: "The builder must and should be completely concerned with getting the lowest available price. That is the major part of his job. He is the professional buyer for the housing industry, and he must resell whatever he buys in a highly competitive free market."

It is bad for dealers, who often find themselves squeezed completely out; it is bad for mortgage lenders and appraisers, because they never know what the builder really spent for better quality; it is bad for manufacturers, because the constant haggling over price drives sales down to the cheapest products FHA will pass.

It is particularly bad for the gas industry and the gas appliance industry because in most areas there is no one place (except sometimes Sears Roebuck and sometimes the local gas company) where a builder can buy all the gas-using components for the houses he builds.

Some he can buy direct from a distributor if he shops long enough and hard enough. Some he must buy from his plumbing contractor, who hides their price and quality (or lack of quality) in his bid. Some he must buy from his heating contractor, who likewise hides their price and quality in his bid. Said utility spokesman Wittman: "The subcontractor almost invariably bases his bid on minimum

Gas Round Table continues on p 208



GAS

LOOK WHAT GAS HE DOES NOW!

LOOK FOR THIS
Gold Star
MARK OF THE
WORLD'S FINEST RANGE
-and it's GAS!

315
HERE
SEE APPLIANCE
DEPT.

GAS...AMER

Today's embattled gas utilities are giving builders plenty of effective selling help

The two homebuilders signing in at the Gas Appliance Center in Dallas (left) didn't just wander in off the street.

They were brought there by the gas company's architect-builder representative—a new breed of employee of the once-staid gas utilities, now fast becoming one of homebuilding's most helpful timesavers and most effective selling allies.

Before the builders leave the Center they will have seen—lined up for easy comparison and one-stop shopping—380 new gas appliances in every price range offered by 26 manufacturers. They will also have been overwhelmed with the selling points of everything new in gas ovens, gas cooktops, gas water heaters, gas furnaces, gas air conditioners, gas refrigerators, gas dryers, gas incinerators, and ornamental gas lights—and how each can be exploited to sell more houses.

So the odds are better than 2 to 1 that before they leave they will sign on the dotted line to put at least four gas appliances in their model houses and let the gas utility give them a lot of free help to sell more gas-equipped homes.

Dallas' Lone Star Gas Co (like many other embattled gas utilities) has decided that the best way to sell more gas is 1) to help manufacturers sell more gas appliances and other gas equipment and 2) to help the builders who buy those appliances sell more gas-consuming houses.

Almost everywhere gas utilities are working as closely with the builder as his architect, his realtor, and his mortgage lender.

To help builders sell, gas utilities are creating advertising (*p 142*); supplying signs (*p 144*) and merchandising displays (*p 145*); running special promotions (*p 146*); providing appliances for model houses (*p 148*); training new-house salesmen (*p 148*); staffing model houses (*p 149*); surveying markets (*p 150*); offering design and engineering services (*p 150*); stockpiling appliances (*p 151*); and even taking over some of the builders' callback problems (*p 152*).

Signing in at the Dallas Gas Appliance Center, two Dallas homebuilders, center take first step in becoming Blue Star builders. Photo: Lawrence Joseph.



They employ experts to write better ads for builders' houses

Many gas utilities provide builders of all-gas Blue Star houses with a professional quality of advertising few builders could afford on their own.

They take over the job of preparing the builders' sales brochures, newspaper advertising, and—in some markets—TV commercials. In varying degrees they help pay for this promotion—some pay \$25 to \$100 a house, others pay all costs.

Perhaps the best example of all-out and effective advertising help can be found in Dallas. The photo sequence below and opposite outlines the advertising job Lone Star Gas Co does for 42 builders in its various gas promotional programs.

Because Lone Star does so much work for builders, it requires more of the builders in its Blue Star Home program than most utilities. To qualify for the complete program shown in the photos, the builder must not only meet the basic requirements of the Blue Star promotion program by using gas for heating, water heating, and cooking; he must also install gas air conditioning and a Gold Star (top quality) range.

Builders who have tied in with Lone Star think this is a fair exchange.



Walter Derron

ADVERTISING AND BROCHURES produced at the expense of the gas utility for Blue Star builders is individually designed, features builders' names, subordinates the gas company.



1. **FIRST STEP** in planning advertising is meeting of gas company architect-builder representative and new Blue Star builder (here, Floyd Smith of Dallas).



2. **FIELD RESEARCH**, to develop sales points for ad campaign, takes gas company copywriter to Builder Smith's site for first-hand information.



3. **UTILITY'S ADVERTISING TEAM** (left) of agency copywriters and publicity men plus gas company's own ad manager maps out builder's advertising.



4. **PREPARING COPY** for builder's sales brochure, agency copywriter works to promote the builder and his houses first—then the gas company.



5. **CONFERRING WITH BUILDER** at his office, architect-builder representative gets approval of copy, artwork, and layout for proposed brochure.



6. **CONFERRING WITH PRINTER**, production woman from utility's agency checks page proofs of builder's brochure for accuracy, color registry, and high-quality appearance.

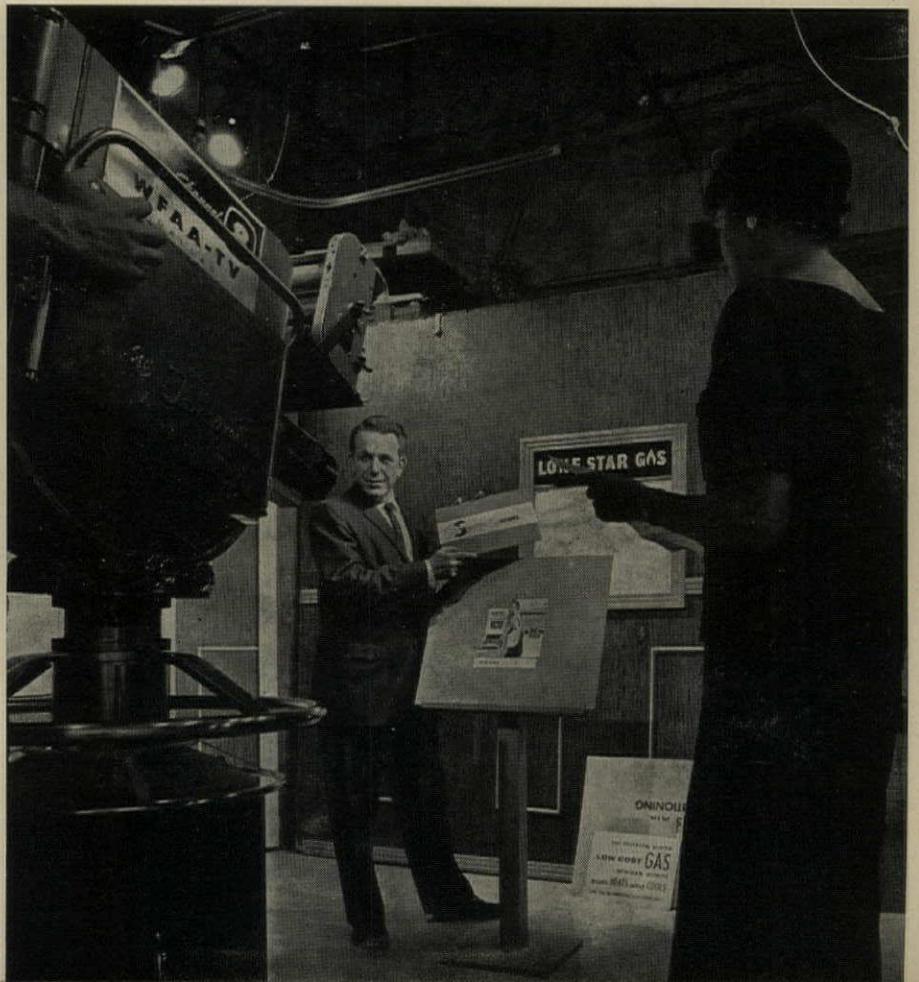


7. **FINISHED BROCHURES** are delivered to builder's sales manager by gas company's representative well before opening.



8. **VISITING NEWSPAPER OFFICE**, utility's publicity man delivers release about builder's houses, answers questions.

9. **TV SPOTS** on prime evening time are paid for by gas company, which shares billing with its latest Blue Star builder.



Photos: Lawrence Joseph



SIGN BEING PAINTED for a Blue Star builder by Lone Star Gas Co will feature builder's name at the top. Gas gets prominent—but second—billing.

They design and supply signs for the model house

Country Photographers

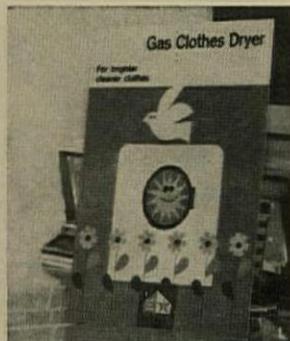
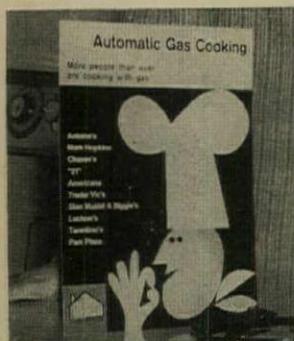


SIGN OUTSIDE MODEL accents gas economy ("Another penny flame home"), was supplied to Medema Bros of Oak Forest by Northern Illinois Gas Co.

Some of the signs are special, one-of-a-kind displays like the one shown above being painted for the builder of an all-gas house. Some signs are standard printed placards like those at the bottom of the page, which were created by A.G.A. and are distributed to builders through their local gas utilities.

Although most of the signs incorporate a variation of the industry's basic flame symbol, most of them feature the builder's name, the names of his models, or the name of his community. A.G.A. has recommended to all utilities that they give builders the top billing on all signs, place their gas message in a subordinate position. Says A.G.A.'s Jerry Mullins: "Our first job is to help the builder sell his houses. The faster he sells, the more gas we sell."

Photos: Hasco



SIGNS INSIDE MODEL stress benefits of new gas ranges, refrigerators, driers, and incinerators. They were supplied by Minneapolis Gas Co for a local builder's model house.





Automatic LAUNDRY

Built-in RANGE

Built-in OVEN

DISHWASHER

Refrigerator



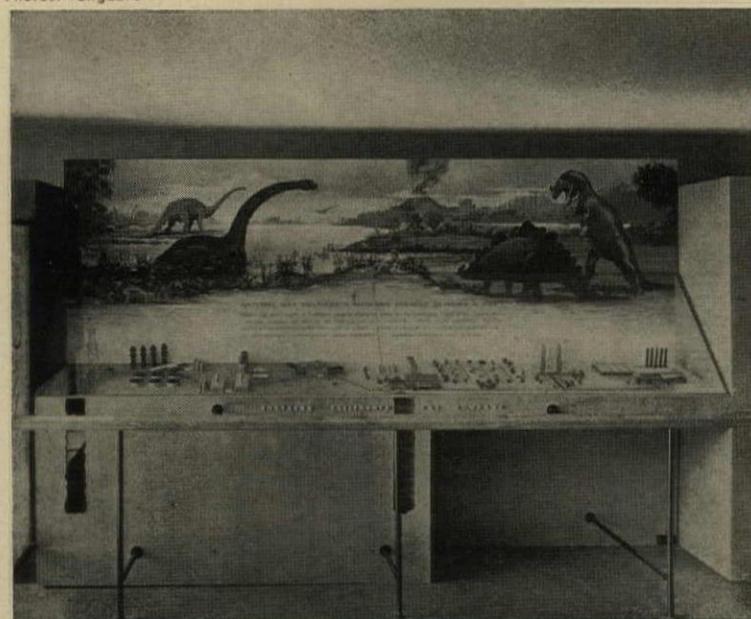
GAS APPLIANCE DISPLAY was set up by Southern California Gas Co for builders of Grandview at Palos Verdes.

They furnish displays for builders' salesrooms



SHOWCASE SIGN in front of model house steers visitors to garage, which has been converted into a product and quality display area.

Photos: Vanguard

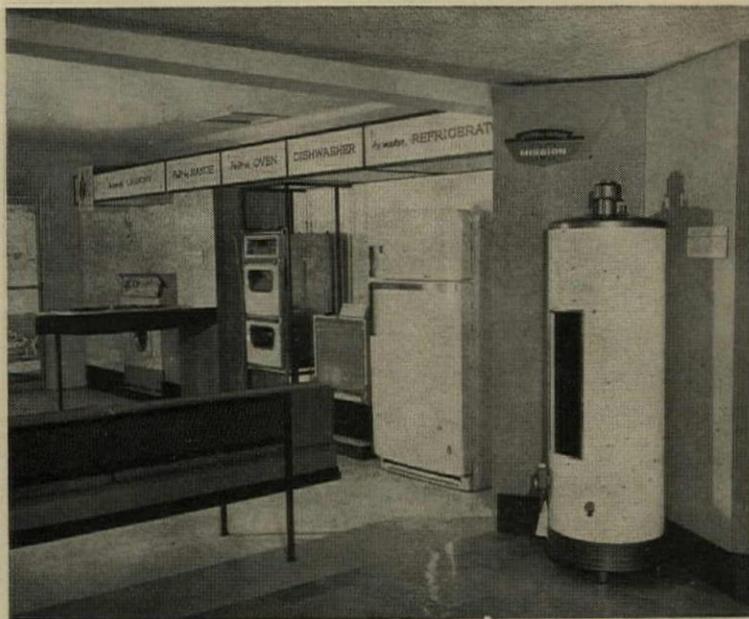


EDUCATIONAL DISPLAY supplied by gas company explains the source, production and distribution of gas. This is inside display room shown above.

"There is no better place to sell the public any new product," says Frank Foster, vice president of Southern California Gas Co (which has set up displays for more than 100 builders, has an average of 175 gas refrigerators on loan in model houses).

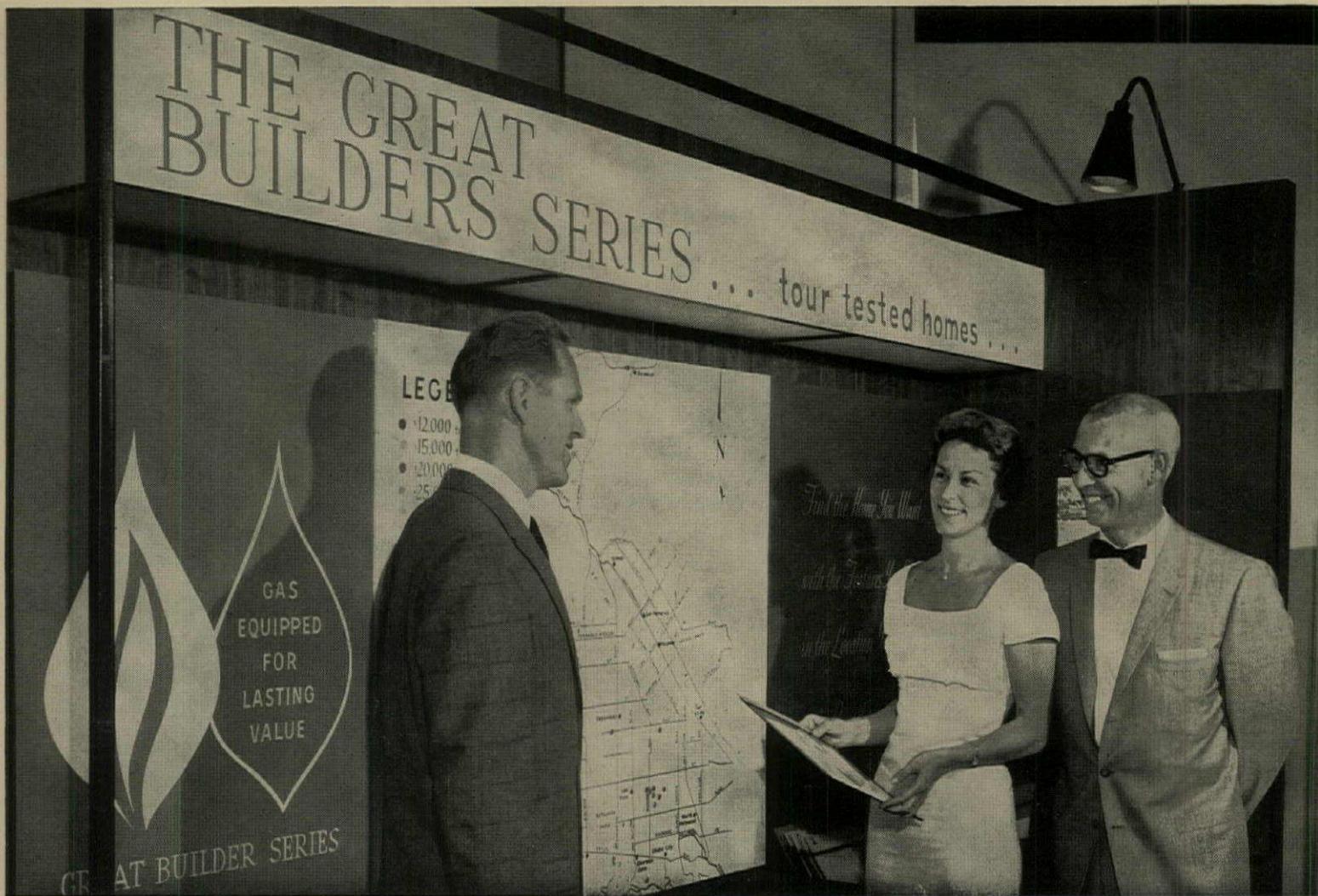
"So," Foster adds, "putting good appliance displays into the model house is good business for appliance manufacturers and for us — as well as for the builder. In our area, some builders don't include refrigerators or washers and dryers in the basic price, but if we put these appliances in a model house display we encourage prospects to take them as optional extras."

What does a builder do to get a utility to set up a product display area? Says Foster: "We have no standard requirements. We evaluate factors like the character of his community, his location, his price class, and the promotional opportunities for us. We evaluate what it will take to help him sell more houses. Then we act."



PRODUCT DISPLAY on opposite wall explains advantages of new appliances, stresses brand names. Careful design and lettering gives display a quality look.

continues



AT INFORMATION CENTER, utility employee points out all-gas models in area, helps prospects choose models in the location and price range that suits them.

They bring out prospects with special promotions

Vanguard



PRE-OPENING BUS TOUR for leading industrialists and businessmen from San Fernando Valley was set up by the utility to promote six all-gas houses.

One of the most successful new-house promotions is Southern California Gas Co's "Great Builder Series" which, since May, 1959, has helped promote the "Tour-Tested Homes" (see photos below) of more than 2,000 builders.

The utility has 18 home-information centers around Los Angeles to which new-house prospects can go for information on "Tour-Tested Homes" which the features they want at the price they can afford to pay. Maps show the location of houses by price class. Files hold sales brochures of 600 different builders.

The home-information centers are particularly helpful to newcomers in California's swelling population.



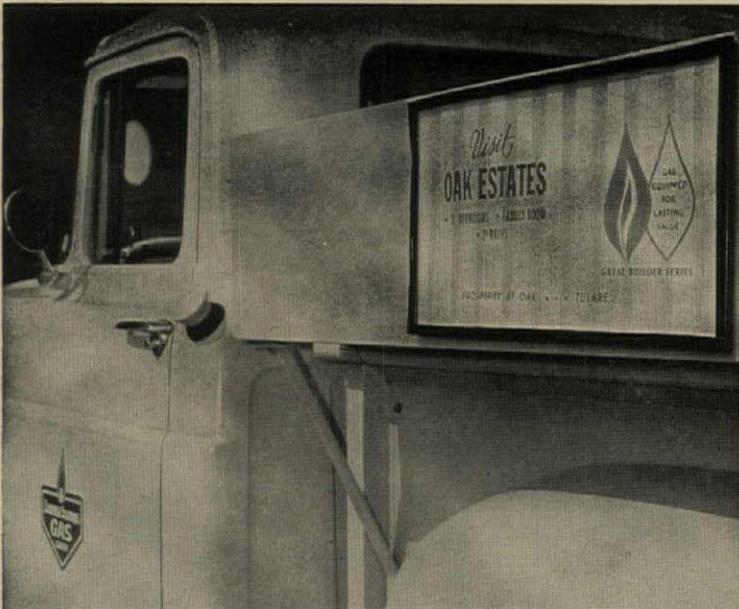
TOURING VISITORS enter Stone Hills model in Sherman Oaks. The promotion drew hundreds more to the development at its opening a few days later.

Crowd-pulling ideas used by gas companies in builder promotion run the gamut from outright stunts to solid marketing ideas (like supplying new-house information to the personnel directors of new or expanding corporations). Most of these promotions are tied in with the opening of new model houses. Here are some examples:



DOOR PRIZES donated by Southern California Gas Co are an added inducement for visitors attending model openings.

Bill Brunk

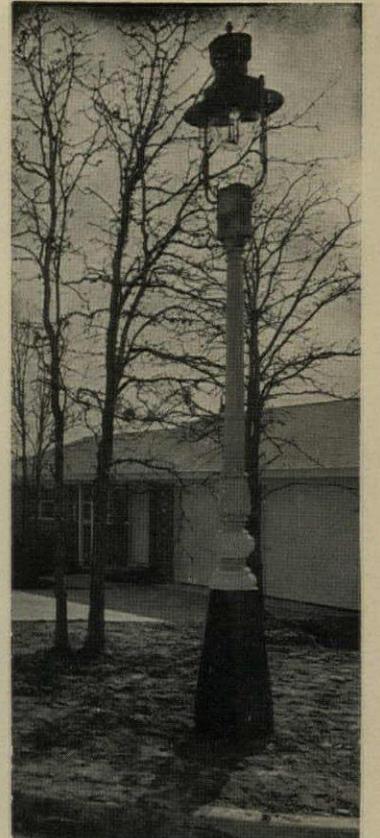


DISPLAY CARDS on gas company trucks give first billing to the name of the building development and basic new-house facts—then promote gas.

Wide World



Don Barnett



100-YR-OLD GAS LAMPS in their original London setting were imported by Lone Star for installation at Stonegate Homes in Tarrant County, Tex.



"TEXAS TORCH," with copper tube bubbling lighted natural gas up through bowl of water, is nighttime attraction supplied by Lone Star for model openings.

Vanguard



CROWD-PULLING CELEBRITY, Actress Margaret O'Brien, appeared at the opening of builder's all-gas model. Tie-in was arranged by the gas company.

They give or lend the appliances for model houses

Most gas utilities realize that a full array of appliances can help the builder sell more houses, and also help sell more gas. That's why:

1. South Jersey Gas Co lends refrigerators and washer-dryers to 30 builders.
2. Laclede Gas usually has 200 gas dryers out on loan in about 50 builders' model houses.
3. Houston Natural Gas Corp gave a range, oven, vent hood, two bathroom heaters, and an ornamental gas light to each of the 16 builders of all-gas houses in the 1960 Houston Parade; installed gas refrigerators and gas air conditioners at discount prices.
4. Southern California Gas Co helps builders by spray painting hundreds of washers, dryers, and refrigerators to match gas-using appliances in model houses.



GAS REFRIGERATOR IS UNLOADED at model house before weekend opening. Lone Star Gas Co delivers just the model and make requested by builder.

Lawrence Joseph



LEARNING ABOUT PRODUCT, Dallas builders are shown the operation of automatic controls on a Gold Star quality range.

Dorrill



WATCHING DEMONSTRATION, St Louis builders see home service women of Laclede Gas Co broil steak, learn about features important to housewives.

They train salesmen to sell gas-product features

Dorrill



Most gas utilities realize that salesmen who know all the talking points and selling points of the house and its equipment can sell a lot more houses, so they offer sales training courses for builders, realtors, and salesmen.

Some utilities concentrate their training on the good points of gas and gas appliances; others like Southern California Gas Co (which has trained over 2,000 new-house salesmen) include talks by engineers and salesmen for other products used in houses, like millwork and cement blocks.

ATTENDING TRAINING MEETING, builders gather at one of Laclede's home service centers. Meeting is followed by dinner that builders cook.

They help staff the model with men who sell houses —not just appliances

"We've learned the best way to sell gas is first to help the builder sell his houses."

So says Billy Harrell, vice president of Arkansas Louisiana Gas Co, who stations his salesmen right in model houses. He adds: "When a salesman points to a Gold Star quality gas range he is implicitly telling the customer something about quality in the rest of the house."

Most gas companies concentrate their sales help on opening weekends or during a builder's heaviest promotions, but some offer year-round sales help and appliance demonstrations by home service advisors.

Says Realtor-Builder Dale Witt of Norfolk, Va.: "The reason I switched to gas was not for the \$25 the gas company gave me for each gas range I installed, but because the company's service girl demonstrated for me as well as for the utility. That kind of help is invaluable."



W. N. Schill

UTILITY HOSTESS (from South Jersey Gas Co) serves punch and flame shaped cookies at opening of builder's model house.

Photos: Film Arbor



1. UTILITY SALESMAN (from Arkansas Louisiana Gas Co) doubles as house salesman at builder's opening, shows builder's brochure to house-hunting couple.



2. SHOWING AUTOMATIC MEAT THERMOMETER. gas company salesman urges wife to "see for yourself" how handy the device is.



3. SHOWING GAS AIR CONDITIONER, salesman answers technical questions raised by husband.



4. SHOWING OTHER QUALITY FEATURES, company salesman points out fireplace with built-in



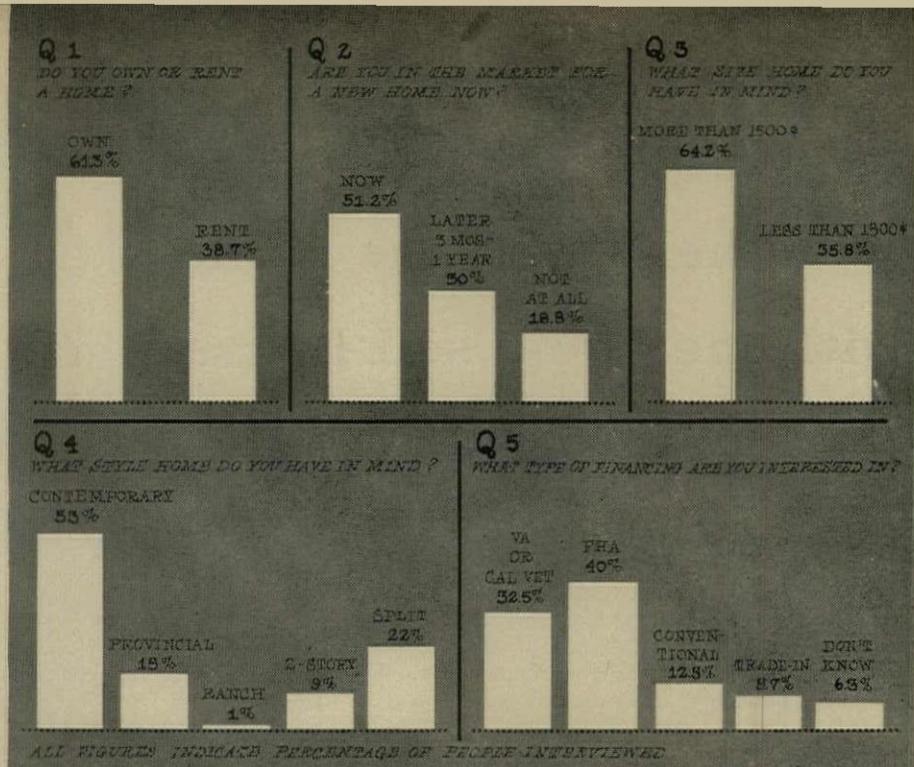
spark screen (left photo), bathroom with vanity, big mirror, quality hardware.

continued



They make surveys to help builders spot the market

Most gas utilities employ builder-architect sales representatives who can advise builders on what types of floor plan, what price range, and what style houses are selling best. But Southern California Gas Co goes a step further, employs a professional marketing organization to conduct market surveys (see bar charts, right). This information is offered to builders as a part of the Great Builder Series program (see p 146).



MARKET SURVEY RESULTS prepared by Southern California Gas Co were developed from curbside interviews in one development during peak traffic hours. Other results showed

where prospects live and work, whether they own or rent, how many previous visits they made, which models they prefer, what attracted them to the model houses.

Lawrence Joseph



SOLVING ENGINEERING PROBLEM, Lone Star Gas engineer figures heat loss to determine size of furnace and air conditioner needed by builder.



SOLVING DESIGN PROBLEM, Southern California Gas planner (standing) discusses arrangement of kitchen with Builder Richard Henniger.

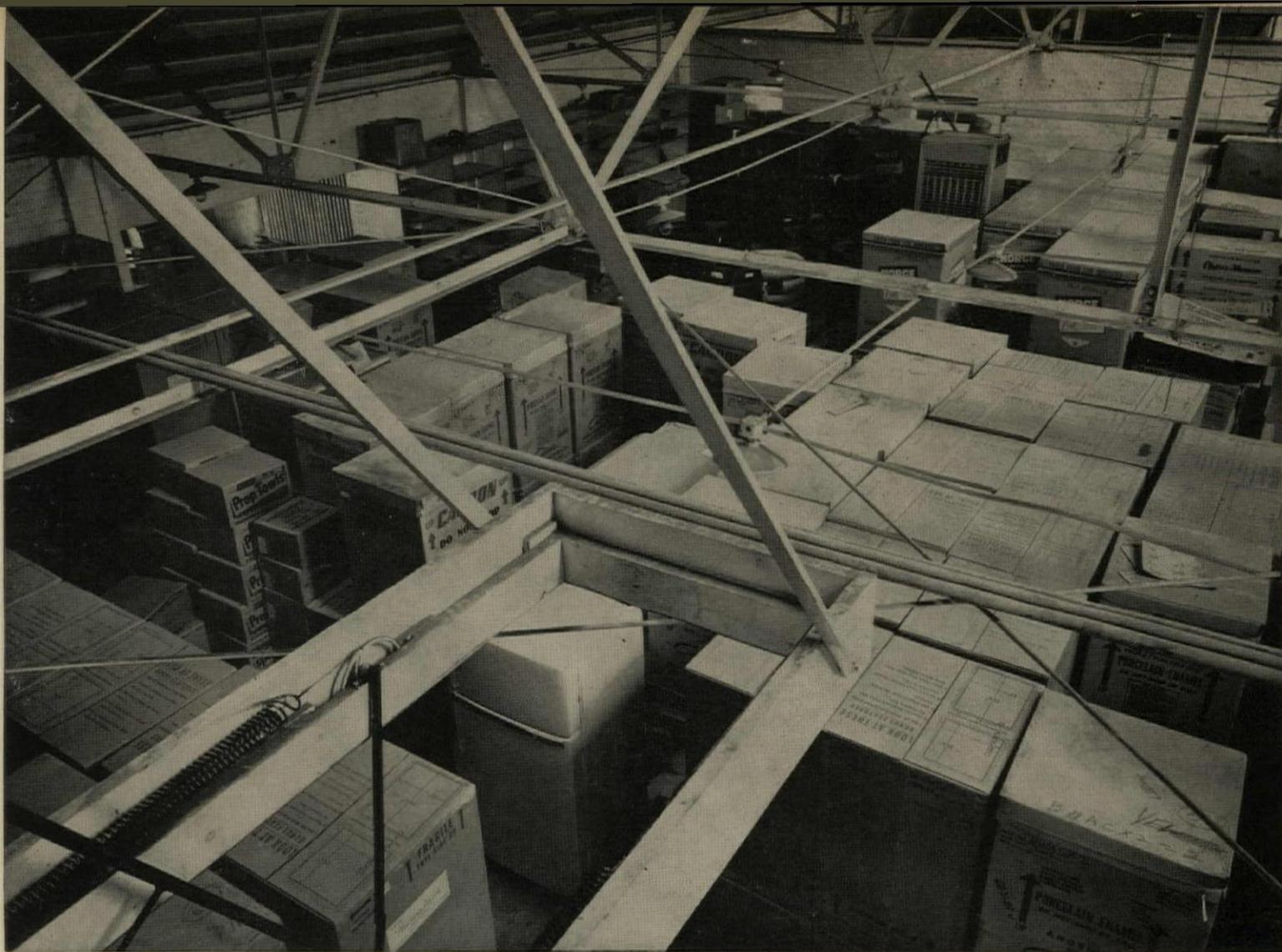
They offer design and engineering services



TEMPORARY FUEL TANK loaned by Lp Gas Dealer Jim Althoff of Chicago lets Builder Roger Ladd do interior work before furnace installation is complete.

Several gas utilities now help builders lay out their kitchens. First they find out how much space a builder has allotted for a kitchen and where he plans to put the doors and windows. Then they prepare colored renderings to show him how appliances will fit into his kitchen and how they will look with different floor and counter materials, kitchen cabinets, and lighting fixtures.

"Gas utilities like Milwaukee Gas & Light, Arkansas Natural Gas, and United Gas Corp offer heating-engineering advice as a standard practice," says Jerry Mullins of A.G.A. And some local utilities give builders special services like the loan of portable gas heaters to thaw frozen ground for a house foundation (H&H, Sept) and temporary heat for houses under construction (photo, left).



WAREHOUSE FULL OF APPLIANCES stockpiled by Arkansas Louisiana Gas Co assures builders of delivery of any make or model on 24-hour notice.

They stockpile appliances to assure fast delivery

By stockpiling appliances themselves or working closely with local distributors, almost all gas utilities make sure a builder can get the make, model, and color of appliances he wants for his model houses.

Arkansas Louisiana Gas Co goes a step further—warehouses enough appliances to act as the distributor for all builders of all-gas houses in its area.

Says Arkla's Billy Harrell: "We buy in carload lots, and offer 70-odd appliance packages with a combination of seven brands of quality ranges, water heaters, dryers, etc. We have 700 dealers, but we are not competing with them because they don't sell the new-house market.

"We give a builder a price on one appliance or five, and if he wants to buy a carload, we'll give him a price on that. We've sold as many as 159 gas ranges to one builder at one crack.

"We don't believe that a builder just wants cheap products. He uses Gold Star quality because we give him carload prices for quality products. Perhaps that is why almost 90% of the gas ranges sold in our area are Gold Star.

"We've learned that the builder wants service. He is more interested in finding equipment that he wants than in saving \$25. We try to save him the time he would spend shopping around for appliances—so he's free to build and sell another house. We don't conference a builder to death. We get the job that he needs done for him. All he has to do is sit in his office and decide what he wants—then call us. Then it's our problem and we solve it—we can supply him with whatever appliances he wants within 24 hours" (see photos, right).

Photos: H&H staff



1. BUILDER CALLS Arkla Gas Co to order appliances for group of new houses.



2. GAS MAN ANSWERS call, promises quick delivery of appliances to builder's site.

Film Arbor



3. GAS MAN CHECKS warehouse stocks to be sure colors in shipment will match.



4. APPLIANCES ARE DELIVERED within 24 hours, installed by gas company men.

continued



They take over the callback problems in gas appliances

Some utilities like the Arkansas Louisiana Gas Co, whose activities are pictured on this page, provide free service on appliances during the warranty period. Other help with post-sales selling, show housewives how to operate appliances after they move in.



SERVICE STICKER pasted on air conditioner by Arkla builds homebuyers' confidence by assuring them of service at any time.

Photos: Film Arbor



1. POINTING TO SERVICE STICKER, Arkla salesman, assigned to model house, tells prospect about his company's service to homebuyers.



2. ASKING FOR CHECK-UP of air conditioner in her new home, housewife dials phone number on service sticker to call gas company.



3. REACHED BY RADIO PHONE from his headquarters, Arkla serviceman in area closest to woman who requested service arrives at her house.



4. PROMPT ARRIVAL OF SERVICEMAN pleases housewife and builds goodwill for the builder as well as the utility.

/END



On the next four pages you will see



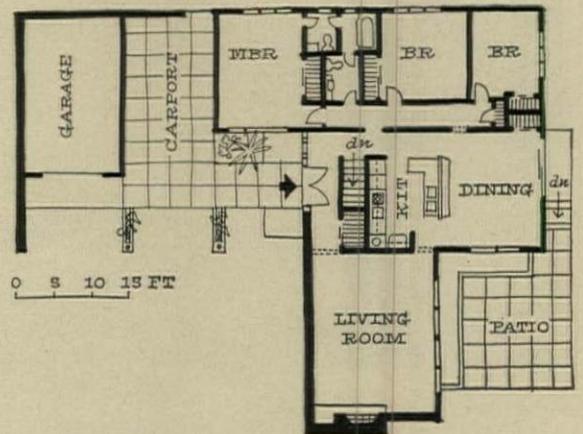
FOUR ALL-GAS HOUSES



HILLTOP HOUSE, modified from an original design by Architects John Normile (of *Better Homes & Gardens*) and Donald Honn has 1,980 sq ft of living space.

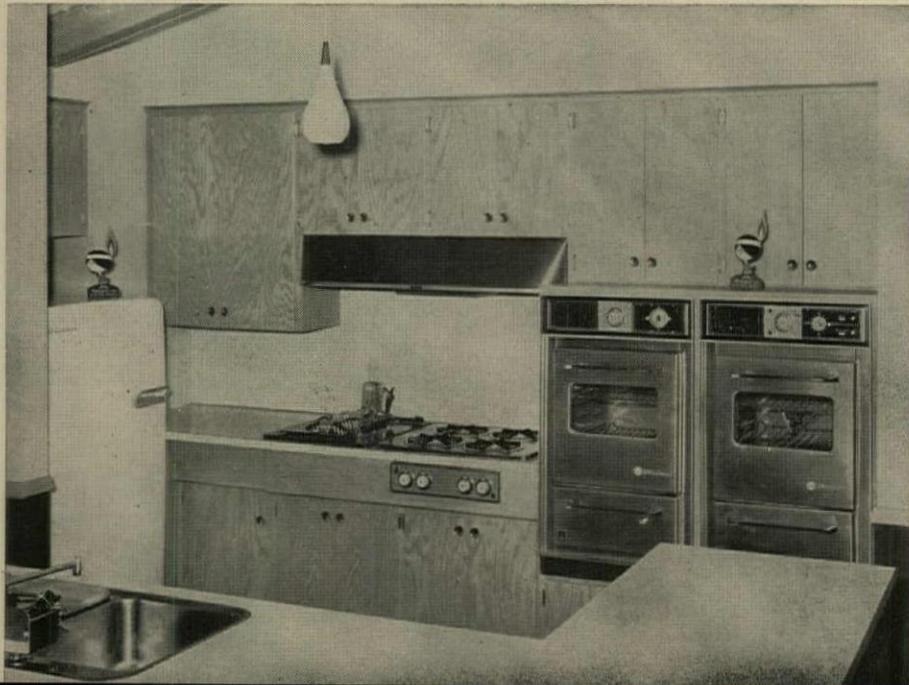
THIS \$39,500 HOUSE IN MINNEAPOLIS by builder Hugh Thorson was a *Better Homes & Gardens* Idea Home as well as a gas promotion house. Its price included landscaping, carpets, air conditioning, and appliances.

The Minneapolis Gas Co helped Thorson build and sell this house by 1) installing an air conditioner at half price, 2) providing a free gas range, oven, and barbecue, 3) loaning a combination washer-dryer, 4) supplying an outdoor gas light, 5) preparing brochures to his specifications, 6) providing TV advertising and four-color advertising in a Sunday supplement, and 7) supplying two salesmen to help handle Sunday traffic.



T-SHAPED PLAN puts three bedrooms and bath in the rear, kitchen between living and dining rooms oriented to a patio.

Norton & Peel



REAR ELEVATION shows how the hillside site was used to turn basement into a daylighted living, work, and play area.

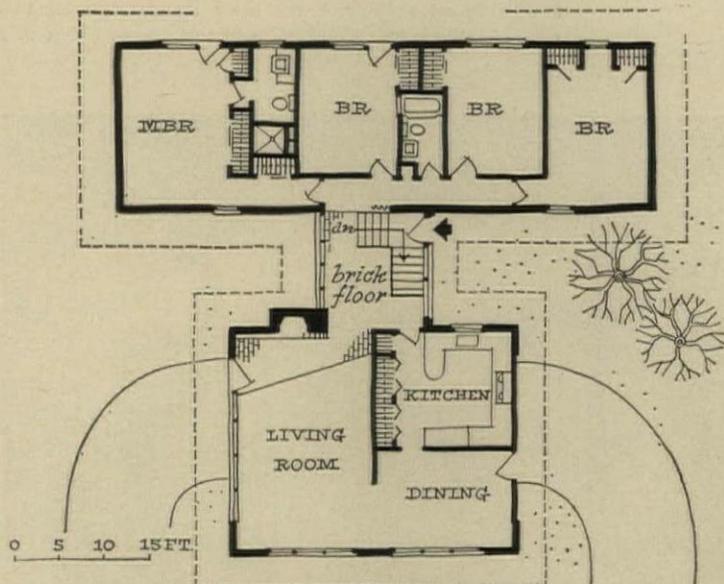
ALL-GAS KITCHEN (left) has refrigerator, twin ovens, barbecue, cooktop, and sink in a compact, efficient work plan.



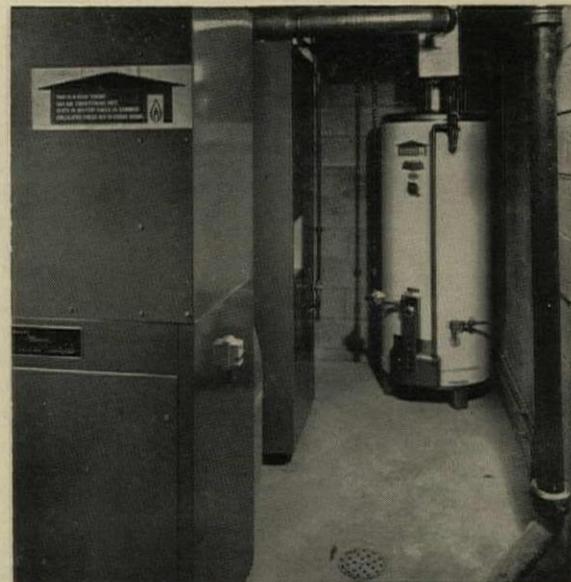
HILLSIDE HOUSE has a 4'-wide deck surrounding the living-dining-kitchen wing, supported by pillars over the carport. Bedroom wing, rear, is built into hill.

THIS \$75,000 HOUSE IN PITTSBURGH helped build prestige for all three gas companies serving the Pittsburgh area and for the builder, Caste Bros Inc.

The house, located in an exclusive Pittsburgh suburb, was shown in well promoted evening openings to a select list of potential customers and to groups of architects, builders, and other housing professionals important to the gas companies. The builders got tv coverage, reduced prices on appliances, and extensive promotional help from the gas companies (People's Natural, Manufacturers' Heat & Light, and Equitable). Architect was Lucian Caste.

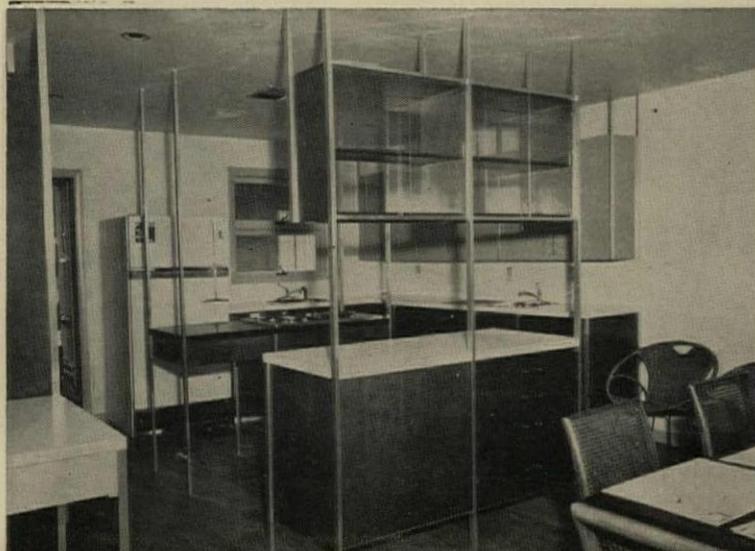


TWO-ZONE PLAN has four bedrooms, two baths separated from living-kitchen wing by entry stairs and corridor.

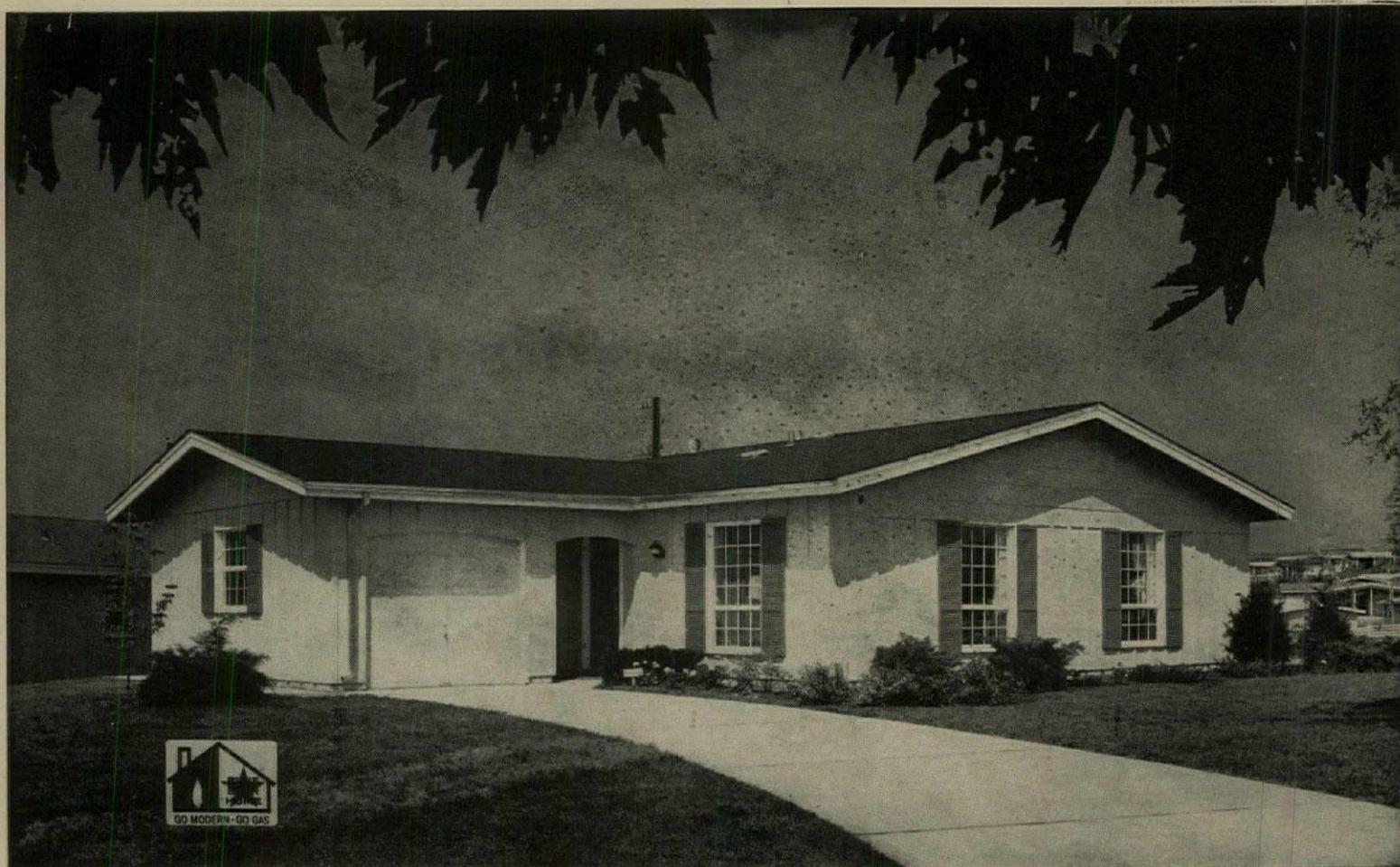


TWO AIR CONDITIONERS—one for each wing of the house—and water heater are in the basement under bedroom wing.

KITCHEN (below) has two sinks equipped with single-handle mixing faucets, glass-door cabinets, gas refrigerator, oven, and range.



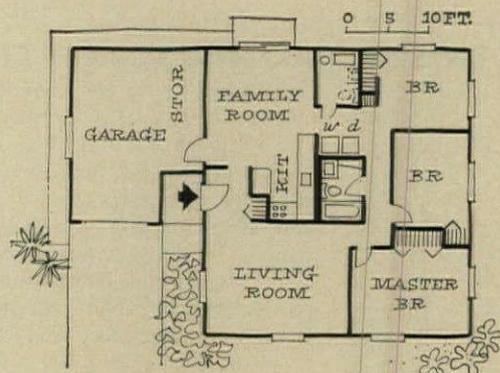
continued



L-SHAPED HOUSE has 1,088 sq ft of living space, is the lowest-priced model of six all-gas houses built by Fischer & Frichtel, St Louis.

THIS \$15,150 HOUSE IN ST LOUIS is one of six all-gas (and Blue-Star-promoted) models now being built by Fischer & Frichtel of St Louis. The house has a separate entryway that keeps visitors from stepping directly into the living room, an almost circular traffic pattern around its interior kitchen and bath.

Here is how the local utility, Laclede Gas, helps F&F:
1) It helps pay for the gas mains extending out to F&F's subdivision; 2) it provides generous cash rebates for advertising; 3) it loans washers and dryers for F&F's model houses; 4) it supplies attractive displays showing "the economy of heating with gas."



FLOOR PLAN shows that the living area, built around an interior kitchen and bathroom, is almost square (32' x 36').



INTERIOR KITCHEN with a U-shaped appliance arrangement opens onto a family room. Washer and gas dryer are located in a corridor off the bedrooms.



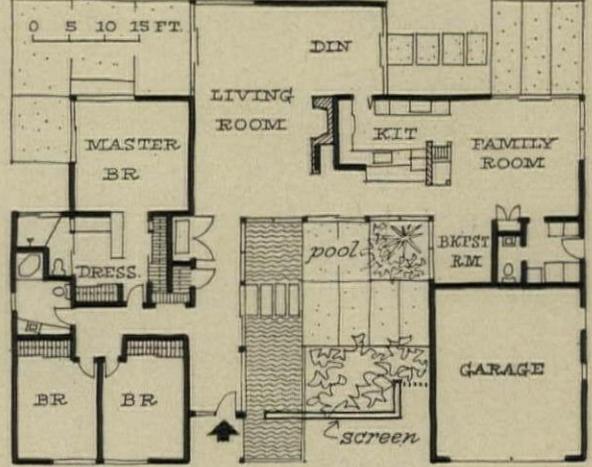
LIVING ROOM can be reached from the entryway (left) or from the bedroom corridor (right). Ceiling-high openings between rooms give house an airy feeling.



RAMBLING ONE-STORY HOUSE has 2,000 sq ft of living area. Wood grillwork screens both bedroom windows, left, and central entry court, center.

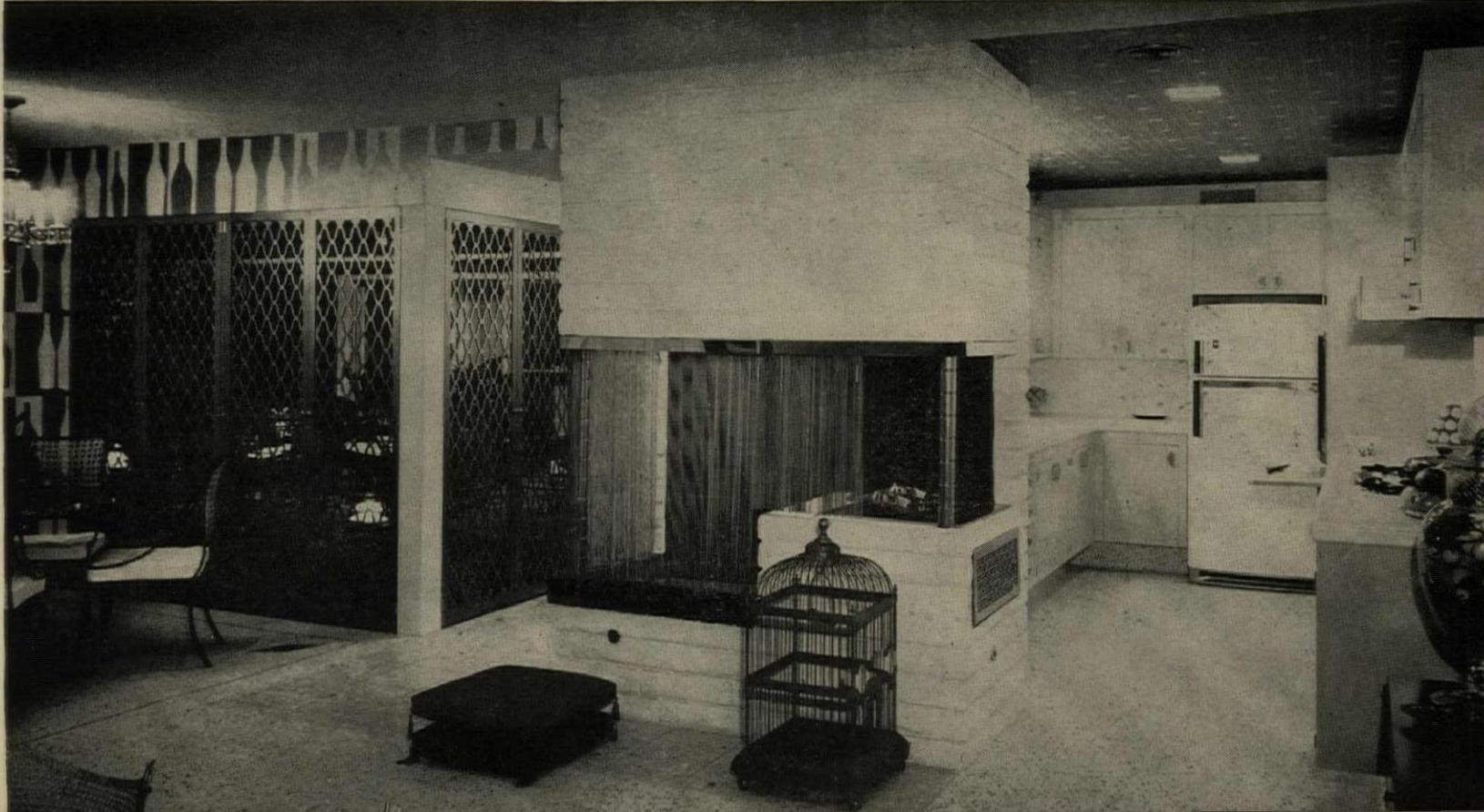
THIS \$75,000 HOUSE IN TUSTIN, CALIF. is a show house for both builder and gas utility.

Builder Ed Nahigan, who specializes in \$30,000 to \$35,000 houses in Orange County, uses the house to show customers the design and construction to expect in any Nahigan house. His architects, Miller & Miller, made almost full use of the lot by putting a central court in front of the house, a swimming pool (not shown on plan) in the rear. Nahigan's utility, Southern California Gas Co, helped furnish the show house with the latest in gas equipment: a single-unit air conditioner that heats and cools, a refrigerator with automatic ice maker, gas oven with motorized triple rotisserie, a gas range with automatic top burner controls, and a gas barbecue.



U-SHAPED PLAN wraps around a patio and pool in the central entry court visible from almost all parts of the house.

BRICK FIREPLACE AND GAS BARBECUE between kitchen and family room are shared with a small breakfast area, left, overlooking the central courtyard. /END



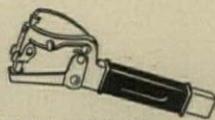


The business end of a Bostitch stapler

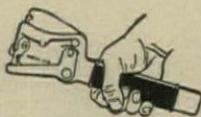
**IT'S BUILT TO DO JOBS WELL...TO DO JOBS PROFITABLY...
TO GIVE YOU MORE TIME FOR MORE JOBS**



The T-5 Tacker
—the standard for all other spring tackers—also available with heavy-duty spring.



The Bostitch H5 Stapling Hammer
—the almost "no fatigue" way to handle light tacking jobs.



The Bostitch H2B Stapling Hammer
—for on-the-job medium tacking.



The Bostitch H4 Stapling Hammer
—for shingling and other heavy-duty stapling.

The quality, ease of operation, and long-lasting usefulness built into each Bostitch stapler mean an increase in your profits.

You'll find there's one for every fastening job. Shingles, foil-type and batt insulation, undercourse shakes, ceiling tile and many other materials are fastened quickly and easily, so you can build better at less cost in time and materials.

See the complete line at your Building Supply Dealer. Buy them—profitably—for your next job.

*Profits are better
and faster with*



Be sure to see **NEW WAYS** **TO BUILD BETTER**

A monthly report on home building ideas, products, and techniques

Starting here

Technology



CHURCH in St Louis, by Architects Manske & Dieckmann, has stressed-skin, folded plate roof.

New designs like this boost use of sprayed-on roofing



VINYL ROOFING is sprayed on in three coats that form membrane 40 mils thick.

With steep roofs, the only way to get an outside surface with no joints, laps, or seams is to spray a waterproof plastic membrane onto sheathing or decking.

To do this for the striking church roof above, the architects specified a new three-coat system (primer and two finish coats) developed by Plas-Chem Corp with Union Carbide. Applied to stressed-skin plywood roof panels at ambient temperature, the plastic formed a membrane said to last at least ten years.

Plas-Chem vinyl roofing is the newest of many spray-on systems worked out in the last two years. Asphalt, polyesters, epoxies, urethanes, as well as vinyls have all been adapted for spray-on roofing. They cost more than many other roofings but solve design problems other roofings cannot solve.

And on the following pages

More Technology

New concrete cuts wall construction costs. . . . Easy way to vent an island sink. . . . How to install sewers to avoid downtime and breakage.

see p 188

What the leaders are doing

New house shows new ideas for built-ins. . . . Local artists help decorate model houses. . . . Prefabber's best seller is split level.

see p 197

New Products

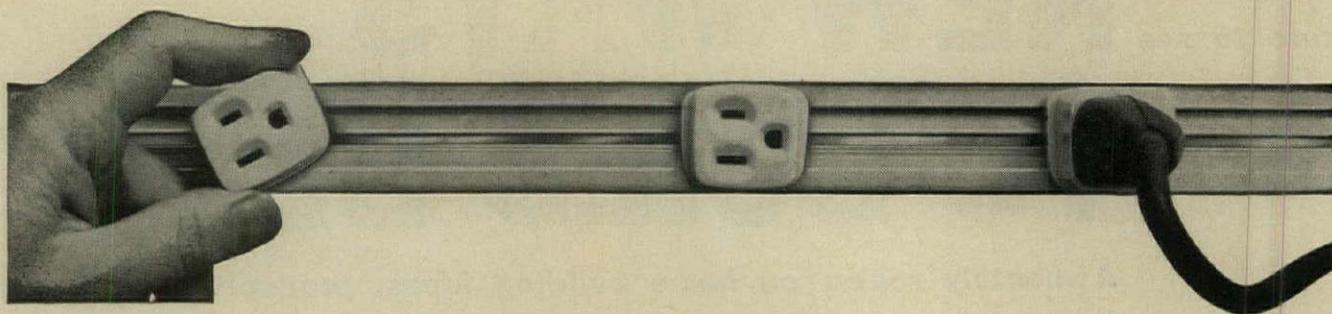
What's new from the gas industry. . . . New system gives guaranteed termite protection. . . . New heavy equipment, new nylon lock, new intercoms, new siding and paneling.

see p 218

Publications

How to sell panel houses. . . . How to cut vapor transmission. . . . How to color-coat masonry. . . . How to specify prefab chimneys. . . . How to use hardboard.

see p 284



Electrical outlets aplenty!
More flexible office layout
with new 3-Wire Electrostrip

PATENTED®

New 3-Wire Electrostrip® grounds office machines . . . gives you handy outlets you can move.

Here's absolute electrical safety combined with an abundance of outlet convenience. New 3-Wire Electrostrip is UL listed and meets the electrical code requirements for equipment grounding. Electrostrip outlet receptacles twist into place *anywhere* on the strip. When you relocate machines, you can relocate outlets right where you want them!

See your electrical contractor about 3-Wire Electrostrip. He'll install it swiftly, economically—without mess, with-

out disrupting work schedules. Electrostrip is the safe, modern system for wiring offices, showrooms, shops and institutions. It provides electrical outlets aplenty!

Bulldog Electric Products Division, I-T-E Circuit Breaker Company, Box 177, Detroit 32, Michigan. In Canada: 80 Clayson Rd., Toronto, Ont. Export Division: 13 E. 40th St., New York 16, N.Y.



BULLDOG ELECTRIC PRODUCTS DIVISION
I-T-E CIRCUIT BREAKER COMPANY



Installs quickly on wall surfaces



Outlets anywhere you need them



PREfinished

*Twice the wear
- half the care*

How to save 40% to 50% on-site labor on Oak Floors

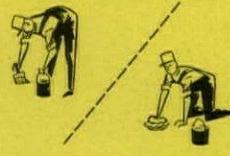
FINEST FINISH EVER GIVEN HARDWOOD FLOORS

Eliminate floor sanding and finishing to free yourself from a big headache in home construction and to save on-site labor costs. When you use Bruce PREfinished Floors there's no waiting for sanding, no tieups while finishes dry, no interrupting other work. Bruce PREfinished Flooring is easy to lay (just like plain strip) and the beauty and durability of the factory-applied finish are far superior to on-the-job finishes. Write today for complete facts. See our catalog on all Bruce Floors in Sweet's File.

Bruce PREfinishing eliminates all these operations



SANDING
(3 Cuts)



APPLYING FILLER and FINISH
(2 or 3 operations)



WAXING and BUFFING
(2 operations)

BRUCE

PREfinished Floors

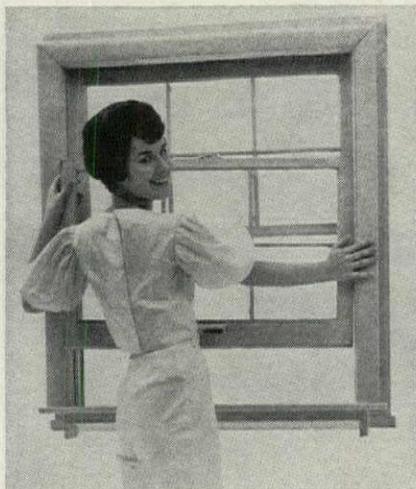


E. L. BRUCE CO., 1594 Thomas St., Memphis 1, Tenn.

A BIG STEP FORWARD IN REMOVABLE WINDOW EQUIPMENT

*Now available
An excellent
feature
for apartments
as well as
homes*

Today, removable windows have wide appeal. Among the first to realize the value of the removable feature was Zegers, Inc. About five years ago they set out to produce equipment that would provide removability and *also assure efficient weatherstripping*. The job was not easy, but constant research and testing finally brought the desired results. Now, the Zegers removable equipment, called "Take-out,*" is available!



Just a slight sideways pressure of the sash, in either direction, and Take-out equipped window is out.

The problem was solved by combining famous Zegers Dura-seal principles of efficient weatherstripping and dual sash support with a new compressible jamb, so that weather-tight, well-balanced, double-hung



Take-out is real easy to remove and replace!

wood windows now can be lifted out and put back *easily*, quickly. No longer will users have to tug and struggle to remove and replace windows. Tests made by independent research laboratories show that windows equipped with Take-out *exceed* F.H.A. requirements by more than 50 per cent!

Probably one of the most important Take-out features is Dual Balancing* which provides *two* spring balances on each sash, one on each side, to prevent the sash from tilting. Furthermore, Take-out is coated with Zelite, an exclusive process that *keeps* the metal bright and beautiful.

With Take-out, cold, drafts, or dirt *cannot* enter. In the summer, warm air cannot enter air-conditioned homes through the windows and cool air cannot escape.



Washing Take-out equipped windows is no task!

Builders! Ask your lumber dealer about Take-out or write *now* for our new folder.

Lumber Dealers: Write for new Take-out folder and ask to see a Take-out Window in operation!

ZEGERS
INCORPORATED

8090 South Chicago Ave.
Chicago 17, Illinois

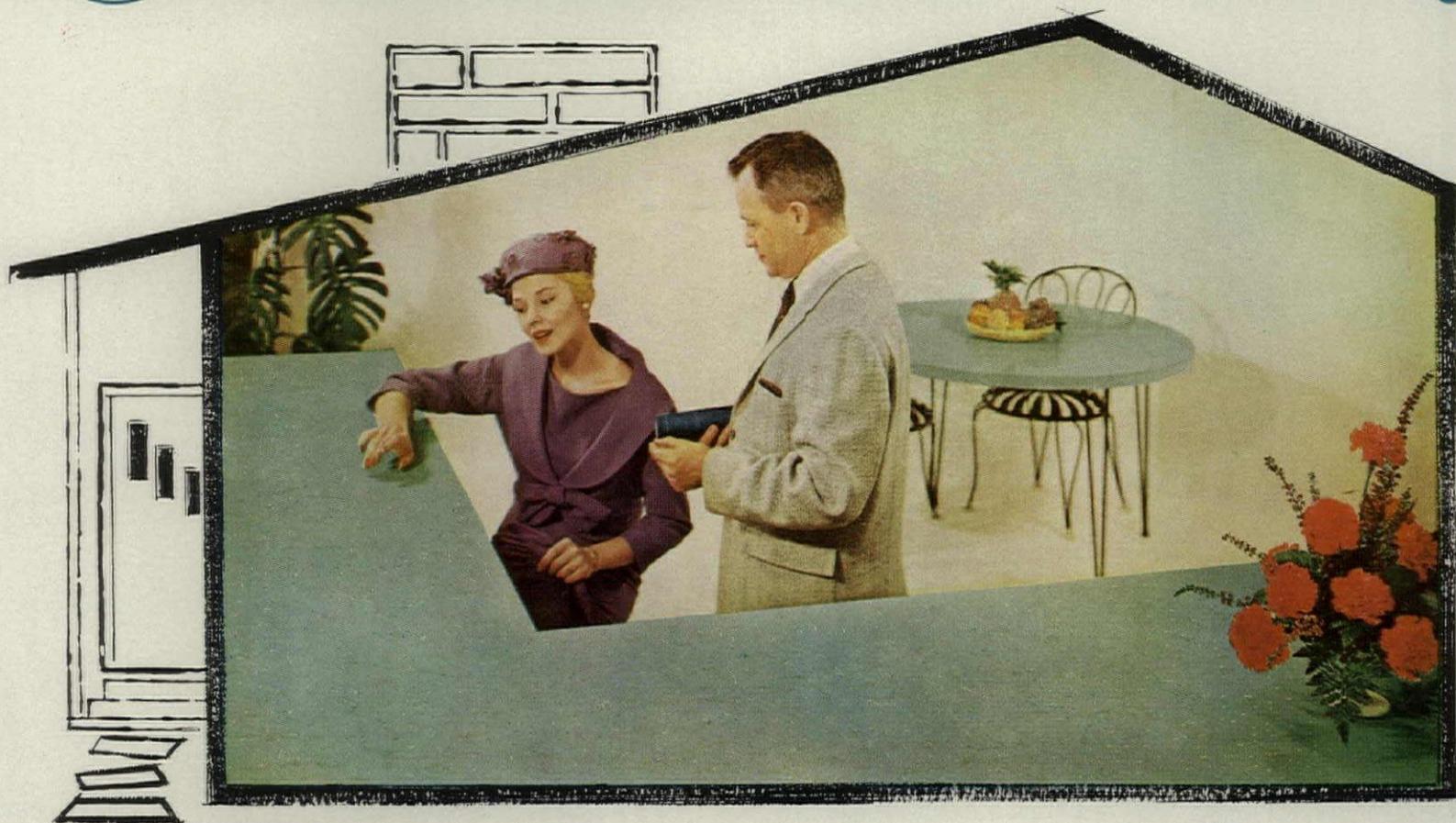
*Manufacturers of Dura-seal Weatherstrip
and Sash Balance, Take-out, and
Dura-glide*

*Pat. Applied For



Textolite®

Laminated Surfacing



... important stepping stones to modern apartment planning

General Electric Textolite adds a touch of beauty and durability to apartment kitchens and baths — counter tops, cabinet fronts, vanities and wall surfacing. Textolite beauty is as important to the apartment resident as Textolite durability is to the apartment owner.

G-E Textolite offers a complete line of counter top patterns, including the original Spungold, as well as a wide range of Woodgrains in both conventional and new textured finishes for cabinet front applications.

For free samples of trendsetting pattern-colors, contact your G-E Textolite representative or distributor . . . they are listed in the Yellow Pages under PLASTICS. Or write, General Electric Company, Coshocton, Ohio.

Patterns Shown:

- 1. Green Spungold TX-4705
- 2. Canary Ming TX-2034
- 3. White Gold TX-4500
- 4. Spice Cherry TX-9103
- 5. Yellow Crackle TX-3334
- 6. Pink Travara Marble TX-2462
- 7. Wood-White Heyday TX-2932



Progress Is Our Most Important Product

GENERAL ELECTRIC

General Electric Company, Dept. HH-100
Coshocton, Ohio

Please send me G-E Textolite samples.

Please send display information.

Please have your representative call.

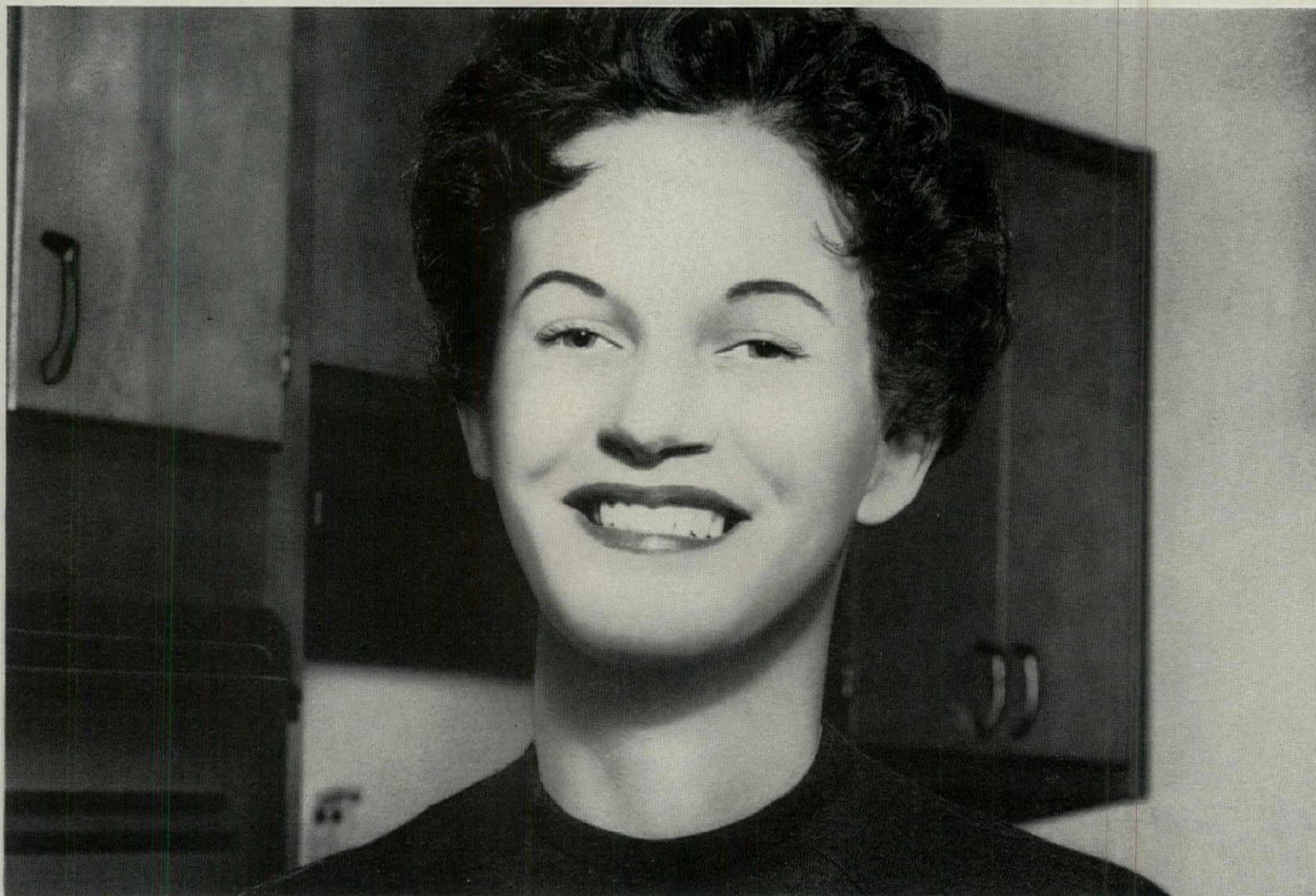
Name _____

Address _____

Firm _____

City _____ Zone _____ State _____

OHIO HOME BUYER SAYS:



"Air conditioning sold me on my new home"

"My husband and I had been looking for a home in the \$15,000 range around Columbus for a long time," says Mrs. Robert Hart. "But when we went through the Homestead model homes of Jewel Builders, we knew our search was over—almost instantly.

"These homes were air conditioned and were so cool and comfortable. Then we learned that the filtered air meant less pollen, healthier living and easier housekeeping. That's important with three small children! We certainly liked the layout and modern kitchen of the homes—but air conditioning was the feature that *really* sold us!"

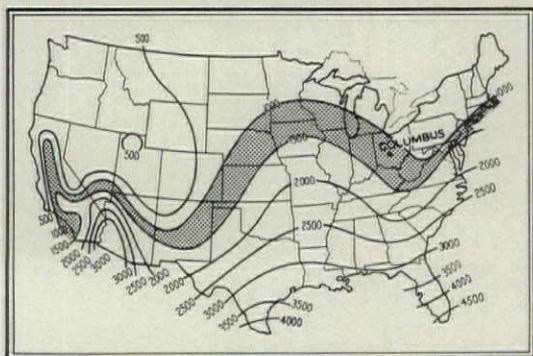
Jewel Builders reports over 50% of the buyers in their Homestead tract cited air conditioning as the key influence in their buying decision. All 300 homes in the tract had it. Mr. Julius

Cohen, president of Jewel Builders, says: "All the nearly 1,600 homes we plan to build during 1960 in Columbus, Pittsburgh and Youngstown areas will have air conditioning. They'll be priced from \$13,750 to \$17,000."

There's proof that air conditioning can help sell homes in northern as well as southern tracts. Summer temperatures for the Columbus area average 85°F., and they range up to 100°F. Pollen count averages 75. These climatic conditions are very similar to those in other northern cities such as Pittsburgh, Chicago, Minneapolis and Detroit.

Top-quality air conditioning units are charged with dependable Du Pont Freon* refrigerants. Call your equipment manufacturer for details about the sales power of air conditioning.

DOES YOUR TRACT FALL IN A CLIMATE SIMILAR TO COLUMBUS, OHIO?



If so, air conditioning can help you sell, just as it did for Jewel Builders. Look at the shaded area on map to left. It includes Columbus and hundreds of communities across the country with the same climatic conditions. Is your tract in this area?

*Freon is Du Pont's registered trademark for its fluorocarbon refrigerants.

BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY



HOUSE & HOME



PROTECT YOUR BUILDING INVESTMENT

*Plywood Grade Stamp
of Dependable Quality*



*One of your best sources of TECO TESTED
Plywood is:*

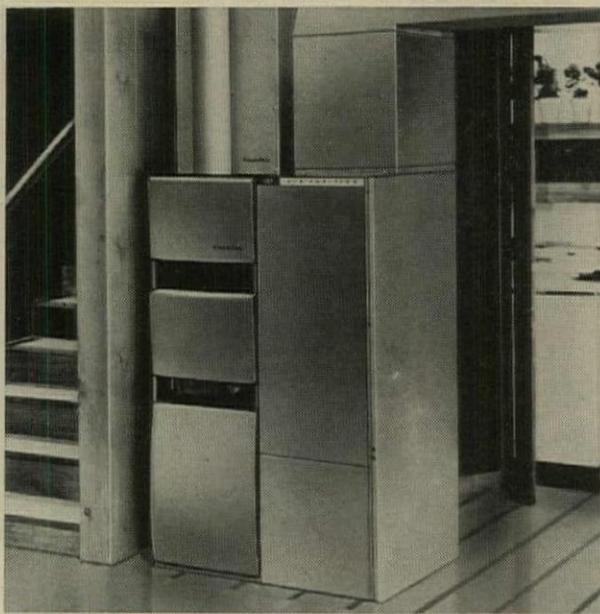
**WILLAMETTE VALLEY LUMBER COMPANY
WILLAMETTE NATIONAL LUMBER COMPANY**
Dallas, Oregon, Phone MAYfair 3-2351, TWX 80-U

TECO is the plywood grade stamp of dependable quality backed by the Timber Engineering Company of Washington, D.C. They are a highly respected engineering and research group known in the forest products field for more than a quarter of a century. This independent FHA-accredited testing agency place their own technician in each participating plant. TECO knows there is more than meets the eye in every sheet of plywood. They check and test on a continuing basis the core material, the kind and type of glue, patching, in fact the whole operation from log to finished product. This is the reason TECO is your best guarantee of a dependable supply of superior plywood.

WHAT ?

A HEATING SYSTEM

Announcing, Carrier's New 5-Dimension Heating Package That...



The key to this 5-Dimension Heating Package is the new Carrier Automatic Air Purifier—shown on the right of the Carrier Furnace.



1. CONTROLS WINTER HUMIDIFICATION—

provides just the right amount of moisture all the time . . . never too little or too much.

2. PROVIDES WHOLE-HOUSE ODOR REMOVAL—

whisks away even such smells as cabbage and stale tobacco from every room in minutes.

3. AUTOMATICALLY CLEANS AIR—

reduces dust, dirt and pollen automatically, with constant efficiency, for a healthier home.

4. DELIVERS CONTROLLED HEATING—

maintains constant temperature within 2° of thermostat setting.

5. PROVIDES FOR ADDITION OF COOLING—

future installation of cooling unit is simple and economical.

WITH HOUSEWIFE APPEAL?

When you talk about removing household odors, easing the lady's cleaning problems, and maintaining comfortable, healthful humidity for her family, you're selling the woman on her own terms. And, of course, well-regulated heating and the possibilities of future cooling are considerations that every member of the family is interested in. But the point is: Now, the heating system in your homes need not be just another commodity—it can be a potent, sales-clinching feature when you install the Carrier 5-Dimension Heating Package.

Here's How 5-Dimension Heating Can Help Sell Your Homes

Have your salesmen put these questions to all your prospects, especially women:

1. How would you like to cut dusting and cleaning time in half?
2. How would you like to be rid of pungent food odors—like cabbage—as soon as the cabbage is eaten?
3. Is anybody in your family a hay fever or allergy victim?
4. Have you ever found an effective way of removing dense tobacco smoke and close, stale air when you have a party?
5. Do any of your children suffer from dry skin, eczema, croup?
6. Did you ever wish you could find a way to stop your valuable furniture from developing loose, creaky joints in the wintertime?
7. Will you consider installing air conditioning in the future?

You're going to get a lot of "yes" answers to these questions, and it only takes *one* to establish a big plus for your home... *if* you have Carrier 5-Dimension Heating.

Prospects Can't Resist This Nose Test—Smelling Is Believing



Does the Carrier 5-Dimension Heating system really remove odors? In case your prospects have some reservations, the Carrier nose-test kit is a clincher. Put the odor cartridge in the Odor Control Demonstrator. Let the prospect smell how odors go right

through an ordinary filter. Then, you can demonstrate how a few drops of Carrex fluid on a similar filter remove the odors before they reach the prospect's nose. It really works! And your Carrier Dealer has plenty of these kits on hand.

FOR MORE INFORMATION MAIL THIS COUPON NOW

Carrier Air Conditioning Company
Syracuse, New York

Please send me complete details on Carrier's new 5-Dimension Heating.

Name _____

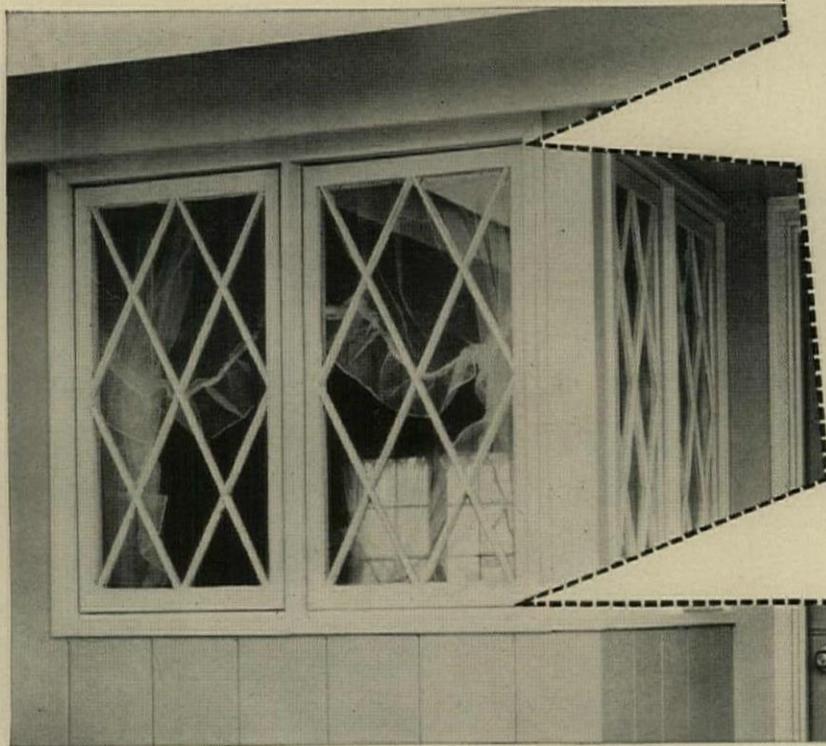
Company _____

Address _____

City _____ State _____

Carrier Air Conditioning Company
A DIVISION OF CARRIER CORPORATION

another first from **Bilt-Well**
by **Caradco**



This concealed hinge is one of the many outstanding features of the BILT-WELL Casement Window

Permits unbroken exterior lines. Window can't sag or pull loose. It's tamper-proof, too!

The First Truly Modern Wood Casement Window

A casement that incorporates all the latest thinking in fenestration engineering

Insist on these BILT-WELL Features:

1. Double weatherstripped for lowest heating and cooling costs.
2. Unitized sill construction facilitates groupings.
3. Nylon bearings, stainless steel track, cadmium-plated steel hinge arm.
4. Angle and radial bays from stock parts.
5. Three glass widths: 16", 20" and 24" and five glass heights: 24", 32", 36", 48" and 60".
6. Gold-tone finished operators, locking handles, storm panels and screens.
7. Single or double insulating glass.
8. Dove-tailed frame joints.

The BILT-WELL Line of Building Woodwork—
WINDOW UNITS, Double-hung, Awning, Casement, Basement, CABINETS, Kitchen, Multiple-use, Wardrobe, Storage, Vanity-Lavatory. DOORS, Exterior, Interior, Screen and Combination.

manufactured by
CARADCO, Inc.
Dubuque, Iowa

There's more to offer with **BILT WELL WOOD WORK** by Caradco





America is sold on Oak Floors

...through the pages of House Beautiful

In the home building field trends begin . . . and traditions are preserved . . . by the 900,000-plus* Pace Setter Families in the House Beautiful audience. Their influence spreads over the entire residential construction market.

These style-setting buyers of quality homes have the income (average \$15,715) and the desire to specify the best in design, construction and furnishings. Among flooring materials, Oak is a favorite choice.

Oak Floors have been advertised regularly in House Beautiful for many years. Using full-color photographs, the National Oak Flooring Manufacturers' Association does a convincing job of illustrating Oak's decorative style, polished beauty, and warm appearance.

By pre-selling the House Beautiful audience, manufacturers of Oak Flooring and other quality building products add sales-stimulating prestige to the quality features of homes you build.

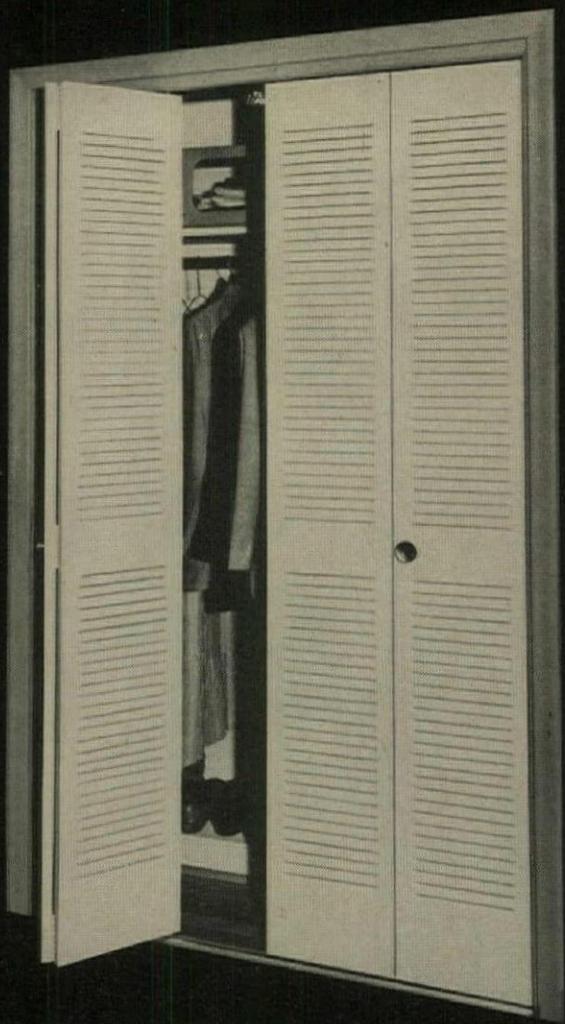
*PUBLISHER'S PROJECTED AVERAGE, LAST SIX MONTHS 1960.



House Beautiful

572 Madison Avenue, New York 22, N. Y.

ONE OF THE 13 KEY HEARST SELECTIVE MARKET MAGAZINES

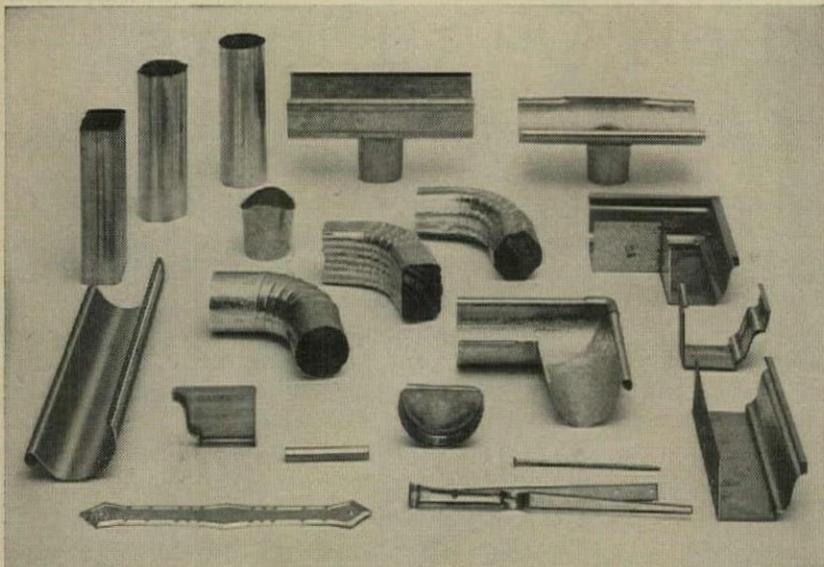


CLASSIC LOUVER FOLDING DOOR



SERIES 57

TRUSCON



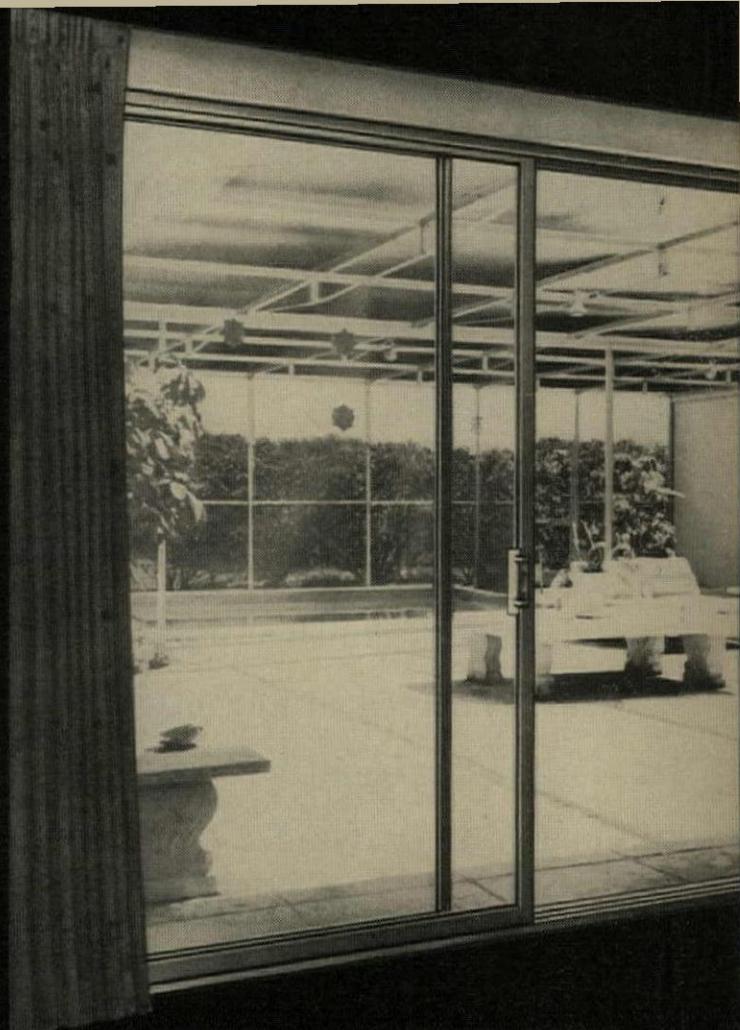
REPUBLIC ROOF DRAINAGE PRODUCTS for better homebuilding! Your Republic Roof Drainage Products distributor carries a complete line of everything you need—in galvanized steel, ENDURO® Stainless Steel, terne, or copper, with perfectly matched accessories to assure fast, low-cost installations. See your sheet metal distributor or send coupon for more information.

TRUSCON TRU-DIAMOND METAL LATH and ACCESSORIES for better living. Straight and true. Precision-made distortion-free, sheets are perfectly rectangular. Each sheet painted individually. Easy to work. Ends are trimmed square and true. Selvage edges are neatly finished. Insure a good fit on the toughest job. Contact your Truscon dealer for the full story, or send coupon.





SERIES 50



ALUMINUM SLIDING PATIO DOORS

Low Cost Metal Doors

The Tops in the Industry at low, low prices

Truscon Steel and Aluminum Doors are low in first cost, save installation dollars, require no expensive call-backs. The full line is carried in warehouse stocks for immediate delivery to meet your tightest building schedules.

Order frames and accessories for same-time delivery. Truscon doors can be prepared for panic exit hardware, door closers, double doors—all are available to meet your requirements with no loss of time.

Now from one source, you get the right door to meet your needs. Doors with sales features that add value to everything you build. At prices you can well afford and with delivery when you want them.

Call your local Truscon dealer listed in the Yellow Pages. Or, contact your nearest Truscon representative. Send coupon today for more information about these low cost metal doors.



REPUBLIC STEEL

*World's Widest Range of
Standard Steels and Steel Products*

REPUBLIC STEEL CORPORATION
DEPT. HO-9911R
1441 REPUBLIC BUILDING • CLEVELAND 1, OHIO

Please send more information on the following products:

- Truscon Hollow Metal Doors and Frames—Series 50
- Series 57 Classic Louver Folding Doors
- Republic Roof Drainage Products and Accessories
- Truscon Tru-Diamond Metal Lath and Accessories
- Truscon Aluminum Sliding Patio Door and Screens

Name _____ Title _____

Firm _____

Address _____

City _____ Zone _____ State _____

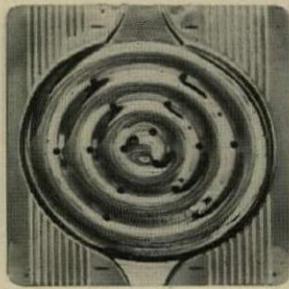


Announcing... a new range of ideas: the new WASTE KING UNIVERSAL Built-In. Dreyfuss-designed to look better... as fresh and new as a spring bouquet. Smart new control panels... a choice of 5 kitchen-fresh colors... smart, new burner grates. And it's WASTE KING UNIVERSAL-engineered to cook better est, work-saving features in ranges to automatic Roast Guide with clock

NEW

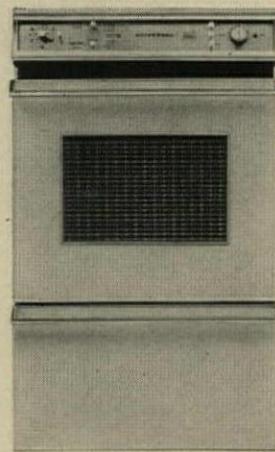
—with the smart-day. Completely controlled oven;

push-button eliminates hot ing with exclu reaching the Duty burners,



easy, it controls by time, size or type of meat. Oven spots and cold corners. Smoke-Proof and Flare-Proof broil-sive "Swirl-Design" keeps grease from smoking and flash point. A complete choice of burner units: Double-"Burner-with-a-Brain" (A. G. A. trademark); new Obedient

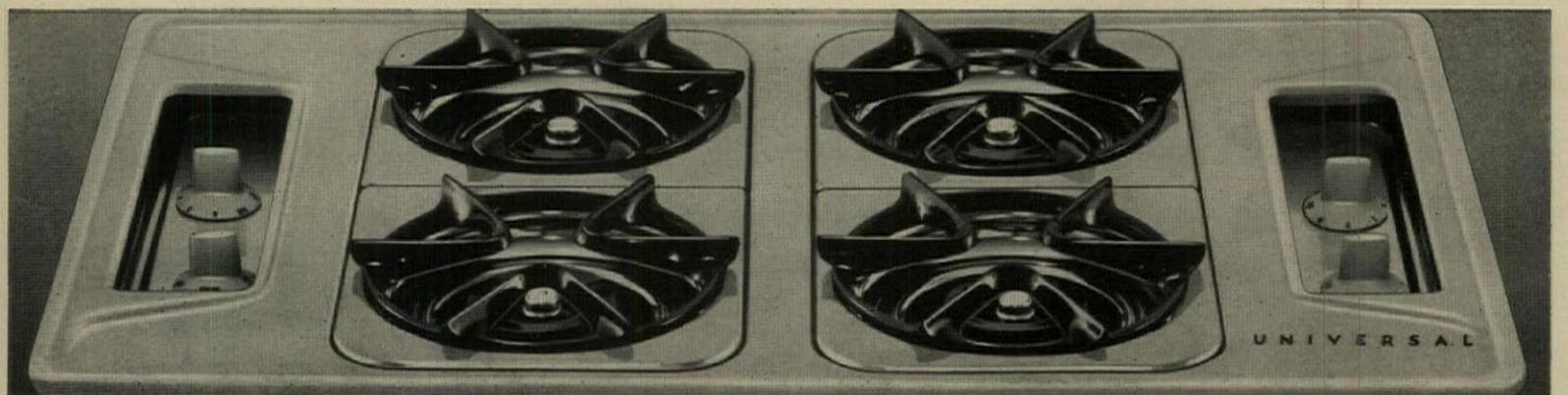
burners. A wide variety of models means Universal line will fit your needs. Gas and interchangeable. Quality is obvious... a approach to building. A fast way to put You can't buy and feature better built-ins fications on built-in ranges, drop-in electric matic dishwashers, and the famous

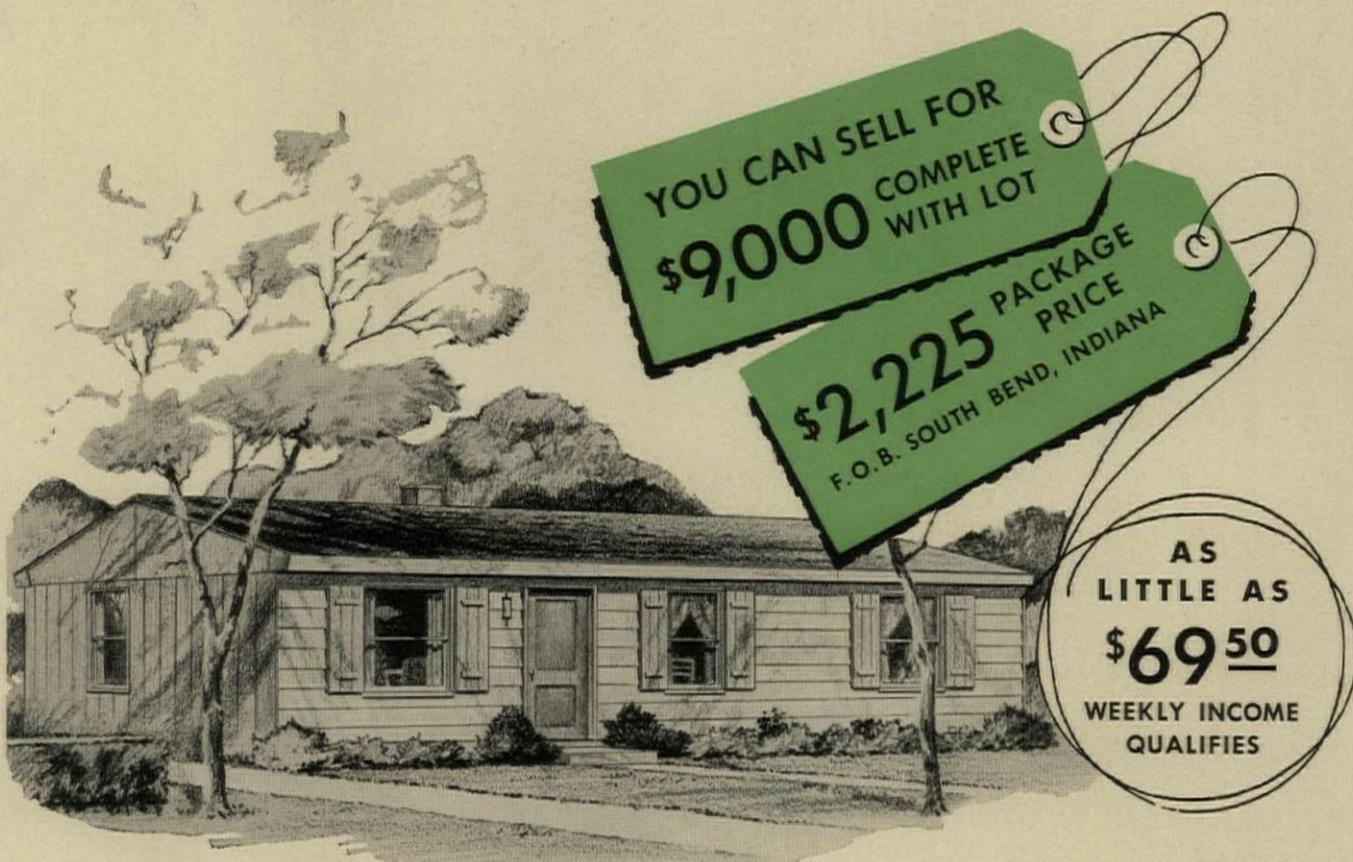


the easy-to-install Waste King electric units are dimensionally fast way to show your quality "Sold" signs on the front lawn. —at any price. For full speci-ranges, undercounter auto-

Waste King Universal disposers, write, wire or phone today to: WASTE KING CORPORATION, Los Angeles 58, California.

**WASTE KING
UNIVERSAL**





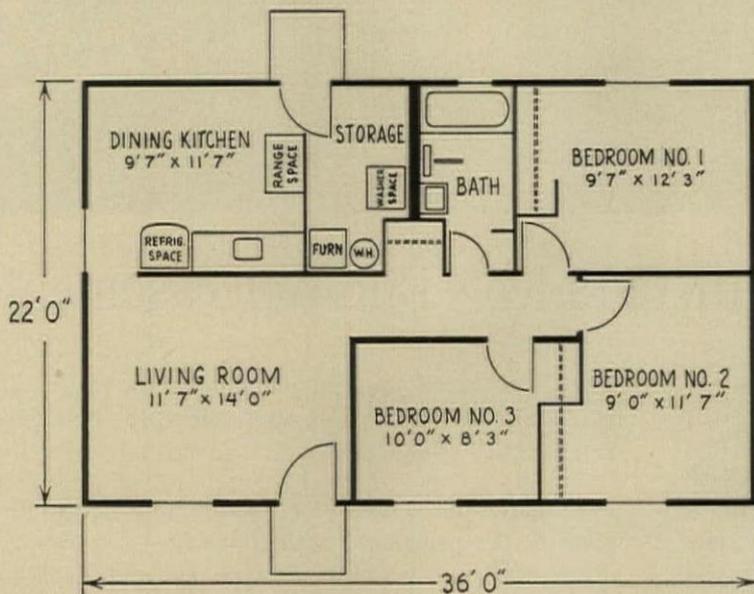
THE *Comanche* SERIES OF COMPLETE 3-BEDROOM HOMES BY PLACE

AT \$9,000...HOW MANY CAN YOU SELL?

Complete with lot to sell for \$9000! A brand new series of 3-bedroom homes designed to meet all low cost housing requirements including 221 and 203i programs. FHA-approved and ready for action by volume and profit-minded builders!

Let us show you the one *complete* program designed to put you in the high-volume low-cost profit picture. Everything to help you . . . filing assistance . . . field engineering services . . . 100% construction money . . . complete interim financing . . . final mortgage money . . . and complete merchandising and advertising programs.

If you're in Illinois, Indiana, eastern Iowa, northern Kentucky, Michigan, northern Missouri, Ohio, western Pennsylvania, West Virginia or Wisconsin



WRITE, WIRE OR PHONE ME...TODAY!

Marc Donaldson
Vice-President — Sales

PLACE HOMES, INC.

1212 S. Walnut Street
South Bend 21, Indiana
Phone ATLantic 8-9111



*Put Caradco's
creativity
to work
for you!*



Concealed hinge permits unbroken exterior lines—it's tamperproof, too!

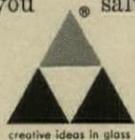
Build wisely...sell well...with Caradco's Bilt-Well casements

Pour it on! There's little chance that wind and weather will get past a Caradco Bilt-Well Casement!

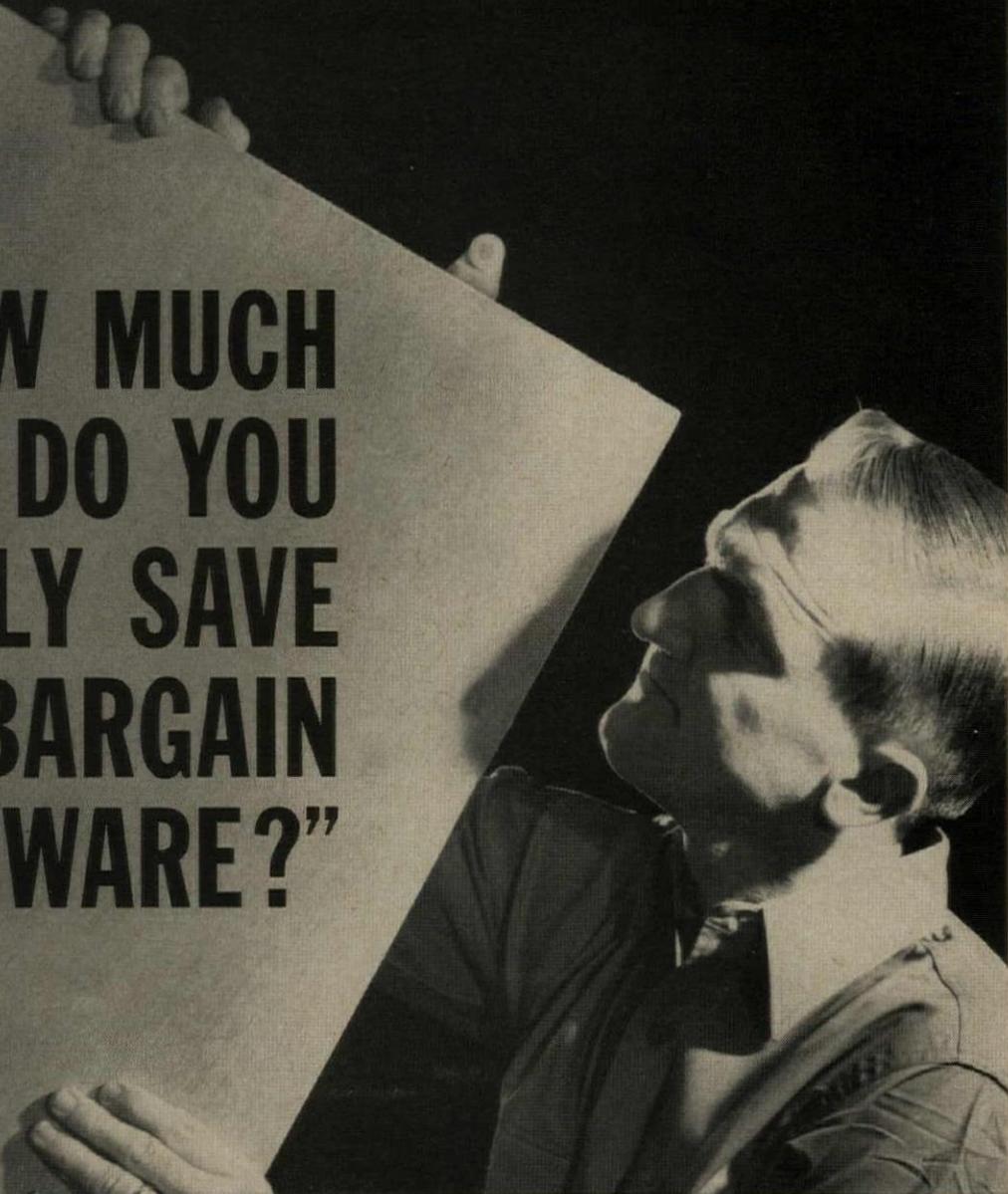
Two independent systems of weatherstripping on each window give exceptional protection from the rain... insure a double seal against dust and air infiltration. With Caradco Bilt-Well Casements, the homes you build will be more comfortable, more convenient, more economical to heat and cool.

This is an extra you can point out with pride. And you'll also do well to call attention to the distortion-free, quality glass Caradco uses in this advanced line.

American-Saint Gobain—as a supplier of fine window glass to the pre-glazed sash industry—is pleased to salute the creative ideas of Caradco and its fellow manufacturers. A-SG's business, too, is *Creative Ideas in Glass*.



HOW MUCH DO YOU REALLY SAVE ON "BARGAIN HARDWARE?"

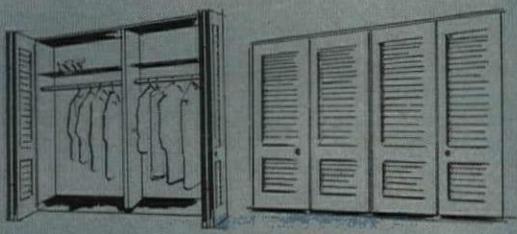


another new product from National Manufacturing Co. . . .



No. 381 FOLD AND SLIDE DOOR HARDWARE

Noiseless nylon pivots and rollers carry the load; it's completely concealed. Builders like the simple installation and easy adjustments of the No. 381; home-owners like its smooth, silent performance.



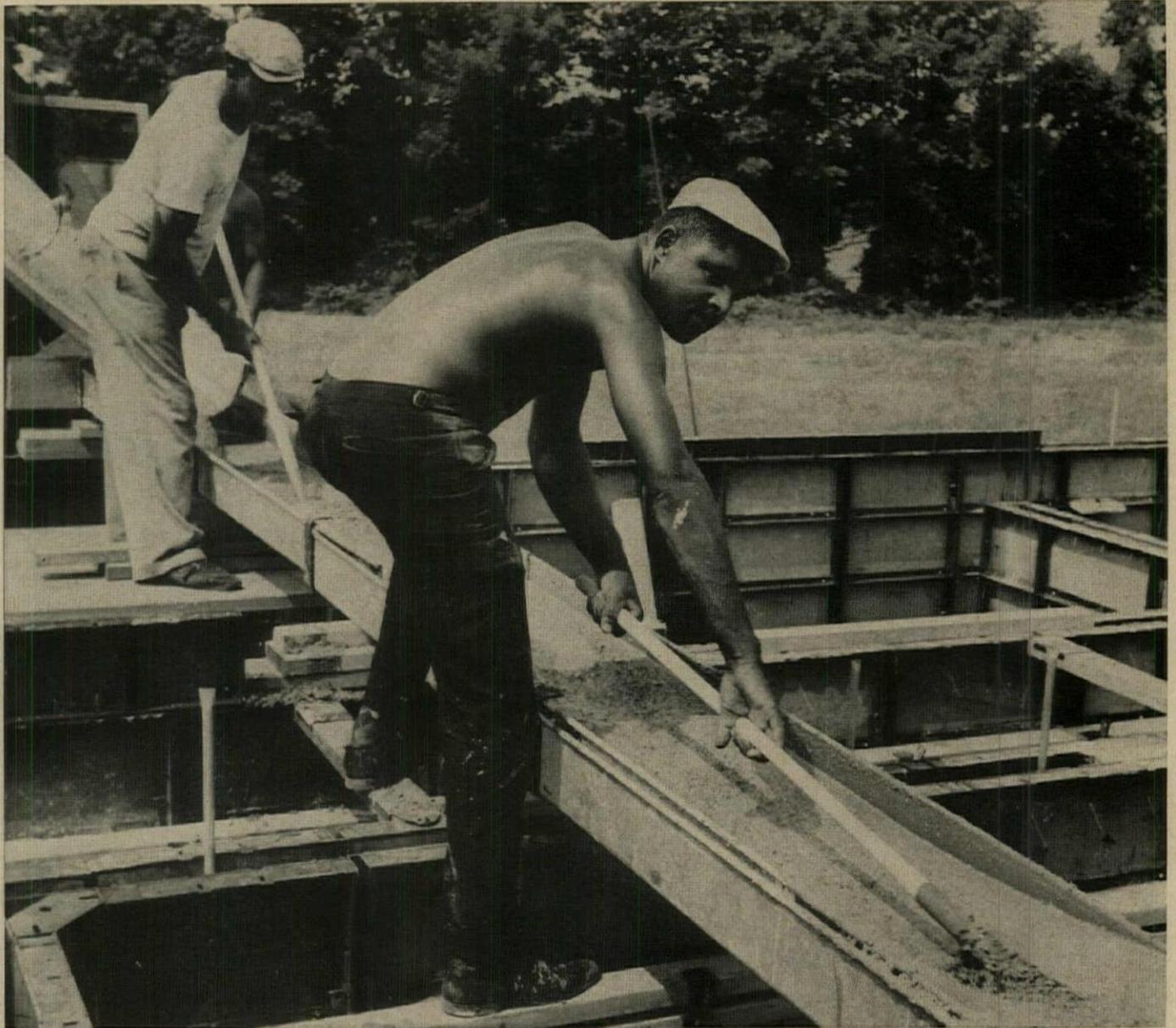
National hardware
prevents costly call backs . . .
builds customer satisfaction

Temporary profits don't build a solid business. You may be able to save a few pennies by cutting hardware costs, for instance, but in the long run it's products like National Mfg. Co. hardware that pay off. You stop costly call backs . . . cut installation time and build customer satisfaction that lasts for years. These are some of the reasons so many prominent builders *insist* on hardware by National.

NATIONAL MANUFACTURING CO.

19010 First Ave.,

Sterling, Illinois



CONCRETE IS A WET SLURRY. It is placed in forms quickly, will start to set in half an hour and will harden overnight.

This new concrete could slash wall construction costs

Baltimore Builder Carroll Martin, who developed the new mixture and is now beginning to use it in his new houses, claims these five big advantages:

1. Walls can be poured with the new concrete at very low cost—up to 40% less than it would cost to build with concrete block stucco, says Martin.
2. The concrete hardens overnight, eliminating costly delays in building. With conventional mixtures, form work must remain in place for three or four days until the concrete hardens.
3. The concrete foams as it sets so outside walls 6" thick have a U factor of only 0.12.
4. The admixtures used to speed the set and foam the concrete generate so much heat during the pour that concrete can be poured even in zero weather.
5. The wall is proof against termites, rot, fire, and water. It is reinforced with

6x6, 6-6 welded wire mesh, is stronger than most conventional walls.

Here is how Builder Martin pours walls using his new mixture:

1. Six-man crew sets Symons forms for both interior and exterior walls on an ordinary slab and foundation wall. Forms are steel with plywood faces, are numbered starting at one corner of the house so crew can follow easily.

2. Windows, door bucks, outlet boxes, and thin wall conduit leading to top of wall are set in forms. (Circuitry leading to the conduit is placed later.)

Steps 1 & 2 take one day for a typical 40'x24' house.

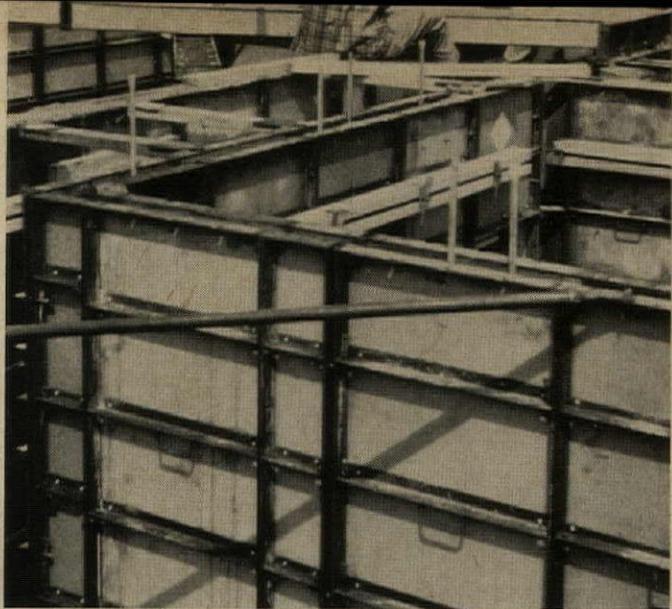
3. Trucks deliver concrete with 40 gal of water per cu yd and a 1/4" maximum aggregate size. At the site, 30 to 40 gallons more water per cu yd are added. Chemical admixtures which

speed the set and foam the concrete are added by Martin's crew. Part of the admixtures is put in 25 minutes before the pour, the rest is added about 15 minutes later. The admixtures (which Martin will not identify) cost about \$6 a cu yd.

4. The concrete is placed in two hours or less. It sets fast, nearly as quickly as plaster of Paris.

5. Forms are stripped the next day, and the walls are ready for finishing and for the truss roof to be erected. The house is closed in the third day.

To protect his investment in research, Builder Martin expects to keep patents pending on his admixtures as long as possible. He has formed a corporation, Monowall Homes Inc, with a \$300,000 public issue, plans to build subdivisions and wholesale them to realty firms. He is also working out plans to license other builders to use his new mixture.



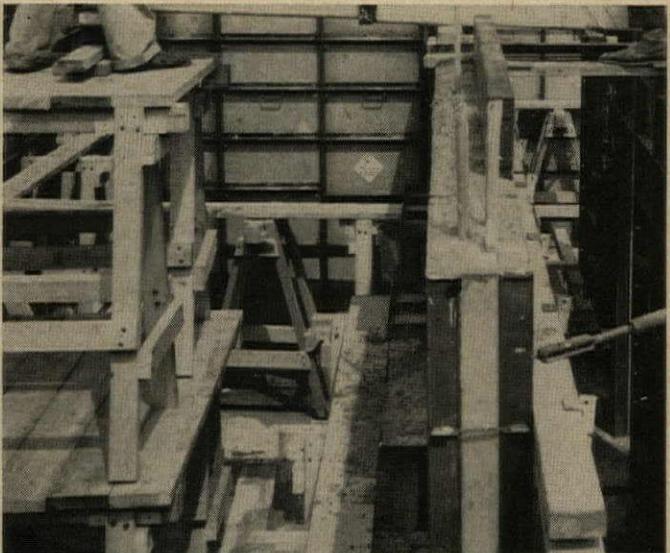
STEEL FORMS WITH PLYWOOD FACES are numbered in sequence for fast erection. Plywood faces are good for 100 homes before renewal.



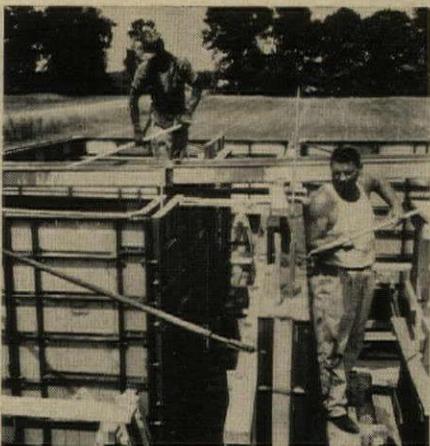
TRUCK BACKS UP TIMBER RAMP to pour into top of forms. A 40'x24' house takes 20 yd of concrete. All walls poured in two hours.



CONCRETE FLOWS READILY around prehung windows and doors set in forms (foreground). Diagonal rods are temporary form braces.



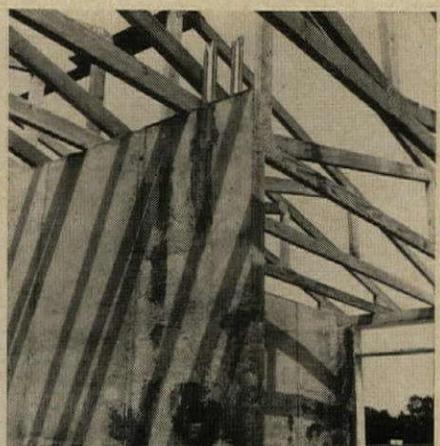
SCAFFOLDING FOR WORKMEN who place and screed concrete in forms is made of 4' sawhorses and planking. Horses are bolted 2x4s.



CONCRETE IS SCREEDD as soon as form is full. Note conduit at top of form.



CONCRETE SURFACE has rough texture that provides a "tooth" for plastering.



INTERIOR PARTITIONS are poured. Martin says they cost \$1 per foot less than 4" block.



PREGLAZED WINDOW was set in form before walls were poured, giving a tight fit. Walls can be poured smooth, painted rather than plastered.



FINISHED HOUSE gets standard truss roof with insulated drywall ceiling. This house is the first of an 82-house development. Price: \$14,500.

*continued
on p 192*

How to build more house for less money

Easy to say but tough to do in this day of spiraling costs. Building better housing at lower cost takes three ingredients: the right ideas, the right materials, and painstaking research and development. These are three reasons why United States Steel works closely with the home builder.

In our Monroeville, Pa., Research Center a team of research specialists constantly tackles cost problems by devising better building methods. They have the best accepted building material in the world with which to work: steel. Their ideas are fashioned in steel with fabricating equipment right on the premises, and tested "seven ways to Sunday." Under test, you'll see slim, trim steel windows with neoprene gaskets to keep the weather out, steel doors being slammed for days on end by an intricate mechanical contraption, shining new insulated steel building panels. You'll see architects and engineers hard at work over drawing boards. You'll see stacks of steel strip, sheets and sections waiting to be shaped into cost-cutting components. You'll see everything but useless gadgetry.

United States Steel works closely with the National Association of Home Builders' Research Institute. One development that you'll be hearing a lot about is a revolutionary new drywall building method that substantially cuts construction time and costs. And there are many more in the wind that mean more house for your money. Watch for them.

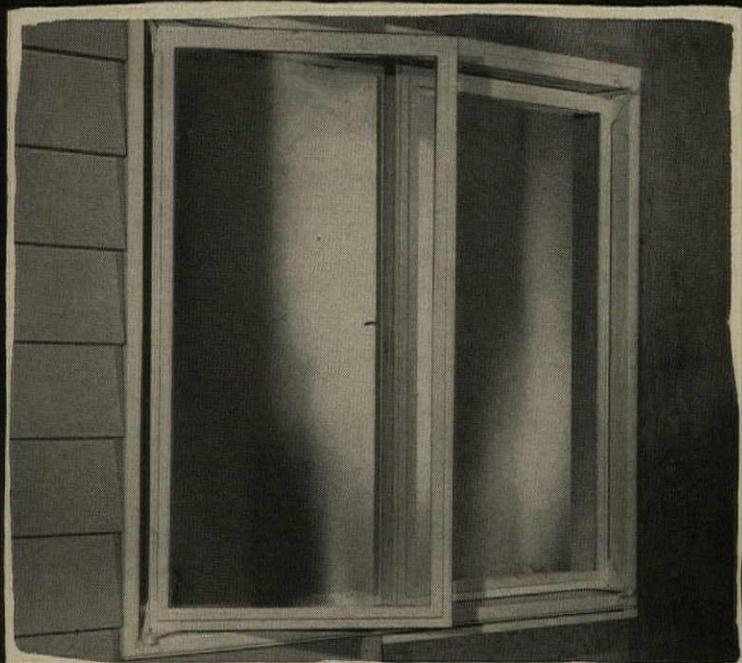
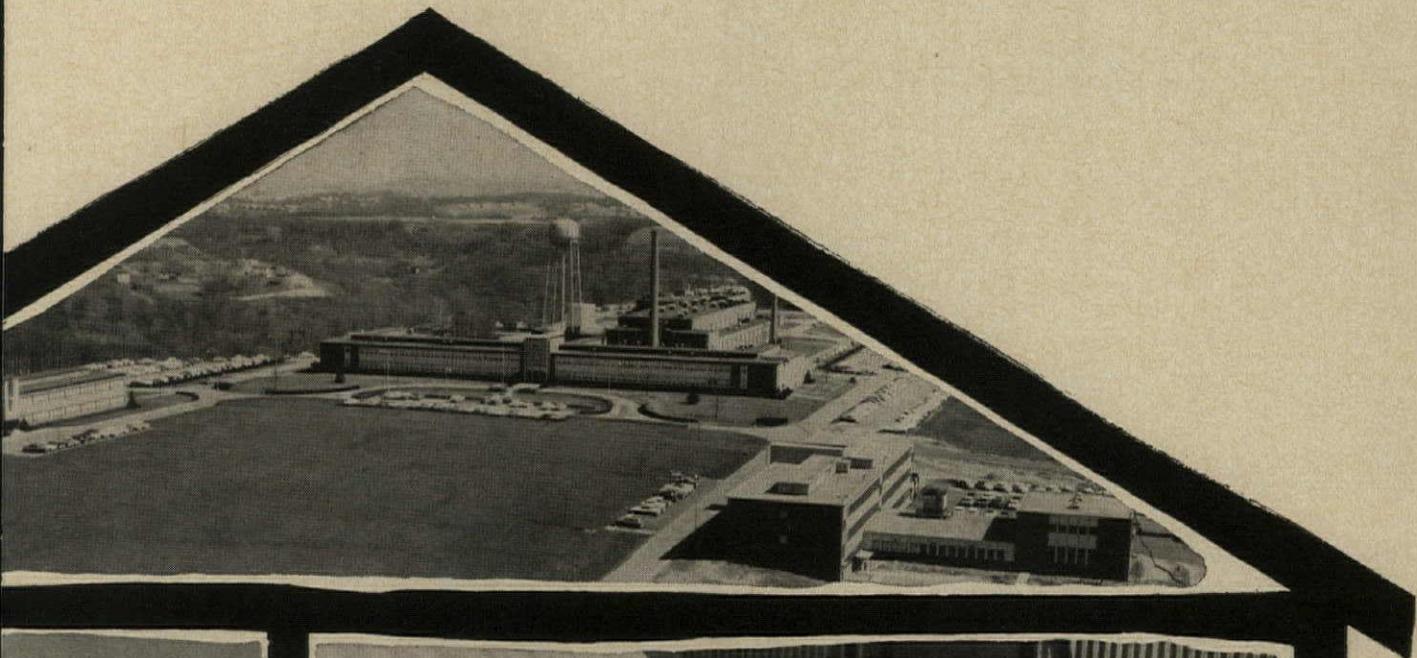
USS is a registered trademark

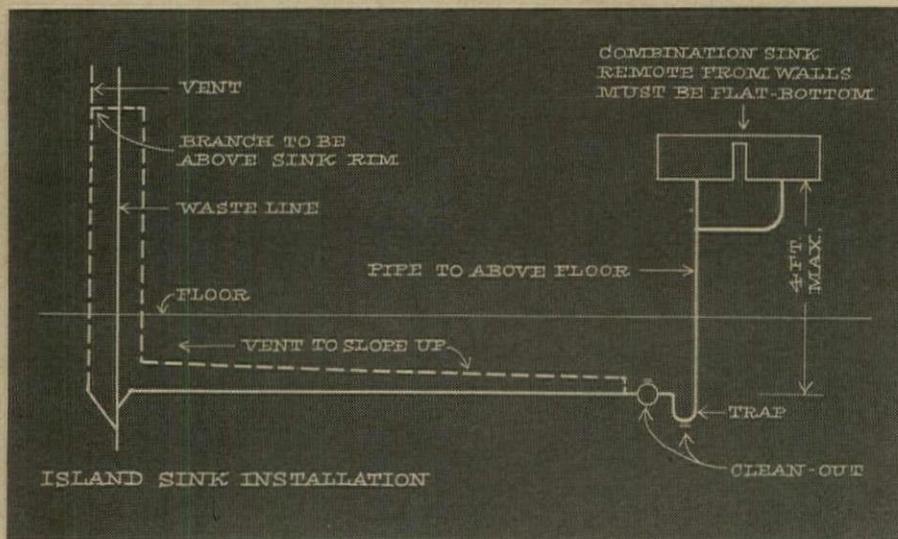
This mark tells you a product is made of modern, dependable Steel.



USS United States Steel







Here is a good easy way to vent an island sink

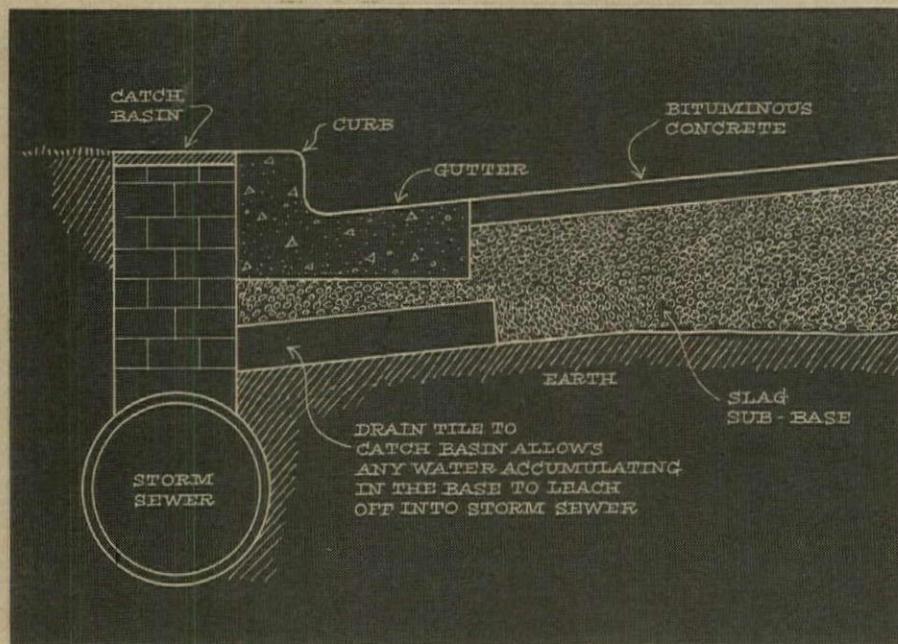
The drawing shows a waste line and vent system that puts all plumbing under the floor with no visible waste or vent lines tying it to the wet wall.

Most codes now require a trap located within 2' of the sink waste outlet to prevent waste building up a velocity that might pull the trap and let sewer gasses into the kitchen. They also stipulate that the vent line be connected to the fixture drain above the dip of the trap and extend above the fixture rim before connecting to a branch vent or stack. Both of these standard code re-

quirements would expose vent piping to view in the kitchen, spoiling the appearance of an island installation.

In the system diagrammed, although the trap is 4' below the sink outlets, the tail-end discharge of waste water is slow enough to prevent the force of water from pulling the trap because each of the two sinks has a flat bottom area of at least 120 sq in.

Some codes now spell out this island sink modification and most codes have a performance standard that allows this type of installation.



How to install sewers to avoid downtime and breakage

If you don't put storm sewers in at the earliest stage of construction, you will be delayed twice: first by muddy roads, then by chopping up your roads to put sewers in later. Yet if you put your sewers in early, heavy trucks can break them under the road, even with a 2' gravel cover.

To solve this problem, Youngstown Builders Cook & Johnson put their storm sewers under the sidewalks at the beginning of the job, as shown in the drawing above. Manholes are right next to the poured concrete curb. A drain tile under the curb drains the road sub-base into the sewer.

Tests spell out chance of survival in house fires

Tests by Canada's National Research Council show:

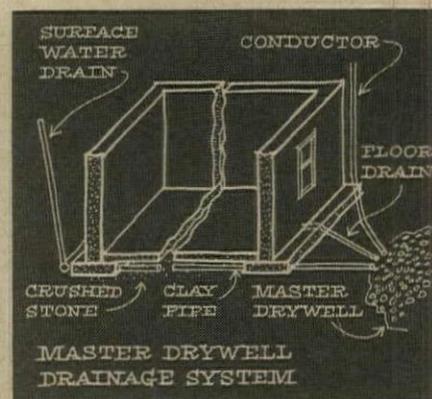
1. Chances of survival in a closed bedroom with walls of plaster or dry-wall are 109% greater than in a bedroom with combustible walls.

2. If the door of the bedroom is left open, the margin for survival is only 39% greater with non-combustible walls than with combustible walls.

3. In a closed bedroom with plaster walls, a fatal concentration of carbon monoxide takes 14.5 to 18.6 minutes to build up. All oxygen is consumed in 20.2 minutes. Within 11.7 minutes, temperature can rise to 300F. (Average arrival time for the fire department is ten minutes.)

If the bedroom has combustible walls, the above figures are cut to 5.6 to 7.5 minutes for carbon monoxide to build up, 12.9 minutes for oxygen exhaustion, and 8.7 minutes before temperature reaches 300F. (In other words, a person in a room with combustible walls has much less chance of survival.)

The studies were made on six test houses burned down in January and February of 1958. The houses were made available by the St Lawrence Power Project, Ont. on land that is to be flooded.



How to drop the water table all around the house

A good drywell is a must on sites where a high watertable threatens basements during wet seasons of the year. Boston realty man Emil Hanslin designed the single-well system above. It eliminates the need for several small wells around the house and it makes a good pit for disposing of rocks, broken block, brick, tile, and other non-combustibles during construction (a drywell must be filled with rock to make it work). Hanslin uses asbestos cement pipe "because it is less likely to break under bulldozer pressure." A backhoe can dig the well and all trenches for this system for less than \$8 per house, says Hanslin. /END

NEWEST IN



GAS

BUILT-INS...

from Magic Chef

help sell houses and cut installation costs



MAGIC CHEF FOLD-AWAY



DIAL-A-MAGIC ROASTING

Both Selected for Display, A. G. A. Convention, October, 1960

Magic Chef Fold-Away introduces custom appearance to surface units. Four burners fold away into less than two feet of counter space. Eliminates carpentry; installs in minutes. **Dial-A-Magic Roasting** is the newest control on any built-in oven. Calculates roasting period and automatically starts and stops oven at the correct times.

Magic Chef's newest developments in gas built-ins... the Fold-Away and Dial-A-Magic Roasting...add new sales interest, new prestige, new built-in quality to your kitchen. This new sales impact adds another powerful plus to the many sales advantages Magic Chef offers you... outstanding brand familiarity, low-cost installation, dynamic national advertising, merchandising assistance.

put a touch of magic in your sales

Magic Chef[®]

CLEVELAND, TENNESSEE



how to turn closets into "closers"

How can you use closet space to help sell your homes? First, use classic-inspired closet doors to add a high-styled luxury touch to home interiors. Then, be sure these doors open effortlessly . . . and make storage space easily accessible. Do all this at lowest cost.

Sounds like quite a job, but Fenestra metal folding closet doors provide this economical "extra" that sells homes. There are three styles—Classic (illustrated at left), Louvered, and Flush—one that's right for every room. Now, you can add a decorator touch to the simplest bedroom or put a distinctive finish on entry hall closets at very modest cost.

Better access—better storage. Fenestra folding closet doors give full-view access. Everything is easier to store, easier to find. These closet doors operate quietly at the touch of your finger . . . require less floor space when opened. They will never warp, splinter or buckle and are available in eight standard sizes, including 6' 8" and 8' heights.

And they cost less to buy—less to install. Each door comes complete in one package. No extra parts to buy or store. They can be installed easily in minutes by one man.

Put Fenestra metal folding closet doors to work selling your homes. Call your local Fenestra representative (he's in the Yellow Pages), or write: *Fenestra Incorporated, Department HH-08, 3401 E. Grand Blvd., Detroit 11, Michigan.*

write: *Fenestra Incorporated, Department HH-010, 3401 E. Grand Blvd., Detroit 11, Michigan.*



Fenestra floor to ceiling folding closet doors eliminate costly framing and finishing needed above other closet doors.

PRODUCTS FOR THE NEW AGE IN ARCHITECTURE

Fenestra

INCORPORATED

Steel and aluminum curtain-wall systems

Steel and aluminum residential windows

Engineered windows for industrial, institutional and monumental buildings

Hollow metal doors, metal folding closet doors, garage doors

Light gauge steel structural systems for floors, roofs, walls, and electrified floors



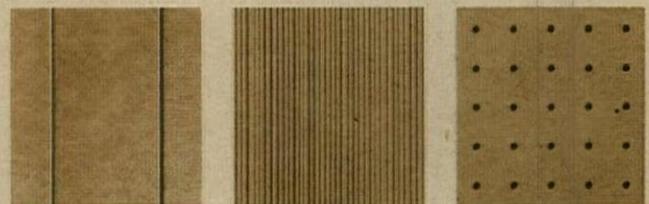
Mr. Builder:
for new construction
for remodeling...

**Weyerhaeuser interior
hardboards combine
brawn, beauty and economy**



For new construction... homes, offices, commercial buildings, inviting interiors come to life with Weyerhaeuser hardboards. Panels have a hard, tough surface which is dent, scratch and wear resistant. They are easy to saw, fasten and handle... go up fast and paint beautifully or can be left "as is". Your in-place costs go down and the value of your building goes up.

For remodeling... from floor to ceiling... from attic to basement, there's a type and thickness of Weyerhaeuser hardboard made to order for practically every interior job... underlayment, wainscoting, wall paneling, liners, sliding doors, built-ins and ceiling surfaces... just to name a few. Combinations of striated, vee grooved, perforated and prefinished panels offer unlimited possibilities in textural contrasts for distinctive and dramatic interior decor.



VEE GROOVED* Plank pattern wall Block ceiling
DEEP STRIATED* Accent wall in entry
PERFORATED* Sliding doors Display wall

*These panels also available prefinished. Use "as is" or finish with a top coat.



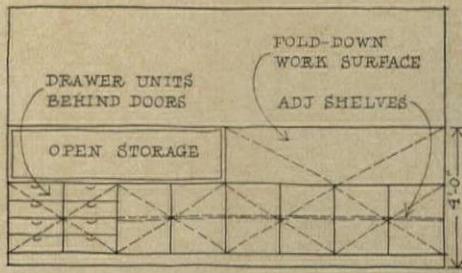
Weyerhaeuser Company
Silvatek Division

For your Application and Specification Guide on the complete line of Weyerhaeuser hardboards write us at Tacoma, Washington.

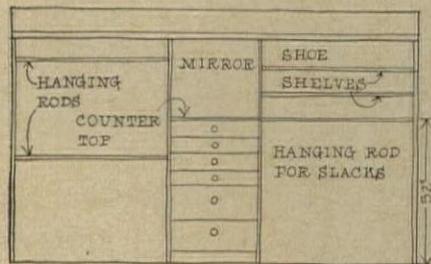
Manufacturers of Versabord® and Versafake particle boards, Ply-Veneer®kraft overlaid veneer



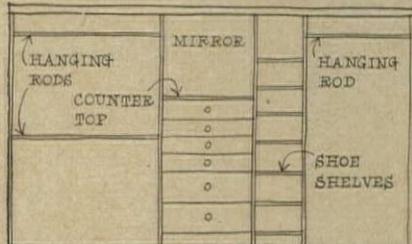
Vee Grooved panels have a clean beveled V-cut edge. A full depth groove is formed at the joint when two panels are butted together and a continuous uniform grooved pattern is maintained.



HOBBY CENTER and desk units are built in under windows in both children's bedrooms.

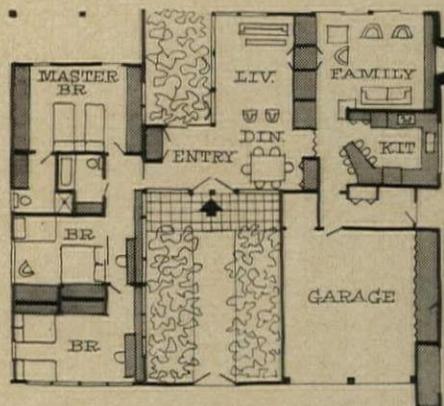


MAN'S CLOSET



WOMAN'S CLOSET

CLOSETS have built-in dressers, two-layer hanging areas, shelf space, and mirror.



FLOOR PLAN shows built-in units (dark shading) in every room in the house.



DIVIDER UNIT between family room (foreground) and living room has built-in hi-fi, television which swivels to face living room, bookshelves, desk, and storage cabinets.



SINGLE BED slides into storage wall. Double bed protrudes to form daytime couch. Blank

area below closet doors is space for the bed in the next-door bedroom.

This house shows how far you can go with built-ins

What the leaders are doing

Get a good trademark and then use it everywhere p 200

1,660 sq ft split is now Harnischfeger's best seller p 202

There are fresh ideas for built-ins in nearly every room of the house, which was designed by Architect Milton Schwartz for *Popular Mechanics*. The magazine will feature the house in a 22-page article in this month's issue.

All bedrooms have big, fitted storage areas (see drawings left above) and the children's bedrooms have slide-away beds (photo above) that enlarge the rooms for daytime use.

Big divider wall shown in top photo separates the living room from the fam-

ily room. Kitchen (not shown) has a snack bar that extends the work and cabinet space. And there is plenty of extra storage space throughout the plan.

Fifteen of these houses either have been built or are under construction in cities throughout the country. They will sell for \$25,000 to \$40,000, depending on land costs and extras.

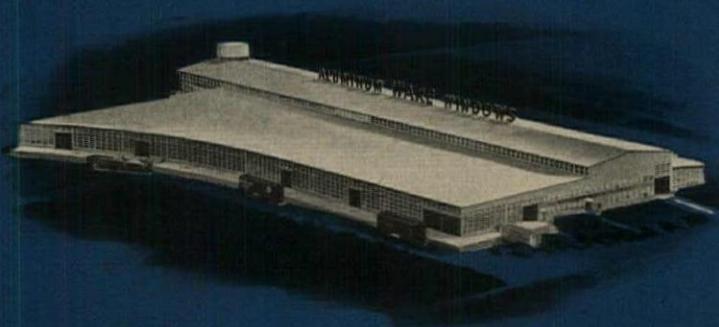
Architect Schwartz estimates built-ins will account for 10% to 12% of the total cost—though part of their cost will be offset by lower furniture costs.

S P E C I F Y

WARE

ALUMINUM

WINDOWS



ROY CHUTZ, ARCH.

**RESIDENTIAL • INSTITUTIONAL
COMMERCIAL**

THE success of Ware Aluminum Windows all over the United States is gratifying, but not surprising. Starting from scratch as one of the pioneers in the exclusively aluminum window industry, Ware's present outstanding position is due to steady growth, built on basic design, skilled workmanship, exclusive manufacturing methods, helpful service and a sane price policy. Constant improvement, the result of sound engineering and improved techniques, plus the experience of thousands of installations, are back of today's superlative line of windows bearing the Ware name, your assurance of customer satisfaction, and enhancement of your own reputation.

Write today for complete catalog.



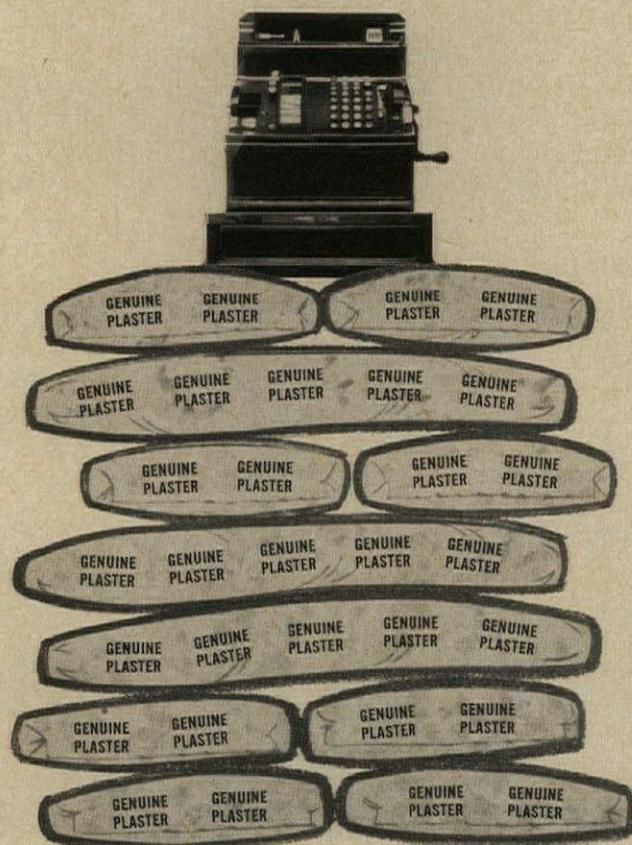
ROBERT M. LITTLE, ARCH.

**WARE ALUMINUM WINDOWS
INC.**

**3700 N. W. 25th STREET
MIAMI • FLORIDA**

Main Office and Factory at Miami. Distribution Centers at Atlanta, Houston, Chicago, Newark, N. J. and Connellsville, Pa.

HOUSE & HOME



“PLASTER AND PROFITS”....

The house that stands unsold represents a costly investment to its builder, gradually absorbing expected profits in a continuing cycle of interest payments on construction loans.

Genuine Lath and Plaster adds more than quality and eye appeal to the house you build... *IT ADDS SALES APPEAL!*

The argument in favor of walls and ceilings with fire resistance, ease of decoration, permanence and control of the transmission of unwanted noises gives the “plastered” house a strong edge over its less substantially built competitor.

Look to lath and plaster construction... there are new ideas to go along with the old... and for you, all spell “profit”

NATIONAL BUREAU FOR LATHING AND PLASTERING, INC., 755 Nada Building, 2000 K St. N.W., Washington 6, D.C.





Fischer & Frichtel built this motel entirely of reinforced concrete

"We've done a lot of commercial construction before," says Ed Fischer, president of the St Louis firm, "but we've never used concrete this way:

"For the roof, we're using big (13'6" x32"x4") concrete panels. And the

walls and partitions are poured in a form that includes a whole room unit. We think there are possibilities here for houses as well as for other commercial work."

Although construction costs for the

concrete are 25% higher than for conventional construction, Fischer cites three advantages: a 75% lower fire insurance rate, lower maintenance costs, and much better soundproofing between the units.



Get a good trademark and then use it everywhere

Builder Tom McGovern of San Antonio chose the arrow-shaped house silhouette shown in these pictures. He uses this trademark on directional signs for his subdivision and display signs in individual houses. In most cases, the shape of the sign echoes the shape of the trademark. He also uses the trademark in all of his newspaper advertising, on his letterheads and brochures.

"It gives us an easily recognizable symbol," says McGovern, "and people have come to associate it with our houses."



How to entertain the kids—and sell your construction

This pipe-and-truss combination serves a dual purpose for St Louis Builders Fischer & Frichtel.

Set up in the playground, it helps keep children busy while their parents visit the model houses. "The kids love it—they'll crowd over, under, and around it for an hour," says John Fischer.

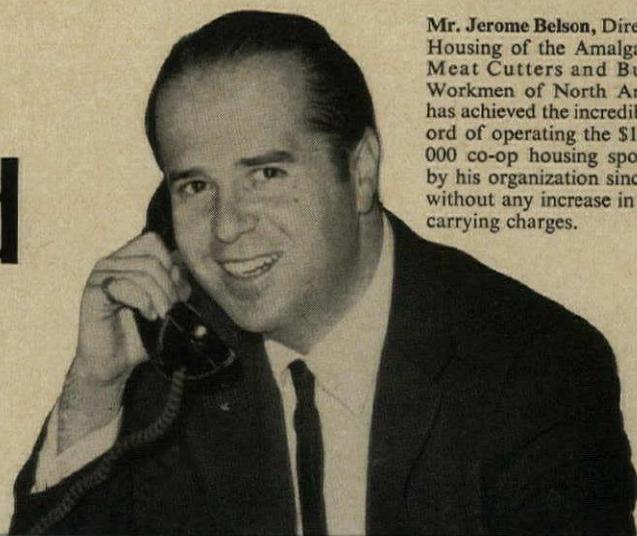
"And it helps dramatize the strength of the truss roof construction used in F&F houses."

Leaders continued on p 202

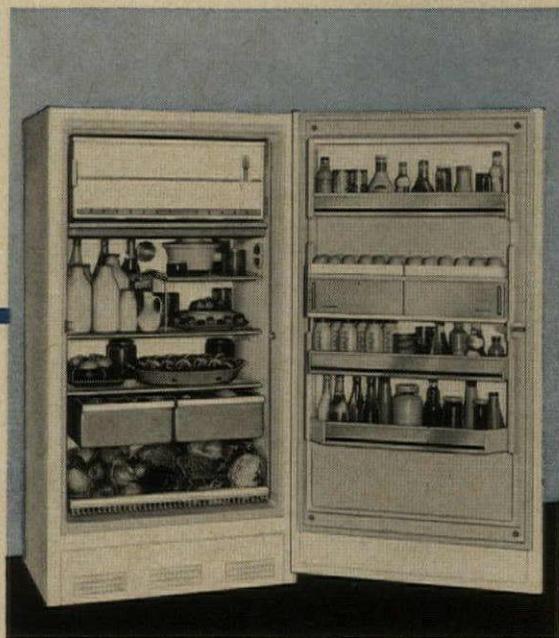
Co-op Housing Expert says:

“Experience has sold me on Kelvinator!”

“Here’s a quality refrigerator that keeps maintenance costs way down—an amazing, low \$1.00 a year,” explains Mr. Belson. “You can’t beat that!”



Mr. Jerome Belson, Director of Housing of the Amalgamated Meat Cutters and Butcher Workmen of North America, has achieved the incredible record of operating the \$14,000,000 co-op housing sponsored by his organization since 1948 without any increase in tenant carrying charges.



Brand-new Kelvinator refrigerators have replaced the nine-year-old Kelvinators in this 228-unit Harry Silver Cooperative in Brooklyn, N. Y. The reason: maintenance costs averaged a mere \$1.00 a year per Kelvinator (an astonishing figure which is far below State Housing average) over the nine year period. Also 420

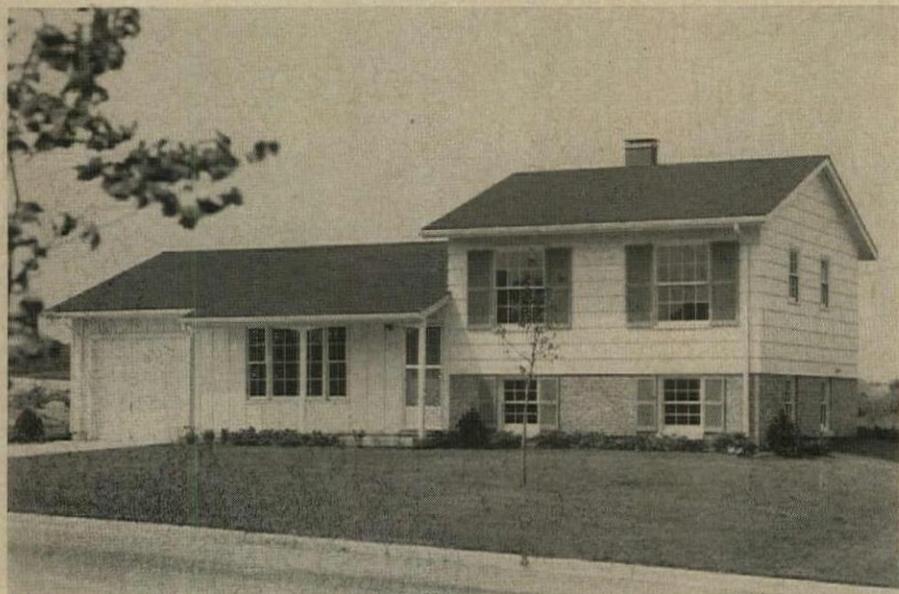
Kelvinator refrigerators have been installed in the \$6,500,000 Earl W. Jimerson development. New projects supervised by Mr. Belson include the 340-unit Patrick E. Gorman development in Brooklyn . . . and the \$96,000,000, 5,206-family Concourse Village Co-op to be built in the Bronx this Fall.

As Mr. Belson, leading authority on co-op housing, will tell you, the smart buyer buys a refrigerator on a “total cost basis,” meaning the year-round maintenance cost as well as the initial price. He says: “Dependable, trouble-free service is just as important as beauty of design and modern foodkeeping conveniences. Kelvinator rates tops in my book on all counts.”

Kelvinator Appliances

Kelvinator Division, American Motors Corporation, Detroit 32, Michigan

REFRIGERATORS • RANGES • AUTOMATIC WASHERS • CLOTHES DRYERS • HOME FREEZERS • ROOM AIR CONDITIONERS • DISHWASHERS • DISPOSERS

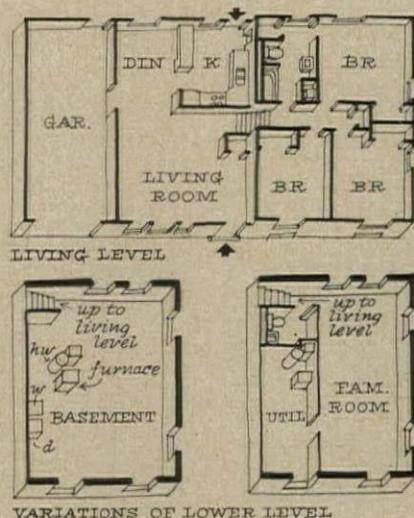


This 1,660-sq ft split is now Harnischfeger's best seller

It has taken over the top spot in the pre-fabber's line despite a price tag \$3,000 to \$8,000 higher than the previous best seller—a 900 sq ft ranch.

The Silvercrest sells for \$14,990 to \$19,990 (depending on land, finished area, and extras). It has three bedrooms and one bath, optional family room and half bath. It presently accounts for a little more than half of Harnischfeger's total house output.

The company is so impressed by the model's sales record that it is planning to bring out an even bigger split—1,750 sq ft—with three bedrooms, two and a half baths.



How to furnish model for less

When you're through with the furniture sell it to your buyers, says Dick Brown, vice president of Chicago's Pacesetter Homes (H&H, Sept). Pacesetter keeps the furniture in the models as long as it looks brand new—about two years, Brown says—then advertises it to buyers in the subdivision at 50% off.

"We can buy it at 40% off," says Brown, "so our net cost is 10%—or even less if you're in a high enough tax bracket. And our buyers get a real bargain. We've never had a bit of trouble selling the furniture very quickly."



Here's a new line for signs

Eichler Homes of Palo Alto makes prospects stop and look with the catch line: "Open for Admiration."

Keep your colors straight

Medema Builders, Oak Forest, Ill. give each buyer color chips plus a small drawing of his house plan marked to show all materials for which there are color choices. "This helps them see what colors will go where," says President Ralph Medema, "and since we keep a carbon of buyers' choices, we have a clear record."

Let them know you called

When a serviceman calls and finds no one home, American Housing Guild of San Diego has him hang a tag on the door knob. It reads: "Dear Homeowner, Sorry we didn't find you at home to service your call. Please call and arrange for an appointment." This speeds future service calls, lets the buyer know he hasn't been forgotten. /END



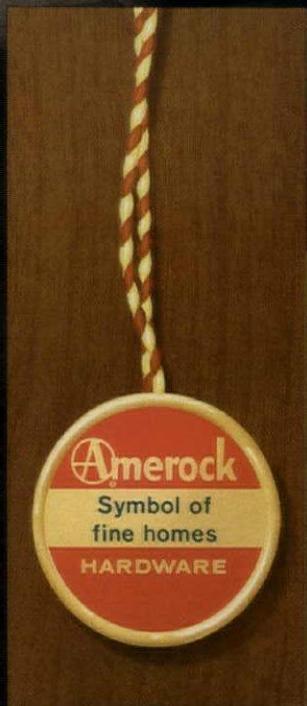
Let local artists help you decorate your models

That's how Boston realty man Emil Hanslin gets the paintings for his company's model houses. He suggests three sources: art clubs or associations, galleries, and individual artists.

Says Hanslin: "Original paintings look much richer than the prints you

see in most models—and you can borrow them for nothing. The artists are pleased and will often help publicize the house. I suggest changing pictures every couple of months and letting your decorator pick them so they'll go with the rest of the decoration."

John P. Daly
John Daly Builder
Houston, Texas



Use this "Emblem of Quality" to establish the fact that Amerock hardware is typical of the top-quality products used throughout *your* homes . . . it will draw attention to the "eye appeal" of your cabinet hardware. Hang it where *your* buyers can see it. Send coupon on other side for complete details.

“Amerock hardware puts more eye appeal at eye level in our homes—at very low cost

Most women judge the house by the kitchen—so it is just good sales sense to ‘dress it up’ with beautiful cabinet hardware.”



Genuine Amerock Cabinet Hardware is not expensive!

Beautiful new No. 456 Catalina Pull shown at right carries list price of only 26¢ in Polished Chromium—36¢ in Satin Chromium, Satin Copper, Dull Bronze, and Polished Brass finishes (Builder Envelope Pack).



there is an Amerock pattern and finish for every decor...every style...every budget

(a) **CONTEMPORARY:** Handsome, rich, elegant "matched" designs in all popular finishes.

(b) **MODERN PROVINCIAL:** Modern yet with the elegance and grace of period styling... pulls, knobs with hinges to match.

COLONIAL (not shown): Authentic design—modern construction and application.

SEE YOUR AMEROCK SUPPLIER OR SEND COUPON

Please send me free samples of:

- Catalina
 Modern Provincial
 Contemporary
 Colonial
 1960 Catalog
 Amerock emblem details
 Have Amerock man contact me

Name _____

Company _____

Address _____

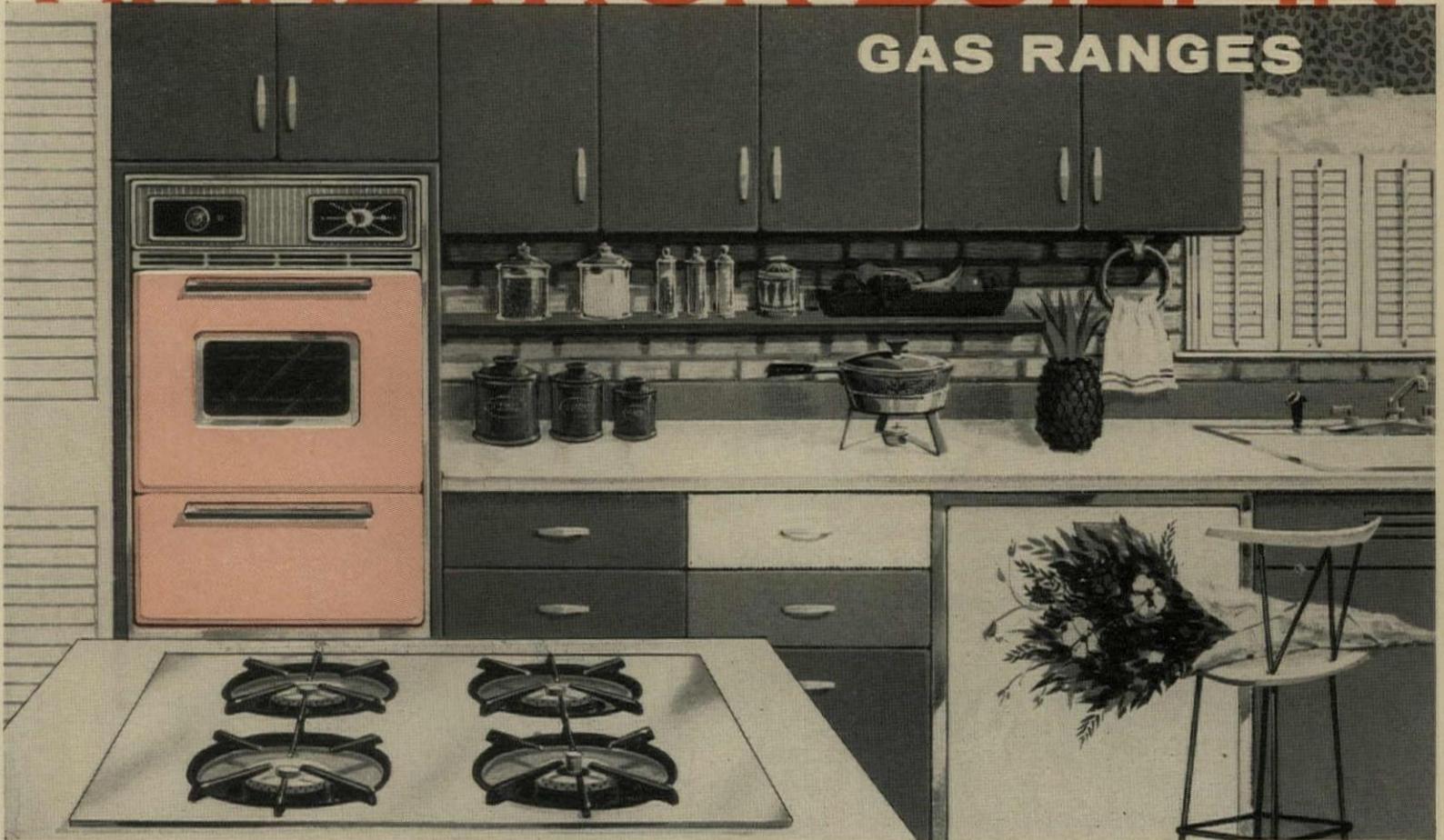
City _____ State _____

I buy my hardware from _____

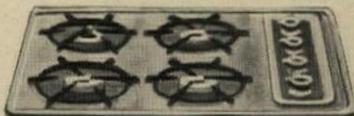
Dept. HH10 AMEROCK CORPORATION, ROCKFORD, ILL. • MEAFORD, ONT.

HARDWICK BUILT-IN

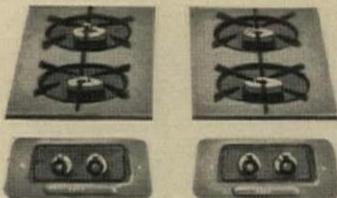
GAS RANGES



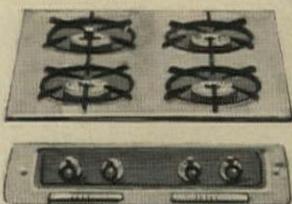
COUNTER UNITS AVAILABLE IN Brushed Chrome or Coppertone



Drop-In Unit



Divided Unit



Cluster Unit

Dazzling Decorator-Design, Six Sparkling Fashion Colors!

Yellow • Pink • Turquoise • Coppertone
Brushed Chrome • White

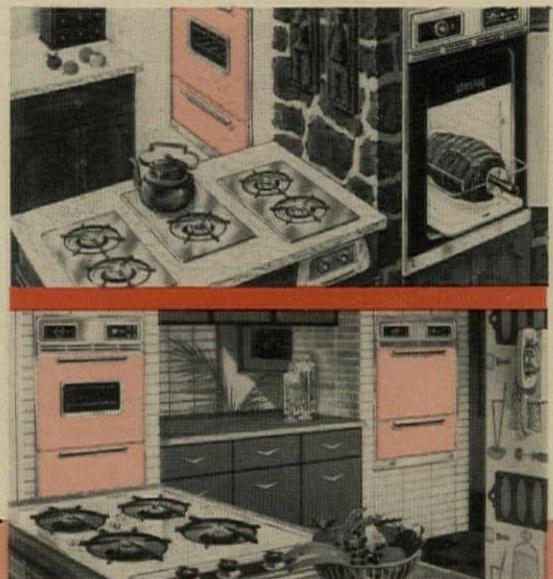
Hardwick offers three styles of surface units for maximum flexibility in price and kitchen design. A new, economical Drop-In Unit has controls on the cooking surface, necessitating only one cabinet cut-out. A Divided Unit consists of two high-speed burners. Two or more of these can be installed. The Cluster Unit, with four high-speed burners, has control panels in front and is used alone or with Divided Units.

No other manufacturer offers anything like the Hardwick two-oven installation. One oven features the famous Hardwick EquaFlo burner for perfect balanced-heat baking and broiling. The other has MicroRay, the sensational ceramic burner, with the thermostatically-controlled rotisserie. This unique combination speeds sales of luxury homes, such as shown in the illustration below.

Write for full information

FOR HOMES IN EVERY PRICE BRACKET

Hardwick, America's foremost manufacturer of gas ranges, presents a new, greatly expanded line of beautiful Built-Ins... six fashion colors, two ovens and three surface unit designs. The most complete, trouble-free, salable line ever offered. Hardwick Built-Ins accent ease and economy of installation — for budget and luxury homes.



Since 1879

**HARDWICK
STOVE COMPANY**

Cleveland, Tennessee

Please send me a full-color folder on the new line of Hardwick Built-In Gas Ranges.

I am a BUILDER BUILDING SUPPLIER KITCHEN SPECIALTY FIRM

ARCHITECT _____

NAME _____

ADDRESS _____

CITY _____ STATE _____

HH-10

NEWS FROM PALO ALTO, CALIFORNIA
.....

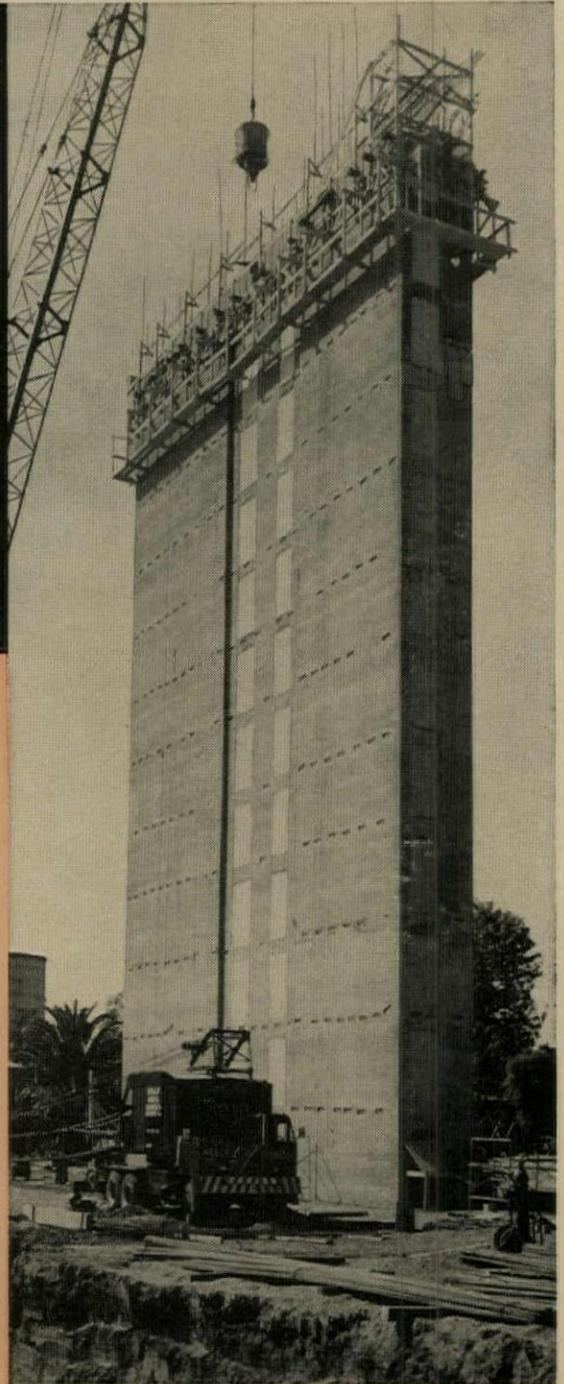
MUELLER BRASS CO. *Streamline*® COPPER TUBE IN THE NEW TYPE "CENTRAL CORE" 15 STORY LUXURY



The first application of "slip-form" central core construction in the United States has been employed in the erection of the new 101 unit Palo Alto apartment building. With this method, the form in which the concrete is poured rides on high strength steel rods equipped with hydraulic jacks. The slip form is progressively lifted to each elevation after the concrete has been poured and allowed to set. By using this system, the 15 story core of the building was completed in 5 working days at an estimated saving of 8% on labor costs. Pre-stressed slabs, poured in place, serve as both floors and ceilings in the core. This Swedish-originated method has been used extensively in this country for bridge piers and storage silos, but is completely new in the construction of buildings.

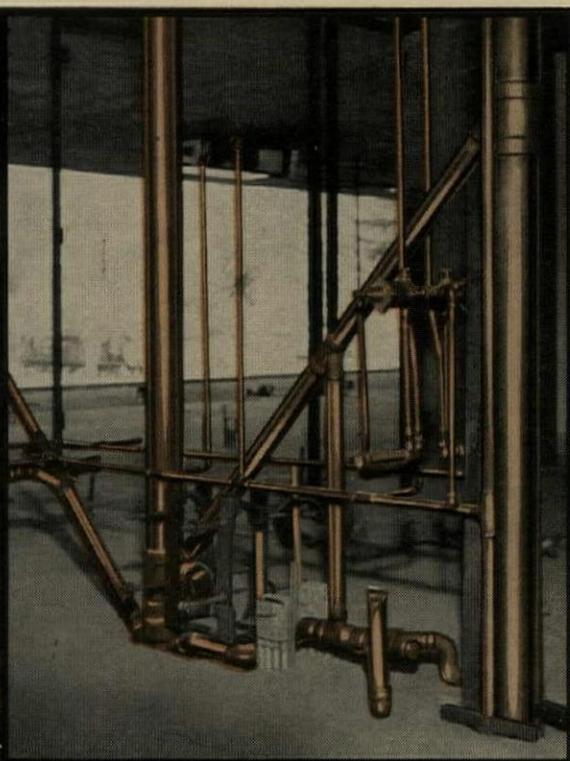
.....

Architect for the new Palo Alto apartments is William F. Hempel, AIA. The North State Builders Ltd. own and are constructing the 15 story building; engineering was by R. B. Welty of Modesto with H. B. Brewster, Fresno, consulting. The plumbing is being installed by the Herman Lawson Company of San Francisco. According to Mr. Hempel, the location of the utilities in the central core of a building sometimes creates problems in relation to local codes. But, in the case of the Palo Alto apartments, the city of Palo Alto changed code requirements so all plumbing in the building could be copper.



MUELLER BRASS CO.

AND FITTINGS USED FOR SUPPLY AND DRAINAGE PLUMBING APARTMENT BUILDING . . .



Since the entire supply and drainage plumbing systems are contained in the walls of the new Palo Alto apartments, the smaller size and lighter weight of copper are essential factors. One unique innovation in this piping system is that many of the lines which customarily would be run horizontally have been installed diagonally, thus eliminating the need for pipe hangers. (Note the photo above). Copper was also used for all heating and cooling lines in this modern structure.

Even complex plumbing assemblies can be quickly put together with a minimum number of joints when Streamline DWV copper tube and solder-type fittings are used. The work is faster and the completed job assures a life-time of clog-free, rust-proof, leak-proof plumbing service . . . and copper costs no more than rustable piping materials. More and more architects and engineers, builders, and owners are specifying Streamline copper tube and solder-type fittings . . . the modern plumbing material for supply and drainage systems.

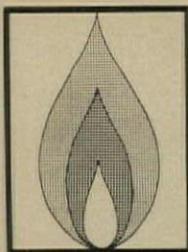
For all the latest facts on Streamline DWV copper tube and solder-type fittings, the modern sanitary drainage piping material, write today for copy of Catalog D-459.



PORT HURON 10, MICHIGAN



316



Gas Round Table continued from p 139



DAVIS: Heating will become the focal point of the battle of the fuels.



DEELY: We take over the service—day and night.



DETGEN: 4" and 2" insulation is not adequate.



SEGLER: Twice a month you take a little tray full of white ashes out of the gas incinerators.



MORGAN: We finance all the appliances as part of a 30-year mortgage.



WITTMANN: We have 150,000 homes on our waiting list for gas.

standards — on products homebuyers would not choose if they could do their own buying."

Said Builder Lefferts, who builds a widely publicized all-gas house: "I had to go into the plumbing and heating business myself to get my prices right."

Said Builder Fisher: "One reason I came to this Round Table was to raise some hell about the way gas appliances are sold in my area."

Said A.G.A.'s Stackpole: "We must find a way to organize complete packages that builders can buy, the same way they can buy a complete line of electrical appliances. I believe this can be done only if the gas utilities take a more active part in sales because we have no giant manufacturers in the gas

appliance and gas equipment industry big enough to do the job. The primary responsibility for rationalizing gas appliance sales so the builder can buy them on an easy and efficient basis will have to be assumed by the utility companies, just as the primary responsibility for promoting the sale of gas appliances will have to be picked up by the utilities or it won't be picked up at all."

Said Banker Morgan: "If it weren't for the gas utilities I don't believe there would be any gas heating or any gas appliance business."

This dependence on the local gas companies raises a very special problem in areas served by combination gas-and-electric utilities.

Dimensional standardization of appliances is more important than the makers realize

Said Savings Banker Morgan: "Nothing sells poorer than a kitchen that has five pieces of equipment that don't match in color and don't fit in line."

Said Builder Brockbank: "It is very important to the builders that sizes should be uniform. Even if nothing else comes out of this discussion, this Round Table would be worthwhile if it just establishes the fact that the homebuilding industry needs dimensional uniformity."

Homebuilding is industrializing faster than even architects, builders, and lenders seem to realize and the stage is thereby set for a great advance in construction efficiency and economy that will let the housing industry offer much better and more salable houses for less or no more money. Already the industry has four of the five prerequisites for a snap-over to industrialization:

1. We have the high-percentage long-term financing that makes volume selling possible—longer and cheaper financing than any other industry can offer. (Appliances sold as part of the house can get up to 30-year financing at interest rates hardly half as high as consumer credit.)
2. We have advance commitments that make it easier to get construction money for 20 houses than it was to get construction money for five in the last big housing boom.
3. We have merchant builders big enough to make factory methods pay off.

4. We have the pressure of almost intolerable on-site labor costs—on-site labor that costs 10¢ a productive minute. Today every smart builder wants to "build with parts instead of pieces"—big factory-made or shop-made components in coordinated standard sizes that can be assembled with minimum waste of erection days and minimum waste of 10¢-a-minute labor to make the parts fit together. These coordinated sizes are even more important to the small builder than to the big builder because the big builder can fabricate many of his own components to fit, whereas the small builder must depend on getting coordination at the factory level. Now what we need is the fifth essential—much wider acceptance of coordinated standard dimensions.

The faster manufacturers fit their products to the housing industry's fast-standardizing sizes, the faster homebuilding can industrialize. And the faster homebuilding industrializes, the more homes it can sell—and the more appliances it can sell as part of those homes.

Five years ago another industry Round Table recommended that all kitchen components should be standardized to fit together under a standard 8'-plus-a-tolerance ceiling, with a 2' base cabinet depth, a 36" counter height, and a 2' along-the-wall module (with 1' half-module). Those recommendations were promptly approved by NAHB and the Homebuilding Industry Committee of AIA. Important then, they are still more important today.

Nearly four out of five new houses built this year will be heated with gas

Since 1949 the number of gas-heated homes has nearly tripled, from 7,443,000 in 1949 to 19,446,000

in 1959, of which 11,926,300 have central systems. More homes are heated with gas today than are



LEFFERTS: Only one gas appliance dealer pays attention to me.



WILSON: The way to hold rates down is to sell more gas.



BECK: We sold more than 100,000 in eight months.



BRUNS: We have more than doubled our pipelines.



PIERSON: We outsold them because we delivered more hot water for less money.



FISHER: We want the appliances to help sell our houses. We don't want our salesmen to become appliance salesman.



CHANDLER: To minimize the disposal problem, the city of Martin Grove requires gas incinerators for every home.

heated with all other fuels combined.

By 1970 the gas industry projects a total of 39,860,000 gas-heated houses.

Last year 781,000 gas-fired central heating units were installed in new houses, nearly four times as many as any other automatic fuel.

For this increased use of gas for heating there are three basic reasons.

1. In most places gas is the cheapest automatic fuel, whether the system is to be warm air, or hydronic, or something else. In parts of the Ohio Valley, for example, the average cost of heating a moderate-sized home with gas is only \$65 a year.

2. Most local gas utilities undertake full responsibility for service and maintenance, usually at no extra cost.

3. Today's gas heating units are much better. Specifically:

Today's gas furnaces are smaller; they are so compact they can be installed in crawl space, in attics, in closets.

Today's gas furnaces are more efficient and economical; they have much better controls—outside thermostats, inside thermostats, and zone controls; they come with electrostatic filters, humidifiers, two-stage burners, and two-speed motors to modulate the fan operation.

"But," said Manufacturer Bell, "we think our biggest responsibility is to keep our equipment as simple and economical as possible—easy to install and easy to service. So we have learned to standardize parts to get our costs down; we have learned that the builder prefers everything factory-assembled, so we ship our furnaces that way in cartons that one man can carry through a door.

"All today's good gas furnaces can handle add-on cooling by just turning a damper so the air goes through the added cooling coils instead of going through the heat exchanger.

"The life of a good gas furnace seems to be indefinite. Many gas furnaces are still in service after 35 years."

Don't promote the fact that gas heating needs less insulation, for three reasons:

1. Heavier insulation is absolutely essential for summer cooling no matter what fuel is used.

2. Adequate insulation costs very little more than the minimum FHA will approve, because labor is the big cost and heavier insulation requires no more labor. "An added 4½" of insulation costs no more in place than the first 1½" because the labor is the same," said Insulation Manufacturer Betteridge.

3. No matter what fuel is used, adequate insulation costs less than it saves on heating alone. The material should cost a builder of ten houses about 6¢ to 7¢ a sq ft for 3" batts for the walls and about 11¢ for 6" batts for the ceiling. And it should cost not more than 2¾¢ a sq ft to install while the house is being built even in the highest wage areas. This is a lot less than it will cost to install after the house has been finished.

Gas plans to give electricity a battle for air conditioning

Said A.G.A. President-elect Potter: "Air conditioning will change the whole economics of the gas industry—if gas gets its share. The fuel that ends up in the dominant position in summer cooling will be in the dominant position in winter heating too." Said GAMA President Davis: "Cooling and heating will be the focal point in the battle of fuels."

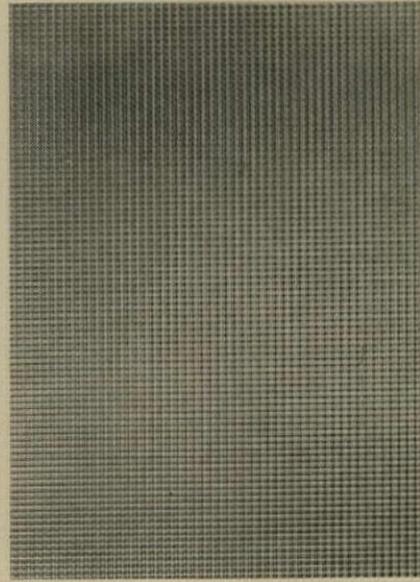
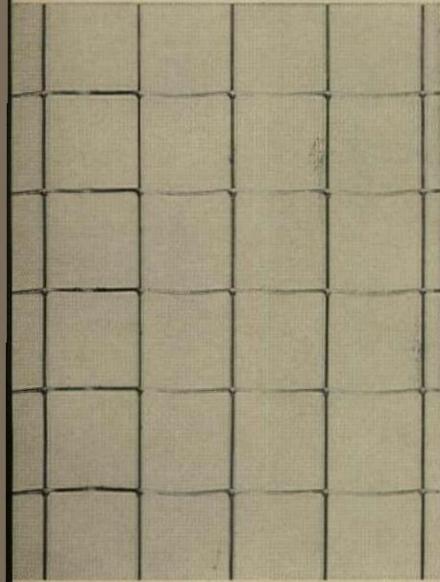
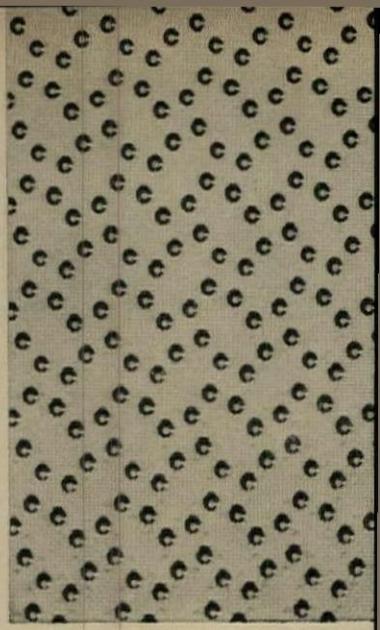
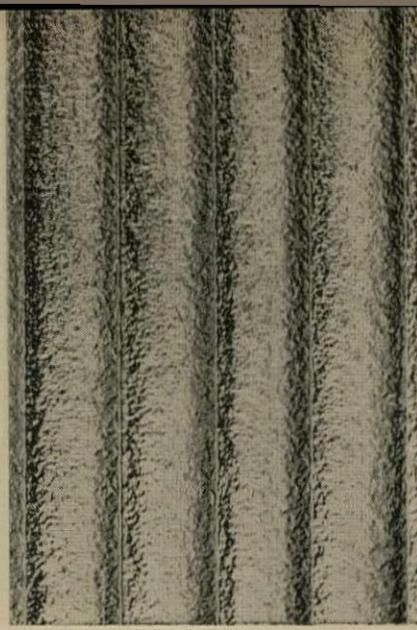
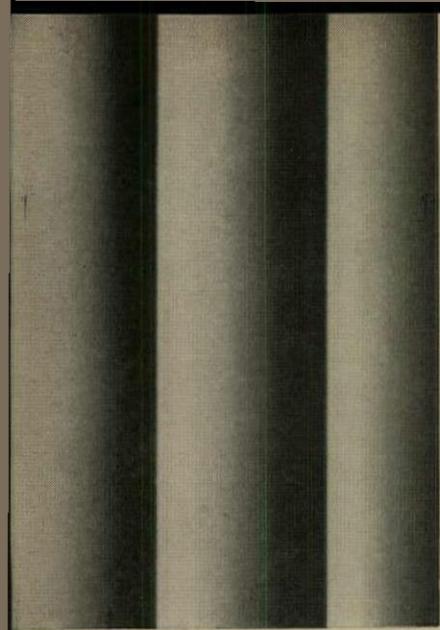
Said FHA Commissioner Zimmerman: "In air conditioning you are moving into the biggest new market you have had offered you since people started heating their homes. I think this market is almost here."

Said Builder Alan Brockbank: "We homebuilders believe that air conditioning will become a standard feature even in low-priced homes if the added first cost for cooling can be brought down by \$500 to \$600."

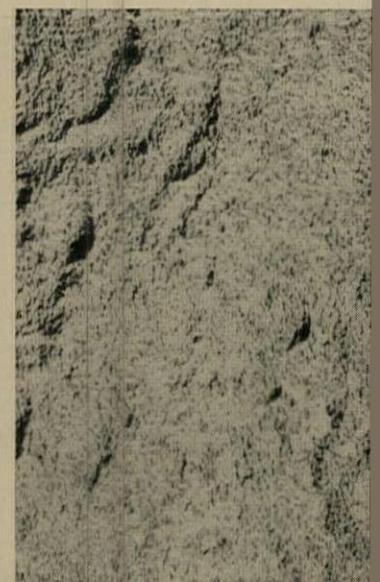
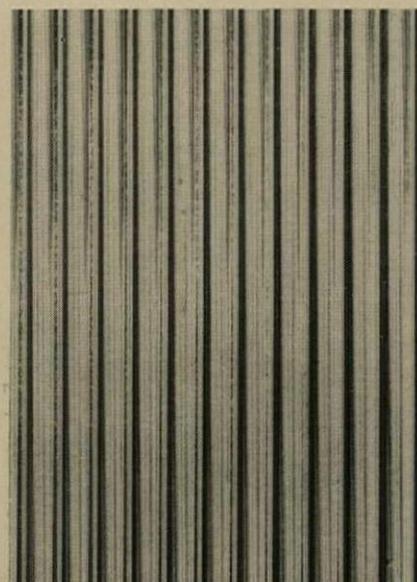
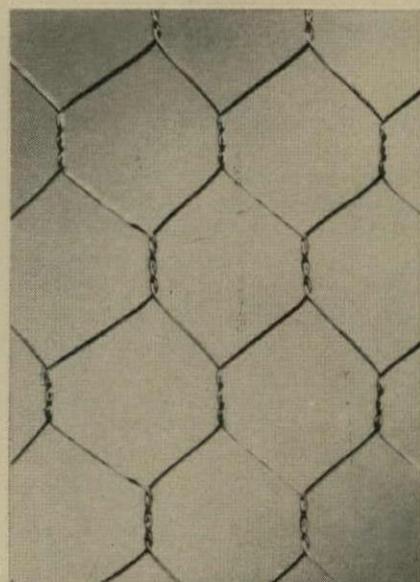
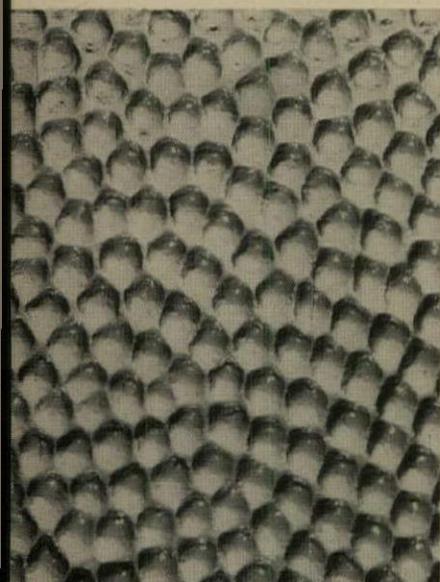
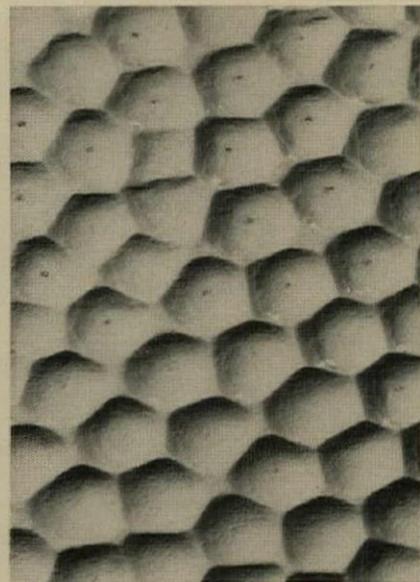
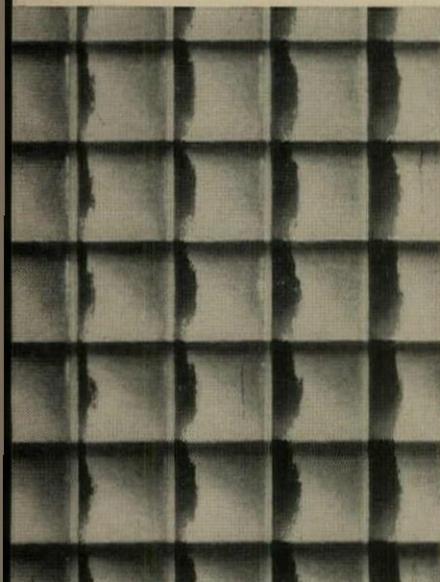
Today many big buildings are air conditioned with gas, including the Republic Bank Building, the Statler-Hilton Hotel, Memorial Auditorium and Love Field Airport in Dallas, and Idlewild Airport in New York (where the chilled water line is 36" in diameter).

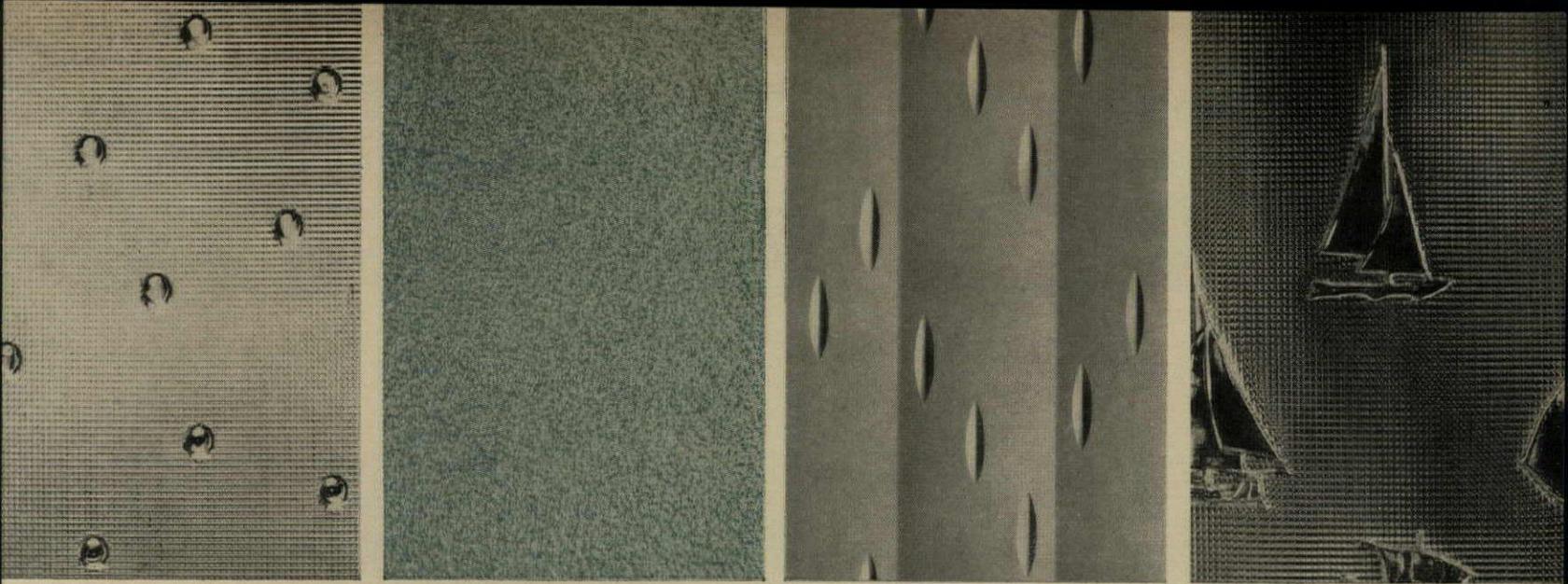
For residential use there are two ways to cool with gas:

continued on p 212

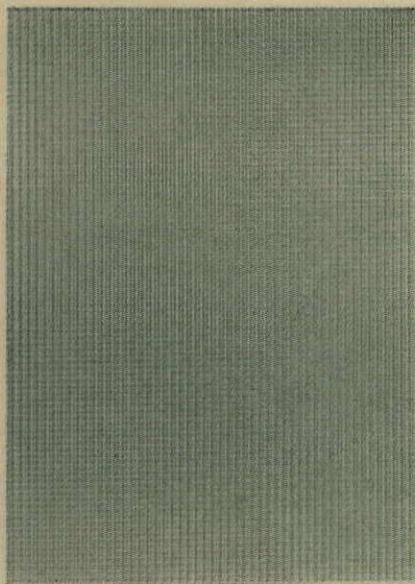
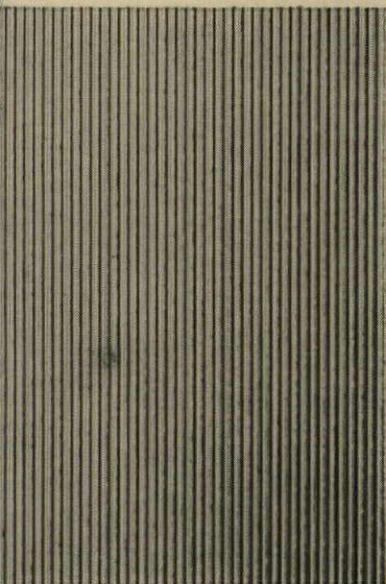


LOF
PATTERNS
 G L A S S
 Made in Great Britain
 LIBBEY · OWENS · FORD, SALES AGENT





L·O·F announces... pattern glass



This exciting family of patterns (shown approximate size) features twenty-six combinations of patterns and textures, including wired and heat absorbing glass. Two thicknesses in many patterns, three in some. Sizes up to 60" x 120", one wired pattern 72" x 132".

Ask your L·O·F Glass Distributor (listed under "Glass" in the Yellow Pages) to show you actual glass samples. Or send the coupon for free booklet which reproduces patterns actual size. It also gives Pattern Glass names, weights, sizes, thicknesses and transmission values of diffused light.



Libbey-Owens-Ford Glass Co.
9100 Libbey-Owens-Ford Building, Toledo 1, Ohio

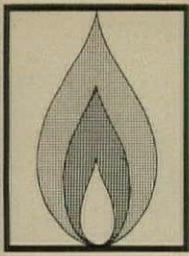
Please send me free booklet showing Pattern Glass.

Name _____
(please print)

Address _____

City _____ Zone _____ State _____

LIBBEY · OWENS · FORD—a Great Name in Glass
Toledo 1, Ohio



Gas Round Table
continued
from p 209



MORTLOCK: He listened.



STEVENS: We have invested \$20 million in our gas refrigerator.



HILL: We favor everything that improves the quality of housing.



HENRY: Distribution investments in our gas companies are steadily going down.



CLARK: Gas service aids lasting home values and should be more available.



MARTIN: Today's saturation on dryers is only about 18%.

1. The absorption or direct-fired systems that are now available in three- and five-ton units.
2. The mechanical system in which a natural gas engine instead of an electric motor is used to drive the compressor.

Meanwhile Robertshaw-Fulton has been pushing the commercial development of a free-piston compressor developed by Battelle Memorial Institute on a research grant for A.G.A. This will be made available to all manufacturers who want to get into the gas air conditioning, just as Tecumseh compres-

sors are sold to most manufacturers of electric air conditioning. This free-piston compressor is small, inexpensive to buy, and very economical to operate. Said A.G.A.'s Stackpole: "We are confident that the free-piston compressor is going to be the answer. This is a real break-through." It is no noisier than a conventional compressor and is subject to minimum wear because the piston is not attached to anything and just moves freely back and forth in lubricating oil. Further development work remains to be done, however, on 1) the ignition, and 2) sealing off the refrigerant.

A 1960 gas water heater takes less space costs less, heats faster, lasts longer

Specifically, a good 1960 gas water heater can offer four big advantages over 1955's best:

1. Twenty percent faster recovery, due to greater Btu input made possible by a) using steel that will stand up under higher tank-bottom temperatures; b) better spacing in the combustion chamber; and c) better venting.
2. Variable input and output. This means that by stepping up the Btu input a 30-gallon tank can now be made to deliver as much hot water as an ordinary 50-gallon tank. This saves space and ends the need of sizing the tank close to the family's needs, which may change at any time and would otherwise require a costly replacement.
3. Longer life, because the glass lining is better and/or better applied. The tank is the critical element, because some types

of water will corrode galvanized iron quite quickly and will even eat through glass. All good makers are now using a more resistant frit. Added manufacturing cost of the better coating is less than \$1. (The best and most expensive tanks are copper alloy or some other non-corrosive metal.)

4. More even water temperature throughout the tank. This is important for both automatic clothes washing (where many women think the hotter the water the whiter the wash) and dish washing (where the water should be above 180F to avoid soap stains). To get this more even temperature required major engineering changes. Today you can even buy water heaters with a valve that supplies 180F water to the dishwasher and clothes washer and 140F water for other uses.

More of these 1960 improvements are offered at no increase in cost over 1955 prices.

The best gas hot water heater will cost the homeowner a lot less over the years

You can buy a glass-lined 40-gallon water heater with an unconditional ten-year warranty for only about \$20 more than you would have to pay for the cheapest heater FHA will accept; ie, a heater whose unconditional warranty lasts only two years, with a proportional warranty covering up to five years. And the better heater will cost no more to sell.

Replacing the cheaper heater with another like it will probably cost the homeowner twice as much as the original FHA-minimum heater cost the builder installed.

This is another way of saying that in many parts of the country the best water heater will prove by far the cheapest to own; a \$20 saving in the builder's first cost is likely to require a \$200 replacement within five years, which is about the average life of the cheaper tank in many locations.

Says Commissioner Zimmerman: "If the gas industry does the selling job it should be doing it can sell quality even if the quality is hidden in the closet." This quality sell should be easier when, as, and if A.G.A. develops a Gold Star Standard to make quality water heaters easy to identify.

The problem of warranties is difficult because local water conditions make such a big difference in how long a water heater will last. A galvanized tank that would fail in three years in parts of Texas or California might well be good for 15 years in Chicago. The danger of corrosion is twice as great with 170F outlet water as with 140F water and it grows roughly 3% more serious with every added degree.

Two years ago FHA raised its minimum property standard for water heaters from a one-year warranty to a two- and five-year warranty. This was a compromise, for both FHA and the manufacturers thought a still longer warranty should

be required to qualify for long-term financing. Whether or not FHA decides to tighten and raise its minimum higher, the Round Table is unanimous that:

1. FHA and conventional lenders should reflect the lower maintenance cost of a better heater in their income requirements and the full difference in first cost in their valuations.

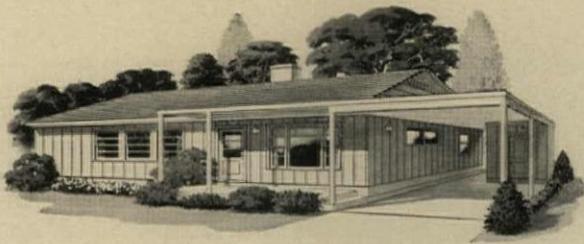
2. Builders would be wise to buy only ten-year unconditional warranty heaters in any area where past experience has shown that water is hard on tanks; one failure can cost the builder more to replace than he can save on a dozen not-good-enough heaters (not to mention the loss in good will).

3. Builders should read the fine print on their warranties carefully. FHA has not been able to get clear quality standards from the industry, so the wording of FHA's warranty requirement is so loose that almost any two- and five-year wording will get by. Builder Alan Brockbank learned too late that his warranty covered only the replacement of parts returned to the factory and pronounced defective by the manufacturer, with no provision for paying his replacement labor cost and nothing said about how the homebuyer was to get hot water while the parts were at the factory for inspection.

Some manufacturers' warranties assure prompt and complete replacement of any unit that fails, and that is what the builders should look for.

Builders have only themselves to blame if they get into trouble and expense by buying too-cheap water heaters on price instead of buying on the quality of the product and the dependability of the maker.

continued on p 214

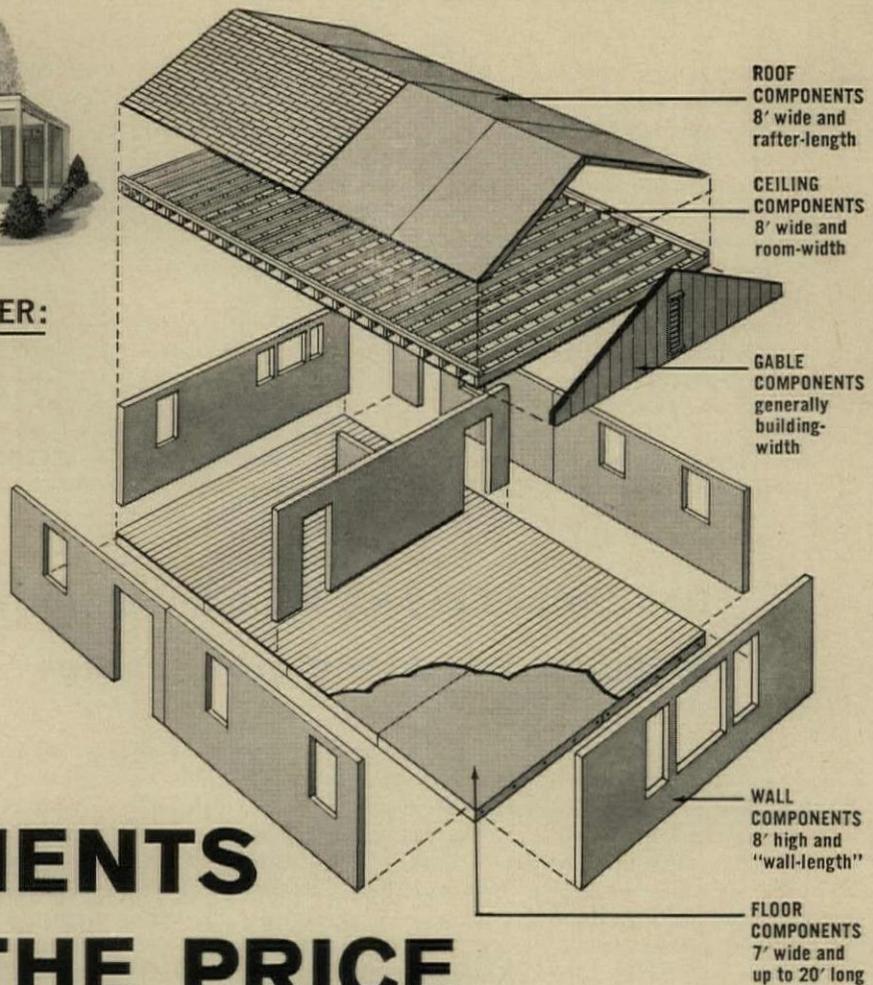


MR. ARCHITECT . . . MR. BUILDER:

More people can now own
their own homes
because
down payments can now
be reduced by \$100 or more

THE REASON:

**P-B
COMPONENTS
LOWER THE PRICE**



Take a 3-bedroom house with 1040 sq. ft. of floor area. Cut your building costs by \$1150...cut the down payment by \$100...a vast new market is now open to you. P-B Components make up the largest part of the house. By building them out of the weather and under controlled conditions, major savings are inevitable.

Every single P-B Component is custom-built to your specifications—to fit your plan. There are no arbitrary "unit" sizes. They are precision-engineered of finest materials in the plant of your near-by building material's distributor—and delivered to your site.

You save many unnecessary handling, storage and re-handling costs...you save by sharing in the distributor's maximum volume discounts...you save at least 200 field-hours per house—17 working days—a minimum of \$600...you save your overhead on the components, while they are being built in the distributor's shop—a saving of at least \$400.

P-B Components are BIG. It takes four men only 11 seconds longer to put an 8' x 14' component in place—than to position a 4' x 8' "baby panel". But you have completed 3½ times as many square feet! With big components, the average house is enclosed in one day—and you finish out in 3 to 4 weeks.

Exterior and interior walls, ceilings and gables are ready for painting, papering or other decoration. Floor panels are covered with 2½/32" factory-finished oak flooring (which you protect with Sisal-kraft paper until owner occupies.) Roofs have 5/8" Homasote sheathing already applied—with all joints flashed.

A house built with P-B Components is a quality house, quiet throughout—free from drafts, dampness, mildew, cracking and bathroom noises. It is cooler in Summer and more economical to heat in Winter.

You get customers in fast—sell at a lower figure—make greater profits.



FOR A HOME OF ANY TYPE OR SIZE!

Write or wire today for fully-illustrated 8-page brochure giving the complete details. Kindly address Department K-23.

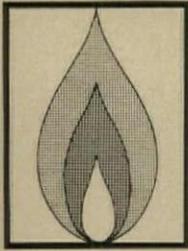


HOMASOTE COMPANY

TRENTON 3, NEW JERSEY

Homasote of Canada, Ltd. • 224 Merton Street • Toronto 7, Ontario

To save money in conventional building—send us your blueprints for a free Cost-Reduction Analysis. They will be returned with an engineering report on the savings you can make with Homasote Materials. Homasote Board-and-Batten and Grooved Vertical Siding construction are lower in cost than anything else you can use currently for exterior walls.



**Gas
Round Table**
*continued
from p 212*

New controls on the 1960 gas range make cooking much easier and surer

Said GAMA President Davis: "Today's gas range is a far cry from the gas range of ten years ago.

"You can buy wall-hung ranges, built-in ovens that stack, lift-up tops, and removable doors. You can buy ranges in many colors to match the other appliances, with coordinated color schemes for flooring and walls. All today's good gas ranges are much easier to clean.

"But the biggest change is the improvement in ignition and controls."

Explained Manufacturer Klein: "Until 1959 there was no automatic temperature control that would hold oven temperatures below 250F. Now we have controls that give you a range all the way down to 140F. That means that if the man of the house is an hour late you can keep his dinner warm without affecting the rare roast beef. It also means that you can put frozen foods in the oven at 140F and defrost most of

them in half an hour without affecting the food; and you can defrost a big turkey in less than three hours.

"Another very important improvement holds oven temperature within a 4° tolerance up or down. This is a tremendous breakthrough. Before we were running 15° or 20° up and down.

"Both these features are now available at no added cost.

"We also have automatic temperature controls for top burners. This device was first introduced in 1956. The sensing element sets directly under the vessel and transmits temperatures directly back to the valve to hold the desired temperature with a tolerance of less than 8°. This ends the danger of spill-overs and makes cooking more dependable. This top burner control retails around \$15 per burner. It would cost a builder buying in quantity \$9 or \$9.50. (Usually only one is included.)"

Gas clothes dryers are coming up fast to bid for a bound-to-grow market

Said GAMA President Davis: "Not long ago the gas clothes dryer was being outsold 5-to-1. Now it is outsold only 2-to-1, and many more manufacturers are beginning to make them."

Compared with gas dryers five years ago, gas dryers today cost 20% less for comparable quality. They dry faster because of higher Btu input. They have better arrangements for tumbling (a feature that was new 12 years ago) so they wrinkle clothes less. They are more dependable because the spinning is simpler. They are easier to install because the vent connection has been re-engineered. They have new controls to regulate the temperature to the fabric being dried. They have electric pilots instead of gas, so they create no heat unless they are working (and then the heat and the moisture

get vented outdoors). Their lint filters work better and are easier to reach in their new top location.

Market saturation on all types of clothes dryers is only about 18%, but the growing popularity of rear outdoor living makes it certain that more and more families will want to substitute indoor dryers for outdoor clothes lines. Few women minded the clothes lines when the family spent the summer swinging and rocking on the front porch and left the backyard to the laundress and the servants. But today the front porch is gone, the servants are gone, and the backyard is where the family wants to live when the weather is good—preferably without looking at their own or their neighbors' wash hanging on the line.

Five makers are pushing the return of an improved gas refrigerator

Three years ago gas refrigerator sales fell to 40,000 units and the only US manufacturer quit, eventually using its cash and its big tax-loss carry-back to buy an electric battery maker.

With the field thus cleared, five other manufacturers moved in, including two very big appliance makers.

One of the two big companies began by putting an American box on a gas cooling element imported from Europe, where gas refrigerators were still prospering.

The other big company bought the erstwhile maker's plant

and launched a multi-million dollar research and development program to bring out a new and much better three-fan "air blast" cooling system that operates 20% more economically with a smaller and 46% lighter sealed-system cooling unit that leaves more room for food storage. Meanwhile, the box has been restyled and the separate built-in icemaker has been redesigned with a 6-lb ice storage tray.

Today gas refrigerators are competitive only with deluxe electric refrigerators, but the makers plan to add a moderate-priced line and project a 1963 sales volume of 300,000.

Newly developed afterburners now make gas incinerators smokeless and odorless

Three years research at A.G.A. laboratories and Battelle Memorial Institute solved the problem of how to make a home incinerator that will burn garbage and trash without any odor or smoke at all. This was achieved by adding an afterburner that consumes whatever escapes the first incineration (just as you can consume the smoke from a cigarette by letting the smoke pass through the flame of a match).

This method works so well that the smoke commissioners who witnessed the first test could detect no odor even from burning feathers and old rubber. It works so well that Pitts-

burgh, today's No. 1 enemy of smoke, has accepted it; even smog-hidden Los Angeles may soon permit its use.

Retail price of these smokeless odorless incinerators ranges from \$139.50 to \$189.50, plus about \$25 for installation. They reduce an average family's garbage and trash to a small trayful of white ashes (mostly epsom salts) every two weeks.

Research is continuing into the apartment house incinerator problem. Here the solution will probably require a water-wash at the roof.

/END
HOUSE & HOME



Line Material PTL's light the parking area and grounds of New Orleans' fabulous Fontainebleau Motor Hotel, providing beauty by day and effective light at night.

L-M's Post Top Luminaire Builds Evening Traffic

Line Material's Post Top Luminaire is an attractive, highly efficient lighting unit with a scientifically designed optical system. It provides excellent illumination where distinctive, high-quality lighting is desired for the better-type place of business—park, pool, estate grounds, restaurant, hotel or motel.

Good lighting increases the hours of use, provides more hours for profit. The PTL is an ideal unit, designed and produced by Line Material, one of the leading manufacturers of scientifically engineered lighting equipment.

Line Material also provides outstanding lighting engineering service, available through your electrical contractor or wholesaler. Ask about L-M lighting equipment—or mail the coupon.



LINE MATERIAL[®]

Industries

McGraw-Edison Company

Outdoor Lighting

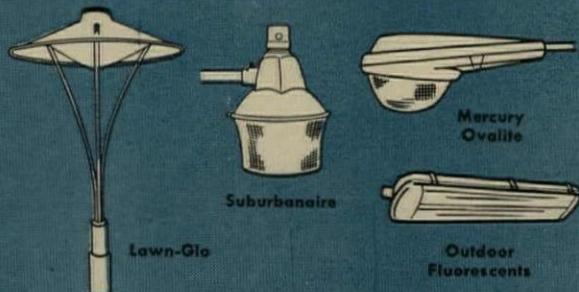


DISTRIBUTION TRANSFORMERS • RECLOSERS AND OIL SWITCHES • FUSE CUTOUPS AND FUSE LINKS • LIGHTNING ARRESTERS • POWER SWITCHING EQUIPMENT • PACKAGED SUBSTATIONS • CAPACITORS • REGULATORS • OUTDOOR LIGHTING • LINE CONSTRUCTION MATERIALS • PORCELAIN INSULATORS • FIBRE PIPE AND CONDUIT



PTL combines rigid spun-aluminum reflector 26" in diameter with optically correct glass refractor which directs the light downward in an even pattern. Choice of seven IES light patterns; lamps up to 10,000 lumens, or with ballast for mercury lamps to 250 watts. Available with photocontrol. Choice of six pastel colors or natural aluminum. For 3" or 7" post.

SOME OTHER L-M LIGHTING UNITS



Mail This Coupon

Line Material Industries, Lighting
Division, Milwaukee 1, Wisconsin HH-100

Please send me folder on the PTL and name of nearest distributor.

Name _____

Company _____

Address _____

City _____ State _____

Type of Business, Please _____

IN CHICAGO...

Al Rubín, leading masonry contractor, gets maximum crack resistance with

KEYWALL

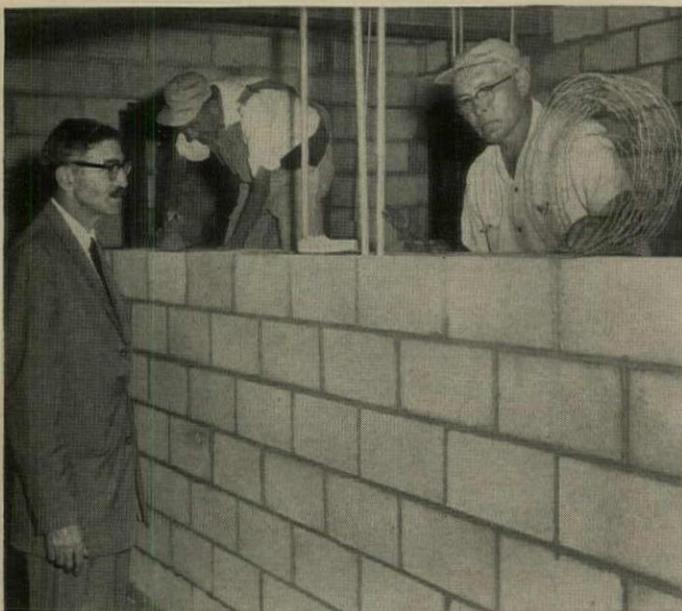
galvanized masonry reinforcement

"You just can't beat Keywall," says Al Rubín, president of Arco Construction Company, Chicago, Illinois. "It's the easiest-to-handle joint reinforcement I know... my men really like to work with it. And I get the results I want. That's why I always urge the use of Keywall wherever joint reinforcement is specified."

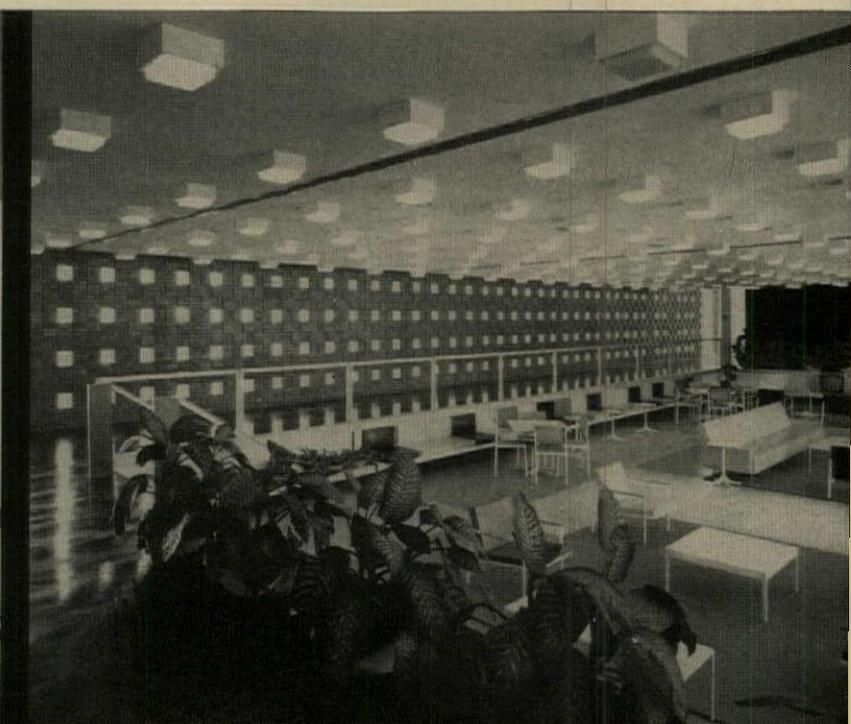
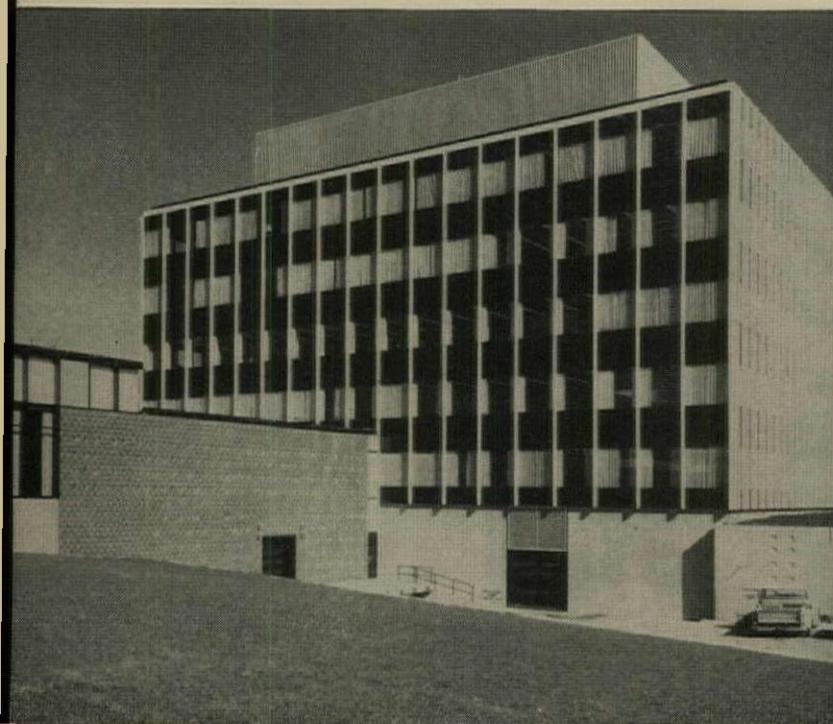
By using Keywall masonry reinforcement on his jobs, Rubín gets stronger walls with greater crack resistance. This is one of the reasons he's recognized for quality masonry by leading Chicago architects and builders.

Rubín's men prefer Keywall. They use it right. Installation details, such as reinforcing corners so they are stronger than the wall itself... lapping joints in straight walls to assure continuous reinforcement... getting full embedment of reinforcement, even when lapping, without increasing thickness of masonry joints... are easily done with Keywall. These superior features, vital in the effectiveness of any reinforcement, make walls reinforced with Keywall stronger and more crack resistant at lower cost.

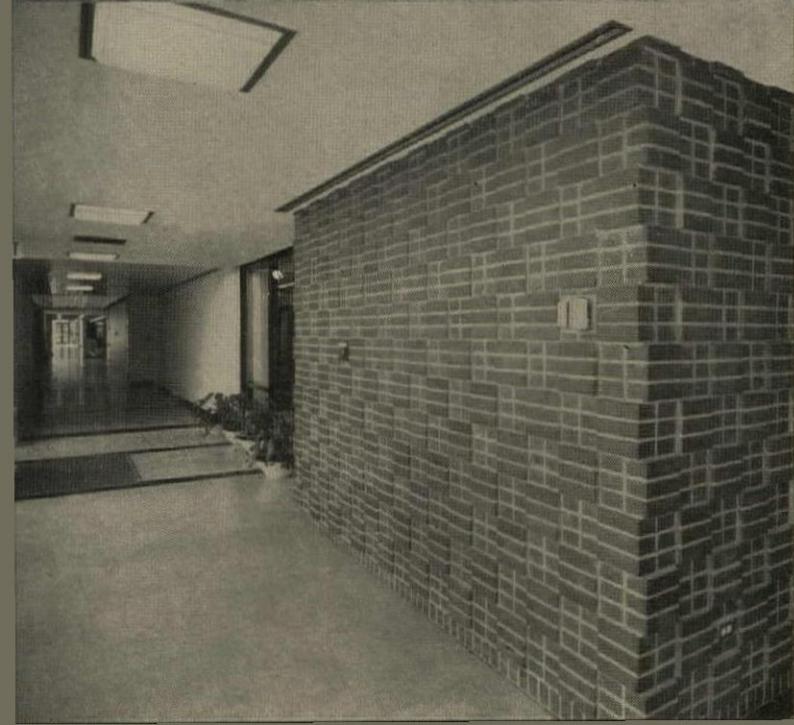
Keywall comes in easy-to-handle 200-foot rolls, galvanized for rust-free storage. Made for the following wall thicknesses: 4", 6", 8", 10" and 12".



Mr. Rubín (standing) notes how easily Keywall is handled on one of his current jobs, the Hyde Park Shopping Center on Chicago's south side. Hyde Park Project Contractor: Webb & Knapp Inc., Chicago. Architects: I. M. Pei & Associates, New York; Harry Weese & Associates, Chicago. General Contractor for Shopping Center: Inland Construction Co., Chicago.



These two Lake Meadows units on Chicago's south side are a prime example of Rubin's fine masonry work. Keywall was used throughout. Architect: Skidmore, Owens & Merrill, Chicago. General Contractor: Turner Construction Co., Chicago.



Rubin used Keywall on the International Minerals & Chemicals Company office building in suburban Skokie. Photographs (left) show interior and exterior masonry construction of this attractive building. Architect: Perkins & Will, Chicago. General Contractor: Turner Construction Co., Chicago.

KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

Keywall • Keycorner • Keymesh® • Keystrip • Welded Wire
Fabric • Nails



ROPER FUTURA



TAPPAN 400



O'KEEFE & MERRITT CONTEMPO

New styling and new controls mark new gas ranges

Roper calls its new cabinet-type built-in gas range Futura (above, left). Ovens for baking and broiling (with rotisserie) are at eye level. Four burners, including one automatic unit, are arranged in line, with all controls on the front panel. Brushed chrome top lifts from the front for easy cleaning and maintenance. Work surface is illuminated by a fluorescent panel behind the burners.

Geo. E. Roper Corp., Kankakee, Ill.
For details, check No. 1 on coupon, p 286

Tappan "Fabulous 400", first of the new wall-hung built-ins, is now made in a gas version. It comes in 30" and 40" models to hang on a wall or stand on a cabinet. Control panel is above matched baking and broiling ovens, includes thermostat dial, clock, roast and rotisserie controls. Oven operates as low as 140F for warming or defrosting foods. Surface burners are concealed by wood worktop when not in use.

Tappan Co., Mansfield, Ohio.
For details, check No. 2 on coupon, p 286

O'Keefe & Merritt Contempo was co-developed with Tappan to give built-in look in the space of a conventional 40" range. Surface burners include one thermostat-controlled unit, are concealed by a solid maple cutting board. Ovens can be vented inside or outside the house. Broiler height can be adjusted in use by a front control. Contempo differs from Tappan 400 chiefly in trim and layout.

O'Keefe & Merritt, Los Angeles.
For details, check No. 3 on coupon, p 286



Wedgewood-Holly Kook-Center can be mounted on legs or built into a cabinet. Cook top contains four paired burners, including two automatic units and a concealed fifth burner-grill. Matched baking-broiling ovens are controlled from eye-level panel. Backsplash, ventilating hood, and condiment shelf are integral with range.

Wedgewood-Holly, Culver City, Calif.
For details, check No. 4 on coupon, p 286



Crown Contemporary offers the built-in look in 30", 36", and 40" free-standing Gold Star ranges. When closed (it's shown open above), recessed top burners and burner controls are hidden by a satin chrome steel top that aligns with 36" high cabinets. Oven and clock controls, fluorescent lamp are in back-splash.

Crown Stove Works, Chicago.
For details, check No. 5 on coupon, p 286



Sunray decoRange is built to Gold Star standards plus full porcelain enamel, silicone oven seals, leg levelers, etc. Three lines come in 24", 30", 36" widths: C series has full backguard with clock, light, timer, etc; D models have clock tower instead of backguard, E series (shown) has flush back. Ranges drop-in cabinet cutouts.

Sunray Stove Co., Delaware, Ohio.
For details, check No. 6 on coupon, p 286



Waste King Universal gas built-ins are designed by Henry Dreyfuss to match company's dishwashers and disposers. New clock control times roast when set to weight or type of meat. Oven doors are full width, fiberglass insulated. Oven lining is porcelain. Oversize oven windows have patterned glass to help conceal oven interior. Two or four burner surface units have removable burners and bowls, spill-proof edges, inset controls.

Waste King Corp, Los Angeles.
For details, check No. 7 on coupon, p 286

Modern Maid has introduced the first double-oven gas built-in with a ceramic infra-red burner claimed to broil steaks in half the usual time with only two thirds as much gas as a blue flame burner needs. Each oven has its own controls, lower oven will cook down to 140F. Each oven is 18" wide but unit fits 24" cabinet.

Tennessee Stove Works, Chattanooga.
For details, check No. 8 on coupon, p 286

Chambers Built-ins now offer thermostats that can be set as low as 140F for keeping meals warm or thawing frozen food. Oven and broiler compartments are oversize to take the largest domestic roasters. Ovens and control panel are framed in a deep extruded rim. New units match other Chambers appliances.

Chambers Built-ins, Chicago.
For details, check No. 9 on coupon, p 286

Hardwick built-in range line includes three surface units, two ovens. One four-burner top has surface dials, takes only one cutout. Divided units with front controls come in two-burner units. One oven has a standard burner, the other has a Micro Ray ceramic burner for broiling and barbecuing. Micro Ray rotisserie is live-flame thermostat controlled.

Hardwick Stove, Cleveland, Tenn.
For details, check No. 10 on coupon, p 286

Caloric built-in ovens and range tops are colormatched to sink, dishwasher, and other appliances. Gold Star range tops come with front or top controls, with one or two Thermo-set units. Built-in ovens come in single and dou-

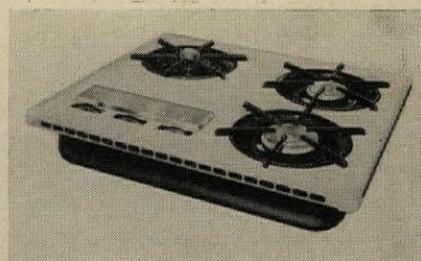
ble types. New "Four" series ranges come in 20", 30", and 36" models with keep-warm ovens, chrome-plated burners, pushbutton switches.

Caloric, Jenkintown, Pa.
For details, check No. 11 on coupon, p 286



Magic Chef Foldaway allows burners to be tipped out of the way to make work space. Units are available with thermostatic burners. All have automatic shut-off, locking control dials, working light, appliance outlet.

Magic Chef, Cleveland, Tenn.
For details, check No. 12 on coupon, p 286



Vernois Shadow Slim three-burner surface units are only 3" deep, fit into 24" base cabinet, need only one cutout. Deluxe models come with thermostatic or center-simmer burners, right or left hand controls. In chrome or colors.

Mt Vernon (Ill.) Furnace & Mfg Co.
For details, check No. 13 on coupon, p 286



Princess compact units are only 22 3/16" wide, 24 3/8" high, 19 3/4" deep, weight only 80 lb, yet have features of full-size range. Unit hangs from countertop by a metal lip; screws in range sides hold it in place. White and six colors.

Pan Pacific Mfg Corp, Los Angeles.
For details, check No. 14 on coupon, p 286



Preway Gold Star oven has automatic clock control, low temperature (140F) oven, built-in rotisserie, large broiler. Control panel is encased in heat-resistant glass, lighted by concealed tubes, holds thermostat, clock, timer, push-buttons.

Preway, Inc, Wisconsin Rapids, Wis.
For details, check No. 15 on coupon, p 286

New Products continued on p 223

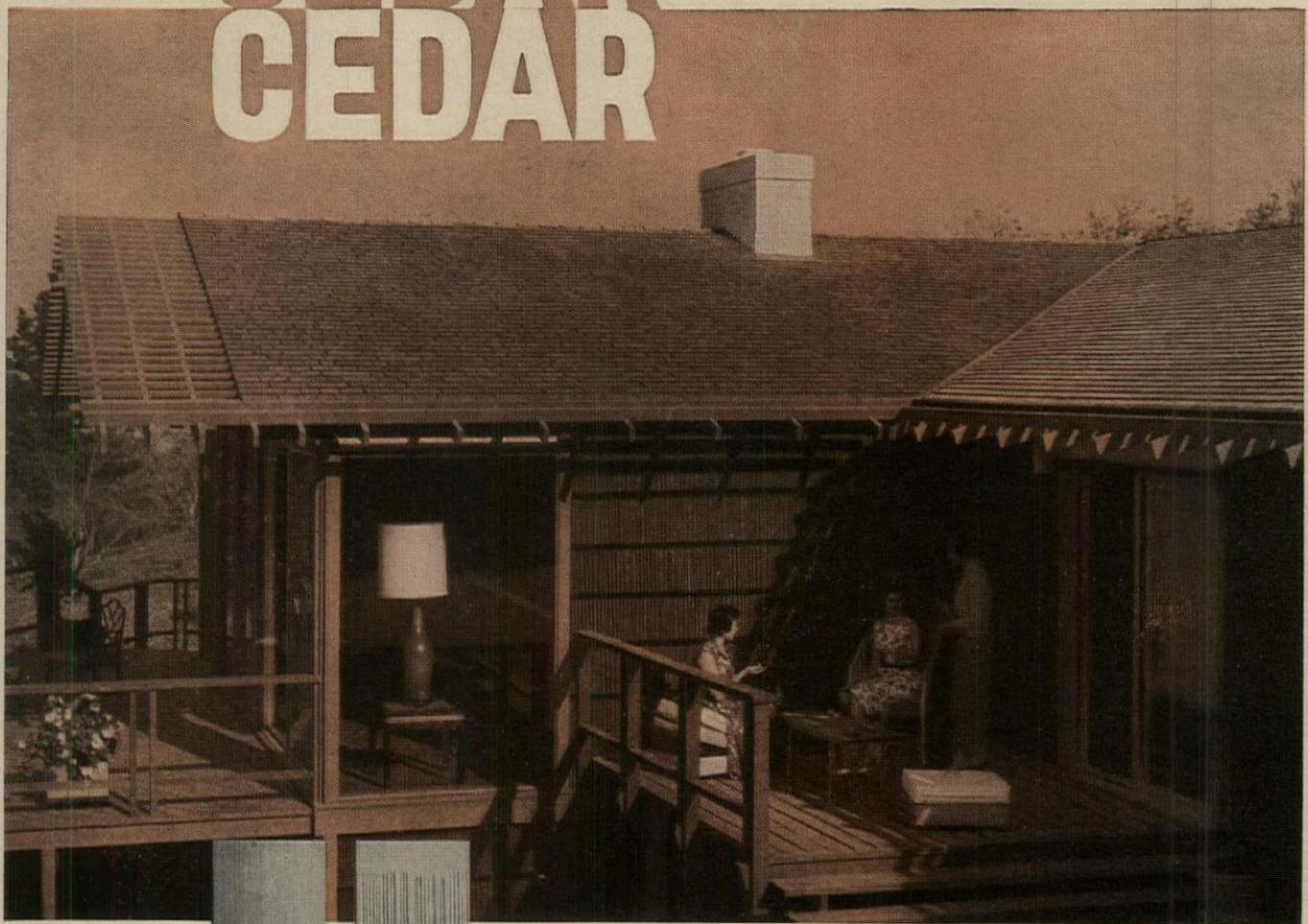
*pride
is part
of the
purchase*

How a house looks usually determines how it will sell.

That's why so many successful builders feature genuine cedar shingle roofs and cedar shake walls. Because pride of ownership is a mighty potent force.

And pride begins with exterior appearance. The natural character and unmistakable thickness of a cedar shingle roof... the rich shadow-lines, deep-etched striations and cheerful factory-applied colors of cedar shake walls... appeal to that pride of ownership. When you build with cedar, you build with pride.

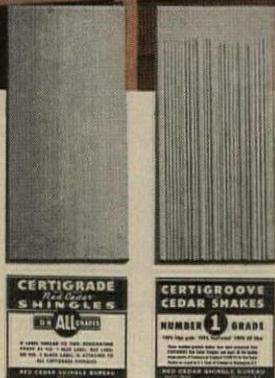
CEDAR CEDAR



For complete application details see your Sweet's File, or write...

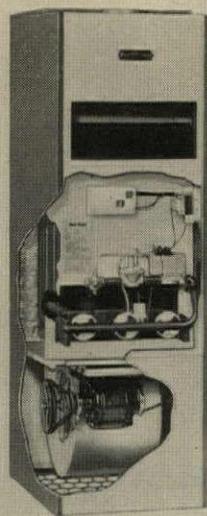
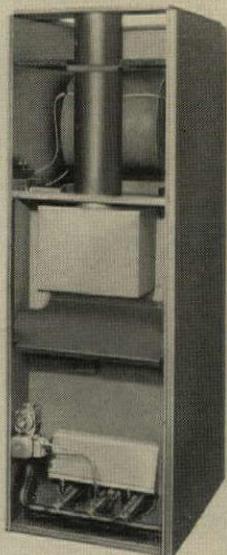
RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Washington
550 Burrard Street, Vancouver 1, B. C.



CERTIGRADE
Red Cedar
SHINGLES
BY ALLUMET
A LUMBER PRODUCT OF THE INTERNATIONAL
PAPER COMPANY, PORTLAND, OREGON
MANUFACTURED BY THE RED CEDAR SHINGLE BUREAU
RED CEDAR SHINGLE BUREAU

CERTIGROOVE
CEDAR SHAKES
NUMBER 1 GRADE
A LUMBER PRODUCT OF THE INTERNATIONAL
PAPER COMPANY, PORTLAND, OREGON
MANUFACTURED BY THE RED CEDAR SHINGLE BUREAU
RED CEDAR SHINGLE BUREAU



Perfection offers four sizes of lowboy gas furnaces—75,000, 100,000, 125,000, and 150,000 Btuh. A new compact heat exchanger keeps size down so that cooling coils can be top-mounted in low ceilinged space. A big centrifugal blower has extra capacity to handle a cooling load. Full steel bottom adds rigidity, leveling bolts eliminate need for a special base.

Hupp Corp, Cleveland.

For details, check No. 16 on coupon, p 286

Majestic has introduced a compact gas furnace only 18" wide for alcove and closet installation. Upflow and downflow models have full-capacity belt-driven ¼-hp blowers. New square-to-round heat exchanger is welded to the frame to eliminate gaskets and leakage. All components are easy to reach when front panel is removed.

Majestic Co, Huntington, Ind.

For details, check No. 17 on coupon, p 286

Bard has new models with 75,000 to 150,000 Btuh inputs that are completely packaged and adaptable to air conditioning. Ribbon burners give quiet, cheap operation. Blower slides out of reinforced steel casing for easy servicing. Sectional heat exchangers are pre-stressed to eliminate expansion noises. The controls are the silent full shut-off type.

Bard Mfg, Bryan, Ohio.

For details, check No. 18 on coupon, p 286

Hall-Neal gas furnaces in the new Victorgas line have a thermistor flame control, claimed to be sensitive to 1/10°, that adjusts burner before temperature change is perceptible to homeowner. Furnaces have five-sided finned radiator for greater economy. Dual-speed blowers control drafts during early and late blower stages. Capacities: 100,000 to 175,000 Btuh input.

Hall-Neal Furnace, Indianapolis.

For details, check No. 19 on coupon, p 286

Burnham has two new lowboy gas series for new or replacement installation. Capacities run from 90,000 to 210,000 Btuh. Heavy-gauge cases finished in baked enamel, fully insulated. Rubber-mounted blower and motor are sized for year-round job. All parts are readily accessible. Unit is fully wired at the factory.

Burnham Corp, Belle Vernon, Pa.

For details, check No. 20 on coupon, p 286

Dearborn has taken over Sequoia's furnace line, is introducing 35,000 and 50,000 Btuh gravity furnaces for small homes and horizontal furnaces of 80,000 to 150,000 Btuh for attic and crawl space installation. Larger units are designed for add-on cooling.

Dearborn Stove Co, Dallas.

For details, check No. 21 on coupon, p 286

Armstrong Series 700 is now available in six counterflow models of 60,000 Btuh to 160,000 Btuh. The 60,000 and 80,000 Btuh models are only 12" wide, 25½" deep, 59" high, need only a 4" flue. All feature a new heat exchanger, quiet burners, permanent washable filters. Blowers are sized for year-round air conditioning. New electronic air cleaner and a comfort control station can be added.

Armstrong Furnace, Columbus, Ohio.

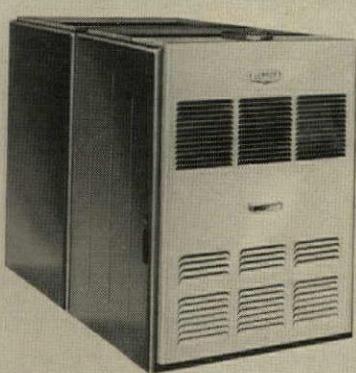
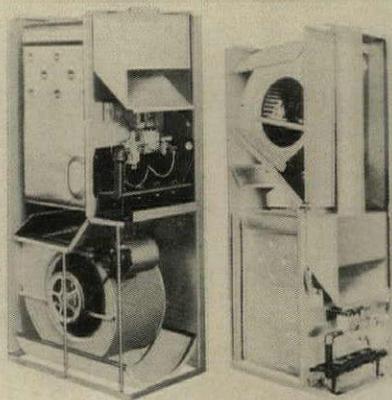
For details, check No. 22 on coupon, p 286

Mueller Climatrol gas furnaces come in six sizes—100,000 to 250,000 Btuh input. All burners are cast iron with deep-drilled raised ports. Blowers are dynamically balanced and all parts are heat and sound insulated. Variable input valve and blower adjust gas flame and air circulation to meet outdoor temperatures. Options include: electronic air cleaner, complete cooling, automatic humidifier.

Mueller Climatrol, Milwaukee.

For details, check No. 23 on coupon, p 286

New gas furnaces make provision for add-on air cooling



H. C. Little has a new line of upflow and counterflow gas furnaces with 82,500 to 160,000 Btuh inputs. Clipper line features a belt-driven 15" blower wheel rotating on a 1" reground shaft with rubber-mounted bearings. The big wheel allows slow speeds and quiet operation. Adjustable features permit on-the-job regulation to fit a specific installation.

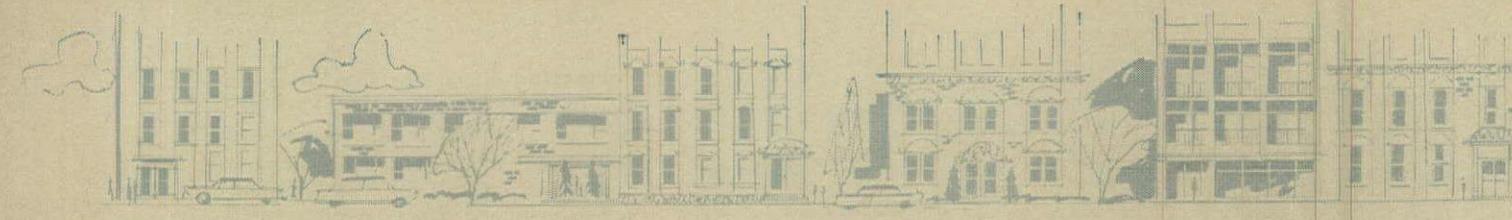
H. C. Little Burner Co, San Rafael, Calif.

For details, check No. 24 on coupon, p 286

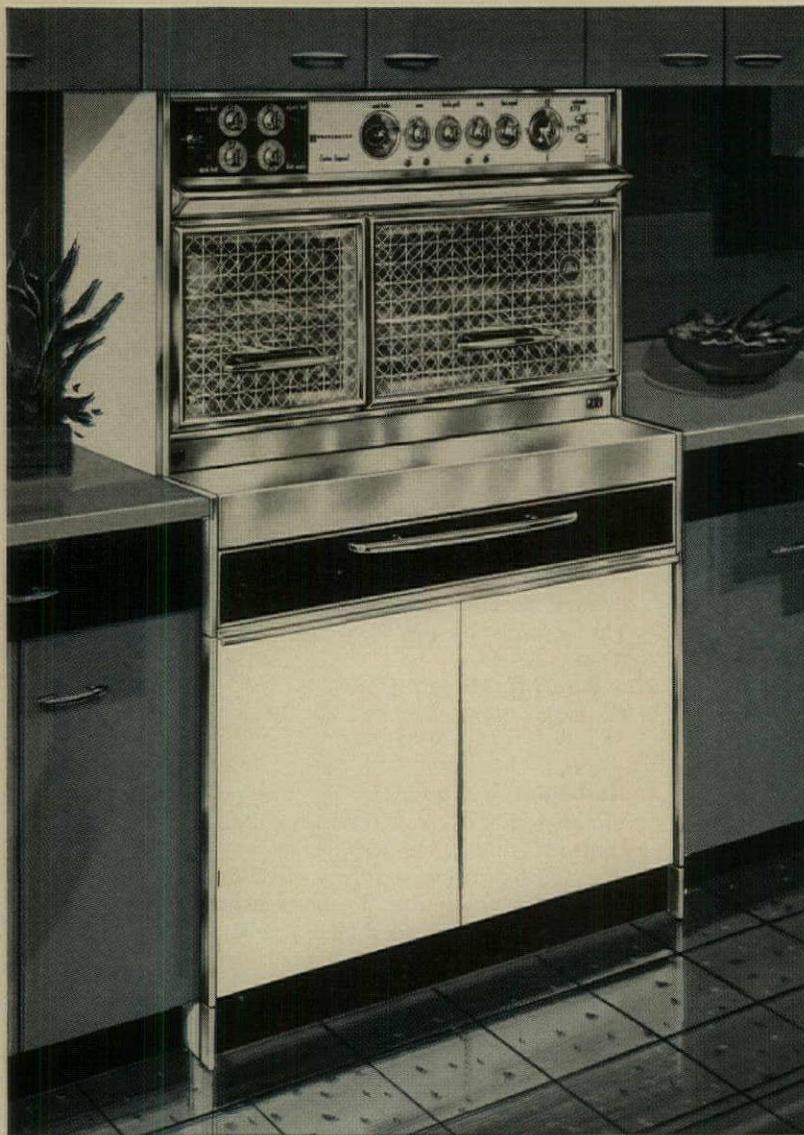
Lennox' newest unit is a 200,000 Btuh lowboy, only 39¾" high, to allow add-on cooling where overhead space is limited. The unit needs only 1" clearance all around, will handle five tons of cooling. The heat exchanger is a welded steel wafer type; burners have slotted ports; blower rests on floating mount; filter is hammock type. The controls work on 24 v, thermostat is heat anticipating.

Lennox, Marshalltown, Iowa.

For details, check No. 25 on coupon, p 286



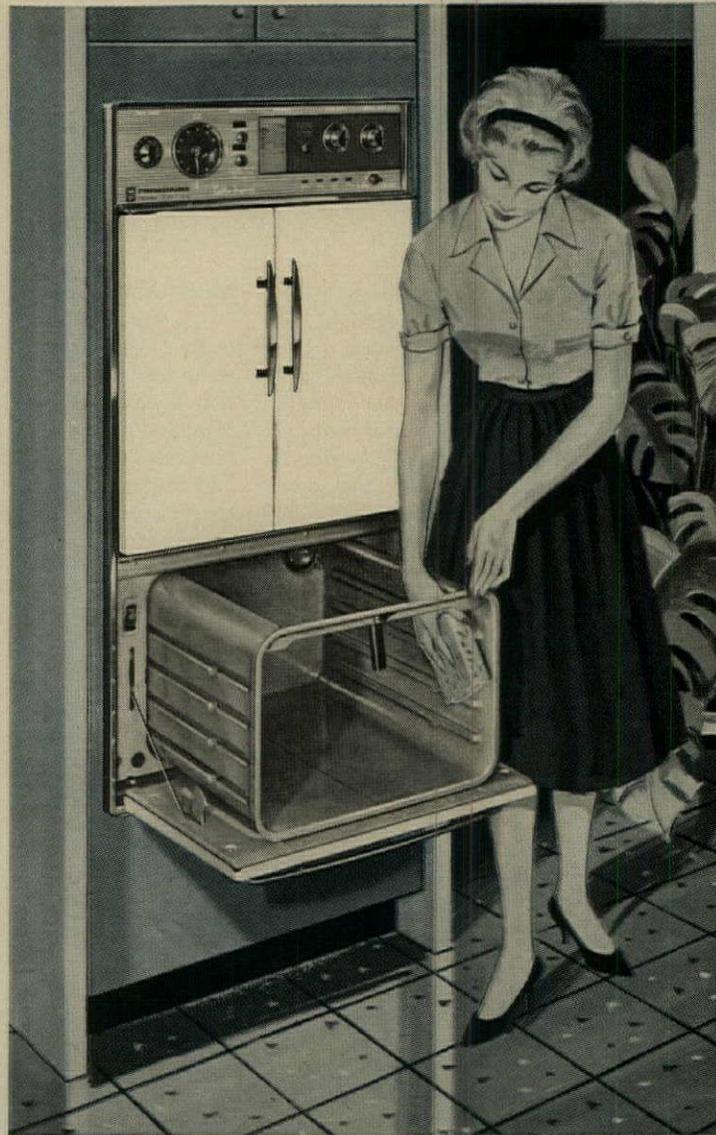
Why are Frigidaire Appliances a BIG



Model RCIB-645

BECAUSE *Frigidaire Flair provides glamorous cooking in rental kitchens*

Beautiful Flair Ranges offer See-Level Ovens and exclusive Glide-Up Doors. Roll-To-You Cooking Top at hand-high level, Cook-Master Control for automatic cooking, Heat-Minder Unit, Speed-Heat Unit, and Meat Tender—all these attract renters too. And Flair slides into place between cabinets or in the space occupied by your old range—no carpentry needed. It's available in both 30" and 40" sizes. Base cabinet optional.



Model RBB-92

BECAUSE *Frigidaire Wall Ovens provide cleaning without stretching*

French Doors and Pull 'N Clean Lower Ovens add cleanability. The Drop-Leaf Door on other models offers up-close cleaning for hard-to-reach corners. Cook-Master Control (standard on most models) makes cooking automatic; and please note: most models install with only two screws; fit standard 24" cabinets or wall sections. Eight models to choose from—single and double ovens, some with glass window doors.

PLUS with your Prospective Tenants?

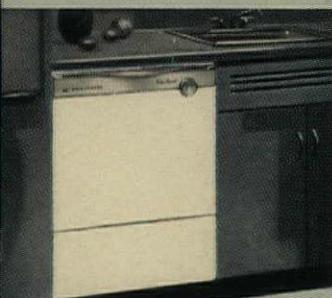
BECAUSE Frigidaire Cooking Tops provide spacesaving convenience



Model RBB-101

Speed-Heat Unit gets hot in seconds; Heat-Minder Unit is thermostatically controlled to help you enjoy cooking without burning or boiling over. All other Radiant-tube Units have "infinite heat" selection. Only two clamps to adjust for easy, fast installation. Four Cooking Top models and three Fold-Back Units offer kitchen planning flexibility.

BECAUSE Frigidaire Dishwashers provide "once-a-day dishwashing"



Model DW-DUB

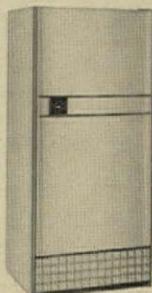
Capacity for 12 place settings (NEMA standard) plus 15 extra pieces. Roll-To-You Racks glide out all the way for easy, front loading. Swirling Water Action scrubs and sanitizes every surface. Frigidaire Dishwashers fit in with standard cabinets. Free-Standing and Dishmobile models available, too.

BECAUSE Frigidaire Disposers provide fast, quiet cleanup



Model FDZ-1

Take care of food waste fast, 30-35% faster than many comparable models. Quiet, too, with an insulated jacket and rubber-cushioned connections. Fits most 3½" conventional drain openings.



Model DA-11-60

BECAUSE Frigidaire Refrigerators provide compact food keeping

For replacement upgrading or new construction, you'll like the compactness of every model — from nines and elevens right up through the pace-setting Frost-Proof models. Dimensions that fit your needs — all the features that attract renters.



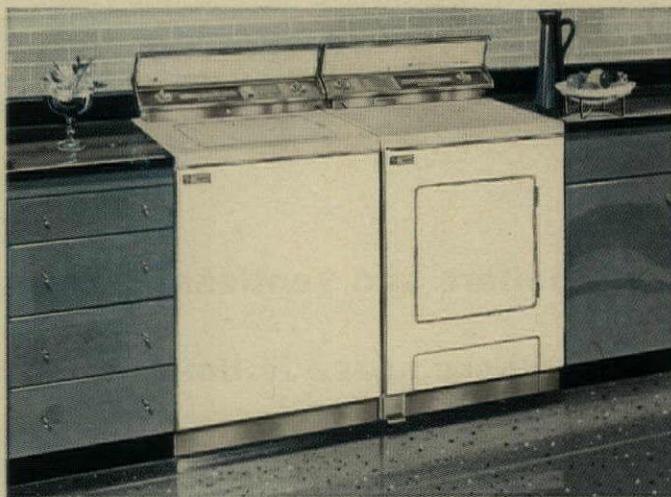
Model AI-100
(10,000 BTU/Hr.)

BECAUSE Frigidaire Room Air Conditioners provide cool, dry, quiet comfort

Fast cool-down capacity, filtered fresh air, high moisture removal, quiet operation. Quick, easy installation in windows or thru-the-wall.

Because renters want what you want!

Frigidaire quality means less trouble for renters, more economy for you. They want smart, efficient design; you want faster, more economical installation. And—when it's needed—Frigidaire factory-trained service is available everywhere. To add color to your kitchens, most Frigidaire Appliances come in Kitchen Rainbow Colors and White. All in all, Frigidaire offers unbeatable benefits to builder, owner, and tenants.



Washer WD-61, Dryer DD-61

BECAUSE Frigidaire Washers and Dryers provide "extra care" for clothes

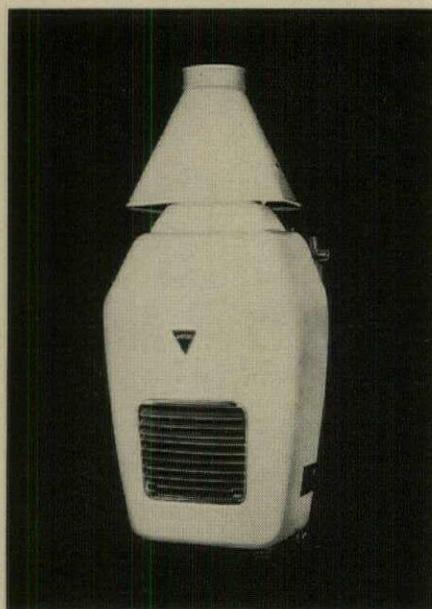
Exclusive "Somersault" Washing Action gets clothes extra clean without beating. Automatic Soak Cycle for diapers, heavily-soiled clothes. Dryer has "Wrinkles-Away" Cycle. Flush-to-wall installation, many models to choose from.

Frigidaire Appliances can be a BIG PLUS with your rental prospects. For full specifications, call your Frigidaire Representative, or write Frigidaire Division of General Motors, Dayton 1, Ohio



FRIGIDAIRE
PRODUCT OF GENERAL MOTORS

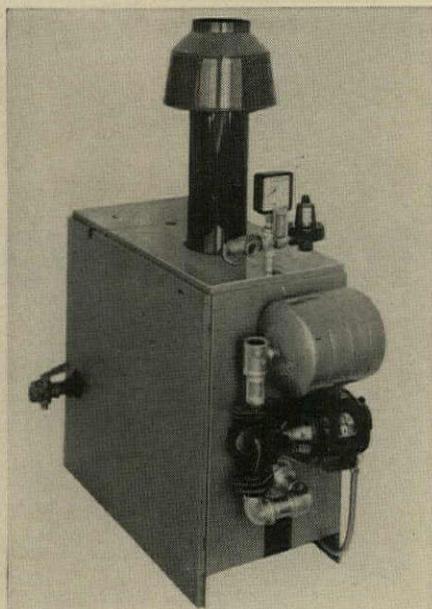
*Advanced Appliances
designed with you in mind*



Ascot, a major English boiler manufacturer, is now introducing this 120,000 Btuh boiler to the US. The compact Ascot 924 weighs less than 100 lb but will heat homes of 2,000 sq ft and over. Control package features a new Basotrol valve, which incorporates an automatic pilot, automatic main valve, and pressure regulator, and a Penn high limit control.

Ascot Gas Water Heaters, Milwaukee.

For details, check No. 26 on coupon, p 286



Hydrotherm P line is completely packaged, comes in 72,000 to 155,000 Btuh capacities. Cast-iron boilers include wired-in circulator, pressurized diaphragm expansion tank, and positive air elimination system that does away with air vents in baseboard or convectors. Honeywell power pile generates its own electricity to operate boiler controls so heater will act as a gravity if power fails.

Hydrotherm Inc, Northvale, N.J.

For details, check No. 27 on coupon, p 286

Federal boilers come in packaged or knockdown styles with optional jacket extensions. Units come in 105,000, 125,000, and 150,000 Btuh sizes. All have 2,300-gph tankless water heaters, silent circular burners with slow opening solenoid main valves, safety pilot, pressure regulator, etc.

Federal Boiler, Midland Park, N.J.

For details, check No. 30 on coupon, p 286

Roberts-Gordon Petite boilers have inputs of 50,000, 70,000, or 90,000 Btuh. Casing is only 13" wide, 28" deep, 25" to 36" high. Boiler sections are cast iron, jackets are baked enamel. Standard equipment includes all controls. Units can be installed in limited space, in individual apartments, for swimming pools, for snow removal.

Roberts-Gordon Appliances, Buffalo.

For details, check No. 31 on coupon, p 286

Peerless Heater's new MM series boiler is only 24" high, comes in 70,000 to 125,000 Btuh input. Units are designed for basementless houses and for individual service to apartments. Jacket is appliance styled in white baked enamel.

Peerless Heater, Boyerstown, Pa.

For details, check No. 32 on coupon, p 286

H. C. Little now makes Safti-Vent gas heaters for window or through-the-wall installation. Sealed burners get combustion air and vent exhaust gases directly outdoors. Units come in 8,000, 20,000, and 30,000 Btuh inputs. Cabinets project only 4½", telescopic vents adjust to any wall thickness.

H. C. Little Burner Co, San Rafael, Calif.

For details, check No. 33 on coupon, p 286

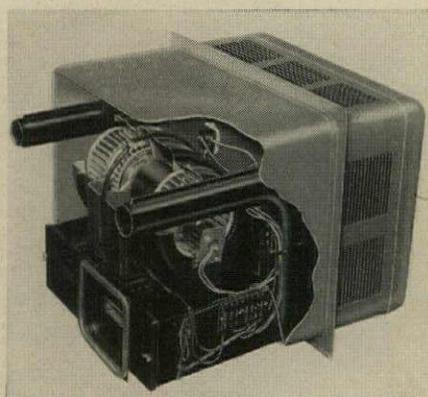
New gas boilers and ventless heaters can serve where space is limited



Coleman now offers a through-the-wall gas heater with a sealed combustion chamber. Two models give 22,000 and 30,000 Btuh from case 30"x26"x9". Unit fastens to studs 4¾" above floor. Outside air is used for combustion and exhaust vents directly to outdoors. Options include manual, automatic, or remote controls, two-speed blower, vent extension for thick walls, decorative insert panels.

Coleman Co, Wichita.

For details, check No. 28 on coupon, p 286



Suburban Novent installs like a room air conditioner. Small units fit between studs, extend only 8½" into the room. A double squirrel-cage blower circulates heated air on a thermostat control. A separate blower supplies power venting to fire box. The unit can be used to circulate air even when heat is not needed. Three models offer capacities of 20,000, 35,000, or 45,000 Btuh input.

Suburban Appliance, Morriston, N.J.

For details, check No. 29 on coupon, p 286

Suburban built-in gas wall heaters have new one-piece front in contemporary design. Combustion chambers are porcelain lined. New counterflow models blow warm air out at bottom to warm floors. Full line includes counterflow and gravity models in dual or single wall models in capacities of 18,000 to 60,000 Btuh. Counter flow models carry 20-year guarantee, gravity models ten-year guarantee.

Samuel Stamping & Enameling Co, Chattanooga.

For details, check No. 34 on coupon, p 286

Martin Duo-Vent wall heater takes in fresh air and vents exhaust through a single opening—inner pipe serves as exhaust, exterior casing as intake. Combustion chamber is ceramic lined, casing finish is porcelain enamel. Squirrel-cage blower circulation is directed by adjustable louvers. Duo-Vent comes in 25,000 35,000 Btuh sizes.

Martin Stamping & Stove Co, Huntsville, Ala.

For details, check No. 35 on coupon, p 286

New Products continued on p 230



1

Make a cylinder of Brixment mortar and a cylinder of 50-50 cement-and-lime mortar. Cure for 30 days. Then put $\frac{1}{4}$ " of water into a tray and place tray in a freezer.



2

Keep water in tray, and alternately freeze and thaw. After a number of cycles, you will be convinced that Brixment mortar is far more durable than cement-and-lime mortar.

BRIXMENT mortar is far more DURABLE!

Good mortar must be durable—must be able to withstand the alternate freezing and thawing to which it is subjected many times each winter.

Brixment mortar is durable. Its greater durability is due partly to the strength and soundness of Brixment mortar—partly to the fact that an air-entraining and water-repelling agent is completely intermixed into Brixment during manufacture. This helps prevent the mortar from becoming saturated, therefore protects it from the destructive action of freezing and thawing.

But greater durability is only *one* of the characteristics in mortar necessary to produce top-quality masonry at lowest cost. Several others are listed below—and *no other mortar combines ALL these characteristics to such a high degree as Brixment mortar.* It is this combination of advantages that makes Brixment superior to any mixture of portland cement and lime—and which also accounts for the fact that Brixment has been the leading masonry cement for over 40 years.

Louisville Cement Company, Louisville 2, Ky.

BRIXMENT MORTAR ALSO COMBINES THESE 8 OTHER ESSENTIAL CHARACTERISTICS



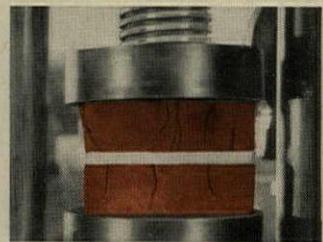
PLASTICITY



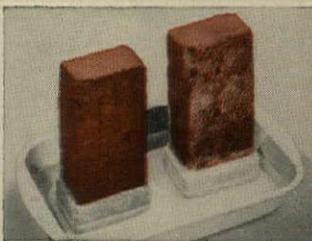
WATER RETENTION



BOND



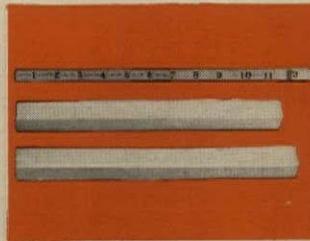
STRENGTH



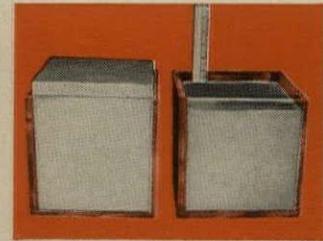
LOW EFFLORESCENCE



IMPERMEABILITY



SOUNDNESS



YIELD

newest addition to a complete line of
FIRST AND ONLY NO-FROST



GA-1400, No-Frost
gas refrigerator-freezer.



It's easier to sell RCA WHIRLPOOL equipped homes!

RCA WHIRLPOOL GAS appliances...

GAS REFRIGERATOR-FREEZER

Now! For the modern gas kitchen
...get everything with one
brand name at a package price!

1 No-Frost gas refrigerator-freezer

There's nothing else like it. *No frost build up in either refrigerator or freezer.* Slim, trim, squared-up design for flush fit and built-in look. New foam insulation permits thinner walls and doors; up to 35% more storage in the same floor space.

2 Built-in gas ovens and surface units

Gold Star approved for outstanding performance. Fixed orifices and automatic pressure regulators eliminate fussy adjustments and service callbacks. Oven has removable door for easy cleaning. The surface "Burner with a Brain" makes every utensil automatic.

3 Free-standing gas ranges

For automatic cooking at its best! Offering exclusive, radiant-heat Bar-B-Kewer[®] meat oven with rotisserie, built-in griddle, thermostatically-controlled top burner, automatic clock controls and removable doors for easy cleaning.

4 Super-Speed gas dryer

Shuts off at "dry enough". Pamper the clothes with Tempered-Heat. Simple to use and it's so fast... a full load dries in less than 27 minutes. Time and temperature are tailored to fit the fabric. All clothes come out fluffier and softer.

5 "Self-setting" gas washer-dryer

Washes and rinses wrinkle-free... dries wrinkle-free in one continuous operation. There's tailored washing for every fabric—with 5 push-button cycles, tailored drying with 3 separate cycles. Handles a giant 10-pound load.

Write to the Contract Sales Division, Whirlpool Corporation, St. Joseph, Michigan for complete details.

Your family will love our family of home appliances

RCA Whirlpool

Products of WHIRLPOOL CORPORATION St. Joseph, Michigan

Use of trademarks  and RCA authorized by trademark owner Radio Corporation of America



G1-178
built-in
gas oven.



G1-508
built-in
gas surface unit.



G1-369
free-standing
gas range.



HD-96
Super-Speed
gas dryer.



GC-55
"self-setting"
gas washer-dryer.



Here is new gas equipment for five jobs

1. Refrigeration



Whirlpool has introduced a gas refrigerator-freezer that meets top standards of modern food storage. The new unit combines air-blast cooling and automatic defrosting to get frost-free operation. A fan-cooled absorber boosts efficiency. A new foamed insulation gives more storage space in less bulk. This redesign of cooling mechanism has saved 46% in weight over old gas refrigerators.

Whirlpool Corp, St Joseph, Mich.

For details, check No. 36 on coupon, p 286

Norco has a new compact gas refrigerator for motels, game rooms, second kitchens, etc. Units come freestanding or built-in in 4 and 6 cu ft sizes. Cabinets are satin-finish aluminum with foamed plastic insulation. Absorption system works without noise or vibration.

Norco, Inc, Los Angeles.

For details, check No. 37 on coupon, p 286

2. Laundry



Hamilton gas dryers feature two air streams, for gentle and fast drying. A three-cycle rotary timer gives different drying cycles for normal, wash and wear, and wool drying. Automatic electric ignition or low Btu safety pilot are offered as options. Retail price range: \$260 to \$340.

Hamilton Mfg Co, Two Rivers, Wis.

For details, check No. 38 on coupon, p 286

Philco gas dryers are claimed to dry 25% more efficiently in machines over 3" smaller than previous models. Maximum temperature is 155F, air flow is 170 cfm. Capacity is full 10-lb (seven bedsheet) load. A new drive and new insulation cut noise to a minimum. Separate units have gas pilot ignition, combinations are electrically ignited.

Prices: \$210 to \$250.

Philco, Philadelphia.

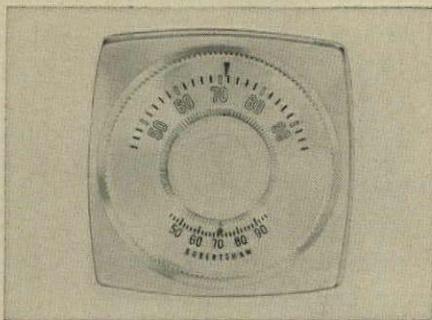
For details, check No. 39 on coupon, p 286

Whirlpool gas dryers have modulated heat to temper drying to the moisture content of clothes. Five pushbuttons control drying cycles. Clothes to be ironed can be dampened automatically by the push of a button or damp-dried by automatically recycling. Whirlpool claims loads of up to 20 lb can be dried at once. Prices: \$210 to \$370.

Whirlpool Corp, St Joseph, Mich.

For details, check No. 40 on coupon, p 286

3. Control



Grayson, a division of Robertshaw-Fulton, has a new wall thermostat series. New magnetic dust-free switch is sealed in glass, does not need leveling, resists vibration. Heat anticipator is available on all models. New unit is available at less cost as RT-100 without the sealed switch.

Grayson Controls, Long Beach, Calif.

For details, check No. 41 on coupon, p 286

General Controls is introducing new high-capacity water-heater controls. Built-in pressure regulators give full-range adjustment for main burner (pilot gas flow is unaffected). Rotary reset simplifies relighting. Gas cock is super-hardened to prevent freezing, galling, assure leakproof service.

General Controls, Glendale, Calif.

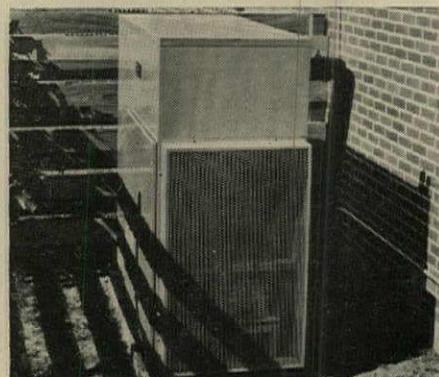
For details, check No. 42 on coupon, p 286

Controls Co has a new low-cost integrated gas valve for "any position" installation on heating equipment. Features include built-in pressure regulator, thermomagnetic safety pilot, full shut-off, electric or mechanical thermostat control. Capacity is 67,400 Btu/h for all heating gases.

Controls Co of America, Milwaukee.

For details, check No. 43 on coupon, p 286

4. Air conditioning



Arkla model 500C is a complete gas air conditioning system installed outside the house. The condensing unit and the evaporator are included in the same case with the heating sections. The unit circulates hot or chilled water to fan-coil air handlers, or baseboard, ceiling, or floor radiators, or ducted systems. Capacity: 42,000 Btu/h. Average cost: \$2,000.

Arkla Air Conditioning Corp, Evansville, Ind.

For details, check No. 44 on coupon, p 286

Bryant cooling unit is designed to add cooling to gas heating. Unit is installed outdoors to keep heat or noise out of the house. Water chilled by absorption method is circulated through plastic pipe to bonnet coils. System is factory-charged, only cooling water needs to be added. In natural gas areas costs favor gas cooling.

Bryant Mfg Co, Indianapolis.

For details, check No. 45 on coupon, p 286

5. Waste disposal



Bastian-Morley is offering a new smokeless, odorless incinerator (see also H&H, Mar '58). High input to primary and afterburner compartments assures complete burning of all waste. Appliance finish and insulation allow installation indoors. Capacity, one-bushel; price, about \$165; operation cost, 3¢ to 4¢ a day.

Bastian-Morley Co, La Porte, Ind.

For details, check No. 46 on coupon, p 286

new
for your homes!



Seadrift

"personality paneling"
by Masonite

Put lively new attraction and quality into your homes with Seadrift "Personality Paneling." Its deep textured and grooved surface imparts all the richness of weathered wood and can be finished in delightful colors or two-tone effects to express any personality. Use Seadrift for a rustic theme, a tropical atmosphere, an "outdoors" motif. Finishing couldn't be easier: Seadrift comes with a factory-applied prime coat to make painting and staining fast and permanent.

In 4' by 8' size panels, Seadrift is made of genuine Masonite hardboard...the only hardboard manufactured by the exclusive wood chip explosion process. It won't split, splinter or check; goes up quickly and easily with joints and nails hidden in the grooves. Ideal for family rooms, as an accent wall in living room, bedroom or den. And Seadrift makes an exciting innovation in commercial structures, too. Architects and designers are specifying Seadrift for reception areas, offices, conference rooms, halls, schools and stores.

See Seadrift—and see the personality it can put to work for you. At your local lumber dealer's or call your Masonite representative. Or, write Masonite Corporation, Dept. HH-10, Box 777, Chicago 90, Ill.



MASONITE 
CORPORATION

Masonite Corporation—manufacturer of quality panel products for building and industry. Masonite and Seadrift are registered trade-marks of Masonite Corporation.

New! another First

World's First Combination Gas Heating/Electric Cooling in One Compact Unit that Fits a 3' x 3' Closet!

*Especially created to solve your heating-cooling problems
for apartments, motels, dormitories, nursing homes,
medical centers, small commercial jobs*

Never before so *much* in so little space—40,800 Btuh heating output (all gases)—22,000 Btuh cooling at ARI standard—all from a compact unit measuring only 89" high and taking only 3' x 3' of floor space. Truly a remarkable achievement—a new climax in 65 years of Lennox engineering leadership!

Matching the compactness of this revolutionary new "package" is its unequalled adaptability. Not only is it ideally suited for installation in a 3' x 3' utility closet with exterior wall but, also, it is equally suitable for air-shaft or remote applications. It is so compact, it may be installed when building is in finishing stage.

For full information or the name of your Lennox Technical Representative—address: Lennox Industries Inc., 424 South 12th Avenue, Marshalltown, Iowa.

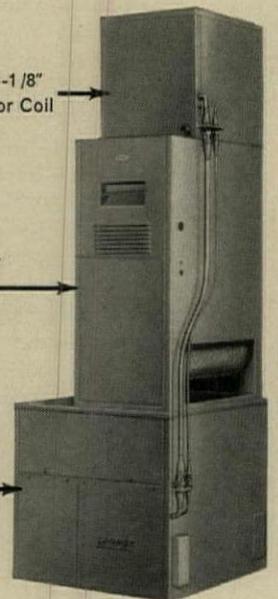
Refrigerant Quick Connectors

No welding! No screwed joints! No adapters! Only one mechanical joint! Pre-charged refrigerant lines with U.L. listed self-sealing "quick couplers" permit safe storage and greatly simplify the field installation of the factory-charged condenser and evaporator units and their connecting tubing.

Only 20" x 18-1/8" x 21-1/8"
Plenum and Evaporator Coil

Only 41" x 18" x 28"
Heat Exchanger
Blower, Filter

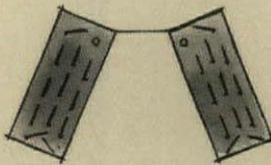
Only 28" x 30" x 30"
Condenser Unit



from Lennox

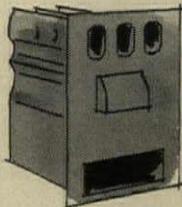
40,800 Btuh heating output —

22,000 Btuh cooling at ARI standards — from a unit only 89" high



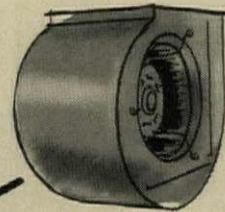
EVAPORATOR COIL

More than 1 sq. ft. net face area per ton of rated capacity. Low resistance to air travel reduces blower power requirements. High dehumidifying capacity.



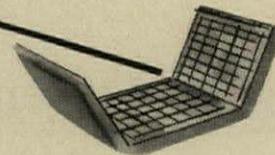
HEAT EXCHANGER

Heavy gauge steel, continuous welded construction. Three aluminized steel, ribbon-type gas burners easily removable for cleaning. Factory-installed back draft diverter.



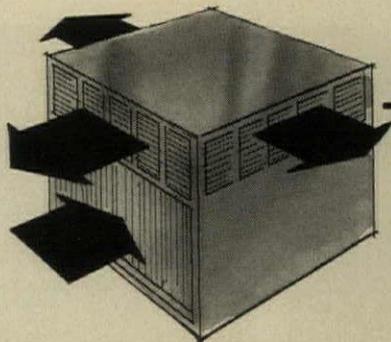
BLOWER

Direct drive; delivers ample cooling air quietly, economically. Blower and resiliently mounted motor operate at low rpm, deliver constant air volume against normal, varying static pressures.



FILTER

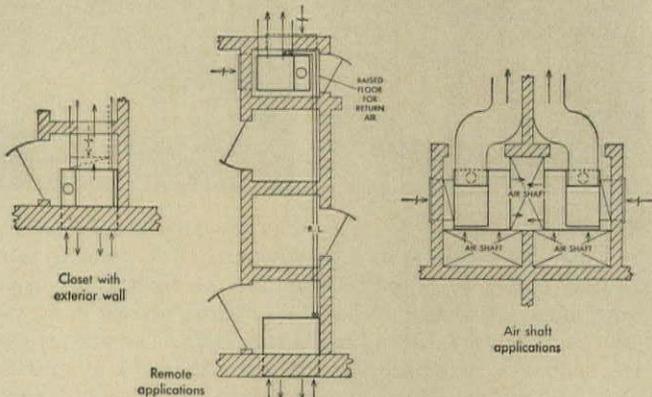
Another Lennox "exclusive"—has TWICE the usual filtering area: 74 sq. in. per 100 cfm of delivered air. Throw-away type filter media, 1" thick, easily accessible for changing.



THE MOST INSTALLABLE PACKAGE EVER ENGINEERED

Condenser air may be discharged from coil side of unit or from right- or left-hand side—furnace section may be rotated 180°—permitting terrifically wide range of applications.

MAY BE INSTALLED 'MOST ANYWHERE!



WRITE TODAY FOR INFORMATION OR NAME OF YOUR LENNOX TECHNICAL REPRESENTATIVE.

**Lennox Industries Inc.
354 S. 12th Ave., Marshalltown, Iowa**

**WORLD LEADER IN INDOOR COMFORT
FOR HOMES, BUSINESS, SCHOOLS, INDUSTRY**

LENNOX

© 1960 Lennox Industries Inc., founded 1895; Marshalltown and Des Moines, Iowa; Syracuse, N.Y.; Columbus, O.; Decatur, Ga.; Ft. Worth; Los Angeles; Salt Lake City. In Canada: Toronto, Montreal, Calgary, Vancouver, Winnipeg.



Choose from Walnut,
Cherry, Hard Maple,
Oak (Natural or Brown)

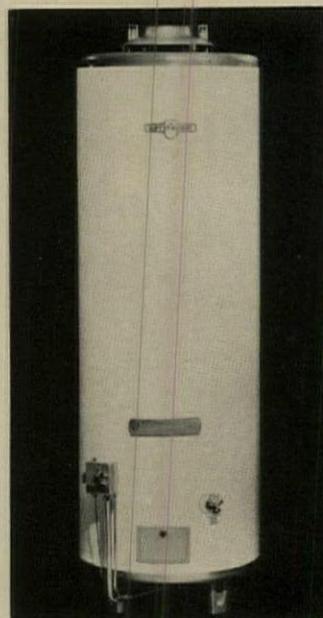
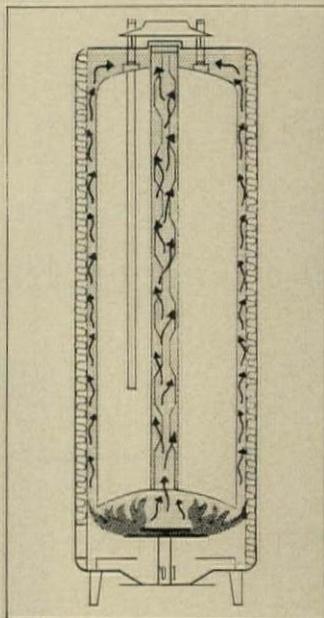


Elise Apartments — Washington, D. C.

New products



start on p 218

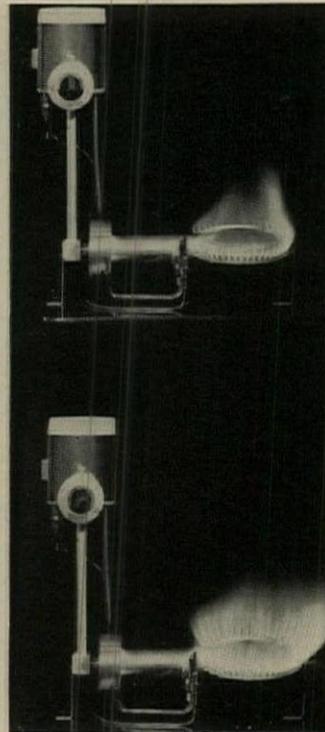
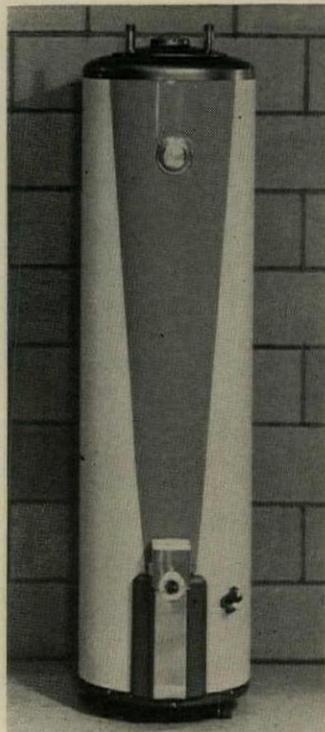


Hotstream J-40 is a nominal 40-gallon water heater with the recovery capacity to raise 63 gph 100F. Yet the unit is only 64" high, 20" in diameter. Combined internal-external flue increases heating area 460% over internal-flue-only types, 13% over external-flue-only types. Design also prevents build up and stacking of too-hot water at top of tank. Also new in this model: low contour draft hood, combination thermostat, and automatic safety pilot.

Hotstream Heater Co., Cleveland.

For details, check No. 47 on coupon, p 286

New water heaters have quick recovery



Rheem 30-plus unit can deliver hot water at a 30-gallon to 50-gallon rate to meet changing household needs or to satisfy a wide inventory with a single model. Instead of heating water hotter, Rheem unit has a new Robertshaw-Fulton regulator that allows burner to be set for faster or slower recovery. Heat input is controlled by a thermostat in the unit base or by a remote wall unit. The 30-plus comes in glass-lined or copper models to meet all water conditions.

Rheem Mfg Co., Chicago.

For details, check No. 48 on coupon, p 286

New Products continued on p 238

Why Apartments Use

Wood-Mosaic

Wood-Mosaic Hardwood Block has solved the flooring problems in apartments like The Elise.

Hardwood

LOW COST LUXURY

Block Floors

Wood-Mosaic Hardwood Block floors provide the richness and warmth that only natural woods can give.

LONG LIFE — TOUGH, DURABLE FINISH

The exclusive Wood-Mosaic finishing process protects floors from stains . . . preserves their beauty year after year . . . provides easy maintenance.

FAST, CLEAN INSTALLATION

Wood-Mosaic Hardwood blocks are pre-finished for ready installation with mastic over concrete, wood or asphalt tile . . . are ideally suited for both new construction and remodeling.

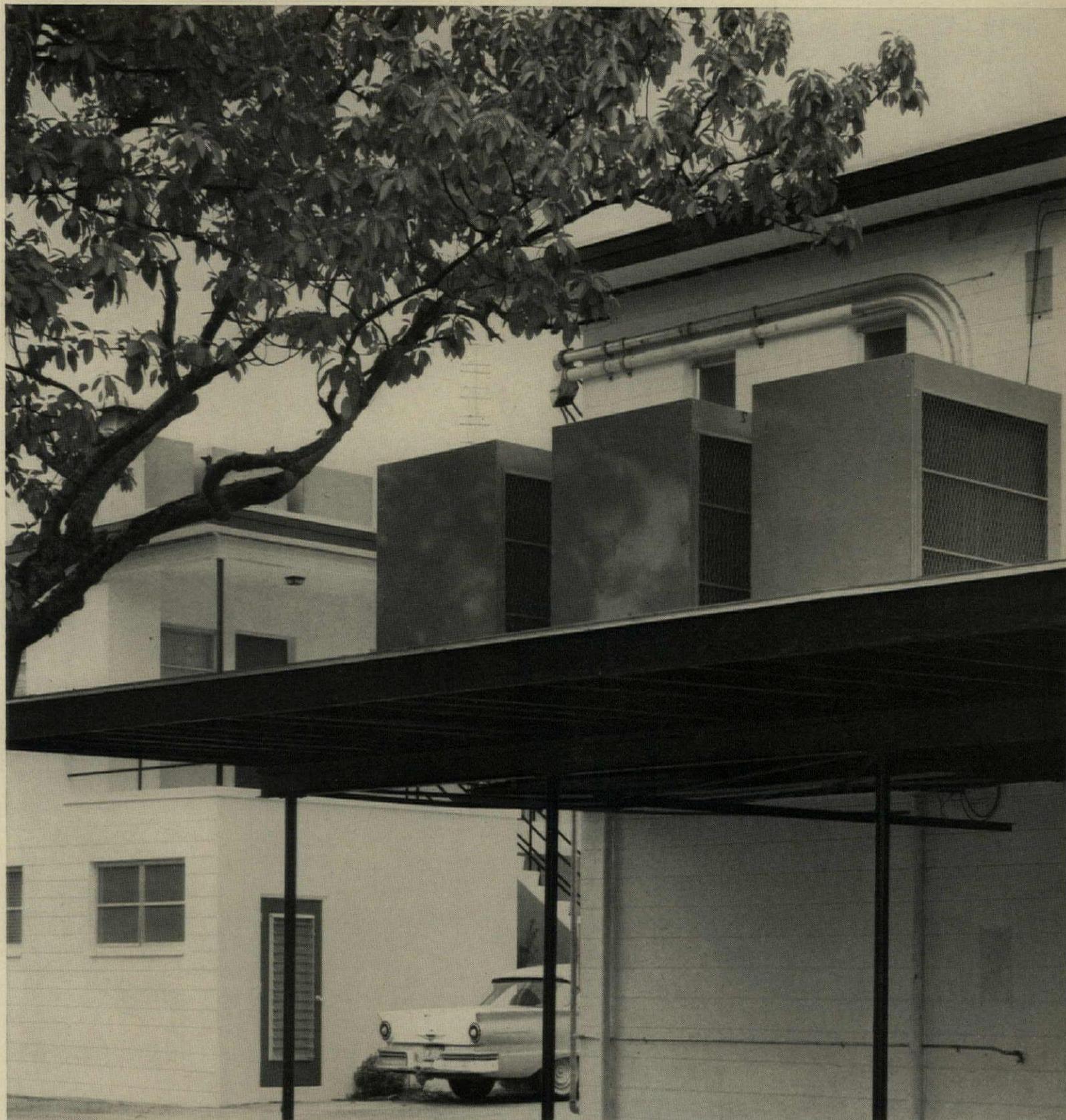
Write for all the facts to: Wood-Mosaic Corporation, Dept. HH8, Louisville 9, Ky. In Canada: Woodstock, Ontario.

Wood-Mosaic

BLOCK FLOORS



Architects Refer to
Sweet's Catalog 13JWO

bryant**GAS AIR CONDITIONING FOR APARTMENTS**

Empress Apartments, St. Petersburg, Fla. Old wing in foreground; new wing at left.

SOLVED: COMFORT COOLING FOR OLD WING... NEW WING

Neatly tucked away on top of the carport, three Bryant 3-ton Gas Air Conditioning units comfort-cool with chilled water the old wing of the Empress Apartments...four 2-bedroom, two 1-bedroom and four efficiency apartments in all. Up through the tree you see three Bryant 4½-ton units on the roof of the brand new wing comfort-cooling one single bedroom apartment, ten efficiency apartments, and fourteen motel rooms.

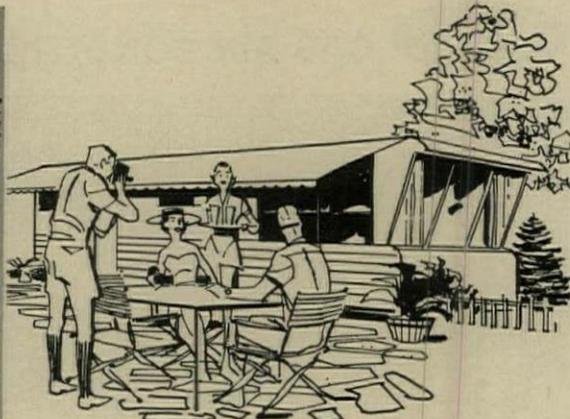
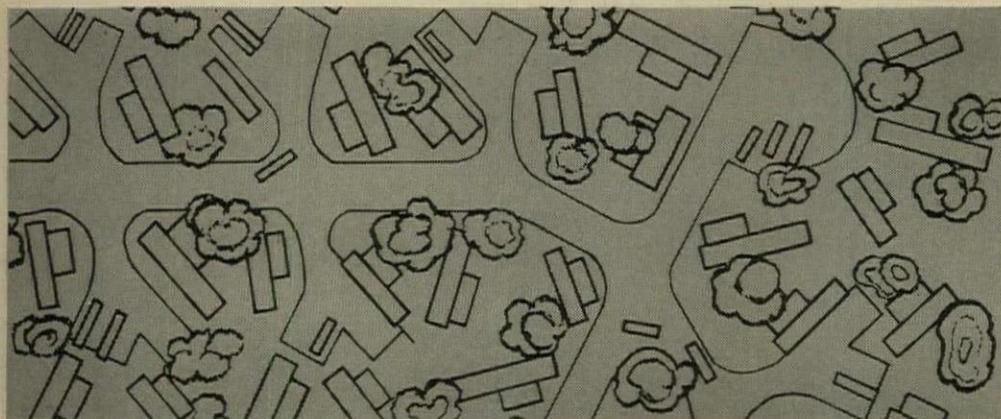
In winter, hot water heating is provided by the same convectors.

In this installation quietness was essential—and a

gas flame is quiet. Maintenance had to be nil or nearly so—there's nothing about a gas flame to wear out, no cooling tower, no condensing water. Actually, Bryant gas units maintain their original efficiency unimpaired by years of service. And no heavy duty wiring is required.

On your next apartment project, take advantage of all that we have to offer you in advanced product and technical assistance. Look us up in the yellow pages or write. Bryant Manufacturing Co., Indianapolis, Indiana • Bryant Manufacturing Ltd., Toronto, Ontario.

bryant**GAS AIR CONDITIONERS**



FOR PROFESSIONAL AND STUDENT LANDSCAPE ARCHITECTS...

Announcing Competitions in Creative Planning for New Mobile Home Park Designs

PROFESSIONAL CATEGORY:

- First prize— \$4,000**
plus a consultant contract opportunity if your design is used.
- Second prize— \$2,000**
- Third prize— \$1,000**

STUDENT COMPETITION:

- First prize— \$1,000**
- Second prize— \$500**
- Third prize— \$250**
- 3 Fourth prizes— \$100
- Six honorable mentions— \$50

This competition seeks an entirely new concept in community design . . . that will provide more desirable living in mobile home areas and attractively integrate mobile home parks into existing communities.

This is an industry that increasingly recognizes the importance of aesthetic values in community planning, the need for the professional guidance of landscape architects. And this is a growing field. Today 1 out of every 9 new housing starts is a mobile home. At least 5000 new parks are needed right now.

The competition is endorsed by American Society of Landscape Architects and will be judged by Vernon DeMars, Professor & Chairman of the Department of Architecture, University of California, Berkeley, Firm

of DeMars & Reay; Eugene R. Martini, Member of ASLA—Pres. of Southeastern Chapter ASLA, Firm of Martini & Assoc. Inc. Atlanta; George F. Miles, Treas. Vagabond Coach, New Hudson, Michigan, Founding Member Mobile Home Research Foundation; *Hideo Sasaki, Professor & Chairman of Dept. of Landscape Architecture, Harvard Graduate School of Design, Firm of Sasaki, Walker & Assoc. Inc., ASLA Member; Stanley Hart White, Professor emeritus Univ. of Illinois, College of Fine Arts, Department of Landscape Architecture.

*Mr. Sasaki will serve on the jury for the professional competition only.

Student competition is open to students in landscape architecture, architecture and city planning.

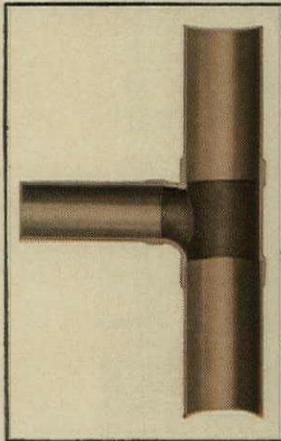
For application forms send to Mr. John L. Bloom, Professional Advisor, Mobile Home Park Competition, 20 N. Wacker Drive, Room 656, Chicago 6, Illinois. Reference material and topography will then be forwarded. All registrations must be completed by Dec. 31, 1960.

Sponsored jointly by

Mobile Homes Research Foundation and Rogers Industries of Detroit



Unretouched photo of 3" dia. copper tube removed after 13 years' service in a soil line.



Anaconda drainage fittings are designed to match Anaconda tube for fast, easy solder connections.

WASTES FLOW FREELY IN COPPER DRAINAGE SYSTEMS AND YOU SAVE MONEY. Compare the condition on the inside of this copper tube with what you might expect to find in ordinary piping after 13 years in service. Rust-caused troubles such as reduced flow or stoppages do not occur inside copper drainage lines. That is why many plumbing codes allow the use of 3" diameter copper tube for soil line and vent. Material costs are reduced and, because a 3" copper tube stack with fittings fits inside a standard 4" partition, the need for expensive, space-consuming plumbing walls is eliminated. Save time, effort, and money—install the modern drainage system with Anaconda copper tube and fittings. For information, write: Anaconda American Brass Co., Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ont.

6001L

ANACONDA[®]

COPPER TUBE AND FITTINGS for soil, waste and vent lines

Available through plumbing wholesalers. Anaconda American Brass Company



Longer Lengths—Fewer Joints



Preassembly—Saves Time



Lightweight Copper—Easier Installation



Compact Connections—Save Space





TERMIBAR SHEET is unrolled over a gravel base before slab is poured. Sealed 2" or unsealed 6" lap is required.

New termite barrier gets FHA acceptance

Bird & Sons' new Termibar offers three-way protection against termite infestation and moisture damage:

1. An asphalted felt and polyethylene vapor barrier impregnated with dieldrin prevents invasion through slab, crawl space, or basement, is used as a shield over foundation walls. Sheet

comes in 550-sq-ft rolls, 6' wide, 90' long.

2. Termibar liquid poured in soil around house and in block-wall voids bars access up foundation. Liquid contains 4 lb of aldrin per gallon, is diluted with water 95 parts to one and used at a 2-gal-per-lin-ft rate.

3. Termibar caulk, an asphalt-dieldrin

compound, is laid down around pipes, structural members, and other openings in the foundation. Caulk comes in standard cartridges.

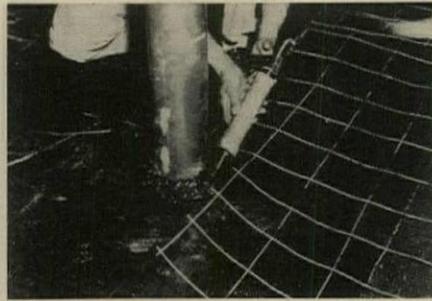
System is covered by FHA Materials Release 246a, five-year guaranty.

Bird & Sons, Waltham, Mass.

For details, check No. 49 on coupon, p 286



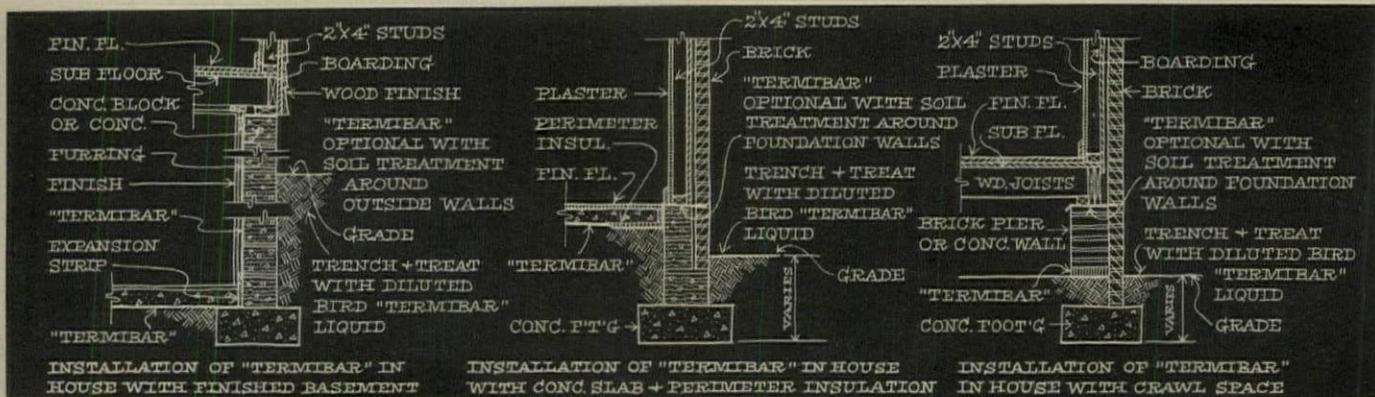
TERMIBAR LIQUID is poured into soil areas that are not covered by vapor barrier.



TERMIBAR CAULK seals space between barrier and all pipes, posts, or openings.



BEFORE POUR, vapor barrier and wire mesh will support weight of transit-mix truck.

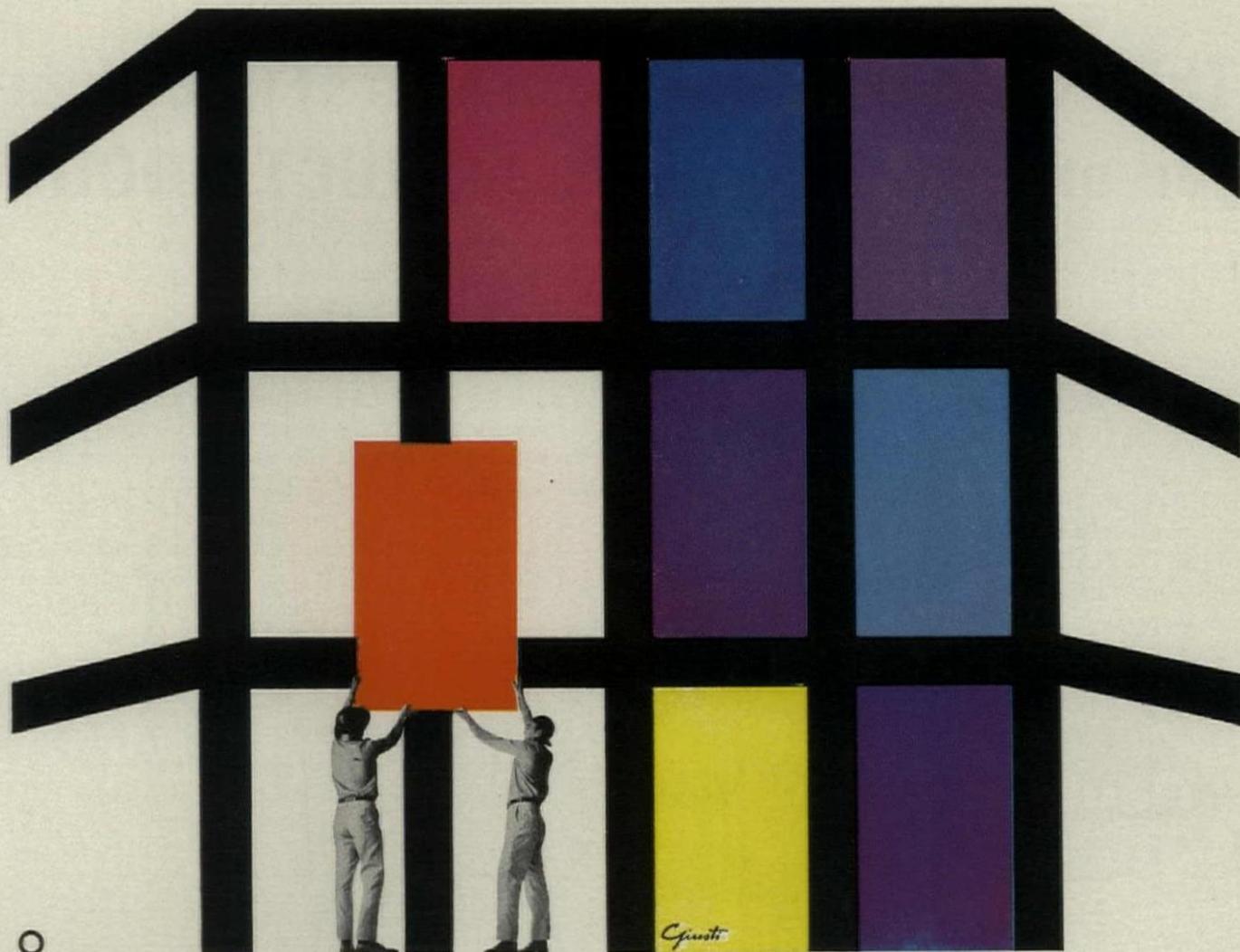


TYPICAL USES show how three Termibar elements are used to seal off wooden parts of house from moist or infested ground.

Cover your investment with colorful **Olin Aluminum**

Building? For apartment house curtain wall treatments that spark a quick sale, check out the myriad designs, textures, finishes and long-range cost-cutting characteristics of products made with Olin Aluminum. **Buying?** The dazzling design departures you get with aluminum are sure-fire lures for beauty-conscious tenants... while upkeep is low because aluminum building products have proved themselves over the years as minimum-maintenance materials for both interior and exterior applications—and today's aluminum products are better than ever. **Backing?** When you finance apartment house construction, suggest to architects and contractors that they contact Olin Aluminum. We and our customers, who produce finished building products from our special alloys, will help them realize aluminum's potentialities to the hilt... from concept to construction.

OLIN There's valuable information for builders, buyers and backers in our free, comprehensive **ALUMINUM** booklet, "Aluminum for Architecture." Just write.

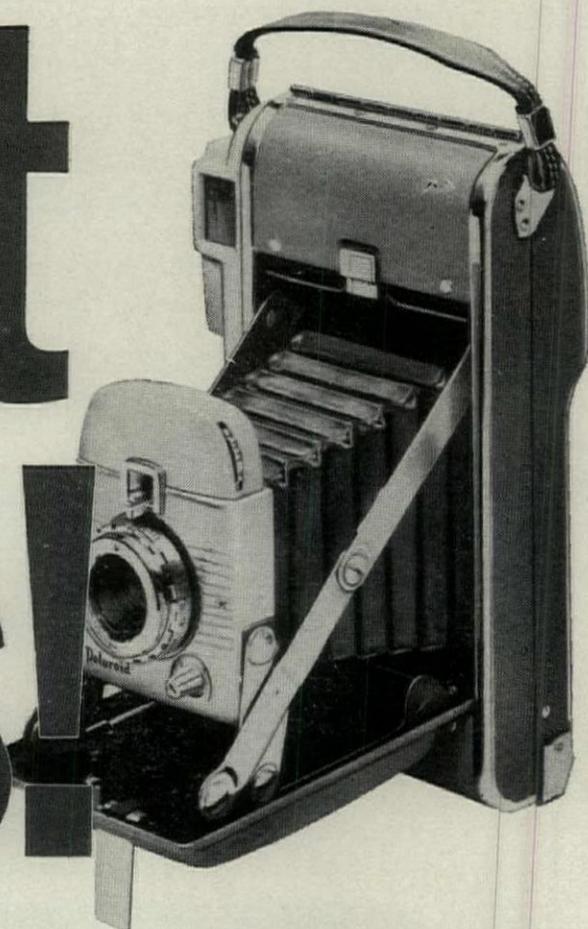


MO

OLIN MATHIESON • METALS DIVISION • 400 PARK AVENUE, NEW YORK 22, NEW YORK

Cjuroti

Great News!



This Polaroid Land Camera—yours FREE when you order 6 NAUTILUS NO-DUCT HOODS

Builders and kitchen specialists, here you are—a versatile Polaroid Land Camera to use right on the job! Snap before and after installations . . . you'll get finished photos to aid your selling efforts in just 60 seconds!

To get your *free* \$76.85 Polaroid Camera (80 B) just order 6 NAUTILUS DeLuxe NO-DUCT HOODS (P Model). You'll find it's easy to sell this nationally advertised hood that's known everywhere. The NAUTILUS sells best because it works best . . . saves time, trouble and

money for you because it goes up in minutes!

\$142 Polaroid Model 800 Presentation Set Free with order of 12 NAUTILUS HOODS!

Quality leader in the Polaroid line, guaranteed for 10 years. Beautifully packaged, complete with Wink-Light for perfect indoor photos without flash-bulbs, and a 4-S Filter. Takes big, 3¼" x 4¼" prints.

Cash in on the big NAUTILUS market in your town—and get your *free* Polaroid camera. Place your order for NAUTILUS DeLuxe (P Model) NO-DUCT HOODS today!



*Patent Pending

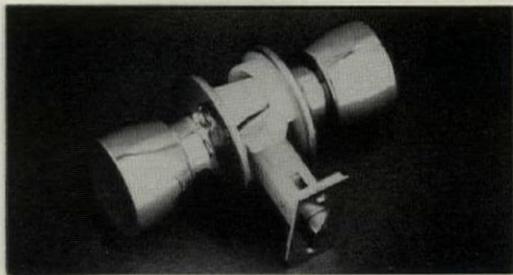


MAJOR INDUSTRIES, INC.

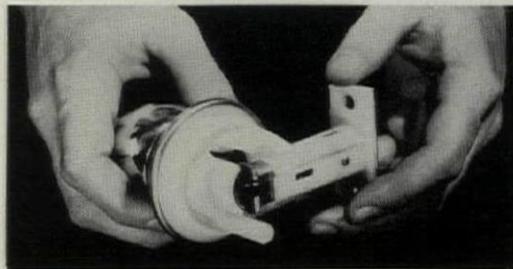
505 N. LaSalle St., Chicago 10, Ill.

YES! I want in on your Polaroid Camera offer. Please send me all the details. I'm interested in 6-Hood order 12-Hood order

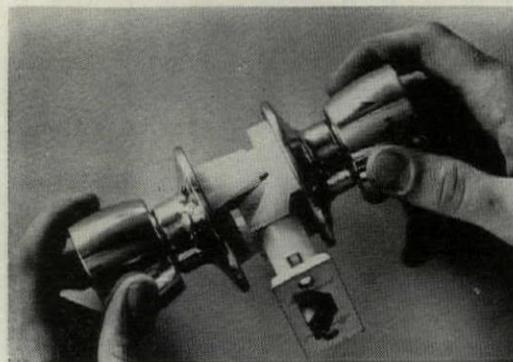
Name _____
 Firm _____
 Address _____
 City _____ Zone _____ State _____



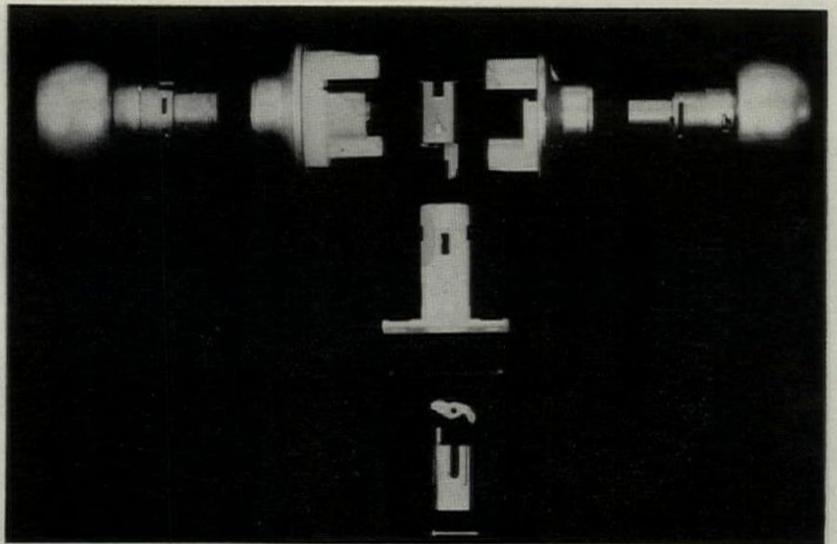
ROSE AND KNOB are brass, bronze, or chrome.



LATCH CASE aligns self when assembled.



CHASSIS SLEEVES match round and square grooves.



EXPLODED VIEW shows nylon parts in new Rocket lock mechanism.

New lock has nylon works

The widest use yet of nylon lock parts is shown by Lockwood Hardware in its new Rocket series residential locksets. Latch shoe case, cam, and bolt (everything in fact but the spring and pin) are molded of DuPont Zytel resin. Because nylon is resilient and has a low friction coefficient, no oiling is needed, lock parts absorb severe impact loads, and lock is expected to outwear metal locks several times. Nylon is also rust and electrolysis free. Installation is claimed to be simplified: Misassembly is said to be impossible (round and square sleeves mate with round and square grooves). Latch case is self-aligning, lets installer swivel latch to compensate for bevel-edge doors or improper boring.

Lockwood Hardware Mfg Co, Fitchburg, Mass.

For details, check No. 50 on coupon, p 286

continued on p 246

Launched with great new advertising and merchandising in: **GOOD HOUSEKEEPING, AMERICAN HOME, SUNSET** and **BETTER HOMES AND GARDENS** to presell your heating prospects!

You can afford the timeless beauty and reliability of the new **ROBERTSHAW** *élégante* WALL THERMOSTAT



... Simply ask your builder or heating contractor!



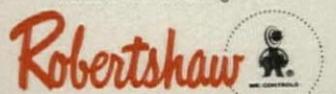
Beautiful, reliable **UNITROL** water heater controls



Space and central heating controls

Styled slim...clings to wall large, easy-to-read dial

New magnetic switch—sealed in glass—provides trouble-free operation, needs no leveling—



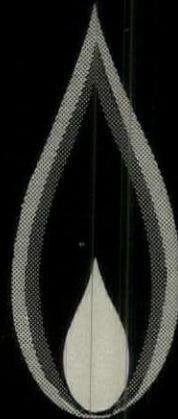
GRAYSON CONTROLS DIVISION Long Beach 5, California

The overwhelming leader in the combination washer-dryer field

ANNOUNCES THE ALL NEW 1961

PHILCO® *Bendix*

HI-SPEED GAS



DUOMATIC®

Washer-Dryer Combination



Washes better than a washer!

Easily handles any load, safely washes every fabric—cleaner, lint-free, sand-free. Washes a heavy 5' x 7' shag rug, never cuts off because of off-balance loads. 2 cycles . . . 3 rinses (2 more than most washers) . . . automatic sand ejection . . . exclusive Automatic Soak Cycle—a must for diapers!

Outfeatures any dryer!

Gas drying is faster . . . most automatic ever! Exclusive Philco Moisture Measure lets you "dial any dryness"—shuts the Duomatic off and delivers clothes fold-dry for immediate storing, damp-dry for ironing without sprinkling. 3300 RPM air impeller for the fastest gas drying ever!

Outperforms every other combination!

Only the Duomatic, of all Washer-Dryer Combinations, gives you true high-speed spin (560 RPM) for safe, thorough water removal after washing and rinsing—assures cleanest washing, faster, more uniform and most economical drying. Washes and dries average family load (2 sheets included!) in approximately 50 minutes . . . even less on those "hurry-up" loads!

NEW! AUTOMATIC DELAYED BLEACH AND FABRIC SOFTENER DISPENSING!



Measures, dilutes and adds both . . . at just the right time!



Stores up to 3 weeks' supply of liquid bleach and fabric softener in built-in separate reservoirs!

New Philco-

BUILT-IN DESIGN GAS DUOMATIC



A complete home-laundry that fits with kitchen cabinets in the floor space of a washer alone—only 26¾" wide, 26¼" deep, 36" high! Front service access (like all Duo's!)

"Only Philco has it!"

FOR THE MOST ADVANCED FEATURES IN HOME LAUNDRY YOU NEED

PHILCO®

The new wood formed board

Duraflake

helps you build
better... faster...
at lower cost!



provides greater
internal strength and a
smoother, flawless surface.

Duraflake is an ideal building material for floor underlayment, partitions, single-wall construction, cabinets and counter tops. Duraflake will not telegraph or indent when properly installed. It is easy to work and has excellent cutting, drilling, routing and nail holding qualities. Duraflake is a stronger board because of its ingenious formation. You'll find there are dozens of practical, economical uses for this superior board.

Mail coupon today for Duraflake sample and information on specific application: ▶

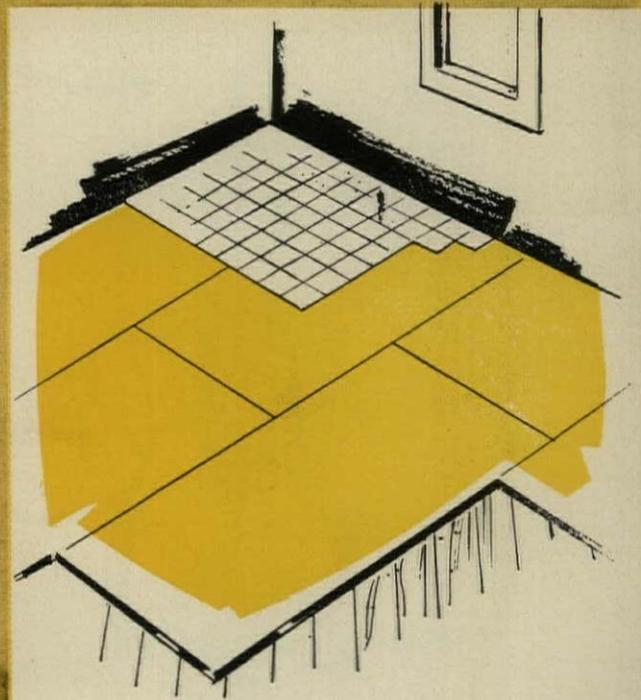
Wood Fibreboard Company

P. O. Box 245 • Albany, Oregon
Telephone WAbash 8-3341 • TWX Alby 696



For counters and cabinets

For underlayment



These are Duraflake's Superior Features:

- Fine surface eliminates telegraphing.
- Excellent screw holding properties.
- Strong internal bond.
- Maximum dimensional stability.
- Tight core for outstanding edge and face cutting.
- Machinability.
- Superior modulus of rupture.
- Uniform density.
- 5' x 16' press for great latitude.
- Teco quality control.

Wood Fibreboard Co.
P. O. Box 245
Albany, Oregon

HH-2

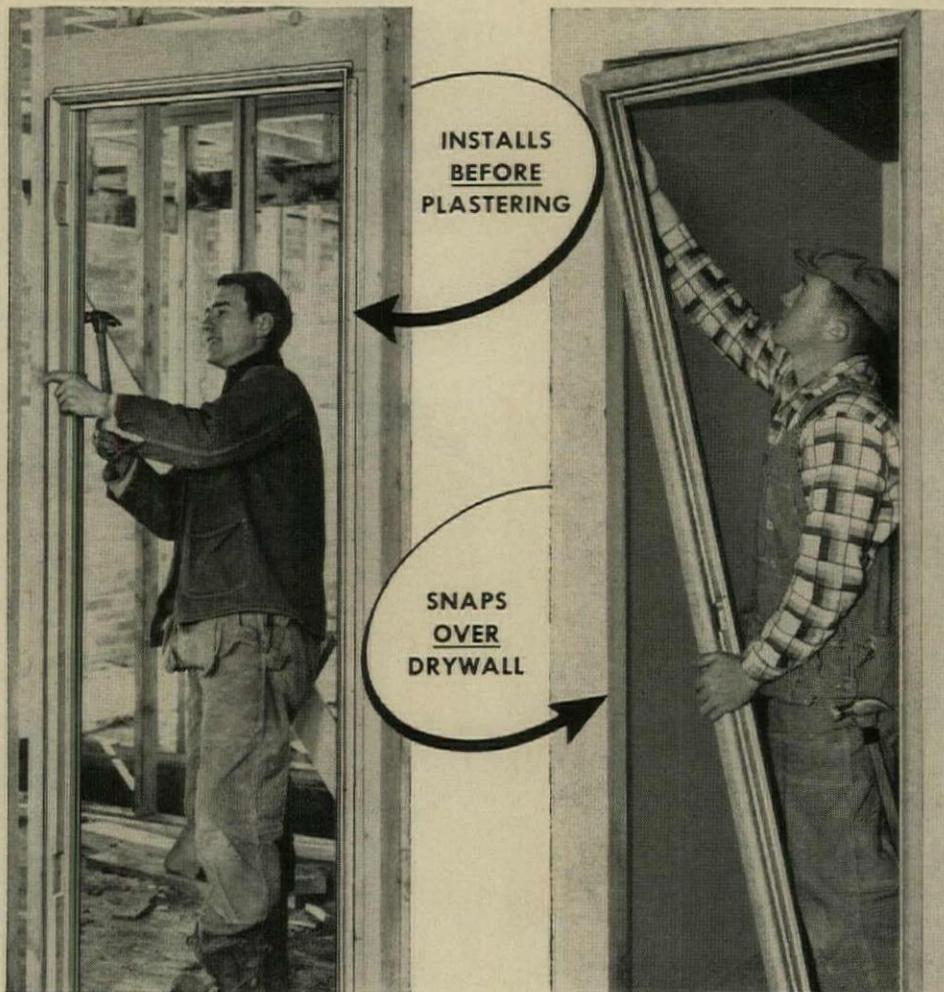
Please send me a sample of Duraflake and specific information on its use in _____

Name _____

Street _____

City _____ Zone _____ State _____

KEWANEE'S FAST INSTALLATION STEEL DOOR FRAMES WILL SAVE YOU LABOR TIME (*Money*)



KEWANEE
PLASTERITE

Quick 3-piece installation. Nail holes on flanges of frame spaced 7 inches apart—provide secure anchorage. Galvanized finish protects metal frame from wet plaster. Full range of sizes to fit standard 1 3/4" and 1 3/4" doors, over 2 x 3" or 2 x 4" studs. Swing, sliding and folding doors . . . cased openings.

(Made under U.S. Pat. Nos. 2,660,272; 2,835,933 and Canadian Pat. No. 563,915.)

Both Kewanee steel door frames feature low "first" costs and a trim, modern appearance. Easily adapted to pre-fit doors—available for use in low-cost, pre-hung units. Shipped mortised and punched, and with mitered corners . . . ready for fast installation. Handy packaging—complete frame packed in individual carton to protect against damage in transit or at job site. Clearly marked with size and installation details. See your dealer or . . .

WRITE FOR STEEL DOOR FRAME LITERATURE

kewanee *Manufacturing Co.*

1060 FULLER AVENUE

• KEWANEE, ILLINOIS

KEWANEE
UNIVERSAL "KWIK-FIT"

For Swing, Sliding and Folding Doors. Jamb, stop and trim formed into a complete steel frame. Fits snugly over drywall. Nail only at baseboard position. Shipped prime coated with oven baked-on enamel, ready for finish painting. Sizes for 3/4", 1/2", 5/8" and 3/4" laminated drywall . . . standard interior door dimensions.

UNIVERSAL
"KWIK-FIT"
Contour edges . . .
looks like ranch
trim



PLASTERITE
Note simplicity
of line



ALSO NEW

**KEWANEE
MASONRY
DOOR FRAMES**

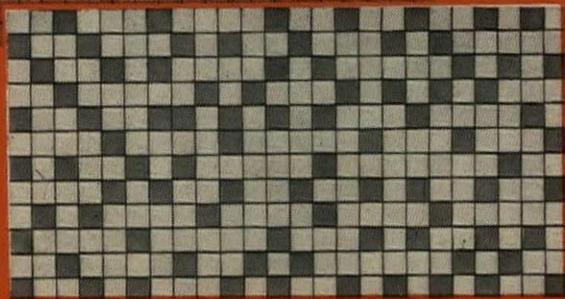
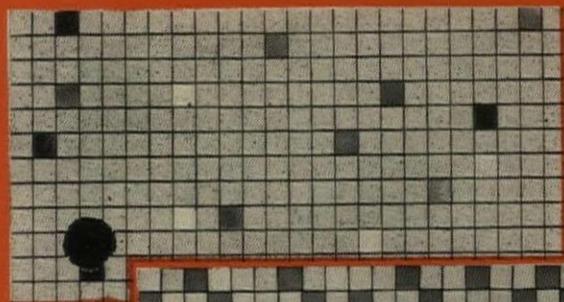
All welded unit frame
(Write for details)

V
I
C
O

Buckshot Ceramic Tile



BUCKSHOT SPATTER PATTERNS



BUCKSHOT BLENDS

A DISTINCTIVELY COLOR-KEYED TILE

For Walls, Floors . . . Interiors and Exteriors

In An Unusual Selection Of **BUCKSHOT SPATTER PATTERNS** And New **BUCKSHOT BLENDS**

Here is an outstandingly different, cushion-edged tile in Modern Decorator Patterns suitable for any installation, any decor . . . and can be Mixed or Matched as preferred. Use **VICO BUCKSHOT** anywhere a high-quality, easy-to-install, durable, and popular-priced Tile is required. We recommend its use in Kitchens, Back Splashes, Recreation Rooms, Living Rooms, Dining Rooms, Entrance Areas, Bathrooms, etc. . . . wherever originality in design, color and expression is desired.

VICO BUCKSHOTS are available in 2 ft. by 1 ft. square sheets of 1 inch tiles . . . all cushion-edged and paper-backed. Trims are also stocked.



Awarded The Seal Of Approval Issued By The American Standards Testing Bureau

AMSTERDAM

VICO is a Reg. Trade Mark of the Amsterdam Corp.

CORPORATION

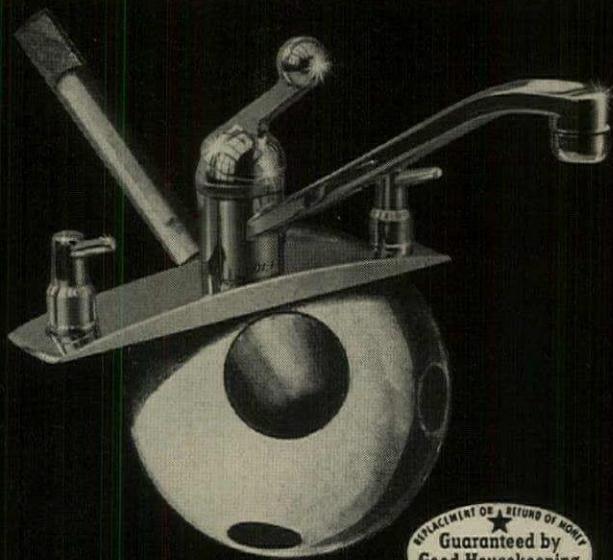
Contact your local Distributor for Samples, Prices, Color Literature and further information, or write direct to:

285 Madison Avenue • New York 17, N. Y.

*Special Note!
order DELTA faucets
on all future jobs...
they're the greatest!
Priced right too!*

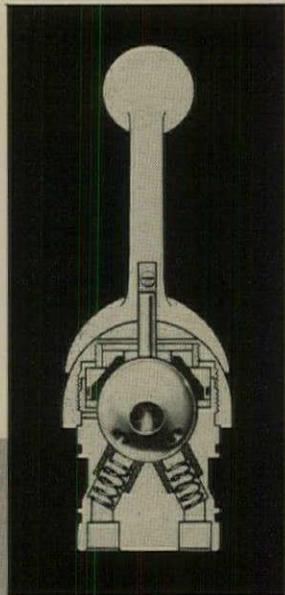
Delta

SINGLE-HANDLE BALL FAUCETS . . .



REPLACEMENT OR A REFUND OF MONEY
★
Guaranteed by
Good Housekeeping
IF NOT AS ADVERTISED THEREON

*the faucet that's "on the ball"
and the ball is the*



**ONLY
ONE
MOVING
PART...**

Here shown is a cut-a-way of the heart of the Delta Faucet. Note the expert simplicity in design excellence. Having only one moving part (the BALL) it is readily understandable WHY the DELTA FAUCET is considered the FINEST.

Delta
FAUCET
CORPORATION
GREENSBURG, INDIANA

In Canada: EMCO LIMITED

Literature available upon request.

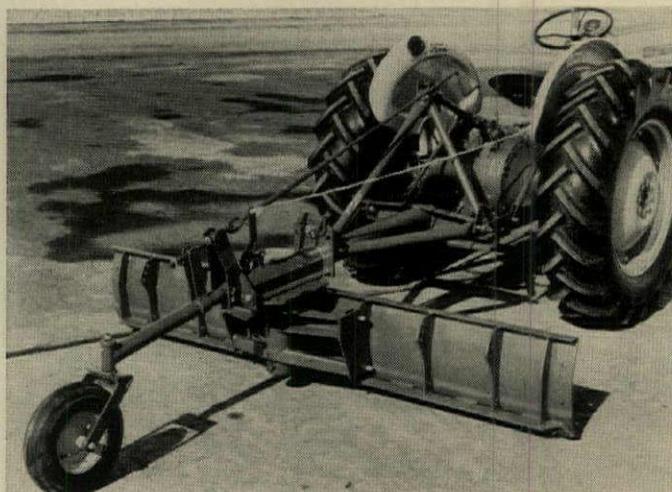


HEAVY BLOCK LOAD is handled by new Ford forklift over rough or wet ground. Check No. 51 on coupon, p 286.

Ford adds to industrial line

Three new earthmoving and materials-handling tools are being offered the housing industry by Ford's Tractor & Implement Division. A new forklift capable of working on rough ground will handle 4,000-lb loads, will stack to 21'. Power is 172 cu in. diesel or gasoline engine. A new scraper to fit most tractor linkage systems has reinforced frame, 6' or 8' fully adjustable blade. A new rotary tiller in models 36" to 60" wide will prepare soil for compaction or lawn development to 6" depth.

Ford Motor Co, Birmingham, Mich.



REINFORCED BLADE takes advantage of greater power of new industrial tractors. Check No. 52 on coupon, p 286.



EARTH PULVERIZING for any job needing homogeneous soil is job of Ford Tillit. Check No. 53 on coupon, p. 286.

New Products continued on p 252

Broan

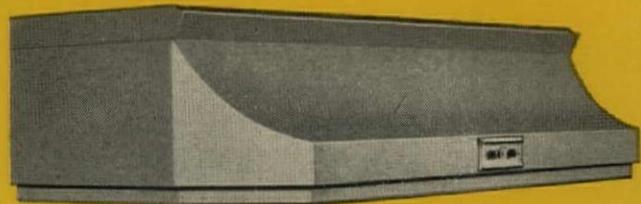


MIXED-FLO HOOD

with optional Charcoal Converter for Duct-Free Service

- Mixed-Flo principle features extremely low sound level performance . . . plus extra pressure for long duct runs similar to that of a centrifugal blower.
- Vertical or horizontal discharge to 3 1/4" x 10" duct.
- Fully unitized — no lost cabinet space.
- Fast running installation — comes prewired, preassembled . . . just remove outlet box cover to hook up power supply.
- Available in 4 sizes, in coppertone, antique coppertone, genuine stainless steel.

Charcoal Converter can be mounted on Mixed-Flo for duct-free installation.



DUCT-FREE HOOD COMBINATION

with Air Refreshing Charcoal Converter

- Slim line converter mounts directly atop any Broan Dual Blower Hood or Mixed-Flo Hood for Duct-Free service.
- Converter removable should a ducted outlet be desired later.
- Converter comes equipped with oversized charcoal filter that adsorbs odors and smoke . . . refreshes air.
- Louvers are completely concealed, so that Duct-Free looks like a conventional hood.
- Available in 5 sizes, in coppertone, antique coppertone, genuine stainless steel; also decorator colors on special order.

Broan Range Hoods

— provide unmatched versatility

To meet your needs

To match your budget

To build your good name

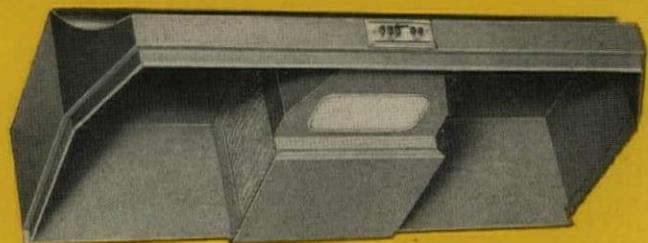


No lost cabinet space



DUAL-BLOWER ISLAND HOOD

- A complete package — hood, blowers, light . . . factory prewired for fast, economical installation.
- Combines the engineering features and advantages of the regular Broan Dual Blower Hood.
- Available in coppertone, antique coppertone, genuine stainless steel; also decorator colors on special order.
- 36" and 42" sizes only.



DUAL-BLOWER HOOD

- Vertical or horizontal discharge to 3 1/4" x 10" duct without reducers or fittings.
- Heliarc welded construction.
- Spring-loaded backdraft damper prevents cold drafts and damper flutter.
- Combined blower and hood saves on cabinet space.
- Twin air intake with twin aluminum filters.
- Blower, light removable without tools.
- Available in 5 sizes, in coppertone, antique coppertone, genuine stainless steel; also decorator colors on special order.

Broan

MANUFACTURING COMPANY, INC.

Specialists in Quality Ventilating Equipment
for Over 25 Years

In Canada —
Manufactured by
Superior Electrics Ltd.,
Pembroke, Ontario

924 West State Street, Hartford, Wisconsin (near Milwaukee)

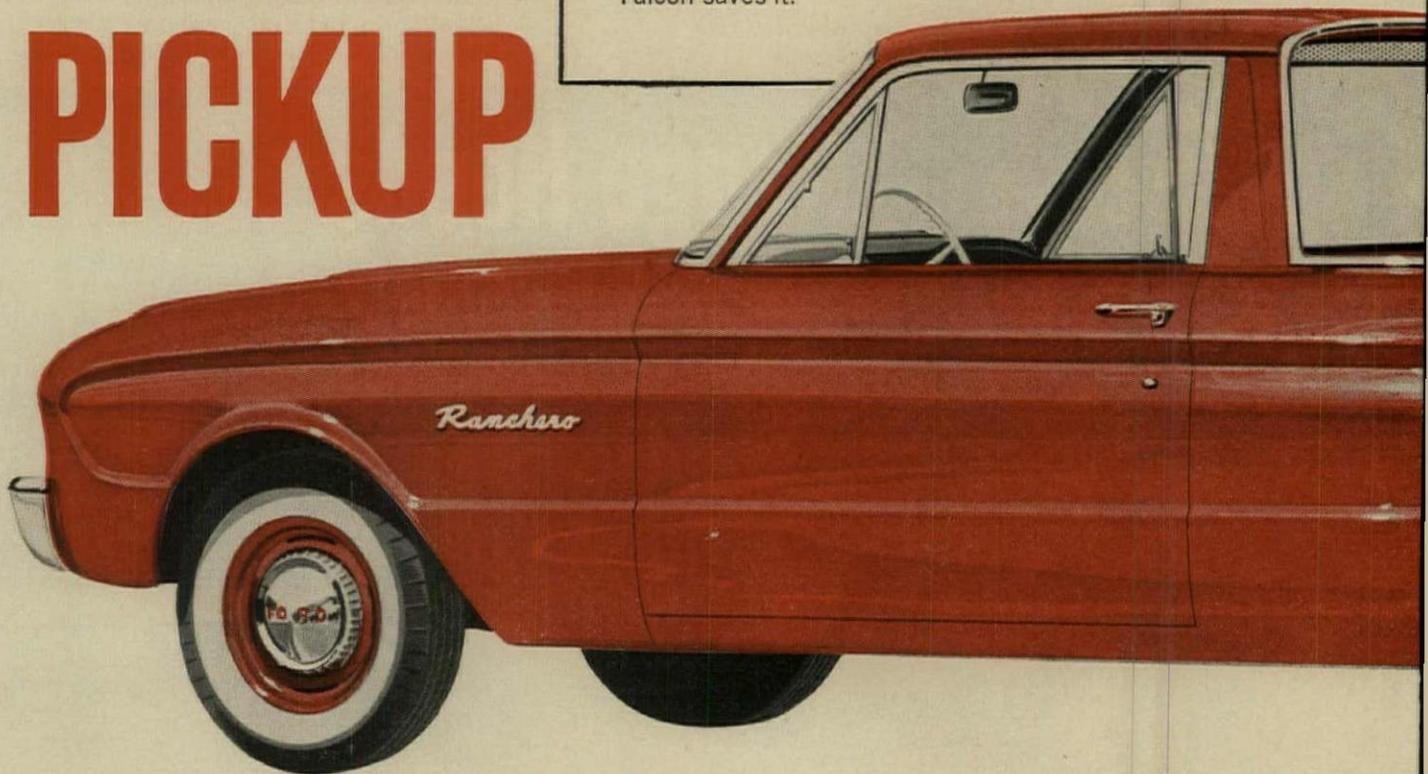
ANNOUNCING THE 1961 FORD FALCON PICKUP

LOW IN PRICE - AMERICA'S
LOWEST-PRICED COMPACT
PICKUP!

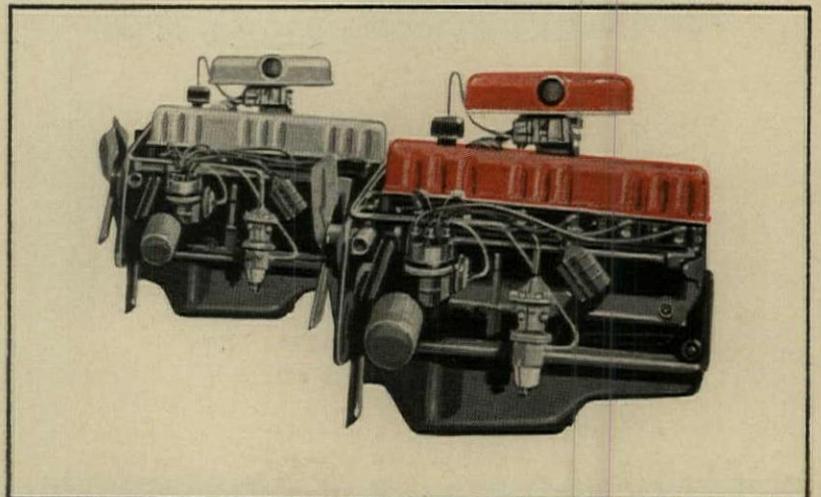
What a Falcon saves you on price* could keep your gas tank filled for thousands of miles! And there's more savings to come! Main underbody members are Zinclud-protected against rust and corrosion. Front fenders bolt on for ease of replacement—cost just \$29.95 each. Insurance is as much as 15% less. Aluminized muffler lasts up to three times as long as ordinary types. You save on tires, on brakes, on oil . . . you name it and your Falcon saves it!

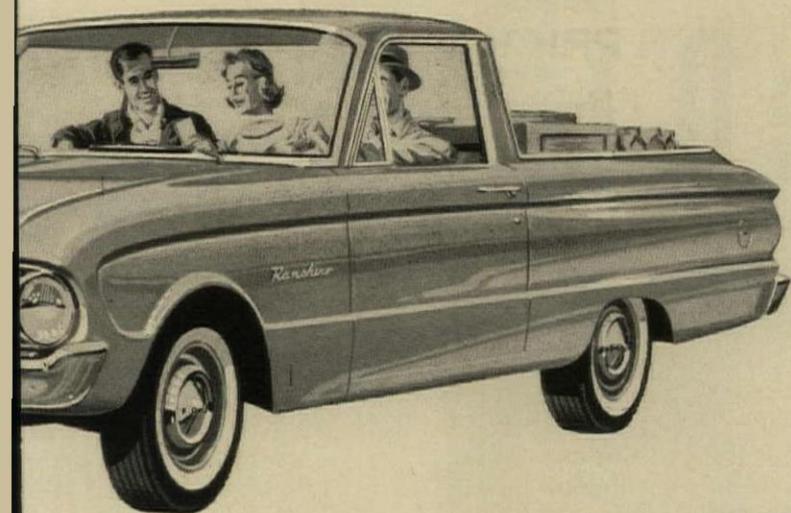


*Based on latest available manufacturers' suggested retail delivered prices

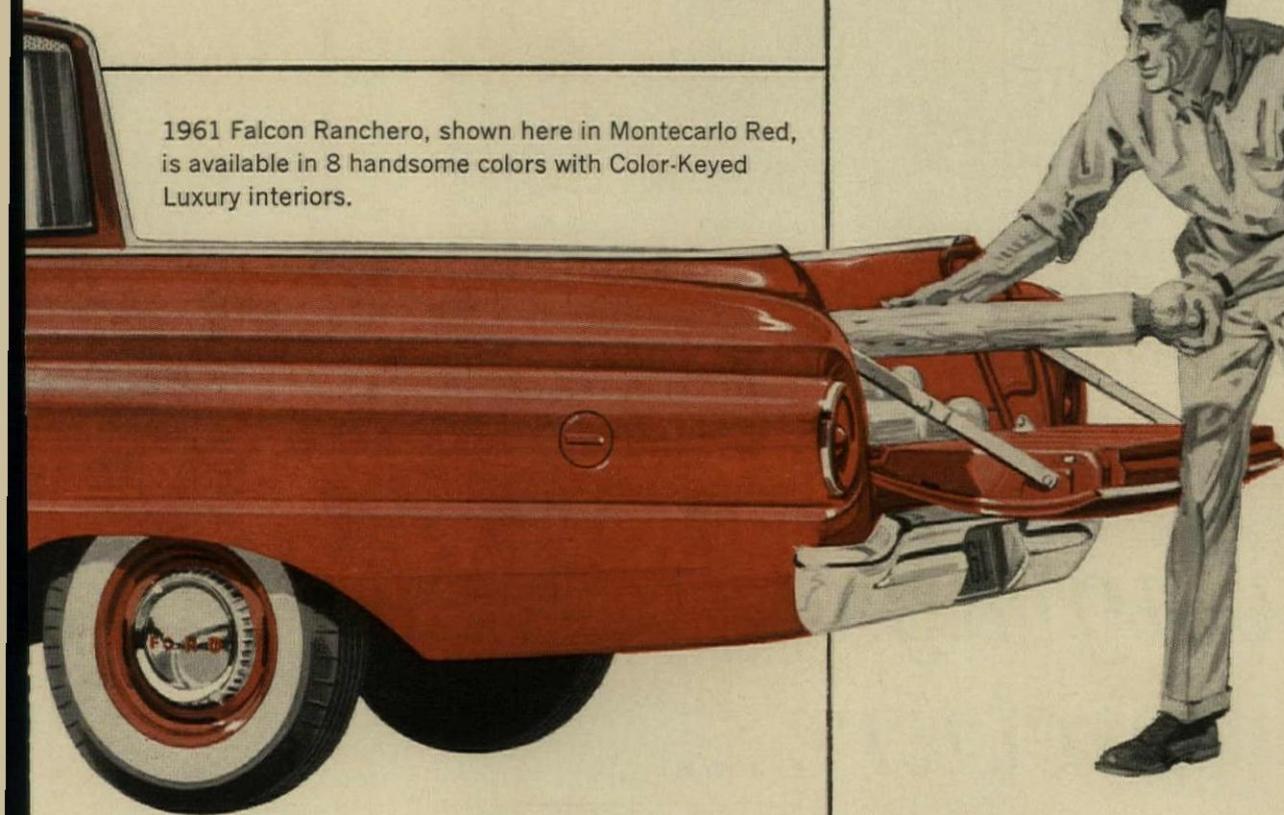


ECONOMY NEVER HAD SUCH STYLE





1961 Falcon Ranchero, shown here in Montecarlo Red, is available in 8 handsome colors with Color-Keyed Luxury interiors.



NEW HIGH-PERFORMANCE OPTIONAL SIX!

For '61 Ford's new Falcon Ranchero offers a choice of two modern gas-saving engines—144 Economy Six and, as an option, a new high-performance 170 Six. Both available with standard or Fordomatic transmissions. And thanks to the simplicity of their proven design, servicing is fast, low in cost!

See your Ford Dealer's Certified Economy Book . . . it proves

FORD TRUCKS COST LESS

LOW GAS COSTS—OVER 30 MILES PER GALLON IN CERTIFIED TESTS!

In certified tests by the country's foremost independent automotive experts, the Falcon Pickup with 144-cu. in. Six scored as high as 38.3 miles per gallon! Average of all tests combined—hills and traffic, as well as moderate speeds on the level—was 30.5 mpg! Low oil costs, too—change it only every 4000 miles!

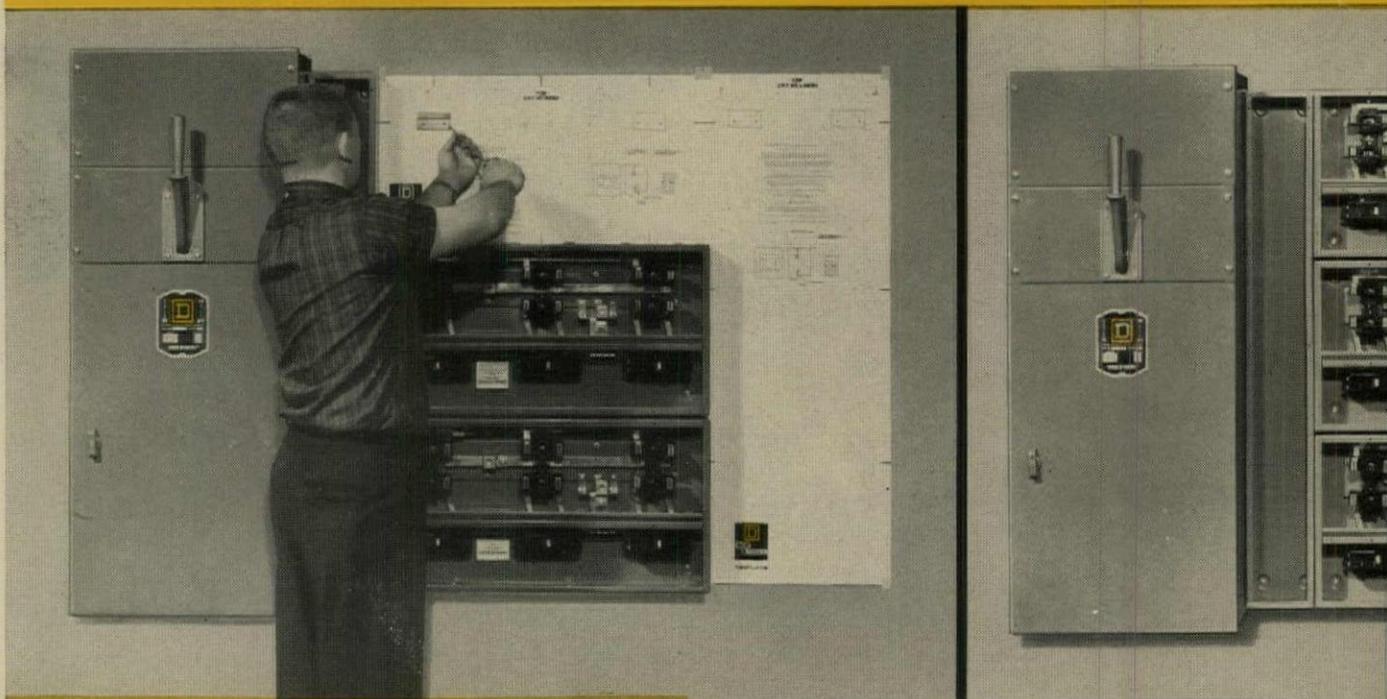
- *Roomy comfort for 3 husky passengers!*
- *Rides, handles like a passenger car!*
- *High Falcon fashion inside as well as out!*
- *Optional Fordomatic Drive available!*

LOW LOADING HEIGHT

Cargo floor to the ground measures a scant 25.2 inches . . . that means easy loading. And what a load! The Falcon Ranchero has a full 800-lb. load capacity! In its big six-foot box—over 7½ feet with tailgate flat—there's room to spare for just about any pickup job! You can open or close the tailgate with one hand . . . it locks tight and rattle-free automatically!

new Square D

**E-Z
STACK**



*easy as
hanging a
picture...*

and in stock at
authorized
distributors

PLAN YOUR OWN ARRANGEMENT — Available wall space for the service and grouping of meters is frequently limited — and of a particular size and shape. Required locations of service and load conduits vary with each job. With E-Z STACK you have freedom of arrangement.

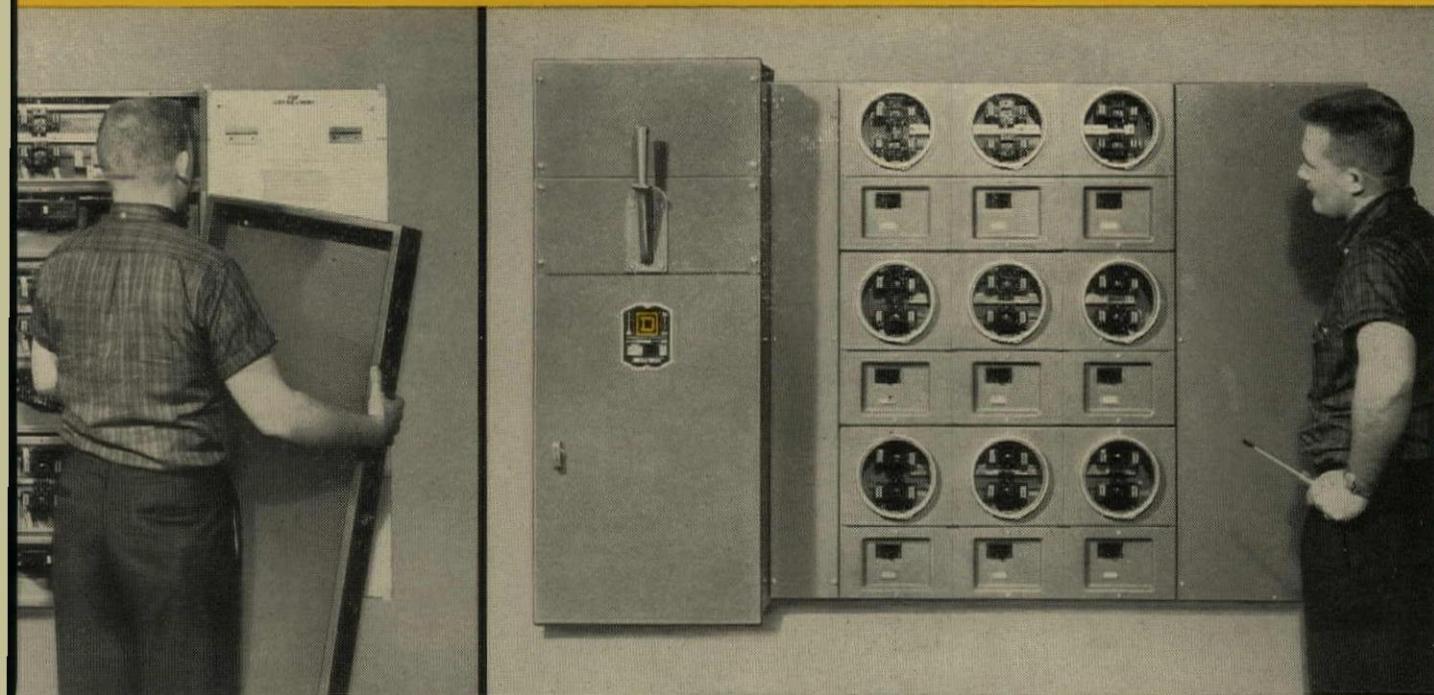
TEMPLATE LAYOUT — For installation convenience E-Z STACK devices include a full size template and wall mounting hanger brackets. Templates, attached to the wall, accurately position the hanger brackets for each device. Brackets on the wall interlock with clips on the back of the device.

AVAILABILITY — All E-Z STACK devices can be ordered by catalog number from authorized Square D Distributors *as they are needed*. Individually cartoned, the final decision as to the meter arrangement and size of the circuit breaker disconnect for



SQUARE D COMPANY

Apartment Metering Panels



each apartment can be determined at the Distributor's counter.

MAN-POWER — Unit assembly of the final configuration permits easier handling of all components. The wall brackets support each unit — in its proper place — while permanently securing and inter-connecting the entire installation.

WE CALL IT E-Z STACK BECAUSE — the basic meter-breaker devices easily stack one on top of the other. All devices are “meant for each other” — and bracket suspended. Knockouts in adjacent devices line up; bushings protect inter-connecting wiring. Load lug assemblies in disconnects and service entrance terminal boxes are pad-mounted in the right quantity for every E-Z STACK installation. All devices are designed for a specific purpose—multiple-metering installations.

Underwriters' Laboratories Approved



GET ALL THE FACTS!

Send for new Service Equipment Bulletin No. SL-27 featuring E-Z STACK design multi-metering devices, a complete cataloging of features, specifications, suggested arrangements, and bills of material.

SQUARE D COMPANY • c/o Department SA-150
Mercer Road, Lexington, Kentucky

NAME _____

COMPANY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

wherever electricity is distributed and controlled

NEW...

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

Here at last—"Suburbia," a sewage treatment plant installed in your new sub-division and ready-to-run within 120 days! What's more, you deal with just *one* company from start to completion—*one* source of responsibility for furnishing and installation.

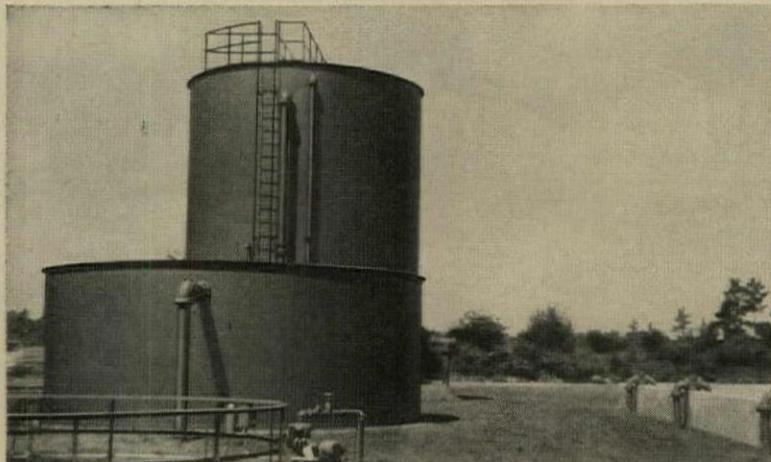
Individually planned and installed under the direction of your consulting engineer, "Suburbia" serves communities of 200 to more than 10,000 homes. Units conform to requirements of your State Department of Health; can be used permanently or as an interim measure (and then be re-erected elsewhere).

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

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

MUNICIPAL SERVICE COMPANY

Your sewage service—our full responsibility
4623 Roanoke Parkway • Kansas City 12, Missouri



TYPICAL SOUTHERN-STATES INSTALLATION can go above-ground. Costs drop when tanks need not be buried, true of most of the South. This installation serves 300 homes (105,000 gallons per day) in the Corrine Terrace Development, Orange County, Florida.

TYPICAL NORTHERN INSTALLATION goes below-grade to take advantage of residual ground-warmth during colder winters. This one serves 700 homes (245,000 gallons per day) in the Gracemor Subdivision, Kansas City North, Missouri. Other installations range as far north as Michigan.



New products

start on p 218

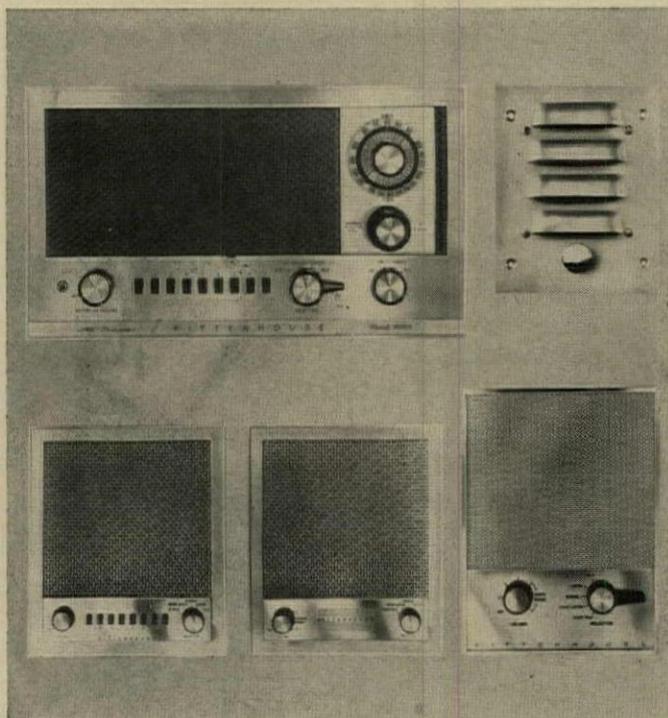


Bell Telephone's home interphone adds the virtues of an intercom—door answering, baby-sitting, hands-free room-to-room communication—to the normal outside telephone service. Equipment consists of phones, small separate speakers, microphone-speaker combinations, signal chimes, control unit, and transformer. Regular desk or wall phones, as well as the new Princess phone, are available. Instruments are supplied and serviced by the local telephone company for an installation charge and a monthly service charge.

Bell Telephone System, New York City.

For details, check No. 54 on coupon, p 286

Here are two new intercoms



Rittenhouse has just introduced a complete, transistorized, high-fidelity or stereo home music and intercom system. Elements include a 14-transistor, 5 diode AM-FM radio with drift-free tuning and automatic volume control; deluxe remote stations with 8" extended-range speakers; master unit to control eight remote and four entrance stations; electronic door chime that sounds above radio or phonograph. Private two-way communication is possible between any two remote units. Parts can be added to basic set-up at any time. List prices: master station with radio, \$225; deluxe remotes, \$39.50 to \$49.50.

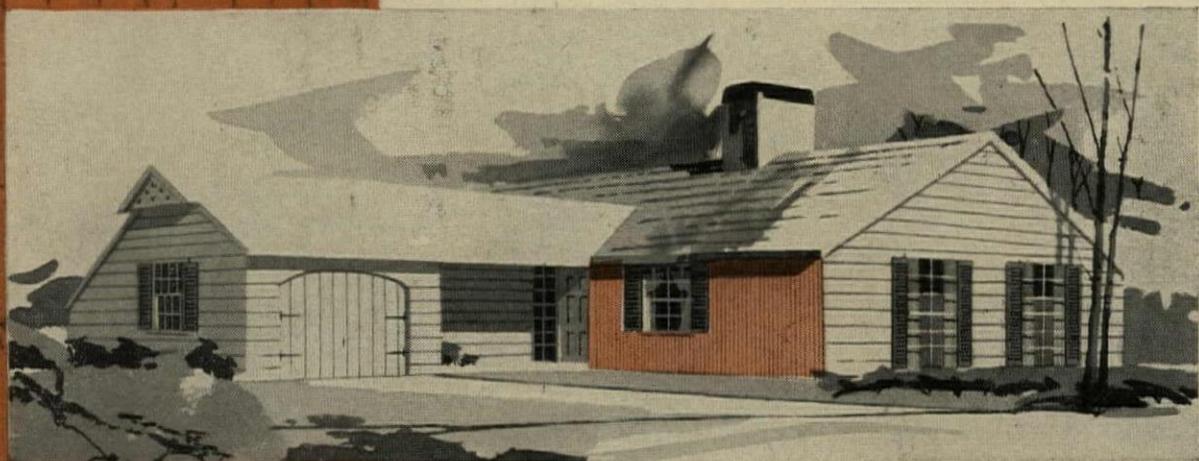
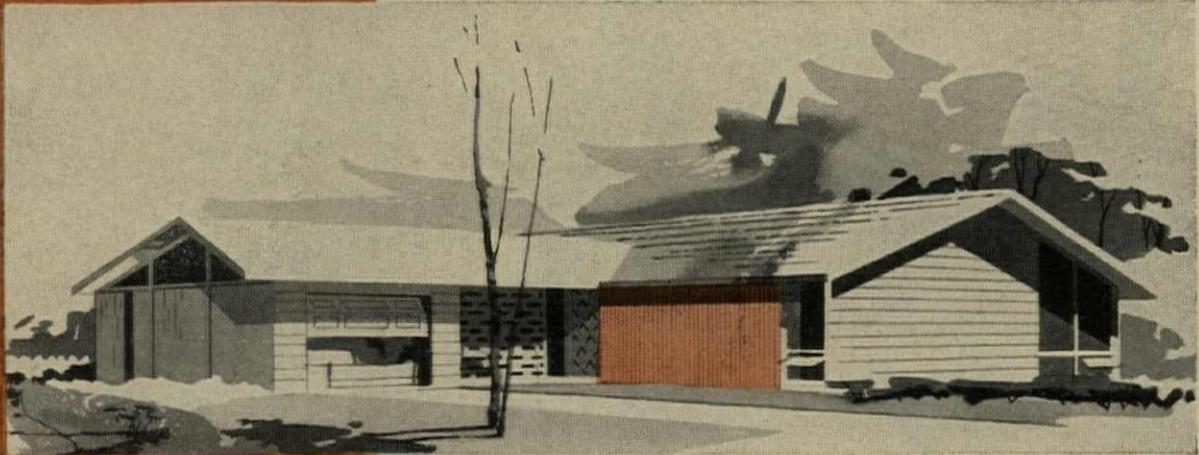
Rittenhouse Co, Honeoye Falls, N.Y.

For details, check No. 55 on coupon, p 286

New Products continued on p 256

STUCCO...

whether you build contemporary or traditional



stucco can help you sell homes faster! No matter what type you build—contemporary or traditional—add extra sales appeal with stucco. You can easily get wide varieties of interesting patterns and designs, including “combed” stucco—sure-fire ways to speed the sale! And for that special attraction, remember: with tinted white portland cement you can have any color you want. For sales-making beauty at low cost, no wonder more and more builders are turning to concrete . . . material of modern living.

For the newest in homes . . .

**LIVING
CONCRETE**

PORTLAND CEMENT ASSOCIATION . . . *a national organization to improve and extend the uses of concrete*



Pegged plank flooring adds the congeniality of colonial rusticity brought up-to-date. Blending beautifully with brick fireplace and paneled walls, this pegged plank flooring forms a solid basis for quick sale.

Because wood floors do so much more to upgrade the whole house . . .

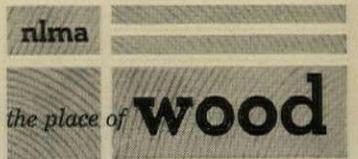
built of WOOD means built to sell



Your perpetual problem, as a builder, is how to give buyers what they want—and still maintain your profit margin. Wood floors are a case in point. As one of the most asked-for features, wood floors readily prove their worth in the salability they add to any house. New ideas in wood flooring cut costs, speed installation time. Pre-finished parquet squares, for example, can be laid quickly and economically for a luxury touch. Pegged plank flooring provides customized, informal, colonial styling.

Whether you select these new floors or lay standard strips, wood floors guarantee the unparalleled wearability, ease of maintenance, resilience and good looks that home buyers recognize as quality features. You build more value into a home with floors and stairs of wood—value that commands, and gets, a premium price. For more information on better homes of wood, write to:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION
Wood Information Center, 1319 18th St., N.W., Washington 6, D.C.



For built-in sales appeal, nothing takes the place of

wood

Parquet flooring, with its attractive geometric designs, is eye-catching and customer-catching, too. You can parlay the easy elegance and enduring beauty of parquet flooring into a strong and sure selling point.

Wood flooring of 2¼" strips is the most popular flooring in America. It, like all wood floors, is easy to install, easy to care for, and easy to live with. Put your best foot forward—foot after foot of wood flooring.



Another Hi-Lo Installation



LINDENWOOD VILLAGE, Woodhaven Blvd. & Belt Parkway, Queens, N.Y.
 ARCHITECT: Benjamin Braunstein, A.I.A. BUILDER: General Builders Corporation
 ELECTRICAL CONTRACTOR: E. A. Kahn & Co. SALES AGENT: Herbert Charles & Co.

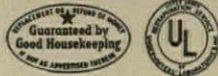
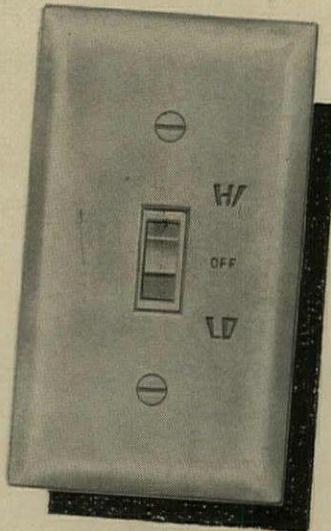
2-DRAMATIC STAGE LIGHTING BY SLATER

UNIQUE, LUXURIOUS, LOW IN COST

Lindenwood Village Cooperative Apartments feature ultra-modern facilities for gracious living. Fittingly, HI-LO dimswitches by Slater were installed in the living and bedrooms of these apartments providing occupants with dramatic 2-stage lighting... "HI" for party brightness... "LO" for relaxation and mood effects.

The HI-LO dimswitch fits any standard switch box—requires no special wiring or costly installation procedures. It is available in a wide range of ratings and may be used singly, ganged, 3-way, 4-way and in combination with other HI-LO's or ordinary switches.

For additional information on the Slater HI-LO dimswitch and over 600 other wiring devices—simply mail the coupon today.

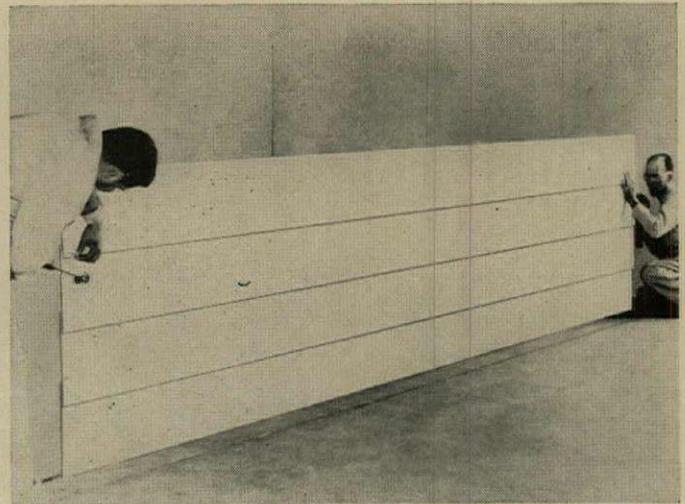


ELECTRIC & MANUFACTURING CO., INC.
 Sea Cliff Avenue Glen Cove, L.I., New York

SLATER ELECTRIC & MANUFACTURING CO., INC.
 GLEN COVE, NEW YORK

- Please send me full information on the HI-LO dimswitch and 600 other wiring devices.
- I would like to have Slater dimswitches for my own home at the special professional discount of 50%, and the names of nearby Slater distributors.

NAME.....TITLE.....
 COMPANY.....
 ADDRESS.....
 CITY.....ZONE.....STATE.....

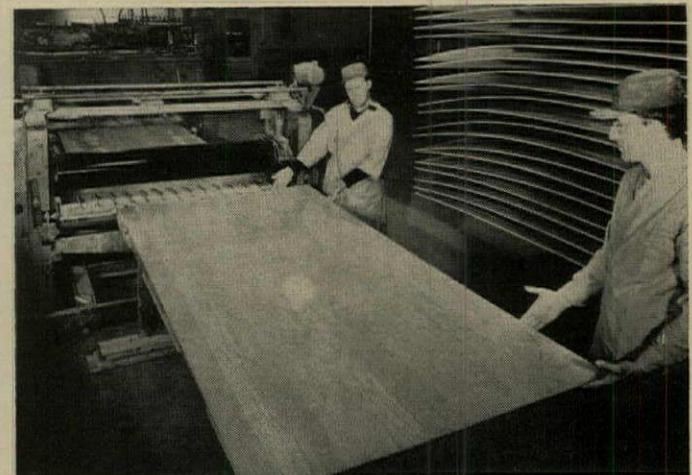
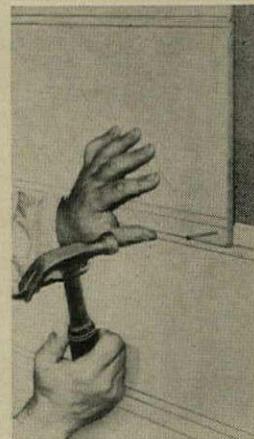


PRECISE ALIGNMENT is set by guide lines at panel edges.

Here's a new nailable siding from Masonite

Called X siding (until a builder contest names it) the new lap siding is 12"x16"x7/16", needs few joints, gives heavy shadow line and wide exposure. Faces and edges are factory primed, backs are sealed. Siding's homogeneous texture is easy to work and paint, gives good dimensional stability. Guide lines along edges allow quick alignment for 10 1/2" or 11" exposure.

Masonite Corp, Chicago.
 For details, check No. 56 on p 286

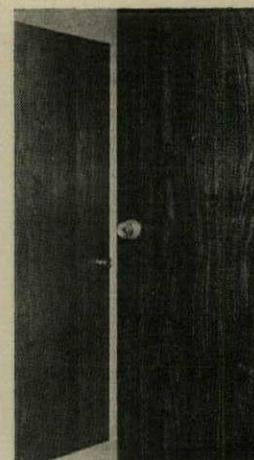


FACE VENEERS are PolyClad-coated after being grained.

Here's a door, paneling, and moulding package

All elements have the same surface treatment so matching finishes are assured and on-site labor cut. Basic door is Bellwood's hardboard-faced hollow-core. Basic paneling is Plywall's quality plywood. Finish is Plywall's PolyClad, a highly durable plastic surfacing that resists damage in transit and use. Stock grainings are English walnut and rock maple; other wood grains on order.

Evans Products, Corona, Calif.
 For details, check No. 57 on p 286



New Products continued on p 258



...and true

Potlatch lumber scores high on all standards of quality... That's because it's *100% Kiln-Dried*. Kiln-Dried lumber is stronger, straighter and more stable. Builders concerned with cost know it's easier and less expensive to use the best—and Kiln-Dried

Potlatch lumber is competitively priced. Ask your dealer about *quality-controlled* Potlatch lumber, produced from scientifically managed tree farms. Remember, when you order Potlatch lumber, *every* piece is Kiln-Dried before finishing.

POTLATCH FORESTS, INC.

GENERAL OFFICES, LEWISTON, IDAHO



symbol
of quality
since 1906

SALES OFFICES: Kansas City, Mo., Elizabeth, N. J., Pittsburgh, Pa., Warren, Ark., Chicago, Ill., Lewiston, Idaho, Deer Park, Wash.



because today's
**APARTMENT
HOUSE
TENANTS**

**Demand Fine
TV Reception**

JERROLD

Master Antenna Systems are specified in over 60% of installations!

Here's a low cost "utility" that keeps paying dividends in good tenant relations! Jerrold Master Antenna Systems, for all types of dwelling-units, assure sparkling TV and matchless sound, in any signal area.

Many builders report that today's tenants consider such TV reception as important as standard utilities! To provide such superior reception in your building or modernization plans, be sure you specify the best, Jerrold . . . the Master Antenna Systems that are engineered for apartments, motels and trailer courts, tract housing . . . and for private homes.



From one antenna, the Jerrold Master Antenna System amplifies the multi-channel signals and delivers them at full strength to every unit in your operation. Factory-trained installers and service personnel across America assure you of initial and continuing satisfaction. In weak or strong signal areas, Jerrold techniques and equipment are your guarantee of performance!

Jerrold is the World's largest manufacturer of TV distribution systems and equipment—and is the creator of the revolutionary new "Magic Carpet"® Antenna System for the home.

*trademark

JERROLD

ELECTRONICS CORPORATION • Philadelphia 32, Pa.

Jerrold Electronics Corporation
Distributor Sales Division, Dept. IDS-84
Philadelphia 32, Pa.

Gentlemen:

I am interested in complete information on Jerrold Master Antenna Systems for the following type of installation . . .

- | | |
|--|--|
| <input type="checkbox"/> Vertical Apartments | <input type="checkbox"/> Garden Court Apartments |
| <input type="checkbox"/> Motels | <input type="checkbox"/> Tract Housing |
| <input type="checkbox"/> Trailer Courts | <input type="checkbox"/> Individual Homes |

Name _____

Company _____

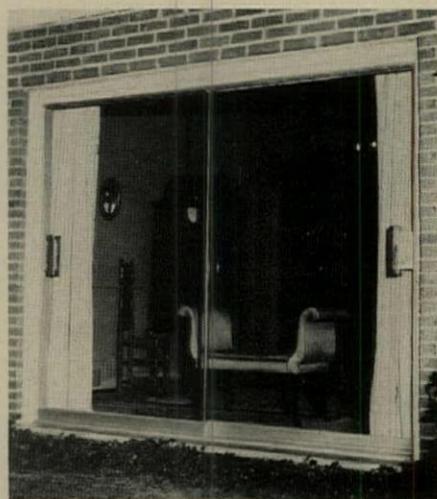
Address _____

City _____

Zone _____ State _____

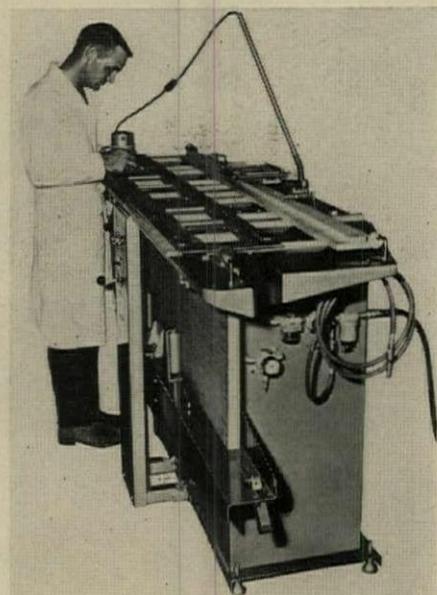
New products

start on p 218



All-glass door gives full view, unbroken by stiles, jambs, or meeting rails. Made of Tempar-Glas, a heat-tempered glass five to eight times stronger than ordinary glass, it will support heavy wind, impact, thermal, or static loads. The door has distinctively styled hardware, rolls on adjustable sealed ball-bearing rollers. A rotating weatherstrip seals the door at the meeting edges; a triple wool pile seals the head; double pile seals the sill. There is no through aluminum to conduct heat so insulation values compare with double glazing. Virginia Patio Doors compare in original price with better quality double-glazed doors.

Virginia Metal Prods, Martinsville, Va.
For details, check No. 58 on coupon, p 286



Prefitted doors can be mass produced on Doorcraft, a new semi-automatic machine for lumber yards, prefabbers, big builders. Doorcraft will handle any 6'8" high 1 3/4" thick door with matching jambs of 1' to 3'. The machine mortises the door and jamb for two or three 3 1/2" hinge butts; it routs jamb for strike plate and latch bolt, drills door for lock cylinder and piston. The single-phase 1-hp motor drives automatic drills, clamps, positioning mechanism, hand router. The machine can be run by a semi-skilled operator. Price, FOB Ft Worth: \$2,995. Terms, lease, or trial demonstration can be arranged.

TAB Corp, Ft Worth.

For details, check No. 59 on coupon, p 286

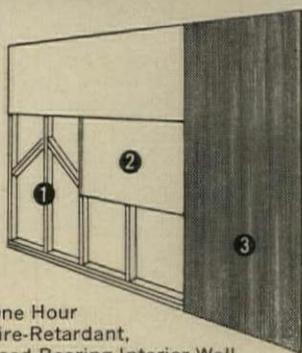
continued on p 264

HOUSE & HOME

Another Roddis "First!"

New 7/16" Architectural Craftwall

FIRE RETARDANT



One Hour
Fire-Retardant,
Load-Bearing Interior Wall

**LABELED AND LISTED BY
UNDERWRITERS' LABORATORIES**

Official tests prove FR Architectural Craftwall, in combination with U.L. labeled gypsum wallboard and wood studs, will form a wall that affords one hour protection against the passage of flame or dangerous heat transmission.

- ① Wood studs: 2" x 4", 16" on center
- ② U.L. labeled gypsum wallboard: 1/2" thick, nailed horizontally
- ③ FR 7/16" Architectural Craftwall, nailed to studs

(Complete construction details available. Write for new Roddis Fire Retardant Bulletin)

Find out more about FR Architectural Craftwall or other Roddis products. Write: **Roddis Plywood Corporation, Marshfield, Wisconsin.**

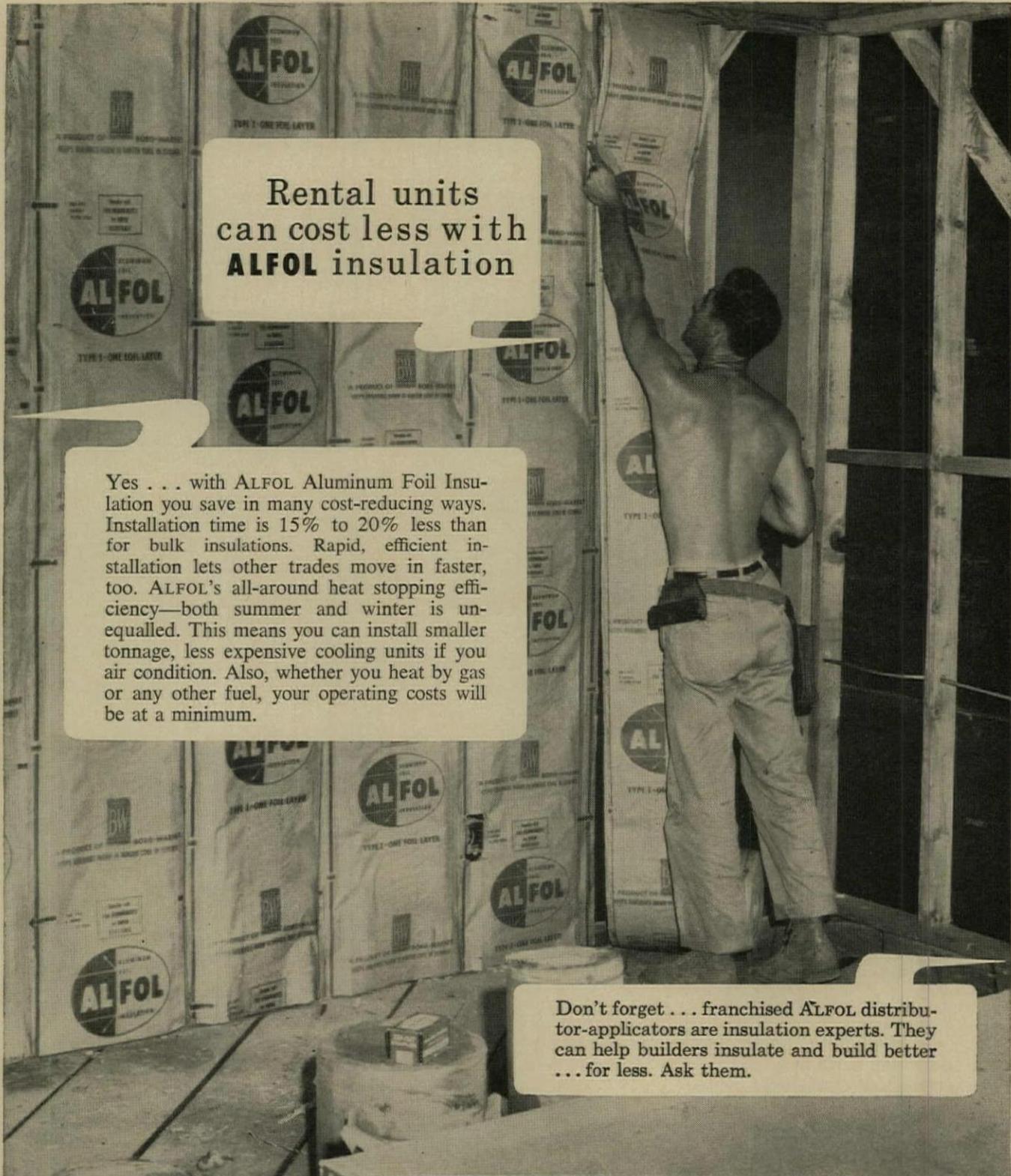
*Roddis does such wonderful
new things with wood*

Now all the richness and beauty of genuine wood paneling, plus amazing new fire safety, can be yours with *Fire-Retardant Architectural Craftwall*. Because its unique, new center core is Roddis' man-made board—Timblend—treated with special fire-retarding chemicals. It's the first particle-core paneling to be listed and labeled by Underwriters' Laboratories!

New FR Architectural Craftwall is designed particularly for offices, or for schools, hospitals, public buildings — anyplace where fire safety is of vital concern. Choose from a wide range of hardwoods. Available prefinished the exclusive Roddis way for lasting beauty and durability. And at a considerable savings over ordinary fire-retardant plywood 3/4" paneling.

FR is just one achievement of Roddis' pioneering with wood. There are others. Such as man-made Timblend... wood doors, guaranteed never to warp... veneers... custom paneling... special wood finishes... modern woodworking adhesives.

Roddis



Rental units
can cost less with
ALFOL insulation

Yes . . . with ALFOL Aluminum Foil Insulation you save in many cost-reducing ways. Installation time is 15% to 20% less than for bulk insulations. Rapid, efficient installation lets other trades move in faster, too. ALFOL's all-around heat stopping efficiency—both summer and winter is unequalled. This means you can install smaller tonnage, less expensive cooling units if you air condition. Also, whether you heat by gas or any other fuel, your operating costs will be at a minimum.

Don't forget . . . franchised ALFOL distributor-applicators are insulation experts. They can help builders insulate and build better . . . for less. Ask them.



Please send
FREE ALFOL Brochure:
"The Modern Insulation
for Today's
Apartment
Construction Needs"

REFLECTAL CORPORATION, DEPARTMENT A-84
A subsidiary of Borg-Warner Corporation
200 South Michigan Avenue, Chicago 4, Illinois

Name _____
Firm _____
Address _____
City _____ Zone _____ State _____

0575

REFLECTAL®

Borg-Warner®



BUILDERS WHO LIKE happy customers
...LIKE G-B DUCT

**"Prefab" Glass Fiber Duct Provides
 Year 'Round "Living Comfort" At
 Less Cost To You and The Homeowner**

Happy is the builder who has discovered G-B Duct, the round prefabricated duct that is made entirely of glass fiber insulation encased in a vapor barrier vinyl sleeve. When it comes to transmitting air evenly and efficiently throughout the home, nothing does it better than G-B Duct. And the same goes for its acoustical properties — G-B Duct soaks up objectionable noises before they're ever heard. If you like stories with happy endings, read on:

BUILDERS like G-B Duct because it adds a definite sales feature to their homes. It may take a modern, convenient kitchen to sell the housewife, but it's a sure bet that the man-of-the-house will be impressed when you tell him about the added comfort and economy he'll get with G-B Duct. And what's more, your sub-contractor will verify the fact that G-B Duct can usually be installed at less cost than an insulated metal duct system.

FATHERS really go for G-B Duct when it comes time to pay the monthly utility bills. This "prefab"

glass fiber duct just doesn't waste heated or cooled air. Consequently, furnaces and air conditioning units operate more efficiently, requiring less fuel or electricity to keep a home comfortable.

MOTHERS may not understand too much about the duct system, but they sure can appreciate the fact that G-B Duct puts an end to the annoying noises that usually drift into the house from the furnace or air conditioner.

BROTHERS AND SISTERS think G-B Duct is the "most", too! They know that G-B Duct keeps temperatures constant in every room of the house, regardless of outside temperatures.

THE WHOLE FAMILY will think you're the smartest builder ever for putting G-B Duct in their home. So, if happy customers are your goal, we suggest you write us for more information on G-B Duct today. You'll be happier, too, if you do.

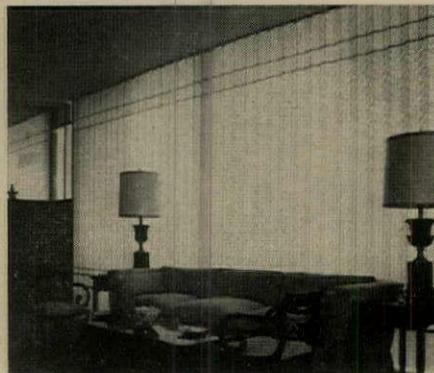
GUSTIN-BACON Mfg. Co. 

258 W. 10TH STREET, KANSAS CITY, MO.

Thermal and acoustical glass fiber insulations • Molded glass fiber pipe insulation • Couplings and fittings for plain and grooved end pipe

New products

start on p 218



Traversing drapes are made of small squares of rigid plastic. Small slots in molded sections admit air. Light and heat are controlled by traversing drape or by a choice of opaque or translucent colors. Heat transfer is claimed to be 1/1000 that of aluminum. New drape stacks one foot to the inch, ie, a 10' drape stacks in 10" space.

Jaylis Industries, Los Angeles.

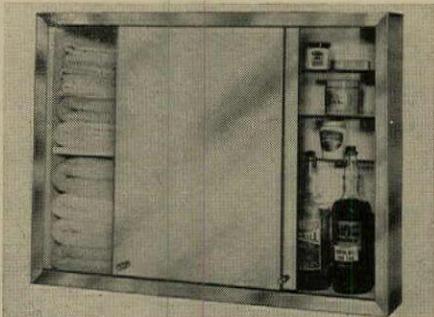
For details, check No. 60 on coupon, p 286



Built-in hamper takes no floor space, can be concealed behind a door or in a closet. Capacity is more than two washer loads. Heavy gauge steel will not absorb odors. Vents top and bottom allow free air circulation. Price, about the same as wall tile it replaces.

Quality Line, Los Angeles.

For details, check No. 61 on coupon, p 286



Big medicine cabinet has 4,400 cu in of storage space behind its double sliding mirrors. Fixed shelves for linen in one half will hold five bath towels, eight face towels, 12 washcloths. Adjustable shelves take tall bottles. Frames are stainless steel, glass is polished plate or crystal. Rough in is 30"x20", 8" depth gives 4" projection.

Jensen Industries, Los Angeles.

For details, check No. 62 on coupon, p 286

because
first
impressions
are lasting ...

ILCO
PHILIPPINE MAHOGANY

With many prospective homebuyers you have only one chance to make good. A casual first inspection and either your model is just another one on their list . . . or one that's worth investigating thoroughly because it's clearly quality built. That's where Ilco Philippine Mahogany comes in.

Ilco is, of course, *solid* hardwood—not plywood or veneer. Thus, with Ilco paneling, your homes take on an appearance of true richness that sets them far above the ordinary. Each piece, though blending harmoniously with every other, is still unique as far as figure is

concerned, reflecting different aspects of growth characteristics, grain angles, subtle interplay of light and shadow.

Perfectly complementing this handsome paneling are Ilco moldings, which also are solid hardwood. And with Ilco you enjoy the widest selection of Philippine Mahogany moldings—77 different patterns, enough to do *any* job.

WRITE FOR FREE CATALOG

All-new illustrated catalog of the entire Ilco line, with special emphasis on moldings.

ILCO PANELING • SIDING • MOLDINGS • FLOORING • TRIM • ROUGH AND SURFACED LUMBER



INSULAR

LUMBER SALES CORPORATION

1405 Locust Street, Philadelphia 2, Pa.



Today's Garage

**your biggest
bargain in space**

Needed storage space, work space, play space—homebuyers are finding it in the garage, the place *you* can find more sales, more profits. For both *you* and the *homebuyer*, today's garage is a *big* bargain in space.

It's a bargain to build. Nationwide comparisons show the square foot cost of an attached garage is $\frac{1}{3}$ the square foot cost of the rest of the house . . . \$3 to \$5 for the garage compared with \$9 to \$15 for the house.

It's a bargain to sell. Surveys show homebuyers prefer garages to carports and certain built-ins. And it's space they can afford. Under FHA, a double garage adds only \$260 to the down payment of a \$15,000 home. To a \$16,000 home it adds only \$360. This is *less than half* the out-of-pocket cash most homeowners pay to a garage contractor within the *first year* of their home purchase.

A "Convertible-Garage-Room" makes it a bigger bargain—a bigger sales opportunity. A second door on the side or backwall makes your garage into a "Convertible-Garage-Room." Total cost: less than \$100 additional for a 16' door. The garage gains light, ventilation, wide access to the backyard. It becomes a covered patio, workshop, play pavilion, family room, as well as storage space. The reason it's such a bargain to build? Materials and labor saved in the wall will make up most of the cost of the second door. Builders report greater garage evaluations, too. And "OVERHEAD DOOR" provides exciting sales tools FREE to help you make the most of this idea.

The "OVERHEAD DOOR" backs your bargain with a guaranteed product. You're guaranteed of dependable quality, reliable service—*no* call-backs. Any trouble will be efficiently handled by your local distributor. *See your distributor soon.* You'll find his name listed under "OVERHEAD DOOR" in the white pages of your phone book . . . or write Overhead Door Corporation, Dept. HH-10, Hartford City, Indiana.



*the original, upward-acting
sectional door, made only by*

OVERHEAD DOOR CORPORATION

Overhead Door Corporation, General Office: Hartford City, Indiana—Manufacturing Distributors: Cortland, New York; Hillside, New Jersey; Lewistown, Penn.; Nashua, New Hampshire—Manufacturing Divisions: Dallas, Texas; Portland, Oregon—In Canada: Oakville, Ontario

Now! Complete home heating and cooling with Trane "big system know-how!"

At down-to-earth prices! A TRANE Climate Changer in any home... in any climate lets you sell competitively and fast!

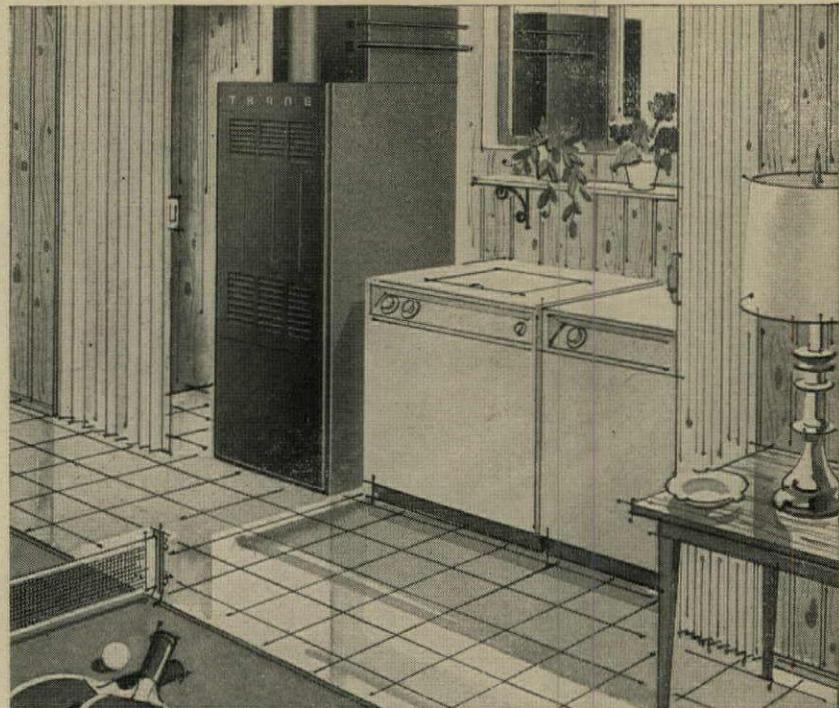
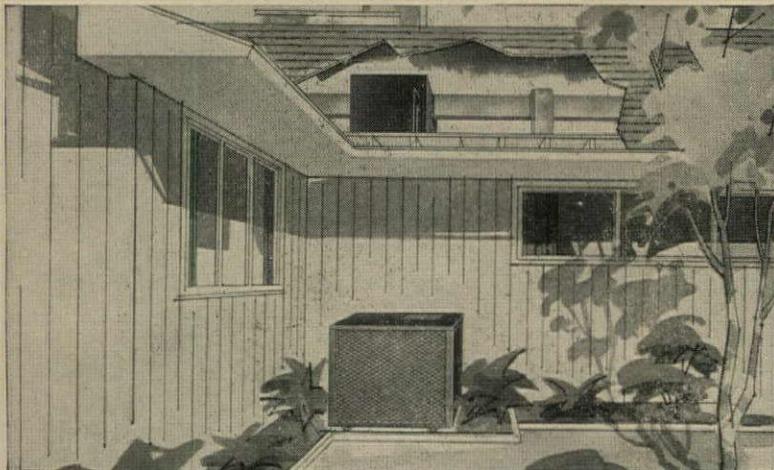
You'll sell your homes faster, easier with TRANE quality air conditioning. TRANE enables you to meet the demands of today's quality-conscious buyers. And meet them head-on *competitively* because TRANE costs no more. Yet TRANE brings you all the experience and know-how of a leader in air conditioning *everything* from skyscrapers to jet planes to sub-way trains!

TRANE Climate Changer units give you a wide choice of systems for heating, cooling—or both. And each TRANE Furnace is designed from the beginning for the easy addition of air conditioning—now or later!

Let TRANE Air Conditioning help you sell! It's quality air conditioning . . . matched equipment, designed and built together to work together. And the name TRANE on your heating-cooling system helps mark yours as a quality home.

Complete facts are available from your nearby TRANE Sales Office. Call the number listed under "Air Conditioning" in the Yellow Pages. Or write TRANE, La Crosse, Wisconsin.

2. NEW HEAT PUMP HEATS, COOLS. TRANE air-to-air Heat Pump operates electrically for heating and cooling an entire home. Uses no water, requires no fuel: Sizes for any home. Outside compressor unit features *upward* air discharge for quiet operation, freedom of location.



1. FOR HEATING AND COOLING ANY TYPE HOME—combination furnace and air conditioner. This TRANE Climate Changer may be oil or gas-fired warm-air type (upflow or downflow). Matched cooling unit shown on furnace; may be added later if owner desires. Capacities available: Heating—from 77,000 to 154,000 Btu; Cooling—2, 3, 4, 5 or 7½ tons.

With TRANE you can:

Heat and Cool any type home with a TRANE matched Furnace and Air Conditioner. (Picture #1.) Cooling may be optional. Owner can add matching cooling unit later, using same ductwork.

Heat and Cool entire home electrically with a TRANE Heat Pump. (Picture #2.) Central duct system distributes both heating, cooling. Uses no fuel, needs no chimney.

Provide separate cooling for entire home with a TRANE Fan-coil unit. (Picture #3.) Ideal for use with TRANE Baseboard or other hot water heat, where there is no central duct system, or with electric resistance heating.

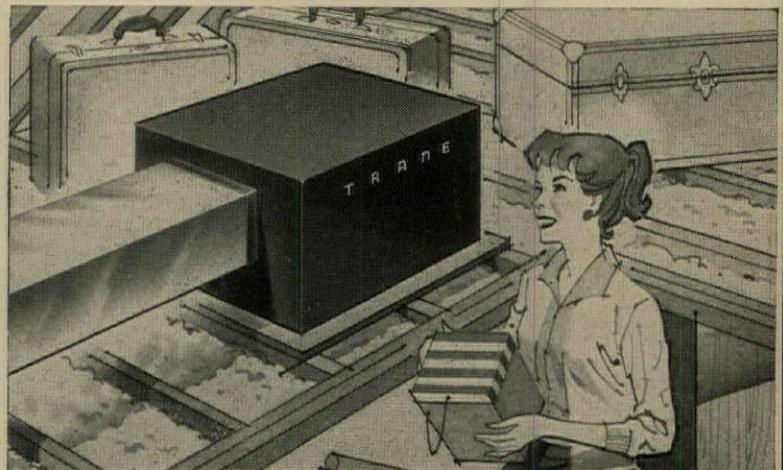
For any air condition, turn to

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

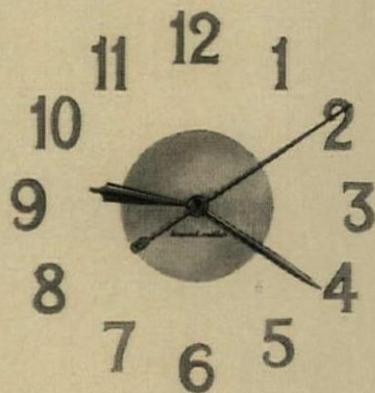
3. FOR SEPARATE COOLING. This TRANE Fan-coil unit nestles into attic, crawl space, basement, utility room or garage. Cools entire home through its own ductwork system, matched refrigeration unit located outside. Available in 2, 3, 5 and 7½-ton models.



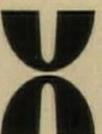
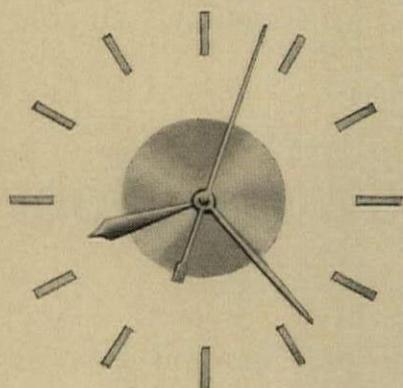
HOWARD MILLER



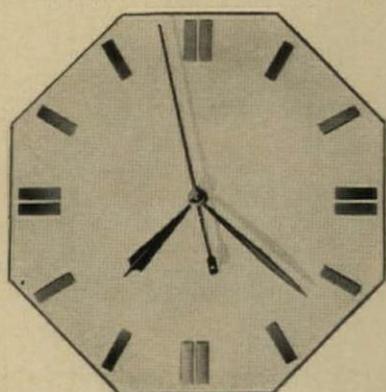
HOWARD MILLER BUILT-IN CLOCKS tell much more than just the time; they bespeak excellent taste and discernment!



Model 6737—New...polished brass or black finish. 9" to 12" diameter. \$17.95



Model 6721—Satin Brass, Copper, Chrome or Black Finish. 9" to 12" diameter. \$15.95



Model 6735—Polished brass hour markers mounted on mat finished white or black polystyrene panel. Brass hands. 11" overall. \$15.95

UL Approved

Easy installation according to template and complete instructions furnished. Write for complete, illustrated literature. Other models dial diameters to 24" and custom clocks to your specifications.

BUILT-IN DIVISION
howard miller clock company
ZEELAND, MICHIGAN

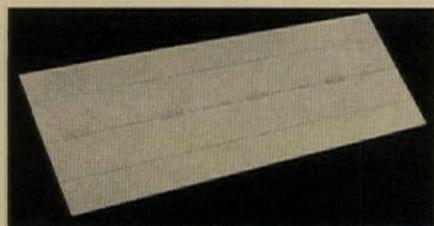
New products

start on p 218



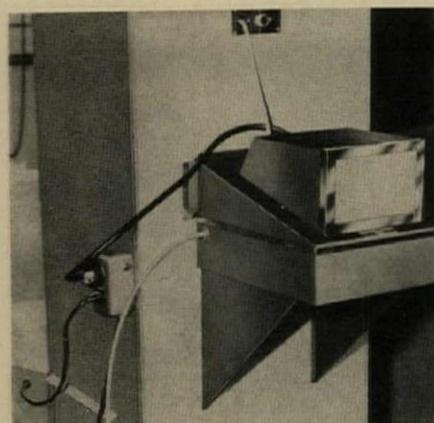
Two-way radio for directing field operations requires no FCC license, operates on Citizen Band communications system. Two-pound unit is milk-bottle size, can be one-hand operated. Four battery types give operating life of 50 to 300 hours. Price: under \$130.

Kaar Engineering, Palo Alto, Calif.
For details, check No. 63 on coupon, p 286



New gypsum lath from Kaiser gives fire-resistant construction. Duralath comes in standard 3/8"x16.2"x46" gypsum-lath size but new core composition changes its properties. Standard tests give one-hour fire rating for Duralath on wood stud construction. It is approved as an alternate to perforated lath by ICBA code.

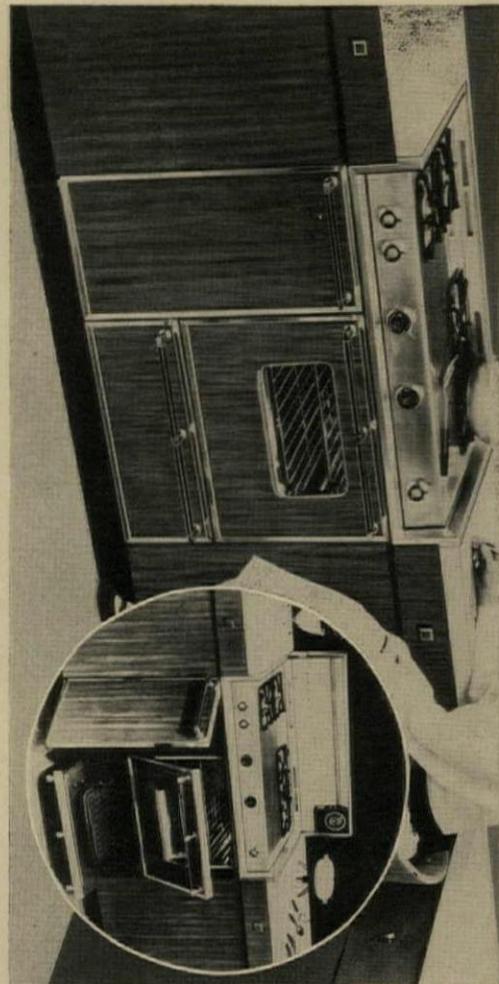
Kaiser Gypsum, Oakland, Calif.
For details, check No. 64 on coupon, p 286



Automatic humidifier disperses seven gallons of water a day through ducts of any forced-air furnace up to 125,000-Btuh capacity. Water flows into the atomizer whenever the furnace blower starts up. Bendix-Friez humidistat controls the humidity level; an automatic control adds water on demand.

Burgess Vibrocrafter, Grayslake, Ill.
For details, check No. 65 on coupon, p 286

continued on p 275



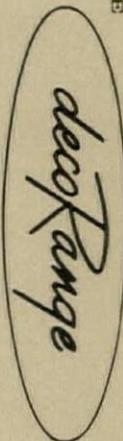
THE SUNRAY STOVE COMPANY, DELAWARE, OHIO

Sunray

BUILT-IN INSTANT FREE-STANDING RANGES

exclusive design in 24", 30" and 36" widths

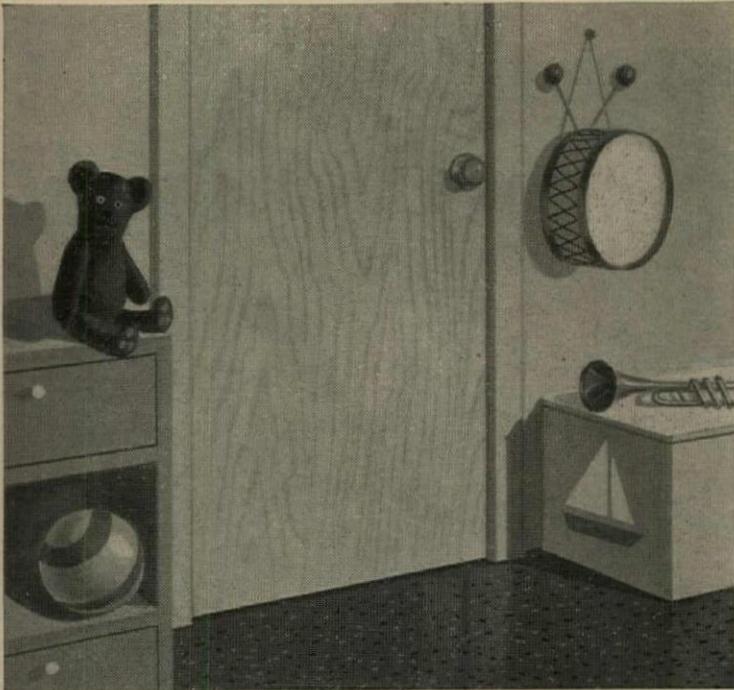
THE MIRACLE
GAS



set it in...it's built-in!

BUILDERS, ARCHITECTS,
DEVELOPERS

Give your homes the significant touch of a custom kitchen without custom installation costs. Sunray offers the beauty and elegance of built-ins at a free-standing price. Write to Sunray before you specify gas ranges.



WELDWOOD ACOUSTICAL DOOR. For the first time, an effective low-cost sound-retarding door with beautiful hardwood faces is practical for applications that could not justify the higher cost of earlier types. Blends with other wood doors and paneled walls. Like any Weldwood door, it can be ordered pre-finished and machined for size and hardware.



WELDWOOD DURAPLY® EXTERIOR PAINT GRADE DOOR. Now, without priming, 2 coats of quality paint, properly applied, will last on a door up to 5 full years without blistering, peeling, checking. Resin-fiber overlay on both outer surfaces resists abrasion. The heartwood cedar used for the edges is one of the most durable woods for exterior use.

at a price you can afford

For every opening there's a Weldwood Door



WELDWOOD STAY-STRATE® DOOR. Faces of beautiful hardwoods give a handsome exterior and match interior wood paneling. The fireproof, inert Weldrok® mineral core is so stable that the door will be easy to operate for the life of the building. Ends costly door adjustments.

The complete line of Weldwood® doors gives you one-source convenience—and responsibility—for all your door needs. Interior, exterior, wood faces, paint grade, acoustical, fire, Paniflex™ bi-fold—these are but some of the doors available. Every Weldwood door is specifically designed and constructed for superior performance in its own applications.

The Weldwood Door Guarantee

United States Plywood unconditionally guarantees the Weldwood Stay-Strate, Acoustical, and Duraply Exterior Paint Grade doors against warping, twisting, or manufacturing defects for the life of the installation, when accorded treatment which is considered good practice as far as storage, installation, and maintenance are concerned. If any of these doors should fail to meet these standards, United States Plywood will replace it without charge, including labor costs of hanging and refinishing involved.

WELDWOOD DOORS

MAIL COUPON FOR FREE WELDWOOD DOOR BOOKLET

United States Plywood
55 West 44th Street, New York 36, N. Y.

HH 10-60

Please send free copies of new 12-page booklet, "Weldwood Architectural Doors"—#2010.

Name

Firm

Address

City..... Zone..... State.....

R & M-Hunter's new Convection Baseboard makes electric heat better than ever!

Here's how exclusive Honeycomb Heat Exchanger increases warm air delivery

In the new R&M-Hunter Convection Baseboard, heating engineers have combined a fast-action, highly efficient rod-type heating unit with newly designed Honeycomb heat cells of non-corrosive aluminized steel. The result: greater metal-to-air ratios provide more efficient heat transfer at lower surface temperatures. Directional outlet speeds circulation of warm air into room, away from wall. This advanced design achieves a 9-to-1 ratio of warm air delivery to radiant heat.

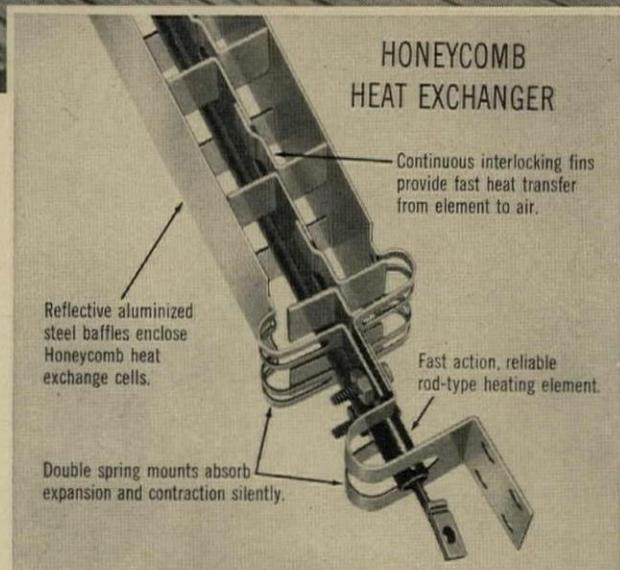
FEATURES

High and low density—For concentrated heat loss area, higher wattage sections may be used (below a window, for example). Low wattage sections spread heat source evenly for normal areas.

Room-by-room controls—Individual built-in thermostat section controls comfort levels in each room. Eliminates wasteful overheating in one area to provide comfort in another. Insures efficient use of power.

Complete safety—Surface temperatures are always low. Can't harm sensitive skin of children. Won't damage fabrics that can be ironed with "medium" setting.

Thermal cut-out—Each baseboard section has a thermal cut-out switch. This prevents any overheating that might occur if air flow were restricted or shut off.



Silent operation—Heat exchange assemblies and baffles are separately spring mounted to prevent expansion or contraction sounds resulting from cycle operation.

Accessories—Convenience Outlet Sections (240 or 120 Volt). Dummy Sections. Matching End Caps and Corner Pieces. Built-in Thermostat Sections. Wall Thermostats also available for use where desired.

Other Data—240 and 208 volt sections available. 32" and 48" long, 6 $\frac{3}{8}$ " high x 2 $\frac{1}{4}$ " deep.



ELECTRIC HEAT

It's Matchless!



Send today
for catalog

Hunter Division—Robbins & Myers, Inc.
2724 Frisco Avenue, Memphis 14, Tenn.

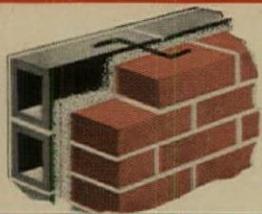
Send complete data on new R&M-Hunter Convection Baseboard to:

Name _____

Address _____

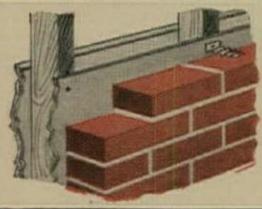


Build Better... Manage Better
 ... Sell Better...
 with **BRICK!**

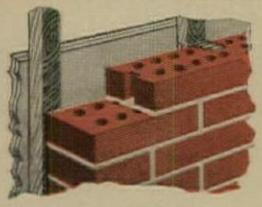


A Wall For Every Purpose

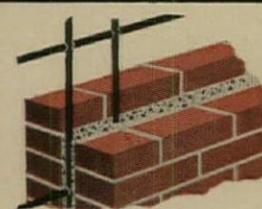
The clay masonry cavity wall offers the beauty of exposed interiors, plus outstanding fire safety, insulation, and maintenance-free economy. The 4" exterior brick wythe is separated from 4" brick or tile interior wythe by 2" air space, effectively minimizing heat loss and gain, and moisture penetration. Cavity walls can be insulated for maximum results.



The brick veneer wall offers new or remodeled homes the prestige, freedom from maintenance, and high value of a beautiful, permanent, and preferred brick facing at low cost.



The 6-inch "SCR brick"* wall provides finish and structure in one, eliminating need for backup materials. Savings in time, labor, and materials make it one of the most economical, yet permanent, walls available for one-story construction.



The reinforced brick masonry wall contains steel reinforcing rods to provide extra strength for resisting lateral forces from earthquakes, tornadoes, hurricanes, and nuclear blasts. RBM is particularly desirable as a "safety zone" within the home; it also offers interior brick "accent" walls.

* Reg. U.S. Pat. Off., Pat. Pend., SCPRF

For further information, see your brick supplier or write to
Structural Clay Products Institute
 1520 18th St., N.W., Washington 6, D. C.

Engineered by Edwards

**INSTALL LOW COST, PACKAGED,
 ZONE CONTROL BASEBOARD HEAT**

...build your reputation for value!

EDWARDS . . . the one dependable manufacturing source for all hydronic and electric heating and cooling equipment . . . for new homes, older homes, motels, apartment houses, schools, churches, etc. Factory guaranteed . . . virtually eliminates costly call-backs. Edwards zoned systems are competitively priced with non-zone hot air systems and are completely assembled at the factory.

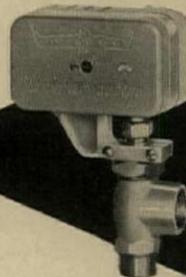


OIL AND GAS HEATING UNIT

Space-saving design (3' long x 2' wide x 3' high). Completely wired. 100% automatic air elimination. Oil-fired units are completely smokeless; feature rumble suppressant design. 100,000 to 3,000,000 BTU/Hr capacities.

HYDRONIC BASEBOARD RADIATION

Lengths from 2 to 20 feet. Installation is simple and fast; quiet wire slide for 1/2" and 3/4" sizes. I.B.R. approved ratings. Available in chrome, copper-tone, wood-grain, white primer coat.

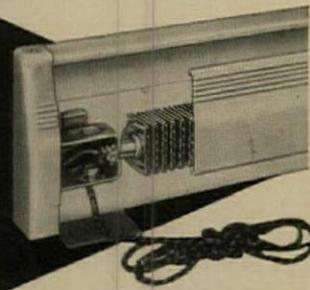


COMPACT MOTORIZED ZONE CONTROL VALVES

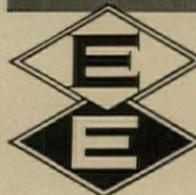
Sealed mercury switches. Completely silent, long life. Positive shut-off valve. Powerful electric motor gear drive. For hot water, steam or chilled water systems. 1/2", 3/4", 1", 1 1/4", 1 1/2", 2".

ELECTRIC BASEBOARD RADIATION

Ideal for new construction, remodeling or mobile homes. Low cost. Perfect for zoned heat — just plug it in. No need for pipes, ducts, furnaces or chimneys. Portable models also available. Lengths from 3' to 12' in chrome, copper-tone, wood-grain or white primer coat.



For complete data on any or all of the above EDWARDS products, write today to:

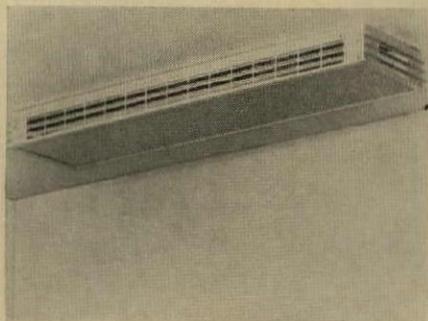


EDWARDS ENGINEERING CORP.

339-1 ALEXANDER AVENUE
 POMPTON PLAINS, NEW JERSEY
 TEmple 5-2808

New products

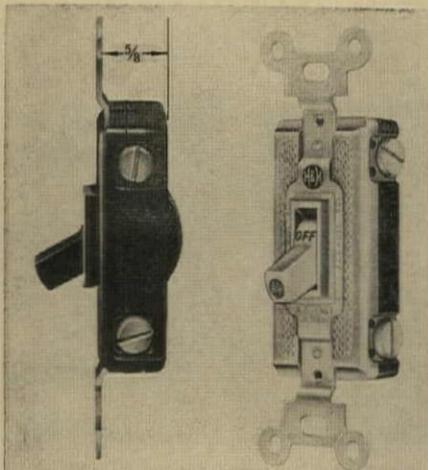
start on p 218



Flush ceiling heater warms by radiation and convection without circulating fan. Radiant panel has 9"x36" face, is only 2¾" deep. Vents allow air to circulate between heating element and fiberglass ceiling insulation, beam heat toward corners of the room. Unit draws 500 w on either 120 or 240 v. Frame is satin anodized aluminum; face is speckled beige steel. Price: \$54.95.

Sun-Tron Corp, Chicago.

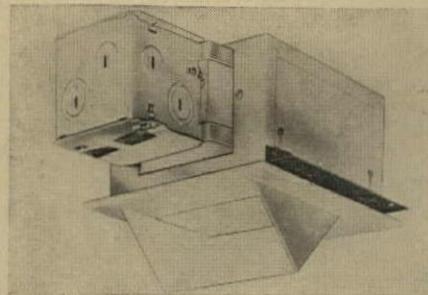
For details, check No. 66 on coupon, p 286



Thin-wall switch is specifically designed to go in thin, space-saving partitions. New ¾" deep Quietie model fits a 1¼" box, leaves ample space for wiring. New features include two anchor holes to hold wire during looping, extra-large binding screws, handle enclosure that fills wall plate. Available in single-pole, double-pole, three-way, and four-way types.

Arrow-Hart & Hegeman, Hartford.

For details, check No. 67 on coupon, p 286



Wall-washer light is a new 40° recessed fixture to light walls, pictures, planter areas, etc. Die-cast one-piece frame is 7½" square, finish opening 6¾" square, housing is 6⅝"x10¾"x4". Unit is completely prewired, comes in matte white or aluminum finish.

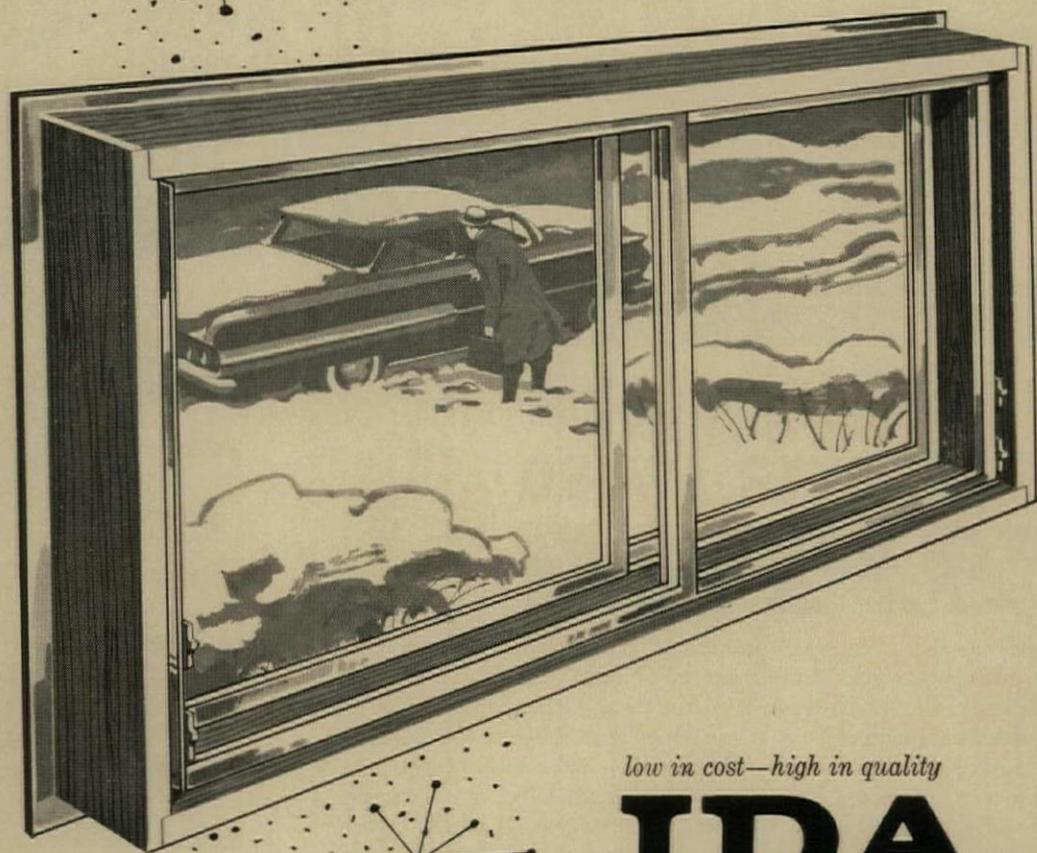
Prescolite Mfg, Berkeley, Calif.

For details, check No. 68 on coupon, p 286

continued on p 280

designed especially for EXTREME COLD AREAS IDA THERMALINER windows

IDA THERMALINER prevents condensation problems because it is actually two prime windows, set into a toxic-treated wood liner and separated by a three-inch-plus thermal barrier. IDA THERMALINER comes completely assembled. Outside window has rigid fixed meeting rail to reduce out-of-square installations. Interior sash are roller bearing units which lock individually (at both head and sill) to assure prowler-proof protection. NO PLASTER OR DRY-WALL RETURNS NEEDED, NO STOOLS OR APRONS NECESSARY! Here's a window that REDUCES builders' costs.

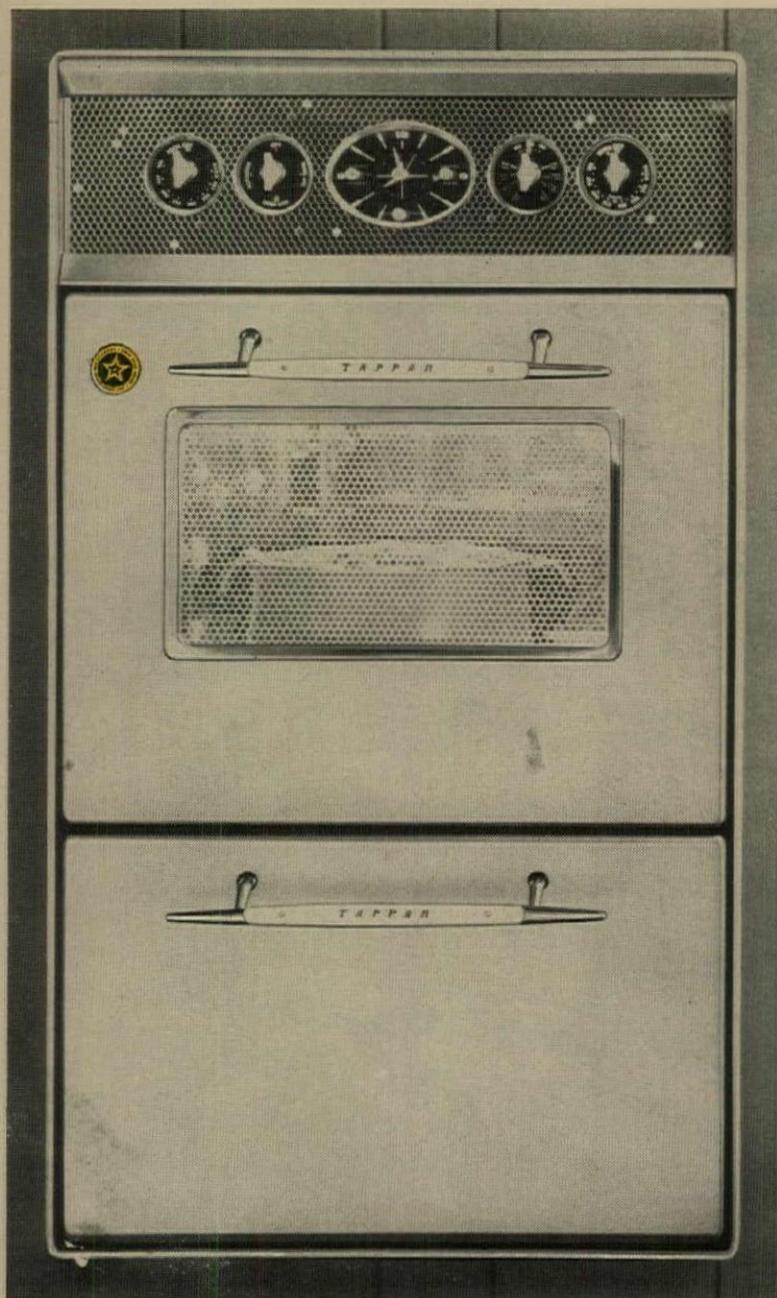


low in cost—high in quality

IDA PRODUCTS COMPANY

3001 Miller Avenue
Detroit 11, Mich.
TRinity 3-8700

Our sales representatives
will be pleased to show you
our window. Call, wire or
write today!



NOTHING SELLS A WOMAN LIKE
A GOLD STAR AWARD
TAPPAN



Wait 'til she sees it in your kitchen. A Tappan Gas Built-In with all the things that are important to women. The Banquet-Size Visualite Oven that can hold a 24-lb. turkey. Tappan's exclusive Sizzle-Simmer Burners that never clog. Automatic controls that cook while she's out. The Set-'n-Forget Top Burner that never lets food burn or overcook. The Roast-Meter that times standing rib roasts and other meats to perfection, automatically. Lift-Off Doors that really make oven cleaning e-a-s-y. A total of 28 wonderful Gold Star Award conveniences that make cooking with Tappan a joy instead of a chore. *Mail the coupon for free information*

NOTHING COOKS, LOOKS **TAPPAN**
 OR SELLS LIKE A

The Tappan Company, Department HH 10-0, Mansfield, Ohio
 Please supply me with complete specifications, installation and model information on Tappan: Built-In Gas Ranges , Tappan's 'Fabulous 400' Gas Range , Built-In Refrigerators .

Name _____
 Address _____
 City _____ Zone _____ State _____

**Leading Delaware
 Home Builder**
Sells Faster and Saves
\$25,000 a year!



Ralph E. Gordy, President, Gordy Enterprises, Inc.

**USES SIMPLEX FORMS TO POUR OWN
 CONCRETE BASEMENTS IN TRADITIONALLY BLOCK AREA**

When Gordy Enterprises, Inc. decided to modernize their basements, as they had their kitchens, sales began to soar. Featuring full basements formed of poured concrete, in what until now was a traditionally block area, proved to be the attraction that brought new buyers to his projects. • Sales of his 3 and 4 bedroom houses, in the \$11,000 to \$14,000 price range, have reached new heights . . . customers get more for their money . . . and, as an added bonus, the Gordy firm is saving \$25,000 this year on 500 homes through using Simplex — *the world's fastest and most flexible system of concrete forming.* • As a result of Gordy's terrific success, other builders and even block masons in Delaware are converting to Simplex so they can pocket more cash, too! How about you . . . isn't it time you enjoyed the extra profits Simplex can bring?



**Make more money from your
 operation with the fastest,
 most flexible method of
 concrete forming**

With Simplex, you don't have to skimp or cut corners to make a neat profit! The system is so easy, so quick, so simple that workmanlike jobs come naturally to any one who has just a basic knowledge of concrete. Look at these superior features of the Simplex System!

● **Accurate Foundations**

Because Simplex panels are drawn together by patented hardware, forms set-up straight and true . . . seam marks are at a minimum. Homes become more salable!

● **Best for Pre-Fabs**

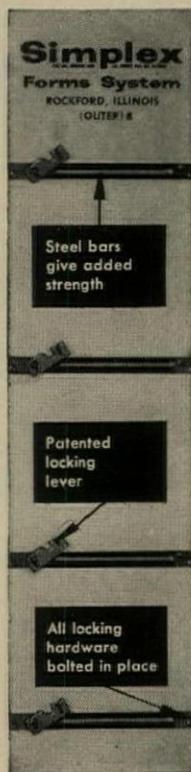
Here's where accuracy really counts! Simplex assures positive wall dimension . . . specifications are easily met . . . above grade work naturally goes faster!

● **Time-Saving Features**

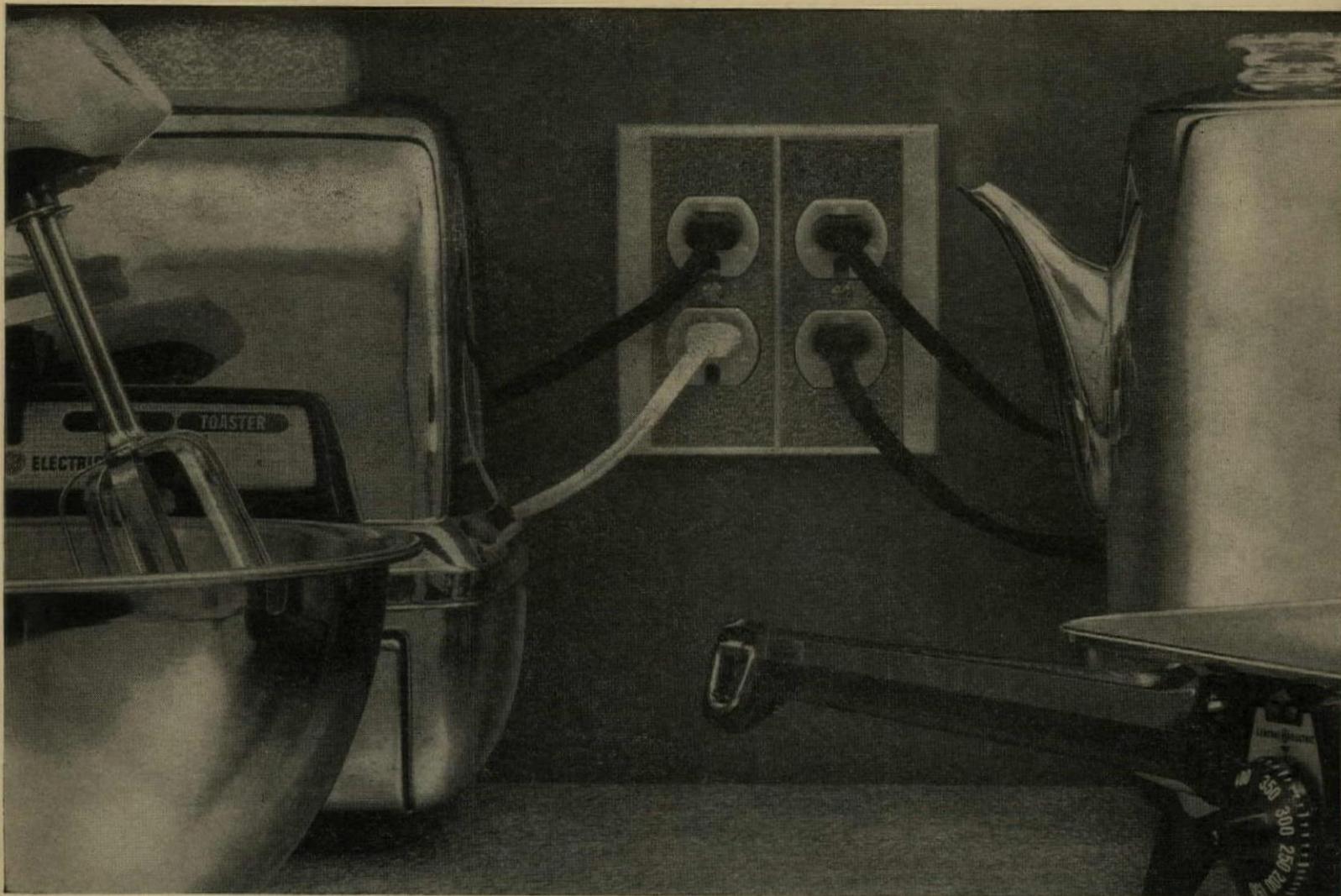
Patented levers and hardware are bolted firmly to panels. Levers lock or unlock with the tap of a hammer. With Simplex, vital parts can't be lost or misplaced . . . saves stripping and moving time. Cuts parts replacement costs.

● **Rugged, Long-Life**

Panels are 9-ply, 1 1/4" plastic-impregnated ply-glaze and are strengthened by horizontal steel backing bars. Users report excellent results after hundreds of pours.



Send For the Complete Story
SIMPLEX FORMS SYSTEM, INC.
 5625 Industrial Avenue
 Rockford (Loves Park) Illinois



Provides full power for 4 appliances at one time . . . completely grounded . . . decorative styling . . . low cost

New General Electric outlet center adds extra sales appeal to your kitchens!

Here's a new idea to make your kitchens more convenient!

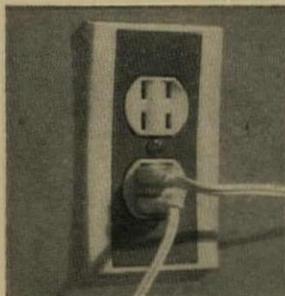
This new GE4106-2 appliance center provides up to 5000 watts at 125 volts — provides full operating power to as many as 4 portable cooking appliances at one time. It uses the new 20-amp ASA standard grounding outlet that will accept all 4 popular types of caps used on today's — and tomorrow's — appliances: the standard parallel cap, the polarized cap, the 15-amp 125-V grounding cap, and the 20-amp 125-V grounding cap.

The G-E appliance center comes complete with an attractive "Decorator Series" wall plate, with ivory frame and a reversible textured metal insert — colored gold on one side, silver on the other. It is pre-wired in the factory for economical installation.

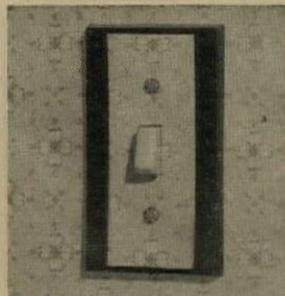
Ask your electrical contractor about this new low-cost kitchen convenience — or write to General Electric Company, Wiring Device Department, Providence 7, R. I.



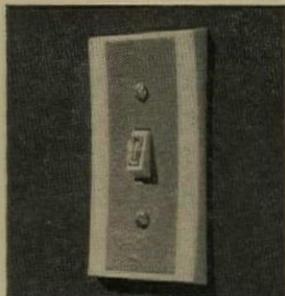
General Electric is your headquarters for new, low-cost wiring device ideas



New G-E 4-Plug Outlets take twice as many plugs, in same space.



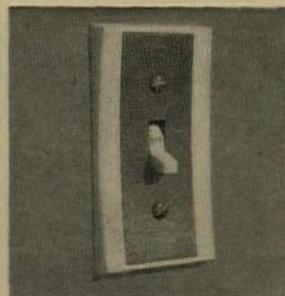
New G-E Decorator Wall Plates beautify switches and outlets.



New G-E Push-Button Switches have built-in pilot lights



New G-E Lighted House Number and Doorbell Button.

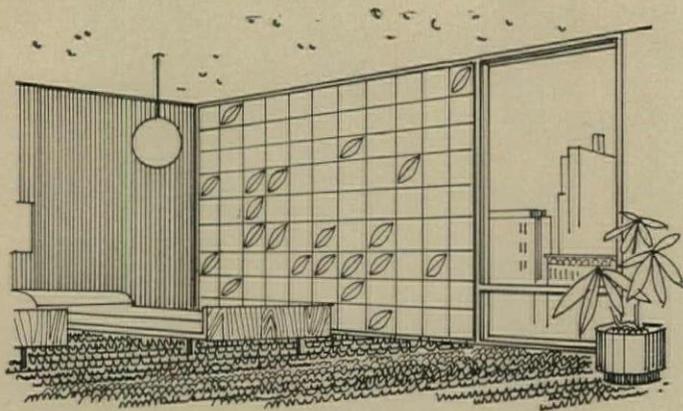


G-E Silent Mercury Switches have soft, luxurious action.

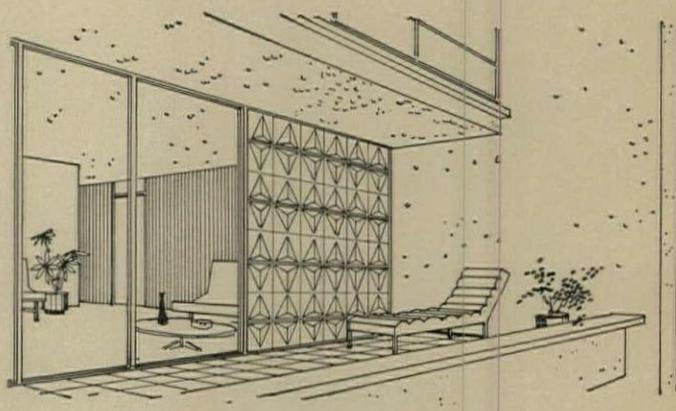
Progress Is Our Most Important Product

GENERAL  ELECTRIC

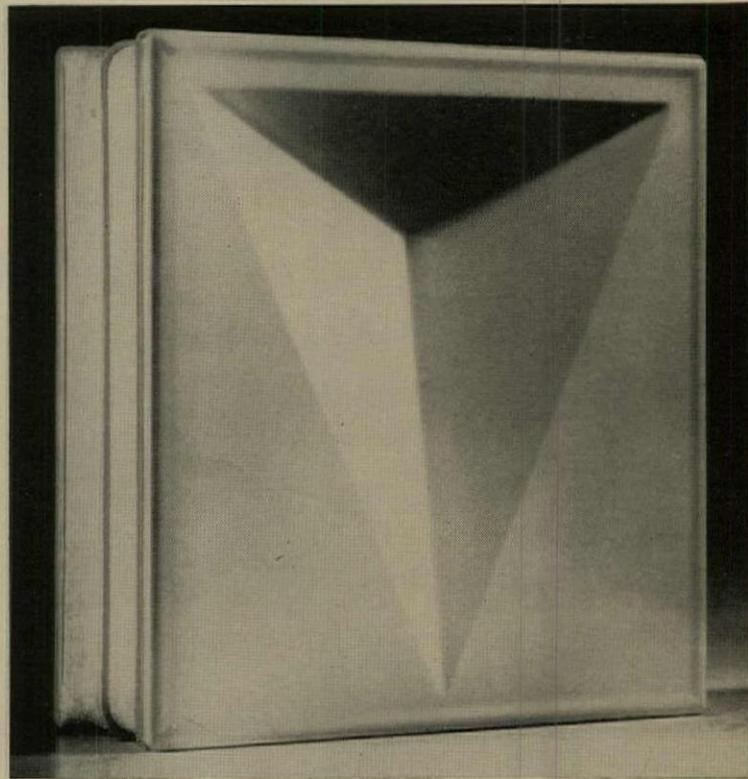
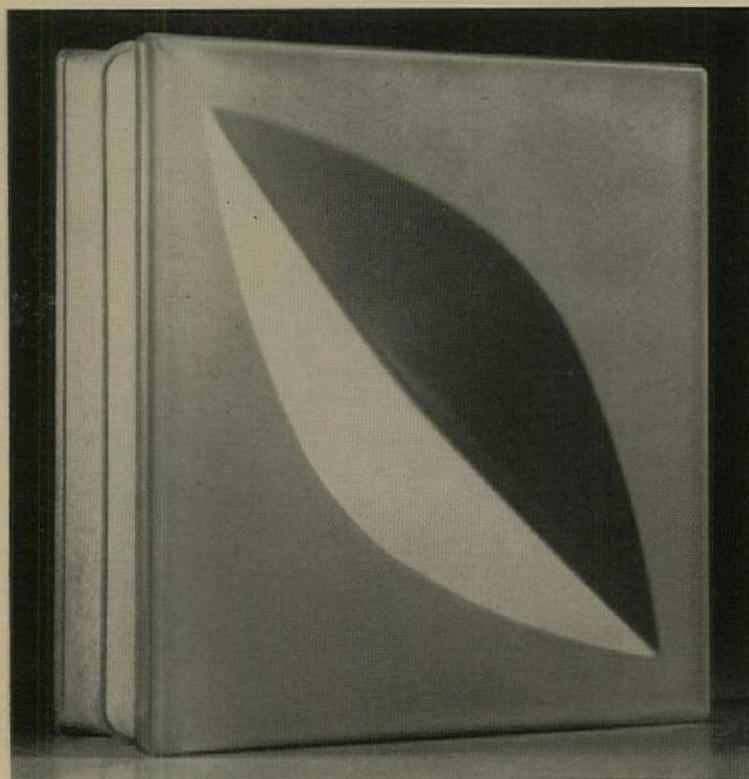
New PC Sculptured Glass Modules for



Bedroom—Leaf pattern in panel brings light with privacy.



Balcony—Pyramid pattern enriches exterior; transmits light.



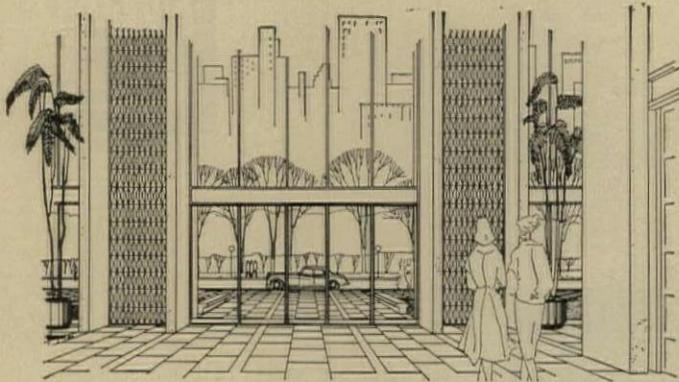
The material is glass, and that means translucency and durability. *The product* gives you much more — color, pattern, and texture all in one.

Used in apartment planning, PC Sculptured Glass Modules control light as they achieve design. The patterns enrich the interior, distinguish the exterior through a visual play-back of light and shade that is bold, yet not aggressive; decorative, yet subtle. And

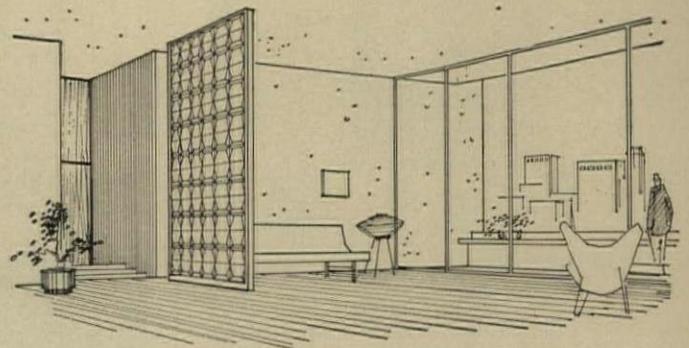
all this without sacrificing that “open feeling” so essential to apartment environments. The product’s light transmitting qualities range from the transparent to the translucent, to partially opaque tones.

Considerations of economy favor this product, too. One operation gives you a finished wall, decorated on both sides. The high insulation factor, equivalent to a 12” thick masonry block wall, suggests economy in

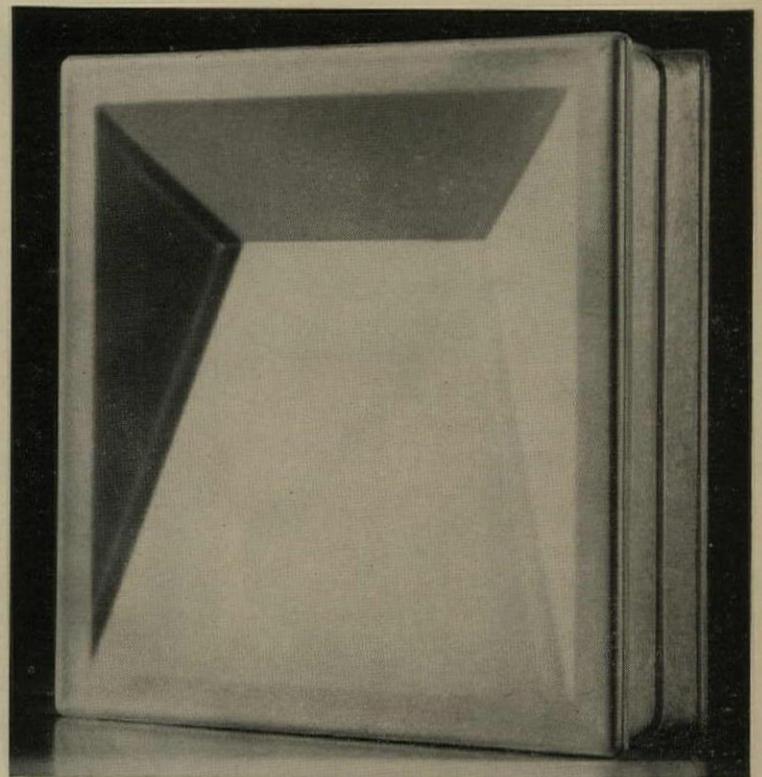
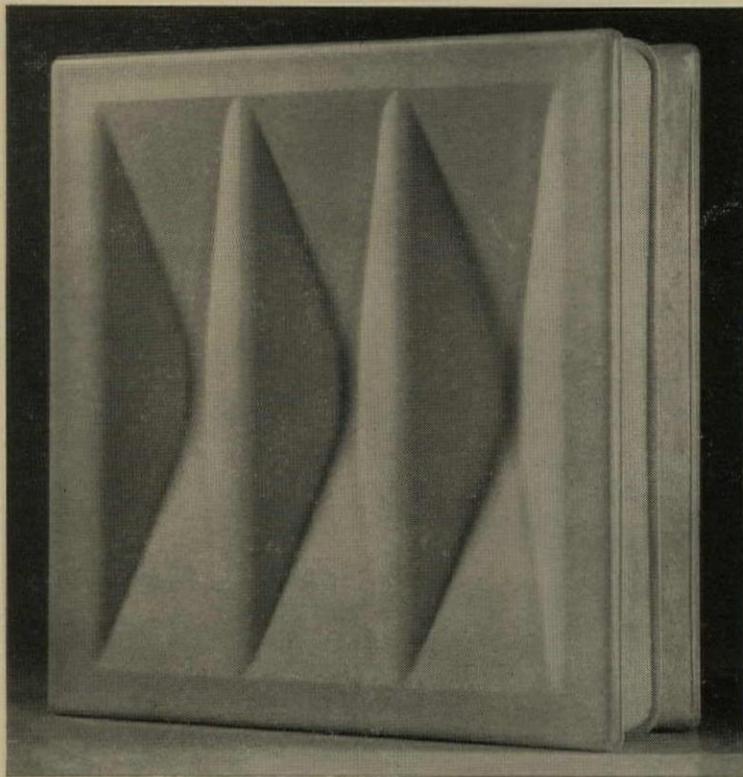
Flair and Flexibility in Apartments



Lobby—Harlequin pattern accents the entrance area.



Entrance—Wedge pattern adds charm to reception divider.



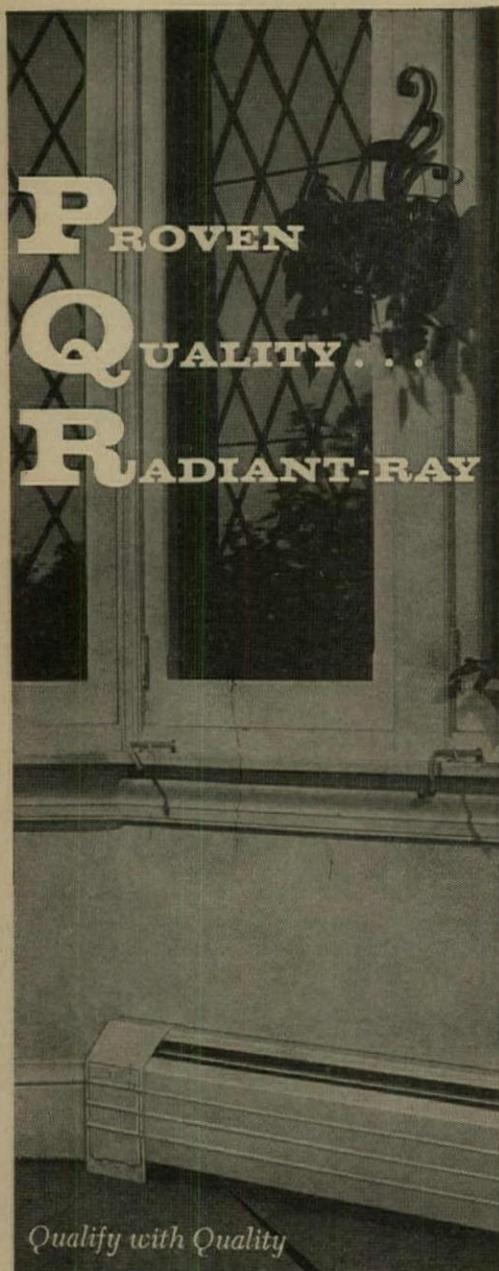
air conditioning or electric heating. Mortared construction practically eliminates maintenance. And expensive accessories such as drapes, curtains and other sun shades are often unnecessary.

PC Sculptured Glass Modules are available in the four face patterns shown above. The patterns are pressed into both sides of the unit to a depth of approximately 1½ inches. All four patterns

come in clear glass, plus eleven ceramic colors applied to one face only. The unit is 12 inches square. It is available on architects' specifications only.

We would like to send you our new folder which presents several panel design interpretations. Write: Pittsburgh Corning Corporation, Dept. HH-100, One Gateway Center, Pittsburgh 22, Pa. In Canada: 3333 Cavendish Blvd., Montreal, Quebec.





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.



newington, conn.

Please send me complete information, including your Free Easy Estimator

NAME _____

TITLE _____

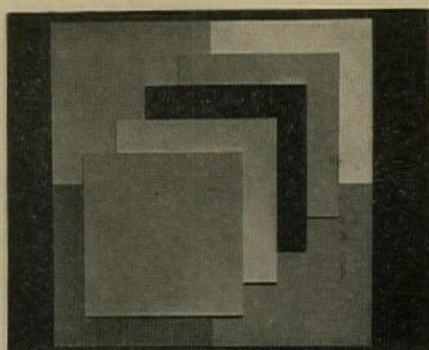
COMPANY _____

ADDRESS _____

CITY _____ STATE _____

New products

start on p 218



Bright new colors in vinyl are feature of Kentile's Designer Palette series. All colors are solids in black, white, and blended tones called hot canary, avocado, burnt orange, Bristol blue, Bangkok pink, sagebrush. Tiles come 9"x9" or in 36" strips 1/8", 1/4", 1/2", and 1" wide in .080" or 1/8" gauge.

Kentile, Brooklyn.

For details, check No. 69 on coupon, p 286



Luxury flooring is offered in Armstrong's latest Hydrocord-backed Vinyl Corlon. Palatial is a marbled pattern with veins of clear and translucent vinyl in a textured field of ground vinyl particles. It has, the company claims, the finest maintenance characteristics of any flooring Armstrong makes. Cost: about \$1.10 a sq ft installed.

Armstrong Cork, Lancaster, Pa.

For details, check No. 70 on coupon, p 286



Narrow clapboards are now reproduced in Alcoa's aluminum siding. New material has two 4" boards in each 8" wide panel. Like Alcoa's 8" horizontal and 12" vertical siding, double four is made of Alumalure-coated alclad, in white, grey, green, yellow, charcoal grey, maroon.

Alcoa, Pittsburgh.

For details, check No. 71 on coupon, p 286

Publications start on p 284

housing
professionals
depend

ON



Says M. O. Gustafson,
Marketing Vice President,
Kingsberry Homes:

"After referring to the December 1959 issue of HOUSE & HOME for about the umpteenth time, I am reminded again of the superbly complete job of reporting and analyzing the manufactured homes field that you folks did in that issue."

in America's biggest industry
almost everybody

reads **House
&
Home**

Published by Time Inc.

Watch for
HOUSE & HOME's
9th Annual
DIRECTORY
of
PREFABRICATION

Including a special study on
the "Second House" market

DECEMBER—1960

ACME...again chosen for important installations!



ROE-5
Refrigerator-Range-
Oven-Sink 4 in 1
Complete Packaged Kitchen



Americana — Miami Beach, Fla.



Riviera — Los Angeles, Cal.



Triton Hotel — Sarasota, Fla.



DEBONAIR
Refrigerator-Range,
Freezer, Sink and Bar



ARISTOCRAT
Refrigerator and 2 burner
Hide-away Range



RES-4AF
2 burner Range,
Refrigerator and Sink

ACME... REFRIGERATOR-RANGE- SINK-COMBINATIONS

Architects everywhere find ACME Space-Saving Units ideally suited for apartment conversions, homes, motels, hotels, cabins, resorts, playrooms, etc. Send for our fully illustrated catalog with complete specifications and prices.

See our complete line in SWEET'S CATALOG 25 $\frac{B}{AC}$

ACME NATIONAL REFRIGERATION CO., INC.

OFFICES & FACTORY: 19-26 Hazen Street, Astoria 5, N. Y. Mailing Address: P. O. Box 188, Astoria 5, N. Y., RAvenswood 1-5510



Mommy!...
Why is the
Ductless
Hood
the
greatest?

THE ORIGINAL DUCTLESS HOOD CLEANS AND PURIFIES AIR BEST

EVERY kitchen can now include a Ductless Hood and all the benefits that magic name implies: Fresh kitchen air—odors, smoke, grease and pollen banished! NO COSTLY DUCTS OR OUTSIDE VENTS NEEDED. Ductless Hood purifies air by the time-proved method of recirculation through activated charcoal filters.

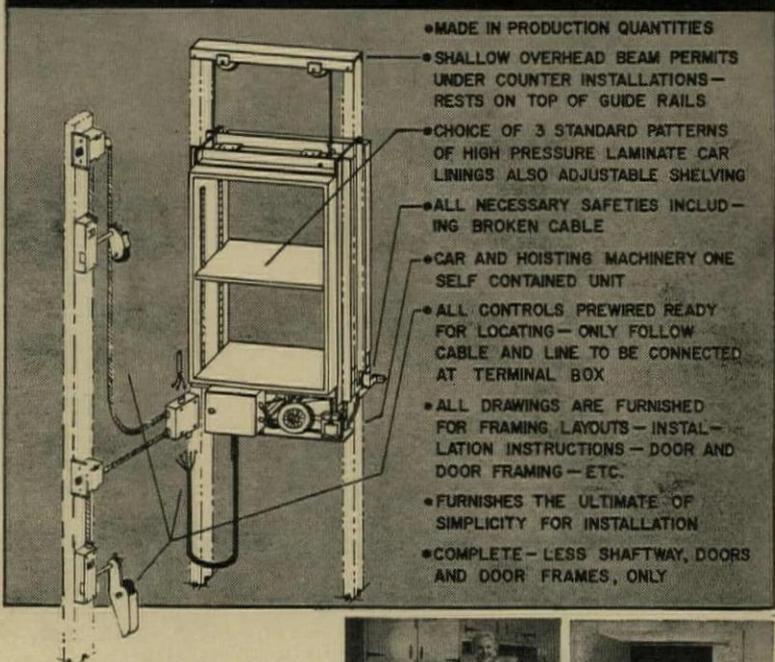
The original Ductless Hood surpasses all others in performance—performance based on patented design impossible to copy. Permits total freedom in kitchen design. Sizes and finishes for every decor.

Write for information:
THE DUCTLESS HOOD CO., INC.
601 Plandome Road
Manhasset 17, N. Y.

Ductless Hood

U. S. Patent No. 2,886,124

BUTLER JR. & SR. DUMBWAITERS higher profits at lower bids



- MADE IN PRODUCTION QUANTITIES
- SHALLOW OVERHEAD BEAM PERMITS UNDER COUNTER INSTALLATIONS—RESTS ON TOP OF GUIDE RAILS
- CHOICE OF 3 STANDARD PATTERNS OF HIGH PRESSURE LAMINATE CAR LININGS ALSO ADJUSTABLE SHELVING
- ALL NECESSARY SAFETIES INCLUDING BROKEN CABLE
- CAR AND HOISTING MACHINERY ONE SELF CONTAINED UNIT
- ALL CONTROLS PREWIRED READY FOR LOCATING—ONLY FOLLOW CABLE AND LINE TO BE CONNECTED AT TERMINAL BOX
- ALL DRAWINGS ARE FURNISHED FOR FRAMING LAYOUTS—INSTALLATION INSTRUCTIONS—DOOR AND DOOR FRAMING—ETC.
- FURNISHES THE ULTIMATE OF SIMPLICITY FOR INSTALLATION
- COMPLETE—LESS SHAFTWAY, DOORS AND DOOR FRAMES, ONLY

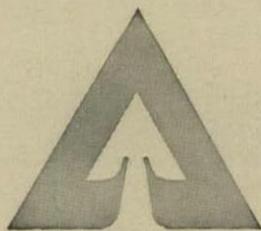
Priced for the home.

Built for commercial loads of 200 to 400 lbs.

Get better acquainted with Butler Jr. & Sr. by writing...



FLINCHBAUGH/MURRAY CORP. 390 Eberts Lane, York, Pa.

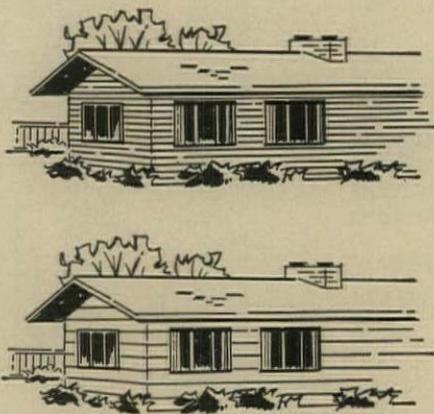


Weyerhaeuser 4-Square Bevel Sidings combine quality and style with economy and durability

- Selection of widths
- Kiln-drying
- Water Repellent Treatment
- Made-to-measure bevel siding

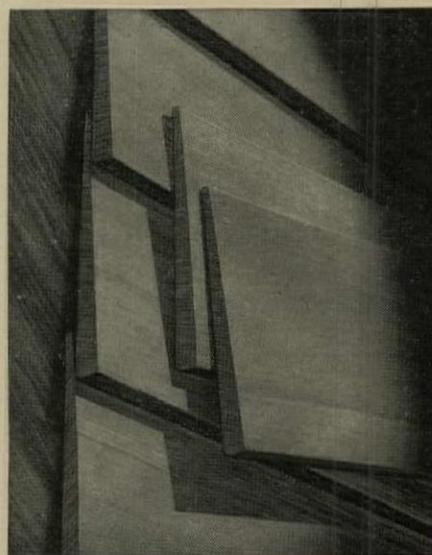
The many advantages of wood as a siding material are easy to see in the bevel sidings manufactured by Weyerhaeuser. They are grouped as narrow bevels, having a nominal thickness of $\frac{1}{2}$ " and a choice of 4", 6", and 8" widths . . . and wide bevels, having a nominal thickness of $\frac{3}{4}$ " and a choice of 8", 10", and 12" widths. Although they are available in several species, this is generally not a consideration because Weyerhaeuser's high standards of quality and uniformity in manufacture give them all very similar strength and performance characteristics.

Selection of the bevel width to be used is principally a matter of the architectural style of the home and individual preference. In general, the narrow bevels are commonly specified for the traditional styles, and the wide bevels for modern and contemporary styles (like the popular Rambler and Ranch-Type homes). One further consideration is the selection of bevel width to give an impression of greater over-all length to a home, to make it look lower, closer to the ground. The two drawings are identical in size, yet the width of the bevel siding (horizontal lines) tends to fool the eye.



All Weyerhaeuser 4-Square wood siding is scientifically kiln-dried to equalize and reduce moisture content. Kiln-drying makes the wood lighter

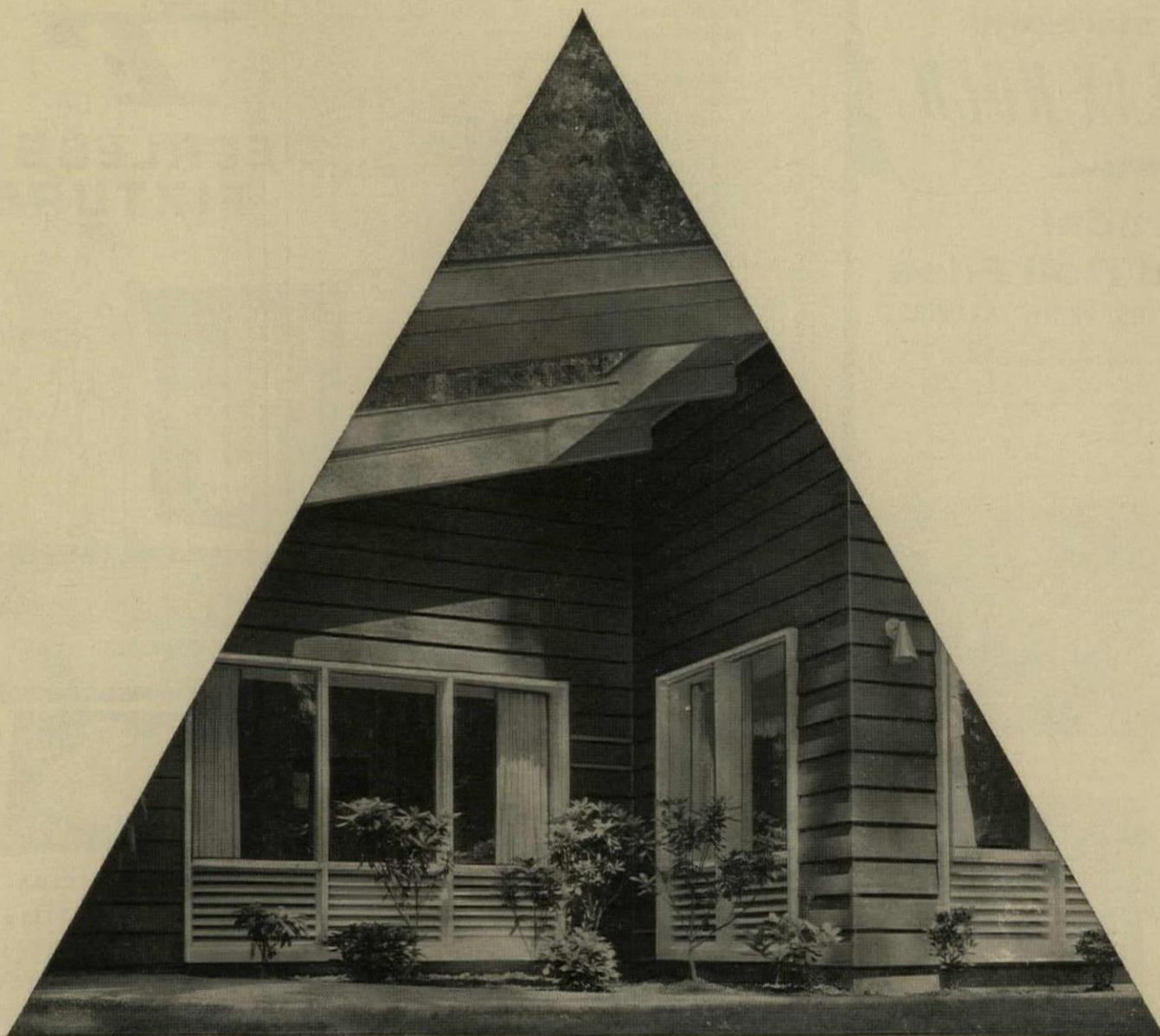
in weight and easier to handle . . . increases its strength properties . . . makes it more stable and more durable. Solid wood siding also adds measurably to the total insulation in a home, adds extra rigidity to the framing, and provides high impact and abrasion resistance, with the result that it will look "new" indefinitely with only moderate maintenance.



An important process commonly used in addition to kiln-drying is Weyerhaeuser's Water Repellent Treatment, which effectively increases moisture resistance, also provides added resistance to termites, stains, molds, and decay-forming fungi. Whether bevel siding is to be painted or finished natural, there are many good reasons to specify 4-Square WRT sidings.

Another Weyerhaeuser development is NU-LOC bevel siding—made to measure in widths to 10" and lengths to 20'. NU-LOC is kiln-dried lumber that is end- and/or edge-glued, then precision finished to close tolerances. Its use will often provide an improved, more uniform finished appearance . . . and greatly reduce application costs by ending much on-the-job sawing and fitting, practically eliminating waste.

For further information on the selection, qualities, performance, application, and availability of Weyerhaeuser 4-Square wood sidings, write: Weyerhaeuser Company, Dept. B-50, Tacoma Building, Tacoma 1, Wash.



Weyerhaeuser 4-Square Bevel Sidings: for economical first costs and low maintenance

Wood is today's number one siding choice for several very important reasons. From the point of view of construction, it is easy and economical to apply to any style home. Its natural insulation value increases the total insulation built into the exterior walls. Properly installed and finished, it requires little maintenance, increases the structural strength of the home.

Wood bevel siding patterns have been widely

imitated. Yet on the basis of appearance alone, wood siding imparts a rich, *natural* beauty so desirable in modern home styling. And wood combines all the desirable application and performance characteristics of good building practice. See facing page for further information . . . see your Weyerhaeuser 4-Square Lumber Dealer for samples and estimates of both wide and narrow bevel siding patterns.



Weyerhaeuser Company
Lumber and Plywood Division

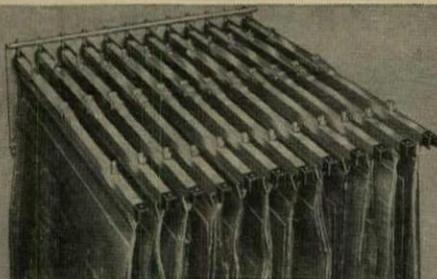
Profitable Planning

starts with
PLAN HOLD®

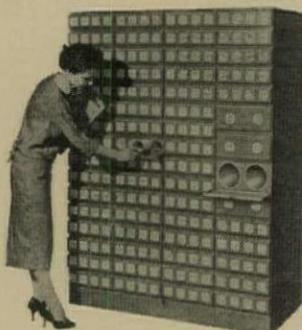
Vertical and Roll Files for PLANS, PRINTS, DRAWINGS

You increase efficiency and cut expense with PLAN HOLD filing equipment:

1. **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.



Exclusive with PLAN HOLD, this "Caddy Rack" with folding table is your project office at the job.

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.

Name _____
Company _____
Street _____
City _____ Zone _____ State _____

Publications

How to sell panel homes

A 14-item package of merchandising aids has been put together by Koppers to show how to conduct a sales campaign for Dylite panel homes. The kit contains sample newspaper ads, radio commercials, billboard layouts, site sign ideas, publicity and promotion ideas, etc. Also included is the Dylite catalog and plans book.

Koppers Co, Pittsburgh.

For copy, check No. 72 on coupon, p 286

Avoiding moisture damage

A 20-page pamphlet from W. R. Meadows, Inc, outlines the dangers to a house from condensation. It then goes on to tell the story of Premoulded Membrane, the company's heavy asphalted vapor seal, and Corktite perimeter insulation. The booklet is written for consumers but contains a lot of information about vapor barriers of interest to housing professionals.

W. R. Meadows Inc, Elgin, Ill.

For copy, check No. 73 on coupon, p 286

Color coatings for masonry

An 8-page color brochure from Sonneborn describes Hydrocide Colorcoat, a new durable, water-repellent coating for masonry above grade. The material is offered for use on concrete, stucco, block, and brick, as well as plaster and drywall. Full application data for brush, spray, or roller, and range of color chips is included.

Sonneborn Chemical, New York City.

For copy, check No. 74 on coupon, p 286

Prefabbed chimneys for all fuels

A comprehensive catalog of new Metalbestos chimneys gives all specifications detail, shows the complete line of chimney pipe and fittings, roof assemblies and housings. Erection procedure for one-man installation and sample details for different types of construction are fully illustrated. Measuring and ordering information is tabulated.

William Wallace Co, Belmont, Calif.

For copy, check No. 75 on coupon, p 286

How to install paneling

"Suggestions for proper handling and installing factory finished paneling," an 8-page brochure, has been prepared by Georgia-Pacific to tell you how to use G-P's product. How to figure a room, how to handle and store the sheets, how to prepare walls, and how to apply panels are covered in full. Though G-P panels are prefinished, lists of finishing materials are included.

Georgia-Pacific, Portland, Ore.

For copy, check No. 76 on coupon, p 286

Subdivision sewage plants

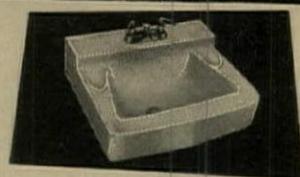
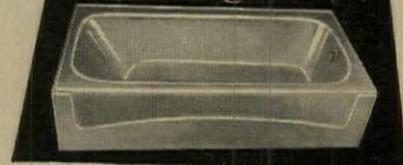
Yeomans 8-page catalog 300 gives full data on Spirahoff primary sewage treatment plants. The single plant is fully described, the operation of each phase is outlined, specifications are unusually complete. Two pages show a detailed assembly drawing and tabulate design data.

Yeomans Bros, Melrose Park, Ill.

For copy, check No. 77 on coupon, p 286



PEERLESS FIXTURES



**REDUCE INITIAL
INSTALLATION TIME—
MINIMIZE POST-
INSTALLATION SERVICING!**

Engineered for fast, easy installation... designed for long-lasting beauty... competitively priced for true value.

Builders, architects and lenders realize the advantages of economy, durability, and modern styling when they specify PEERLESS FIXTURES. All Peerless Fixtures in china, steel and cast iron are style and color coordinated... are available in white and 7 decorator colors... are compatible with all standard fittings.

Call your Peerless Wholesaler **TODAY**
or write for complete catalog
and specifications.

MANUFACTURED BY

**PEERLESS
POTTERY, INC.**

917 NORTH ST. JOSEPH AVE.
EVANSVILLE 12, INDIANA

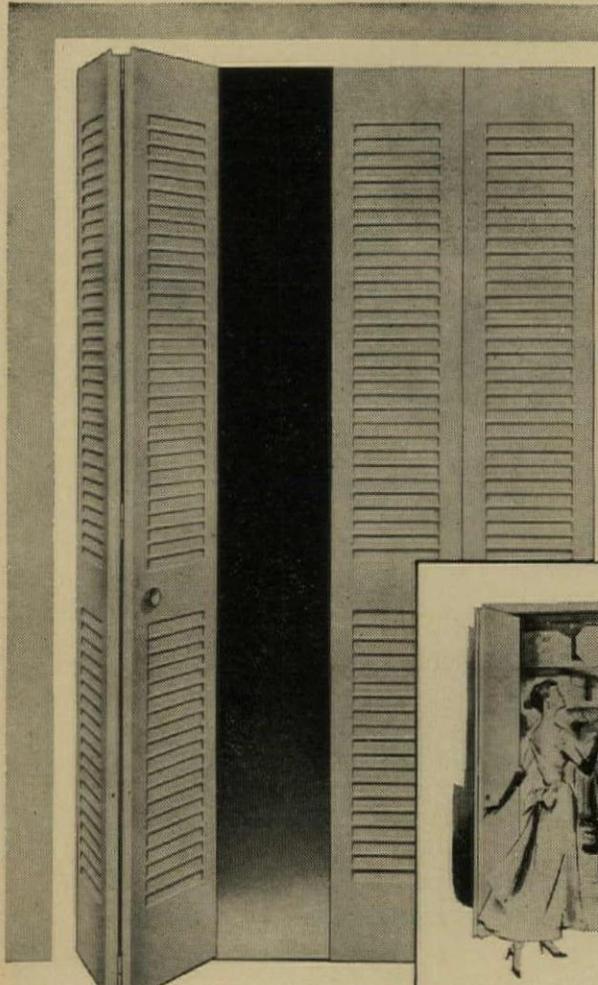
Peerless Quality • For A Lifetime of Service
Since 1902

continued on p 286

Cut your closet costs

with **Leigh**

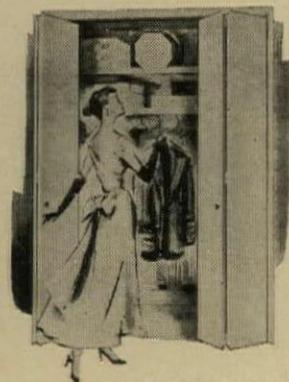
FULL-VU STEEL FOLDING DOORS
and closet accessories!



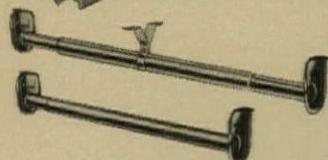
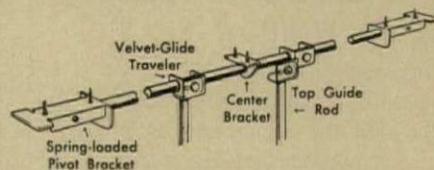
IN FLUSH PANEL OR LOUVER STYLE

Excellent for any type of closet or compartment . . . in beautiful baked enamel beige prime coat or handsome birch grain finish (Philippine Mahogany grain available in orders of 50 sets or more at same price as birch grain).

EXCLUSIVE "JUMP-PROOF" LEIGH TRAVERSE ROD*



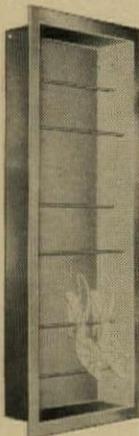
Holds FULL-VU doors in perfect alignment. No dragging or binding. No chance of door jumping the track or going out of adjustment . . . yet easily removed for decorating. Easy, cost-cutting installation. Entire assembly installed at one time. Decorative fascia strip available as an accessory.



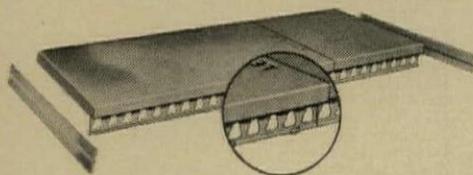
ADJUSTABLE CLOSET RODS

A complete line to fit any closet . . . no cutting, fitting or waste . . . heavy-gauge telescoping sections won't bend or sag . . . with formed end plate that can't come loose. 3 beautiful finishes.

RECESSED SHOE RACK



Built-in convenience for the closet . . . holds up to 6 pairs of shoes . . . easy-to-clean white baked enamel finish, heavy-gauge welded steel construction, fits 14" x 36" opening.



ADJUSTABLE STEEL WARDROBE SHELF

with built-in closet valet.* Spaces clothes to avoid wrinkling . . . costs less than wooden shelves . . . 12" deep . . . heavy-gauge steel . . . gloss finished in ivory baked enamel . . . won't buckle or slip . . . includes wall supports . . . 5 extension ranges.



ADJUSTABLE LINEN CLOSET SHELF

All metal . . . no rough edges or corners . . . no splinters . . . prevents damage to stored fabrics . . . easy to install . . . 14" deep . . . ivory baked enamel finish . . . 2 extension ranges.



STEEL CLOSET VALET*

Less than 1/3 the cost of most closet rods . . . spaces clothes to avoid crushing and wrinkling . . . installs easily . . . girder-like design strengthens shelf . . . bright electro-plated finish . . . 2 models.



Clip this Coupon

*Patent Pending

For a **FREE** copy of Leigh Catalog 300-L covering our complete line, clip this coupon to a postcard and mail to:

Leigh Building Products
2560 Lee Street, Coopersville, Michigan

NAME.....

ADDRESS.....

CITY.....STATE.....

Also manufacturers of a complete line of sliding, folding and pocket door hardware and accessories . . . and many other metal building products.

LEIGH BUILDING PRODUCTS, Coopersville, Mich., Div. of Air Control Products, Inc., West Coast Warehouse: Leigh Industries (California), Inc., 649 S. Anderson, Los Angeles, Calif.; Southeastern Warehouse: Leigh Industries Inc., Asheville, N. C.; Made in Canada by: Leigh Metal Products Ltd., 72 York St., London, Ont.; Prairie Provinces Affiliate: Leigh-Tornel Distributors Ltd., 549 Archibald St., St. Boniface, Man.

How to use hardboard

New catalog from Weyerhaeuser gives full product data and detailed working and application instructions for the company's line of hardboards. Products include standard, tempered, and light density boards in prefinished, perforated, striated, grooved styles for interior and exterior use. Special attention is given to Weybase, a close-tolerance sheet in 4'x4' and 4'x3' sizes for floor underlayment. Working instructions cover sawing, machining, bending, conditioning, backing, fastening, joint treatment,

finishing. Specification tables of sizes and properties are included.

Weyerhaeuser Co, Tacoma.
For copy, check No. 78 on coupon below

Water protection for masonry

A new 8-page brochure from GE tells the story of silicone treatment for brick, block, concrete, and stucco. What they are, how they work, and how to use them are all detailed.

General Electric, Waterford, N.Y.
For copy, check No. 79 on coupon below



looks... feels
and appeals like
MARBLE
AT LESS THAN
HALF THE
COST!

Want more information?

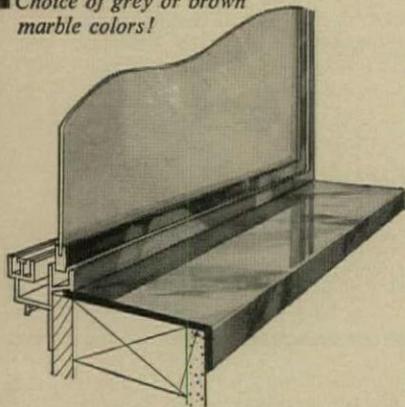
The numbers below are keyed to the items described on the New Products and Publications pages. Check the ones that interest you and mail the coupon to:

House & Home Room 1960, Time & Life Building
Rockefeller Center, New York 20, N.Y.

NEW GLASSILL
FIBERGLASS WINDOW SILLS

An exciting new concept in window beauty, Glassill Fiberglass Window Sills give you the look, the elegance of costly marble... at less than half the price! Home buyers will appreciate the economy, the distinctiveness, the lasting richness of windows trimmed with Glassill,

- Looks and feels like natural marble!
- Quickly, easily installed in minutes!
- Made of tough, specially processed fiberglass for lifetime service and beauty!
- Resists chips, burns, streaks, or stains!
- Easy to clean and polish!
- Completely maintenance free!
- Choice of grey or brown marble colors!



NEW GLASSILL can be used on new or existing window installations, or as a jamb liner for entire window areas, back splash for kitchen units, etc. Available in 9' lengths, 4 1/2" or 5 1/4" wide. Easily cut with hacksaw or abrasive disc.

Write for complete information
GLASSILL CO., P.O. BOX 4025, DEARBORN, MICH.

NEW PRODUCTS • October

1. Roper Futura range
2. Tappan 400 range
3. O'Keefe & Merritt Contempo range
4. Wedgewood-Holly Kook-Center
5. Crown Contemporary range
6. Sunray decoRange
7. Waste King Universal ranges
8. Modern Maid double oven
9. Chambers built-in ranges
10. Hardwick built-in ranges
11. Caloric built-in ranges
12. Magic Chef Foldaway units
13. Mt Vernon surface units
14. Princess compact ranges
15. Preway double oven
16. Perfection gas furnaces
17. Majestic gas furnaces
18. Bard gas furnaces
19. Hall-Neal gas furnaces
20. Burnham lowboy furnaces
21. Dearborn furnace line
22. Armstrong series 700 furnaces
23. Mueller Climatrol furnaces
24. H.C. Little gas furnaces
25. Lennox lowboy furnace
26. Ascot gas boiler
27. Hydrotherm gas boiler
28. Coleman wall heater
29. Suburban Novent wall heater
30. Federal gas boiler
31. Roberts-Gordon gas boiler
32. Peerless Heater gas boiler
33. H.C. Little Saffi-Vent heater
34. Samuel's Suburban wall heater
35. Martin Duo-Vent heater
36. Whirlpool gas refrigerator
37. Norco gas refrigerators
38. Hamilton gas dryers
39. Philco gas dryers
40. Whirlpool gas dryers
41. Grayson wall thermostat

42. General Controls' valves
43. Control Co's valves
44. Arkla gas air conditioner
45. Bryant gas air conditioner
46. Bastian-Morley gas disposer
47. Hotstream J-40 water heater
48. Rheem 30-plus water heater
49. Bird Termbar system
50. Lockwood nylon lockset
51. Ford forklift
52. Ford scraper
53. Ford Tillit
54. Bell System Home Interphone
55. Rittenhouse music system
56. Masonite X siding
57. Bellwood-Plywall package
58. Virginia Tempar-Glas doors
59. Doorcraft door machine
60. Jaylis plastic drapes
61. Quality Line built-in hamper
62. Jensen medicine cabinet
63. Kaar two-way radio
64. Kaiser Duralath
65. Burgess humidifier
66. Suntron ceiling heater
67. Quietie thin-wall switch
68. Prescolite wall-wash light
69. Kentile designer colors
70. Armstrong Palatial vinyl
71. Alcoa double-four siding

PUBLICATIONS

72. Kopper Dylite sales aids
73. Meadows vapor seal booklet
74. Sonneborn masonry coating catalog
75. Metalbestos chimney manual
76. Georgia-Pacific paneling manual
77. Yeomans sewerage bulletin
78. Weyerhaeuser hardboard catalog
79. GE water protection for masonry

NAME _____

POSITION _____ FIRM _____

KIND OF BUSINESS _____

STREET _____

CITY _____ STATE _____

IMPORTANT:

House & Home's servicing of this coupon expires Jan, 1961. In addressing direct inquiries please mention **House & Home** and the issue in which you saw the product or publication.

I wish to enter a subscription to **House & Home** for 1 year, \$6 2 years, \$8

US and possessions and Canada only

New Renewal

Signature _____

“With Transite Pipe, our first cost was the last cost.”

Say builders Sam Primack, Jordon Perlmutter and William Morrison, partners of Perl-Mack, Inc., Denver, Colorado.



“For the 2,500 homeowners in the burgeoning community of Northglenn, Colorado, we selected Transite® Pipe for water supply and distribution lines. We feel our choice insured a lifetime of trouble-free service. In addition to offering us the best value, we found real savings in installation. Lightweight Transite was moved to and distributed on the job site faster, easier and less expensively. Its long lengths and simple coupling method substantially reduced assembly time and costs.

“To keep our 18-hole golf course in top shape, we have installed Transite underground mains for the sprinkler-irrigated system. And, Northglenn telephone service is protected by an installation of over 250,000 feet of Transite Telephone Duct.

“We’re still in the process of completing the initially planned 5,000 homes, recreation areas, churches, schools and shopping city. Our long-range plan is to make Northglenn a community future generations can enjoy. That’s why we’re using modern methods and quality materials.”

Get the full Transite story by sending for our builders’ “kit” of ideas for volume profits and sales. Write Johns-Manville, Box 14, HH-10, New York 16, N. Y. In Canada: Port Credit, Ontario. Offices throughout the world. Cable: Johnmanvil.



JOHNS-MANVILLE



CARPET

... MOST WANTED HOME FEATURE

NEW



All Luxor Carpeting is foam-backed for easy installation, long life, luxurious quality

Put yourself in the buyers' place. When they see Luxurious wall-to-wall carpeting they see a "home" . . . cozy, livable, easy to move into. Carpeted homes even "sound" better . . . quieter, more solid and secure. Aren't these the reasons why one house is selected over another when price and location are equal? Most folks want that quality touch . . . carpeting . . . especially by Luxor.

★ **DIRECT-TO-BUILDER**

Only Luxor offers carpeting direct-to-builder . . . and at a price competitive to any other floor covering material.

★ **EASILY INSTALLED BY BUILDER'S CREW**

Complete, easy-to-follow instructions are supplied . . . no skilled help needed.

★ **COMPLETE CARPET SERVICE**

Luxor offers free layout service from your dimensions, prompt shipment geared to your building schedule and samples of all fabrics and colors.

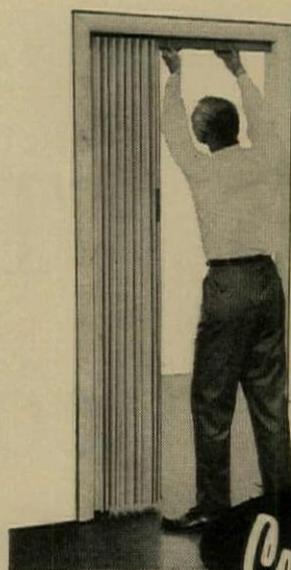
★ **LOW-COST**

Beautiful, long, long wearing Luxor foam-backed carpeting is low in initial cost (from 2.95 sq. yd.), low in installation cost (no padding needed) and virtually eliminates call backs.

Write for Complete Story



1507 COPLEY RD. • AKRON 20, OHIO
TEmpLe 6-5531



Takes longer to unpack than **INSTALL!**

THE *Columbia-matic*

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.
368 S. WARREN STREET • SYRACUSE 1, NEW YORK

For interior Wood Paneling . . . a better finish at less cost!



Designer: Russell Forester, La Jolla, Cal.
Cabot's Stain Wax on ceiling and woodwork.

Cabot's STAIN WAX

The "three-in-one" finish
Stains • Waxes • Seals
in one easy operation.

The beauty of a stain, the luster of a wax, the protection of a sealer . . . all in one finish, Cabot's Stain Wax. Cuts costs to a minimum;

SAMUEL CABOT, INC.

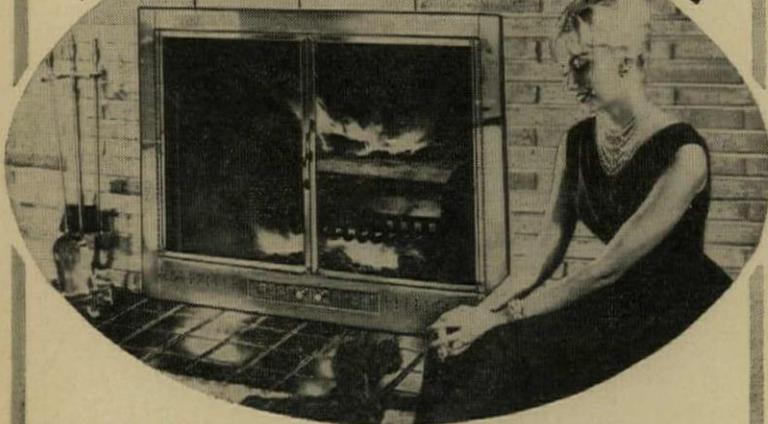
1030 South Terminal Trust Bldg., Boston 10, Mass.
Please send Stain Wax color card.

easy to apply and maintain; enhances the beauty of the wood grain. Choice of twelve rich colors, plus natural.

ADD QUALITY SALES APPEAL
FOR DISCRIMINATING HOME BUYERS

With The *Thermo-Rite*

FIREPLACE ENCLOSURE



SOLID BRASS FRAME

BEAUTY • Solid brass frame blends with modern or traditional decor.

SAFETY • Protects children and pets from flying sparks.

CONVENIENCE • Piano-hinged doors open easily. Sliding draft doors control fire

TEMPERED GLASS DOORS

COMFORT • Eliminates drafts... radiates even heat.

ECONOMY • Burn wood, coal or gas and save on fuel bills. No loss of room heat.

CLEANLINESS • Seals in smoke, ashes and soot to prevent rug and furniture damage

Treasured In Fine Homes Everywhere!

FITS ANY SIZE OR TYPE FIREPLACE...AVAILABLE IN 32 SIZES.



For complete details Write Dept. HH-1060

Thermo-Rite

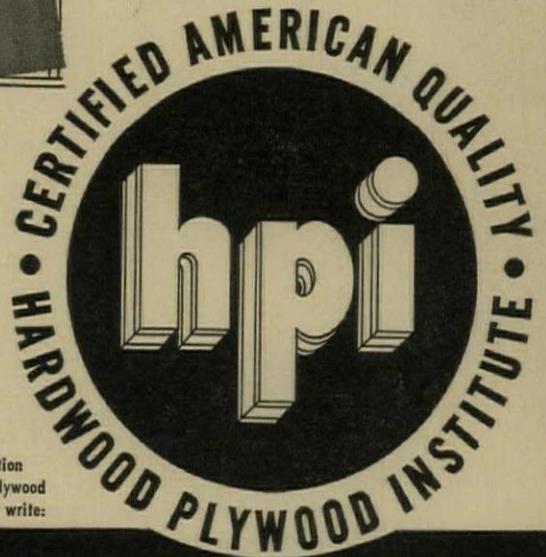
MANUFACTURING CO. AKRON 9, OHIO
Canadian Plant: St. Catharines, Ontario

hpi means quality

HARDWOOD PLYWOOD PANELING



The hpi seal guarantees that the plywood you specify has met the rigid testing and inspection of the Hardwood Plywood Institute—30% more exacting than Commercial Standard



For more information about hardwood plywood or the Institute, write:

HARDWOOD PLYWOOD INSTITUTE
2310 South Walter Reed Drive, Arlington 6, Virginia

HOMES FOR BETTER LIVING AWARDS ENTRY SLIP

Entry slip and fee must be in the hands of the committee
by January 27, 1961
To the Committee for the Homes for Better Living Awards
American Institute of Architects
1735 New York Avenue NW, Washington 6, D.C.

Category.....
Class.....
Location.....
Owner.....
Architect.....
Builder.....
Submitted by.....
Address.....

Enclosed is (check) (money order) in the amount of \$10 covering this entry.

For additional entry slips or copies of the program, write The American Institute of Architects, or HOUSE & HOME, Rockefeller Center, New York 20, N.Y.



NEW
16 page
4-color
catalog

progress BUILDING PRODUCTS

RANGE HOODS A complete line for new or existing homes . . . 4 models . . . all popular finishes including solid copper.

HOME RADIO INTERCOMS 4 models in copper and stainless finish, engineered for easy installation, priced for project or custom homes.

EXHAUST FANS Variety of models and sizes. Ceiling fans, wall fans, blower fans, air exchangers, heater and ventilator lites.

BATHROOM CABINETS Sliding or hinged door models in new square cut cabinet design. Choose overhead or side fluorescent fixtures.

PROGRESS MANUFACTURING CO., INC., Dept. H&H-10, Phila. 34, Pa.
Please send FREE copy of Progress Building Products Catalog.

NAME _____
COMPANY _____
ADDRESS _____



Put the Selling in Your Dwelling...

Add the Luxury of Hardwood at the Cost of "Substitutes"

Now you can offer homes and apartments with the rich, mellow beauty of solid Appalachian Hardwood parquet flooring at no increase in cost! Prefinished Hartco Wood FLOR-TILE® make it possible for you to gain this real selling advantage and turn it into profit. Investigate this newest flooring development now. Check these important features:

- * SOLID HARDWOOD TILE . . . 5/16" x 6" x 6"
- * PREFINISHED . . . no on-the-job finishing
- * EASY ADHESIVE INSTALLATION . . . no forcing
- * STABILITY . . . guaranteed to stay down
- * TWO GRADES, FOUR WOODS . . . Oak, Ash, Walnut, Maple

SEND FOR SAMPLES AND LITERATURE!



NAME _____
 ADDRESS _____
 CITY _____
 FIRM _____

TIBBALS FLOORING COMPANY
 Dept. HH-1 Oneida, Tennessee

ADVERTISERS INDEX:

This advertisers index published by HOUSE & HOME is an editorial service to its readers. HOUSE & HOME does not assume responsibility to advertisers for errors or omissions in preparation of these listings.

Page:	
281	Acme National Refrigeration Co.
80	Air Conditioning & Refrigeration Inst.
52, 53	Allied Chemical Corp. (Barrett Div.)
176, 177	American St. Gobain Corp.
237	Anaconda American Brass Co.
23-34	American Gas Association
180, 181	American Hardboard Assoc.
201	American Motor Corp. (Kelvinator Div.)
166	American-Olean Tile Co.
35-38	American-Standard
203, 204	Amerock Corp.
245	Amsterdam Corp.
50	Arkla Air Conditioning Corp.
221, 222	Armstrong Furnance Co.
293	Azrock Flooring Products Div. (Uvalde Rock Asphalt Co.)
259, 260	Barber-Coleman Co.
52, 53	Barrett Div. (Allied Chemical Corp.)
3	Bell & Gossett Co.
78	Borg-Warner Corp. (Norge Sales Corp. Div.)
158	Bostitch, Inc.
247	Broan Manufacturing Co.
161	Bruce Co., E. L.
235	Bryant Manufacturing Co.
160	Bulldog Electric Products Co.
288	Cabot, Inc., Samuel
18	Caloric Appliance Corp.
170	CARADCO, Inc.
168, 169	Carrier Corp.
160W6	Cloverdale Plywood
288	Columbia Mills, Inc., The
269	Crown Zellerbach Corp.
178, 179	Cutler-Hammer, Inc.
246	Delta Faucet Corp.
160W4	DeMarco Cabinet Mfg., Co.
48, 49	DeSota Chemical Coatings, Inc. (United Wallpaper Co. Div.)
9-17	Douglas Fir Plywood Assn.
281	Ductless Hood Co., Inc.
164	DuPont de Nemours & Co., Inc., E. I.
274	Edwards Engineering Co.
7	Eljer Division (Murray Corp. of America)
65, 67, 69, 71	Emerson Electric Mfg. Co.
54	Farley & Loetscher Manufacturing Co.
74, 75	Fedders Corp.
194, 195	Fenestra, Inc.
281	Flinchbaugh/Murray Corp.
62	Float Away Door Co.
292	Follansbee Steel Corp.
248, 249	Ford Motor Co.
224, 225	Frigidaire Division (General Motors Corp.)
277	General Electric Co.
163	General Electric Co. (Laminated Products Div.)
224, 225	General Motors Corp. (Frigidaire Div.)
160W5	Gladding, McBean & Co. (Hermosa Tile Div.)
286	Glassill Co.
2	Gold Seal Division (Congoleum-Nairn, Inc.)
241	Grayson Controls Div. (Robertshaw-Fulton Controls Co.)
263	Gustin Bacon Mfg. Co.
205	Hardwick Stove Co.
289	Hardwood Plywood Institute
160W5	Hermosa Tile Div. (Gladding, McBean & Co.)
56, 57	Hines Lumber Co.
213	Homasote Co.
171	House Beautiful Magazine
280	House & Home
270	Howard Miller Clock Co. (Built-in Div.)
273	Hunter Division (Robbins & Myers, Inc.)
275	Ida Products Co.
5	Inland Homes Corp.
264	Insular Lumber Sales Corp.
258	Jerrold Electronics Corp.
19-22, 287	Johns-Manville Corp.
40, 41	Kaiser Aluminum & Chemical Corp.
201	Kelvinator Division (American Motor Corp.)
42	Kentile, Inc.
244	Kewanee Manufacturing Co.
216, 217	Keystone Steel & Wire Co.
70	Kohler Co.
285	Leigh Building Products Division (Air Control Products, Inc.)
232, 233	Lennox Industries Inc.

Page:	
210, 211	Libbey-Owens-Ford Glass Co.
215	Line Material Co.
227	Louisville Cement Co.
288	Luxor Carpet Co.
193	Magic Chef
240	Major Industries, Inc.
72, 73, 231	Masonite Corp.
236	Mobile Homes Mfrs. Assoc.
206, 207	Mueller Brass Co.
252	Municipal Service Co.
7	Murray Corp. of America, Inc. (Eljer Div.)
199	National Bureau for Lathing & Plastering
76, 77	National Gypsum Co., The
294	National Homes Corp.
254, 255	National Lumber Manufacturers Assn.
187	National Manufacturing Co.
78	Norge Sales Corp. Div. (Borg-Warner Corp.)
2A, 2B	Nutone, Inc.
160W2, 3	O'Keefe & Merritt Co.
60, 239	Olin Mathieson Chemical Corp.-Metals Div.
266, 267	Overhead Door Corp.
284	Peerless Pottery, Inc.
242	Philco Corp.
160W1	Pioneer Mfg. Co.
278, 279	Pittsburgh Corning Corp.
175	Place Homes, Inc.
284	Plan Hold Corp.
253	Portland Cement Assn.
257	Potlatch Forests, Inc.
289	Progress Mfg. Co., Inc.
280	Radiant Ray Radiation, Inc.
220	Red Cedar Shingle Bureau
160W4	Red Cedar Shingle Handsplite Shake Assn.
262	Reflectal Corp.
172, 173	Republic Steel Corp.
8	Republic Steel Kitchens
273	Robbins & Myers, Inc. (Hunter Division)
241	Robertshaw-Fulton Controls Co. (Grayson Controls Div.)
6	Robertshaw Thermostat Div. (Robertshaw-Fulton Controls Co.)
165	Rock Island Millwork Co.
261	Roddis Plywood Corp.
265	Roper Corp., George D.
182	R. O. W. Sales, Inc.
68	Ruberoid Co., The
59	Sandura Co.
39	Scholz Homes, Inc.
64	Shower Door Co. of America
276	Simplex Forms System, Inc.
81-86	Simpson Logging Co.
256	Slater Electric Mfg. Co.
183-186	Smith Corp., A. O.
291	Sonoco Products Co.
61	Southern Pine Assn.
250, 251	Square D Co.
274	Structural Clay Products Institute
270	Sunray Stove Co.
276	Tappan Co., The
289	Thermo-Rite Manufacturing Co., The
290	Tibbals Flooring Co.
268	Trane Co., The
272	United States Plywood Corp.
190, 191	United States Steel Corp.
48, 49	United Wallpaper Co. Div. (DeSota Chemical Coatings, Inc.)
271	Universal-Rundle Corp.
293	Uvalde Rock Asphalt Co. (Azrock Floor Products Div.)
198	Ware Aluminum Windows, Inc.
174	Waste King Corp.
160W6	Wedgewood-Holly Appliance Co.
79	Weiser Co.
4	Western Lock Mfg. Co.
66	Western Pine Assn.
282, 283	Weyerhaeuser Sales Co.
196	Weyerhaeuser Sales Co. (Silvatek Div.)
228, 229	Whirlpool Corp.
167	Willamette Valley Lumber Co.
243	Wood Fibreboard Co.
234	Wood Mosaic Corp.
162	Zegers, Inc.

TOPS

IN QUALITY and ECONOMY



SONOCO
SONOAIRDUCT[®]
FIBRE DUCT

Cherry Point
Capehart Project—
849 units.
General Contractor:
H. O. Coble
Construction
Company.
Heating Contractor:
E. L. Scott
Roofing Company

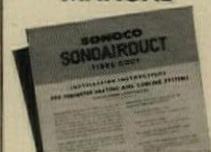
Low first cost, faster installation, highest quality—you get all three when you use F.H.A.-permitted SONOAIRDUCT Fibre Duct for slab perimeter heating, cooling, or combination systems.

SONOAIRDUCT handles easily, levels and joins quickly . . . saving time and labor on the job. Long lengths mean fewer joints to make, and there are no sharp cutting edges to worry about. Every piece is usable, because SONOAIRDUCT won't chip, crack, or break when dropped.

Highest quality is assured, too, because SONOAIRDUCT has been subjected to F.H.A. testing procedures—meeting or exceeding all criteria and test requirements for products in this category. Year in and year out, aluminum foil-lined SONOAIRDUCT is America's best selling Fibre Duct—proof of its dependable performance.

Order SONOAIRDUCT Fibre Duct in 23 sizes, 2" to 36" I.D., in standard 18' lengths—special sizes to order. Can be sawed.

FREE
INSTALLATION
MANUAL



Contains latest, detailed, step-by-step installation data for SONOAIRDUCT Fibre Duct. For copy, send us name, address on company letterhead.

See our catalog in Sweet's,
or write for complete information to

SONOCO

Construction Products

SONOCO PRODUCTS COMPANY, HARTSVILLE, SOUTH CAROLINA • La Puente, Calif.
Fremont, Calif. • Montclair, N.J. • Akron, Indiana • Longview, Texas
Atlanta, Ga. • Brantford, Ont. • Mexico, D.F.

4840

WILLIAM E. BOYD RESIDENCE, EL PASO, TEXAS
ARCHITECT: RAY PARRISH, SCOTTSDALE, ARIZONA
ROOFING CONTRACTOR: L. & K. SHEET METAL
ROOFING CO., EL PASO, TEXAS



Beautiful Roofing and Beautiful Dreamers

It used to be that the roof of a house was a very unimaginative thing—installed mainly to afford protection against the elements. It was given little consideration in the overall aesthetic expression of the house.

Then, a number of beautiful dreamers—architects and builders who felt that the roof was a significant design feature—began to design roofs that became the focal point of the house's beauty.

Follansbee Terne, an architectural roofing metal, has been used as the roofing material for many of these houses because its use places no limit on the imagination of the designer. Terne is versatile, allowing the desired expression of form, function and color because it can be applied in so many ways.

Follansbee Terne is a very practical roofing material, too. Properly installed and painted, it will last more than a lifetime. It can be painted any color, any time, to harmonize with other aesthetic changes. Painted a light color, it will reflect most of the sun's heat. And Follansbee Terne is completely fireproof.

Materializing a beautiful dream with Follansbee Terne is the practical way to a distinctive roof—one which makes a house an outstanding and beautiful structure. If you do not have the latest information on Follansbee Terne, we would be very pleased to send it to you.

Follansbee is the world's pioneer producer of seamless terne roofing.



"Sure, folks like carpet—but how can I afford it in my \$12,000 homes?"



Give them the look of
carpet... the value of vinyl asbestos
in *Vina-Lux* carpet tones

Your flooring dollar buys the most — in sales appeal and performance — when you install Vina-Lux Carpet Tones . . . available in 5 decorator-designed colors.

Here is the true deep-textured look of fine carpet in long-wearing, easy-cleaning vinyl asbestos tile. And Vina-Lux beauty is matched by solid economy, because it's ideal for installation on or below grade over concrete slab, or over wood and plywood subfloors.

Want to sell more houses — faster — at a better profit? Free Vina-Lux model home merchandising kit, samples and "Floor Styling Handbook" can help you! Write today!

AZROCK FLOOR PRODUCTS DIVISION
UVALDE ROCK ASPHALT COMPANY
555A FROST BANK BUILDING • SAN ANTONIO, TEXAS



Over 50 colors and a style for every builder requirement



BULLETIN FROM



CORVETTE

DOMESTIC SERVICE	
the class of service desired:	
otherwise this message will be sent as a fast telegram	
GRAM	
LETTER	
NIGHT LETTER	

\$
S
E

WESTERN UNION TELEGRAM

1206 (4-55)

INTERNATIONAL SERVICE	
Check the class of service	
otherwise the message will be sent at the full rate	
FULL RATE	
LETTER TELEGRAM	
SHORE-SHIP	

W. P. MARSHALL, PRESIDENT

WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED

and the following message, subject to the terms on back hereof, which are hereby agreed to

TO ALL BUILDERS:

AUG. 26, 1960

NATIONAL HOMES ANNOUNCES MOST COMPETITIVELY PRICED LINE IT HAS EVER OFFERED BUILDERS. NEW "CORVETTE" SERIES FOR 1961. "PRICED TO SELL" HOUSES NOW OFFERED WITH MORE OPTIONAL ADDS AND DEDUCTIONS THAN EVER BEFORE. BASIC SPECIFICATIONS ALLOW THEM TO BE OFFERED TO MEET STANDARDS OF LOWEST COST HOMES IN YOUR MARKET...BUT CAN ALSO BE ALTERED TO OFFER THE MANY FINE QUALITY FEATURES WE HAVE DEVELOPED THROUGH THE YEARS. WRITE FOR FULL DETAILS.

NATIONAL HOMES CORP.

NATIONAL HOMES CORPORATION, LAFAYETTE, INDIANA



PLANTS AT
LAFAYETTE, IND.
HORSEHEADS, N. Y.;
TYLER, TEX.