

ONE-OF-A-KIND HOUSES: Lessons in delight

Research report: "Trades are the one sure way to sell more people more new houses' Bill Levitt finds the market eager for bigger and better houses

The Most Advanced Idea i

New NuTone 3000



Get All these Exclusive Features in

- 1. SELECT ANY HOOD SIZE ... ANY HOOD FINISH ... ANY POWER UNIT
- 2. FULL 21" DEEP... REACHES ALL THE WAY TO FRONT BURNERS
- 3. MULTI-SPEED DIAL CONTROL ... FOR ANY VOLTAGE VARIATION

Kitchen Ventilation in 25 Years

Series Hood Fans!

.... with Interchangeable "Plug-In" Power Units



OVER 60 DIFFERENT HOOD-FAN COMBINATIONS *

Get Exactly What You Want at the Price You Want

- * 20 DIFFERENT COMBINATIONS WITH STANDARD POWER UNITS
- * 20 DIFFERENT COMBINATIONS WITH DELUXE POWER UNITS
- * 20 DIFFERENT COMBINATIONS WITH WALL FAN POWER UNITS



MULTI-SPEED DIAL CONTROL FOR ANY VOLTAGE VARIATION



POWER UNIT CONCEALED IN HOOD EXTRA LARGE GREASE FILTER

NuTone's 3000 Series Hood-Fans!

- 4. POWER UNITS ARE CONCEALED IN HOODS. RECESSED LIGHTS
- 5. EXTRA LARGE "WRAP-AROUND" GREASE FILTER ... EASY TO CLEAN
- 6. PREWIRED AT FACTORY. SAVES VALUABLE INSTALLATION TIME SEE OTHER SIDE

4 EASY WAYS TO INSTALL

NuTone's 3000 Series Hood Fans!



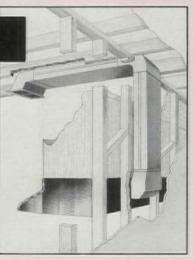
Here's the newest idea in Hood-Fans . . . that saves you money when you buy ... and saves you money when you install. Get COMPLETE FLEXIBILITY ... Choose the exact Hood-Fan you want and the type of installation best suited for your needs!

Write for new catalogs to NUTONE, INC., Dept. HH-9, CINCINNATI 27, OHIO

ulone

1. Vertical

Transition elbow in wall and ducts concealed between the wall studs.



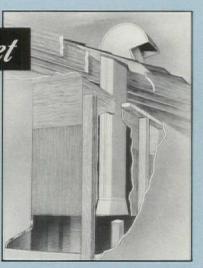
2. Horizontal

Ideal for outside wall. Horizontal discharge through outside wall cap.



For installation along the back wall of cabinet and soffit above.

← See other side



4. In Wall

For a wall fan the hood on an

installed below outside wall.

Sales-minded Builders Choose NUTONE Built-In Hood-Fans · Exhaust Fans · Door Chimes • Intercom-Radio • Ceiling Heaters • Food Center • Built-In Scale

14,000 JAM THROUGH MODEL HOME ...

SEE HOW Hydronic* SYSTEM DOUBLES USUAL LIVING AREA



B&G Booster Pump

The B&G Booster is a silent, vibrationless electric pump which circulates hot water through the heating system—automatically keeps indoor temperatures at whatever degree desired. This key unit and other auxiliary Hydro-Flo equipment can be installed on any hot water boiler.

Hydro-Flo heating plant takes much less space than a refrigerator.

"Hydronic Homes" sales promotion for builders

Every builder should see this comprehensive program of ideas and sales helps for utilizing the outstanding and exclusive advantages of hydronic heating. There's no obligation in get-ting all the facts—write today.

sponsored this home to show builders how a properly designed hydronic heating system could produce 2400 sq. ft. of usable floor

full and two half baths, living room, separate

Full use of the basement was made possible by the hydronic heating system. It includes a family room, playroom, half bath, laundry, hydronic heating plant, water heater and storage areas. The playroom floor is so warmed that young children can play in the coldest weather without need for extra

The basement is on one zone and the first floor on a second zone, both thermostatically controlled.

Mr. L. M. Van Kersen, of the M & I Supply Company, says, "The basement area created the most excitement for both husband and wife. The direct result is that in 90% of the homes we have laid out, complete heating of the basement has been specified."

*Modern hot water heating.



Separati.

Hydro-Flo system BELL & GOSSETT

COMPANY

Dept. FW-10, Morton Grove, Illinois

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



to install Johns-Manville Fiber Glass Home Insulation —vou reduce labor costs on every installation

Johns-Manville Fiber Glass home insulation is so light in weight and resilient it fits snugly between framing members and stays in place until stapled. No helper is needed to hold the blanket up during installation.

One man alone can insulate an average-size house, both ceilings and sidewalls in a matter of hours. The result: a great saving in time and labor costs.

Because of the design of the exclusive "Double-Fold" Tabs, the blankets are automatically positioned in place

on the framing members to provide proper air space.

And there are added benefits after the insulation is in place. Because the "Double-Fold" Tabs extend only ½" on the face of studs or joists, framing members are not hidden from view of other craftsmen. Stapling is done on the portion of the tab along the side of the framing member. There are no obstructions on face of studs or joists to interfere with lath and plaster or drywall construction.

The tabs are aluminum foil, covered on both sides with Kraft paper. They have stronger holding power and don't tear away from the staples.

For additional information and name of nearest distributor, write: Johns-Manville, Box 111, New York 16, N. Y. In Canada, Port Credit, Ontario.

Ask your J-M representative about the 7-Star and Mrs. America® promotion to help you sell more homes.

@Reg. U.S. Mrs. America, Inc

JOHNS-MANVILLE





MAKE "PROBLEM" AREAS MORE EFFICIENT WITH SPACE-SAVING

MODERNFOLDS!

In every house there is at least one area that needs a Modernfold door. Modernfolds eliminate "door-swing." Your customers gain more wall space, more floor space, more living space! And Modernfold doors divide space... instantly! They make one room do the work of two!

Famous Modernfold fabric covered doors with all-steel inner framework, come in a wide variety of new weaves and patterns...in warm, neutral colors that blend, match or contrast with any color theme. All washable, durable!

Now, Modernfolds come in wood grain, too...for traditional or modern settings. In richly handsome hardwood finishes. They're quiet and easy gliding.

Your customers see Modernfold's space-saving story in national ads appearing regularly in "Better Homes and Gardens," "American Home" and "Newsweek" magazines. Why not show them, firsthand, how you make "problem" areas more efficient with new Modernfolds! Your Modernfold Distributor is listed under "Doors" in the Yellow Pages.

NEW CASTLE PRODUCTS, INC., Dept.6. New Castle, Indiana - Manufacturers of "Modern-fold" Folding Doors, "Air Doors," "Modern-cote" Wall Coverings and "Peabody" School Furniture. In Canada: New Castle Products Canada, Ltd., St. Lambert, Que.



2nd kitchen in the home



ADDS SALES APPEAL

The family or recreation room becomes a complete hospitality center when you plan to include a Dwyer Snack Bar. Choose from several models, ranging from a handsome refrigerated beverage bar, to a full compact kitchen complete with refrigerator, range, sink and storage. Each is designed for fast, economical installation.

Which of these fun centers fits your plans?



DWYER SNACK BAR

Richly paneled in your choice of several fine woods, or in unfinished fir for custom decorating on the job, the Snack Bar comes complete with big refrigerator, freezer, deep sink, rangetop and oven (both optional), plus storage cabinet. There's also a lock-up beverage

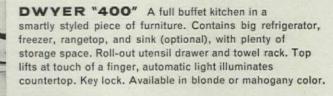
keeper and a utensil drawer with sandwich board. Available in sizes from 57" to 89" in length, each with stain and mar-resistant top.

MAÍTRE "D"

In sleek ebony set off against gold-colored aluminum trim, the Maître "D" opens at the touch of a button to provide at-hand refreshments and light snacks. Five-plus cubic

foot refrigerator has convenient roll-out shelves and freezer that can hold nine ice cube trays. Lock-up beverage keeper, utensil drawer with cutting board and towel rack. Plugs into 110 AC outlet.







wyer

PRODUCTS CORPORATION
Dept. J 1509 Michigan City, Indiana

Gentlemen: Please send complete information on:

SNACK BARS_____ MAITRE "D"____ DWYER "400"____

MY NAME

COMPANY NAME

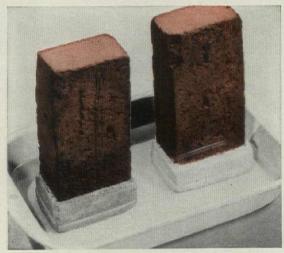
ADDRESS

CITY, STATE

Also send information on full line of conventional compact kitchens.

BRIXMENT MORTAR

Helps Prevent Efflorescence



To test Brixment mortar and ordinary cementand-lime mortar for resistance to efflorescence, "cap" two brick heavily with the mortars—



let harden, and keep both brick for a few weeks in a shallow pan of water, as shown. See the difference with Brixment mortar!

HERE'S WHAT CAUSES EFFLORESCENCE-AND WHY BRIXMENT MORTAR HELPS CONTROL IT

Efflorescence is an outcropping of small white crystals on brickwork. It is caused by the soluble salts which almost all masonry materials contain. When reached by water, these salts dissolve. They may then be drawn by evaporation to the surface of the wall.

Brixment helps prevent efflorescence. The air-entraining, water-repelling agent in Brixment helps to prevent water from saturating the mortar and dissolving the small amounts of salts it may contain. Brixment mortar also helps prevent

water from seeping down through the wall, dissolving the salts in the brick, and carrying them to the surface.

Contractors who have used all sorts of mortars say they have far less efflorescence with Brixment.

This is only one of many advantages which have helped make Brixment the most widely-used masonry cement on the market. It will be worth your while to hear all the advantages of Brixment the next time a Brixment salesman calls on you. Or write direct for full details.

LOUISVILLE CEMENT COMPANY, LOUISVILLE 2, KENTUCKY

Cement Manufacturers Since 1830



Builder Michael Campanelli (above, left) discusses telephone planning with Architectural Consultant Edward Poskus. In photo at right, Mr. Poskus tours a Campanelli model home with New England Telephone and Telegraph Company man "Pete" Danforth.

"People want telephone-planned homes"

-SAYS MASSACHUSETTS BUILDER MICHAEL CAMPANELLI

"We make pre-wired telephone outlets a standard feature of all the homes we build," says Michael Campanelli, Senior Vice-President of Campanelli Bros., Inc., Braintree, Massachusetts.

This progressive New England firm has built over 8000 homes in the past 10 years—and, since pre-wiring facilities became available, 3000 of them have been telephone planned. Every one of the Campanelli homes now under construction north and west of Boston contains pre-wired telephone outlets.

"People want telephone-planned homes," says Mr. Campanelli. "They like being able to add extension phones easily when they're needed. And they like having the wiring for them neatly concealed within the walls.

"No question about it. Telephone planning is a plus feature that really helps us sell our homes."

Your local Telephone Business Office will be glad to help you with telephone planning for your homes. For complete details on home telephone installations, see Sweet's Light Construction File, 8i/Be. For facts about commercial installations, Sweet's Architectural File, 32a/Be.

"The Regent," a modern Campanelli home in Danvers, Massachusetts.



BELL TELEPHONE SYSTEM





Ralph Campbell owner of Campbell Leisure Living Homes, Builder of Windsor Park Development in suburban Harrisburg, Penna.

















Like all smart home builders Ralph Campbell, of Harrisburg, Pennsylvania knows it's the out-of-the-ordinary appointments that add extra value to homes. That's why he uses Fasco hoods and ventilators exclusively to give his homes that extra sparkle that lifts them out of the ordinary . . . makes them more attractive . . . sell faster!

Fasco hoods and ventilators are precision built and engineered for fast, economical installation . . . dependable, efficient service . . . call backs are cut to a minimum. Let Fasco help you sell . . . get the facts from your Fasco representative today!



4500 industries incorporated · rochester 2, N. Y.

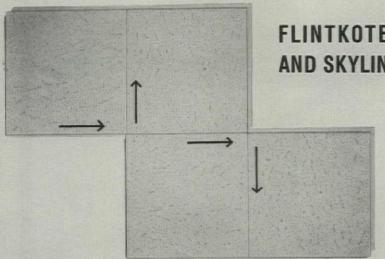
SEND COUPON FOR FULL COLOR CATALOG ON THE FASCO LINE

1	1
100	1

Company

HH 9-59

ANNOUNCING



FLINTKOTE'S NEW CREVATEX AND SKYLINE ACOUSTICAL TILE...

with exclusive new installation and decoration features that are made to order for you and your home-buyer prospects!

IN CREVATEX TILE—Tile comes with two design directions in a single unit—each non-repeti-

tive for superb high style. "Twin-Tile" feature cuts installation time in half because you install two pieces of tile at once!

EXCLUSIVE "FOUR-PATTERN" FEATURE IN SKYLINE TILE. Tile comes in four beautiful star-design perforation patterns. 1200 to 1500 perforations per tile in star clusters eliminate mechanical look, improve styling. For complete information and samples, call your Flintkote supplier or write: The Flintkote Company, Building Materials Division, 30 Rockefeller Plaza, New York 20, New York.

‡A trademark of The Flintkote Company



GET ALL THE FACTS

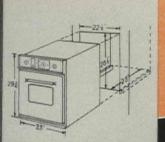
before you specify any appliance!

NEW BUILT-IN OVEN CAN BE SET IN PLACE AND FULLY CONNECTED IN 4 MINUTES!



FITS IN 24" CABINET WIDTH

Hotpoint gives more cooking capacity in less cabinet width



WHEN YOU BUILD IN HOTPOINT YOU BUILD IN PUBLIC PREFERENCE

A Division of General Electric Company, Chicago 44, Illinois

ELECTRIC RANGES • REFRIGERATORS • AUTOMATIC WASHERS CLOTHES DRYERS • CUSTOMLINE® • DISHWASHERS • DISPOSALLS® WATER HEATERS . FOOD FREEZERS . AIR CONDITIONERS

Hotpoint

PRODUCT FACTS

TEAR OUT AND SAVE FOR FUTURE REFERENCE

Hotpoint built-in ovens install quickly and easily because all connections are made to the junction box attached to the front of the oven. Both leads and terminals in the box are color-keyed and numbered for quick, positive connections. The box is easy to inspect and meets the requirements of Underwriters' and local electrical codes.

But easy installation is only one of your needs. More important is choosing the oven model that adds maximum sales power to your kitchen at minimum cost.

Since 1954, Hotpoint has made builtins a full-time business - not a sideline. This is the only way to develop a complete line of built-in models designed. featured and priced to meet builder and customer needs for homes in all price ranges. And this is why . . .

Hotpoint Offers More Saleable Quality Features For Your Money

Automatic Rotisserie . Meat Thermometer . Panorama Window . Interchangeable Oven Door Panels . Plug-In Bake and Broil Units . Available in Sunburst Yellow, Turquoise, Coral Pink, Copper Brown, Silver Satin, and White

- BE SURE YOU GET ALL THE FACTS --

To receive copies of all the Hotpoint Product Facts series write today to:

Kitchen Appliance Department Hotpoint 5600 West Taylor Street Chicago, Illinois Attn.: Mr. F. Gene Abrams

Your Name

Your Company





side, Model RJ77-A has controls mounted on left side of oven. Each oven fits in 30 inch cabinet width.

Banquet-size oven features Twin Rotisseries

This extra-wide Hotpoint oven offers the giant cooking capacity your customers want and need, yet it fits in a 30 inch-wide cabinet. For big barbecue parties, the new twin Rota-Grill rotisseries accommodate two roasts or several small fowl at once. And, this model also has the new removable door, mirrored window and many other de luxe features.

Model RL75-A

and only Hotpoint offers all 3!



Only Hotpoint built-in ovens offer all three of 1960's newest most exciting sales features. All are easy to see and demonstrate so your prospects can quickly appreciate the extra quality built into your kitchens.

New 3-Way Oven Ventilation System means better cooking, cooler kitchens and cooler oven doors. The new attached hood-fan keeps the kitchen free from heat and food odors during broiling and Rota-Grilling. The new positive internal venting assures even heat and moisture distribution all through the oven, and new three-panel air-cooled door assures cooler outer door temperatures.

New Flexible Control Panel Mounting lets you order Hotpoint ovens with the controls mounted on either side for greater kitchen planning freedom.

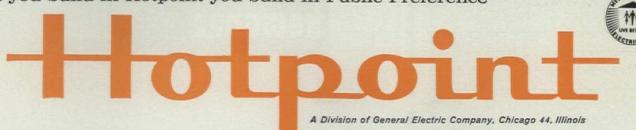
New Full-Width Door lifts off easily for quicker, easier oven cleaning, also lets you give the home buyer complete freedom in selecting the finish she prefers. New Mirrored Window lets you see how the meal is cooking, when the oven interior lights are on. But with them off, the window acts as a mirror hiding utensils stored in the oven from view.

And only Hotpoint offers so many other quality features

- AUTOMATIC ROTISSERIE AND ROAST-RIGHT THERMOMETER
- WIDE SUPER-OVEN COOKING CAPACITY
- INTERCHANGEABLE OVEN DOOR PANELS
- AVAILABLE IN SUNBURST YELLOW, TURQUOISE, CORAL PINK, COPPER BROWN, SILVER SATIN AND CLASSIC WHITE

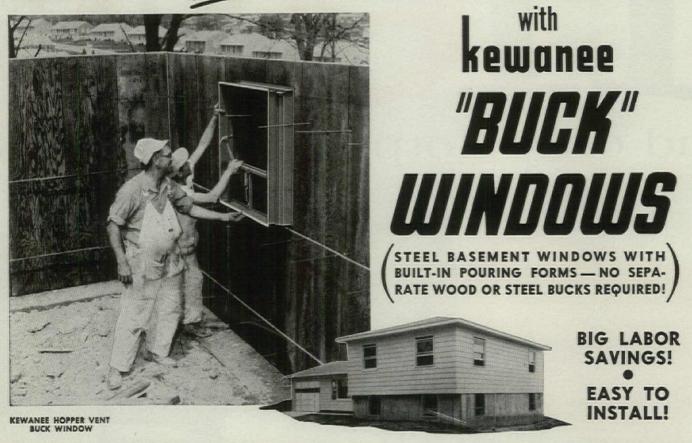
Put the added sales power of these great new Hotpoint ovens in your kitchen today.

When you build in Hotpoint you build in Public Preference



ELECTRIC RANGES · REFRIGERATORS · AUTOMATIC WASHERS · CLOTHES DRYERS · CUSTOMLINE® DISHWASHERS · DISPOSALLS® · WATER HEATERS · FOOD FREEZERS · AIR CONDITIONERS

NOW! Take the Labor out of basement window installation



FOR CONVENTIONAL & "WALK-IN" TYPE BASEMENTS

The new Kewanee line of "Buck" Windows offers builders and concrete contractors a real opportunity to improve basement design and construction, and cut down on labor costs. Installation is fast - just position buck window against wall forms, level and nail. There are no clumsy, heavy steel bucks to handle ... to strip, clean, oil, store or haul around. No wood bucks to build. All units are comparatively light in weight, available for a full range of wall thicknesses.

THE KEWANEE "BUCK" LINE INCLUDES . . .

- STANDARD 2-LITE WINDOW Project builders report save
- ings of \$3 per opening.

 LARGE WINDOWS FOR "WALK-IN" BASEMENTS Big selection (Hopper Vent, Slider, Ranch and Casement types).
- Units feature the same fast, labor saving installation.

 NEW! KEWANEE BLOCK BUCK WINDOW Standard 2, 3 or 5 block high.
- BUCK DOOR FRAME Installed as quickly and easily as any buck window.



KEWANEE STANDARD 2-LITE BUCK WINDOW

KEWANEE SLIDER BUCK WINDOW

KEWANEE BLOCK BUCK WINDOW

KEWANEE BUCK DOOR FRAME

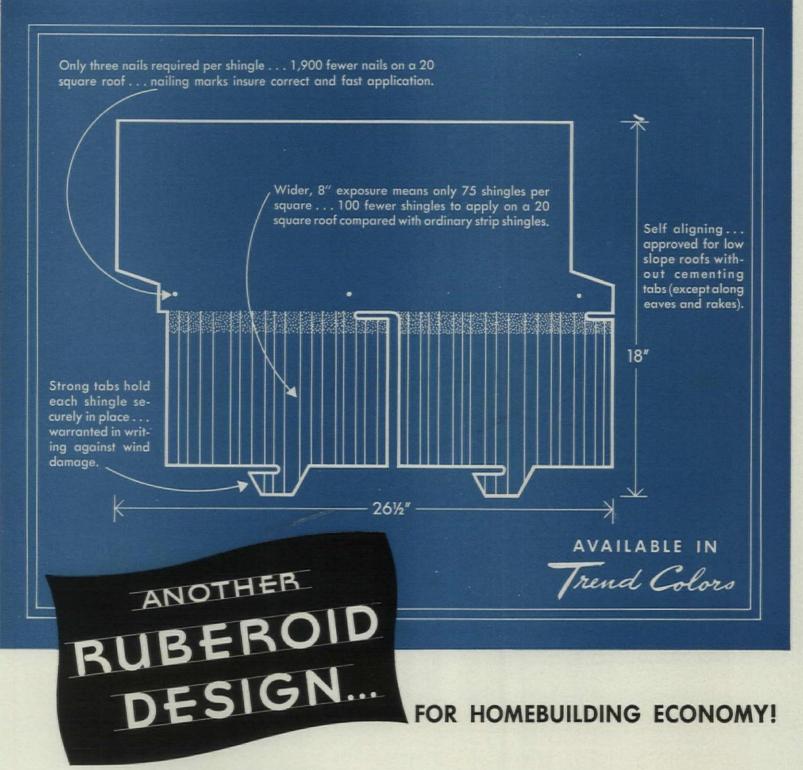
OTHER KEWANEE QUALITY BUILDING PRODUCTS

Steel Door Frames Mortar Boxes

Conventional Steel and Aluminum basement windows Aluminum Sliding Horizontal Windows

Other metal building products

Please send "Buck" Window literature for	SEE YOUR DEALER OR WRITE TO		
☐ Poured Walls ☐ Concrete Block NAME	kewanee Manufacturing Co.		
STREET	959 FULLER AVE. • KEWANEE, ILL.		
CITYSTATE	— "Our 40th Year Making Quality Building Products"		



LOK-TAB asphalt shingles

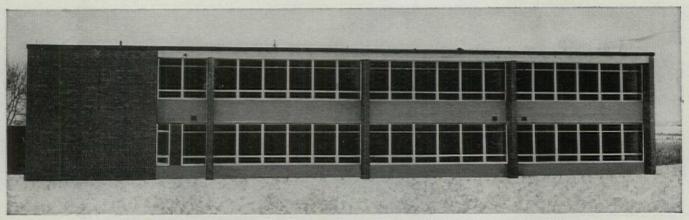
Lok-Tabs are designed by Ruberoid to cut application costs, yet at the same time provide a better and stronger roof. Ruberoid offers a written warranty against wind damage on every Lok-Tab roof. Lok-Tabs give you a new roof selling feature for your new homes and cut your building costs.

The Lok-Tab is another product originated by

Ruberoid and designed to improve new homes and cut building costs. It's part of a line that has been serving builders better since 1886. On your next house or project, check with your Ruberoid dealer. Learn how you can build a better looking home and cut your costs with quality Ruberoid building products. For more information on Lok-Tab asphalt shingles, write: The RUBEROID Co.

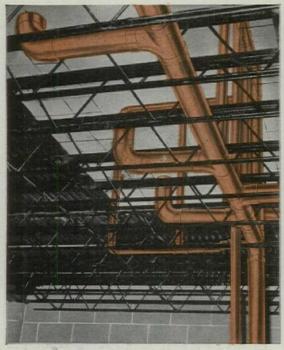
RUBEROID

500 FIFTH AVENUE, NEW YORK 36, N. Y.



GOWER SCHOOL ADDITION, Hinsdale, Illinois. Architect: Wight & Schlaebitz, Downers Grove, Illinois. Plumbing and heating contractor: Jerry & Phil's Plumbing & Heating, Inc., Brookfield, Illinois.

SUPERIOR ALL-COPPER PLUMBING IN THIS SCHOOL AT LOWER COST TO TAXPAYERS



COPPER SANITARY DRAINAGE LINES roughed-in among structural members at Gower School. This space-saving installation would have been impracticable with heavy, bulky pipe requiring threaded or caulked joints.



COPPER SANITARY DRAINAGE LINES for second floor lavatories at the Gower School. Light weight of copper tube and ease of making solder joints save many dollars on multiple installations like this. Compact assemblies eliminate wide plumbing walls, give greater usable floor area.

Phil Bergeron and Jerry Wehrmeister, plumbing contractors near Chicago, have found that the installation economies with copper tube and solder-joint fittings enable them to offer all-copper plumbing—water supply and sanitary drainage—at a cost lower than competitive bids based on installing ferrous piping. Recent jobs awarded to them as low bidder include the Gower School, the LaGrange Township Junior High School, a church, health center, two restaurants and a store. Anaconda was used for all these jobs. Phil Bergeron says, "We specify Anaconda Copper Tube and Fittings

because their consistent fine quality and close tolerances makes our work easier and keeps the job costs within our estimates."

Contractors, builders, and architects the country over are finding that they can provide long-lasting, low-maintenance all-copper plumbing at a cost competitive with ferrous piping. For information on Anaconda Copper Tube and Fittings, write for a copy of Publication C-33. Address: The American Brass Company, Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ont.



COPPER TUBE AND FITTINGS

Available through plumbing wholesalers
PRODUCTS OF THE AMERICAN BRASS COMPANY





vibrapac architectural block

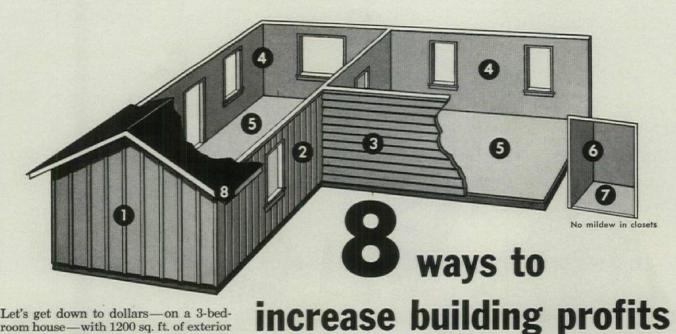
Turn loose your creative imagination on Vibrapac Architectural Block. One style alone gives you countless numbers of wall patterns. And each Vibrapac wall provides fireproof, textured beauty of dramatic contrasts. What's more, it's so easy to maintain. Specify this exciting product, Vibrapac Architectural Block, on your new building projects.

Most Vibrapac block plants can meet your specifications for architectural block—in many styles and sizes, interesting textures, and distinctive colors. Write for our A.I.A. Design Block Bulletin No. 139.

BESSER COMPANY

Dept. 175. Alpena, Michigan, U. S. A. FIRST IN CONCRETE BLOCK MACHINES





Let's get down to dollars—on a 3-bedroom house—with 1200 sq. ft. of exterior wall surface, 3000 sq. ft. of interior wall surface, 960 to 1144 sq. ft. of floor area. Here's how Homasote Boards—with the highest quality in their field—can save you money over other standard building materials...

1 SAVE \$204 to \$929

with Homasote ¹⁵/₅₂" Board-and-Batten Exterior Walls...*Provides* high structural strength and top insulation value; holds paint 20% longer.

2 SAVE \$164 to \$889

with Homasote %" Grooved Vertical Siding... Provides even greater insulation value than #1; beautiful in appearance.

3 SAVE \$103 to \$828

with Homasote %" Reversible Siding—in 12" width, with 10" exposure. If used with clip, there are no exposed nails—no danger of rust stains.

4 SAVE \$270 to \$462 with Homasote Interior Walls. No need for door or window trim... Keeps out dampness—stops mildew, bathroom noises and glare... Makes the whole house quiet and rest-

ful...Ideal surface for paint or wallpaper.

with increased quality

- 5 SAVE \$32 to \$38 with Homasote %" Sub-Flooring—in Big Sheets 8' x 12'. Adds insulation; reduces noise; keeps dampness away from finished flooring.
- 6 SAVE \$25 to \$37 with closet walls of ¹⁵/₁₆" Homasote. Keeps closet dry; provides added sound-deadening between rooms.
- SAVE \$9 to \$12 with closet flooring of 38", 1532" or 58" Homasote—instead of finished flooring. Increases mildew-protection
- 3 SAVE \$19 to \$26 by making facia and rake molds from pieces cut out from door and window openings. (Two pieces of ¹⁵/₃₂" glued together make strong ¹⁵/₁₆" thickness.)

FREE — HOMASOTE'S COST-REDUCTION ANALYSIS

Send us one of your bestseller house plans. (It will be treated in strict confidence and returned to you.) We will be glad to give you the exact cost—in your area —for using each of these eight products on that particular house. You incur no cost or obligation.

Remember — Homasote products give you *new selling features* as well as lower costs.

Get the facts! Other progressive builders have taken advantage of our free Cost-Reduction Analysis. We haven't yet failed to prove our case to their great satisfaction. Send your house plan to Dept. J-5.

REDUCE YOUR COSTS BY \$458 TO \$1504 PER HOUSE

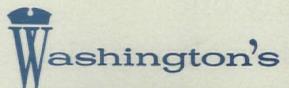
		Board-and-Batten	Vertical Siding	12" Siding	
4 Homasote Int 5 Homasote Sul 6 Closet Walls 7 Closet Floors 8 Facia and Rah	b-Flooring	\$204 to \$ 929 270 to 462 32 to 38 25 to 37 9 to 12 19 to 26	\$164 to \$ 889 270 to 462 32 to 38 25 to 37 9 to 12 19 to 26 \$519 to \$1464	\$103 to \$ 828 270 to 462 32 to 38 25 to 37 9 to 12 19 to 26 \$458 to \$1403	
		\$559 to \$1504	1 \$313 (0 \$1404	1 \$430 (0 \$1403	

Further savings occur, because application of materials is not included in above prices. Homasote Boards—in a wide variety of sizes, forms and thicknesses—reduce application costs.

HOMASOTE COMPANY

TRENTON 3, NEW JERSEY

Homasote of Canada, Ltd., 224 Merton Street, Toronto 12, Ontario



TWO-PRONGED SALES ATTACK..







Complete "kitchen ease" with attractive, convenient polystyrene drawers.



Point-of-Sale Merchandising Aids help your salesmen sell the house.



POLYSTYRENE DRAWERS

Aimed at Your Customers

Here are Washington's High-Impact Polystyrene Drawers—the ultimate in cabinet convenience and luxury! Easy-to-clean, lightweight, versatile and attractive. The Drawer merchandising aids shown above will help sell your homes quicker. Designed for model home shows, the aids demonstrate many advantages of Polystyrene drawers in a colorful way—stressing to the consumer the easy-to-clean, attractive kitchen or utility cabinets available to them.

Washington's High-Impact Polystyrene Drawers make your homes worth MORE!



Please send me complete details on the Washington High-Impact Polystyrene Drawers and the Builders' Merchandising Kit.

NAME	
ADDRESS	
CITY	.STATE

There's only one KitchenAid dishwasher quality...



Every model has the same superior features!

Home-buying prospects know about KitchenAid dishwashers—and they appreciate the fine performance of a built-in KitchenAid in the homes they buy. It says: "This is a quality home," with the extra convenience of the finest dishwasher made.

Hobart builds KitchenAid dishwashers to do a job, then prices them fairly. There is no stripped-down, lower quality model! There is only one KitchenAid quality and that is the very best!

A builder's reputation depends on quality materials, workmanship and product performance. His future success depends on customer satisfaction today. Quality built-ins, such as a KitchenAid dishwasher by Hobart, can go a long way toward helping sell new homes. They can also help convince prospects that the builder puts a high rating on customer convenience and satisfaction.

KitchenAid®

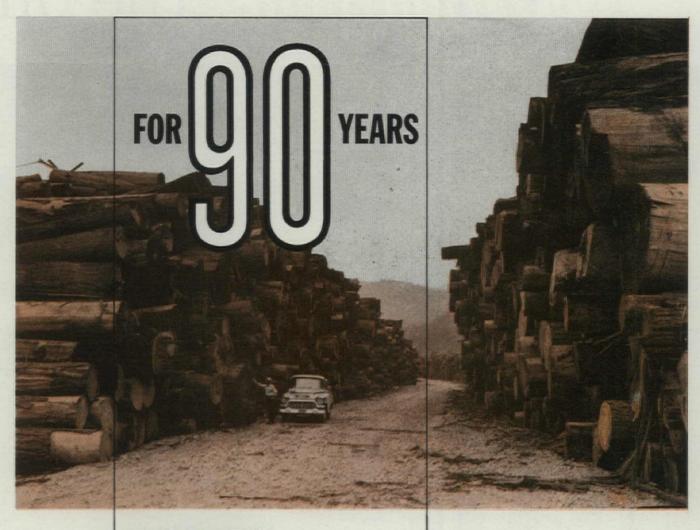
the builder's dishwasher

The finest made... by **Hobart**The World's Largest Manufacturer of Food, Kitchen and Dishwashing Machines

KitchenAid dishwashers have so many exclusive features that home buyers like, plus a remarkably low percentage of service calls. KitchenAid has just as many features that builders like, including the simplest installation, standard cabinet width and a range of front finishes to match or blend perfectly with either wood or metal cabinets. All models have famous Hobart revolving powerwash action with the exclusive overlapping, high-velocity water pattern to give the most effective washing results.

We're with you in National Home Week, Sept. 12-20

T	CitchenAid Home Dishwasher Division The Hobart Manufacturing Co., Dept. KHH Troy, Ohio (In Canada: 175 George St., Toronto 2)
	Please send literature Please send name of nearest distributor
	ame
	ddressddress
C	ityZoneState



PALCO —your prime source for Architectural Quality REDWOOD

This ready reserve "cold deck" of finest quality redwood assures constant mill supply regardless of forest weather conditions. Dependability, plus skilled workmanship and the most modern equipment have, for 90 years, made PALCO REDWOOD the industry's standard of quality comparsion.

Better buy PALCO-there's no better buy than the best



Your dependable supply source: Capacity: 155 million board feet. Inventory: 100 million board feet — self-perpetuating timber reserves.

909

THE PACIFIC LUMBER COMPANY

Mills at Scotia, Eureka, and Elk, California

100 BUSH ST., SAN FRANCISCO 4 • 35 E. WACKER DRIVE, CHICAGO 1
2185 HUNTINGTON DRIVE, SAN MARINO 9, CALIF.

. /

MEMBER OF CALIFORNIA REDWOOD ASSOCIATION

RCA Whirlpool ... the only



Eliminates mismatching! Every appliance is perfectly

Gas refrigeratorfreezers

Think of the sales appeal you'll add with these convenience features. Exclusive ICEMAGIC® that makes and stores ice cubes automatically, no more trays to fill or spill; so quiet you can't even hear a hum; 10-year warranty, the strongest in the industry; plus many other exciting features. Available in 11, 10, 9 and 6 cu. ft. models.

Gas built-in surface units

Here's the flexibility to fit any kitchen plan and provide the most modern cooking features . . . thermostatically-controlled burner with "Flame Set" eliminates burning and boilovers, Dispos-A-Bowls*, Center Simmer burners plus many others. Choice of 4-burner models, 2-burner units, even a drop-in griddle that converts into a giant-size burner.

Gas built-in ovens

Almost like "providing a cook"! Rotisserie turns meats automatically; Meat Probe tells when meat is done; "2-Set" automatic clock turns oven on and off. All 3 models feature matchless automatic ignition and "smokeless" broiling. If your prospect prefers free-standing gas ranges there's a complete selection of 30", 36" or 40" models to fit any budget.

Gas washer-dryer combination

Washes and dries a big, 10-lb. load of clothes cleaner, softer and fluffier in one continuous operation. And, it saves up to 15,600 gallons of water a year over competitive models in washing and drying a full load of clothes. There are also gas dryers and matching washers if your buyer prefers separate laundry units.

complete all-gas kitchen!



coordinated to give your kitchens more appeal than ever!

Now, you can add extra sales appeal to your homes with the one and only design-coordinated, all-gas kitchen. Women want their gas kitchens to look like a unit, not mismatched and jumbled. That's why RCA WHIRLPOOL all-gas kitchen gives your homes sales power others can't. Everything from floor to ceiling can be correlated in color and design . . . no single appliance "interrupts the beauty", because they're all matched mates. Another big advantage! It means you deal with just one dependable source who is eager and able to furnish expert planning assistance, merchandising aid and the quick delivery you want. Also, the heavily-promoted, nationally-accepted name of RCA WHIRLPOOL quickly tells prospects you've built the finest QUALITY into your homes.

Get the complete story. Send coupon today!

	n, St. Joseph, Michigan mation on RCA WHIRLPOOL
Name	Title
Firm Name	
Firm Address	
City	Zone
County	State

RCA WHIRLPOOL . . . America's first family of gas appliances Products of WHIRLPOOL CORPORATION St. Joseph, Michigan

Use of trademarks age and RCA authorized by trademark owner Radio Corporation of America

For the package deal at a package price...it's RCA WHIRLPOOL!

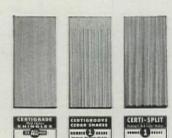
TOP IT OFF WITH TEXTURE



Handsplit cedar shakes have a texture and a thickness all their own. Virtually any home design—topped with the texture of handsplit cedar—takes on the dimension and stature of a custom property. The hand-hewn character of this extraordinary roofing puts quality up where it is obvious, apparent, unmistakable. Too, a roof of thick cedar shakes provides extremely effective insulation . . . is unaffected by hail, wind or blistering heat . . . and will outlast the very sheathing it protects. In every respect, handsplit cedar shakes reflect quality. And quality, today, is what sells houses!

RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Washington 550 Burrard Street, Vancouver 1, B. C.



Zone State

Address



lighting guide and catalog!

SHOWS YOU How to Use Decorative Lighting to Sell Your Homes Faster

Easiest way to keep ahead of your competition... best way to flatter your homes ... quickest way to the heart of a home buyer! MOE Light brings you the latest ideas in lighting... MOE Light Inspiration Lighting, the newest styles in nationally advertised fixtures. Put them both together and they spell profit!



- 52 Pages in Full Color
- Practical New Lighting Ideas
- Easy Guide to Fixture Selection
- Facts on Certified Inspiration Lighting
- . Mood Lighting with Dimmers
- Accent Lighting
- Decorating with Pendants, Clusters
- Recessed Lighting
- Outdoor Lighting



THOMAS INDUSTRIES INC.

Send for Your

Free Copy Today

LIGHTING FIXTURE DIVISION
410 S. Third St., Louisville 2, Kentucky

MOE LIGHT - STAR LIGHT - BENJAMIN ENCHANTE - SAN MARINO THOMAS INDUSTRIES INC., Dept. HH-9
Lighting Fixture Division • 410 S. Third St., Louisville 2, Ky.

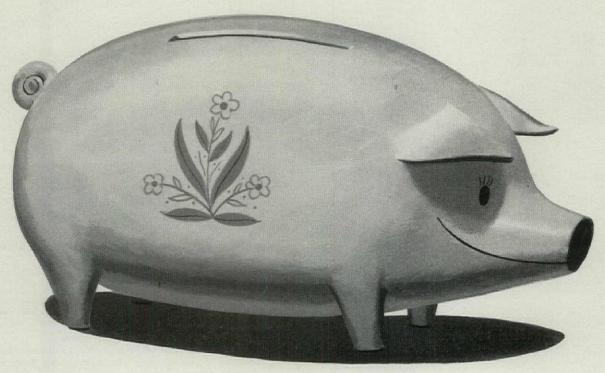
Send new 52-page full color MOE Light Lighting Guide and Fixture Catalog.

COMPANY

ADDRESS.

SEPTEMBER 1959

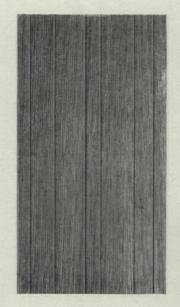




Top quality with tremendous finishing savings go hand-in-hand with General's *Gibraltar* and Paine's *Century* SSS flush doors. The same is true of SSS wall paneling.

Our factory controlled Super Microseal Process makes these finishing savings possible by effecting a chemical-physical change on and within the wood's surface . . . the natural way.

Result: a beautiful finish in *depth* which is hand rubbed in appearance . . . a better finish than costly on-the-job built-up finishes. With the Super Microsealed surface there is NO SANDING . . . NO SEALING . . . NO SECOND COATS . . . NO IN-BETWEEN COAT SANDINGS. Just *one final* coat of wax or clear finish and the result is magnificent! Think of your savings!





37

costs on SSS doors and panels

Specifically, you save a *minimum* of \$3.20 per door in finishing costs. On one house alone you save at the very least \$42.00; twenty houses \$840.00 and fifty houses \$2,100.00. Elimination of these five steps make it possible.



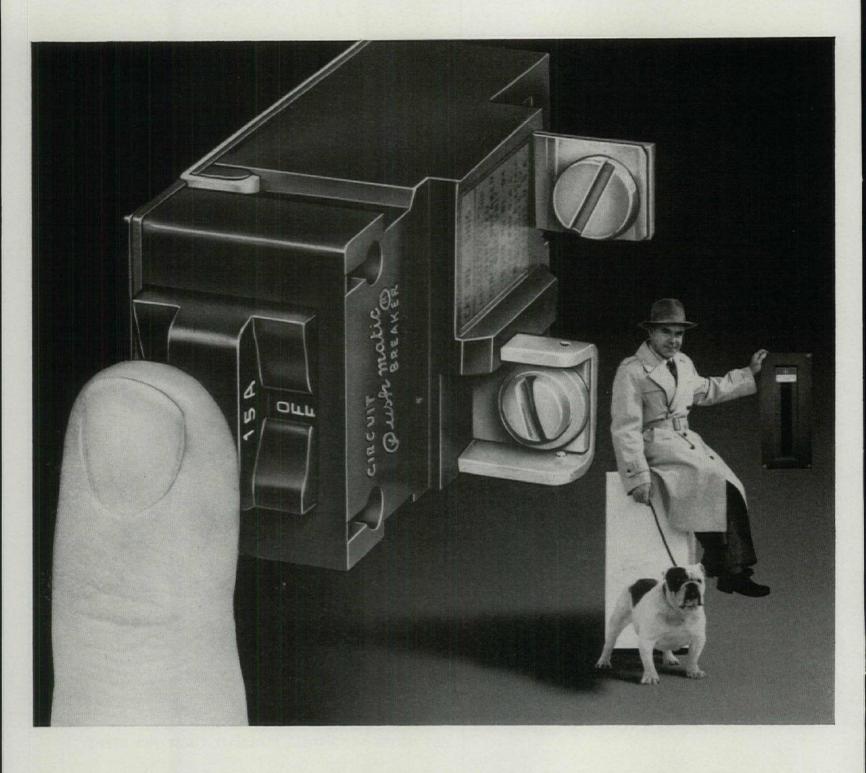
SSS DOORS AND PANELS ELIMINATE THESE FIVE STEPS



GENERAL PLYWOOD CORPORATION 3131 W. Market Street, Louisville, Kentucky
PAINE LUMBER COMPANY LTD. Oshkosh, Wisconsin

*"Super Satin Surface" and "Triple S" or "SSS" are trademarks owned by GPC (General Plywood Corporation) and used by GPC and Licensees on products having a Super sealed or Super Micro-sealed surface that satisfies the quality standards established by GPC."

SEPTEMBER 1959



EASIER SALES, RIGHT AT YOUR FINGERTIP, WHEN

YOU SPECIFY TROUBLE-FREE PUSHMATIC BREAKERS

We asked builders, "How do Pushmatic® circuit breakers help you sell more homes?" And here are a few answers—

"Today, prospects go for the idea of safer electrical living—and no fuses to change."

"Maximum protection of everything electrical from the utility pole right to the appliance cord. That impresses them."

"I tell 'em Pushmatic means Full Housepower with complete safety."

"Great pushbutton convenience—just

push the button to operate."

Next we asked, "What do you, as a builder, like about Pushmatic circuit breakers?" We got many answers. Here are some—

"Pushmatic protection and full capacity — plenty for present and future electrical needs."

"Pushbutton convenience is easy to sell."

"Real consumer appeal and acceptance."

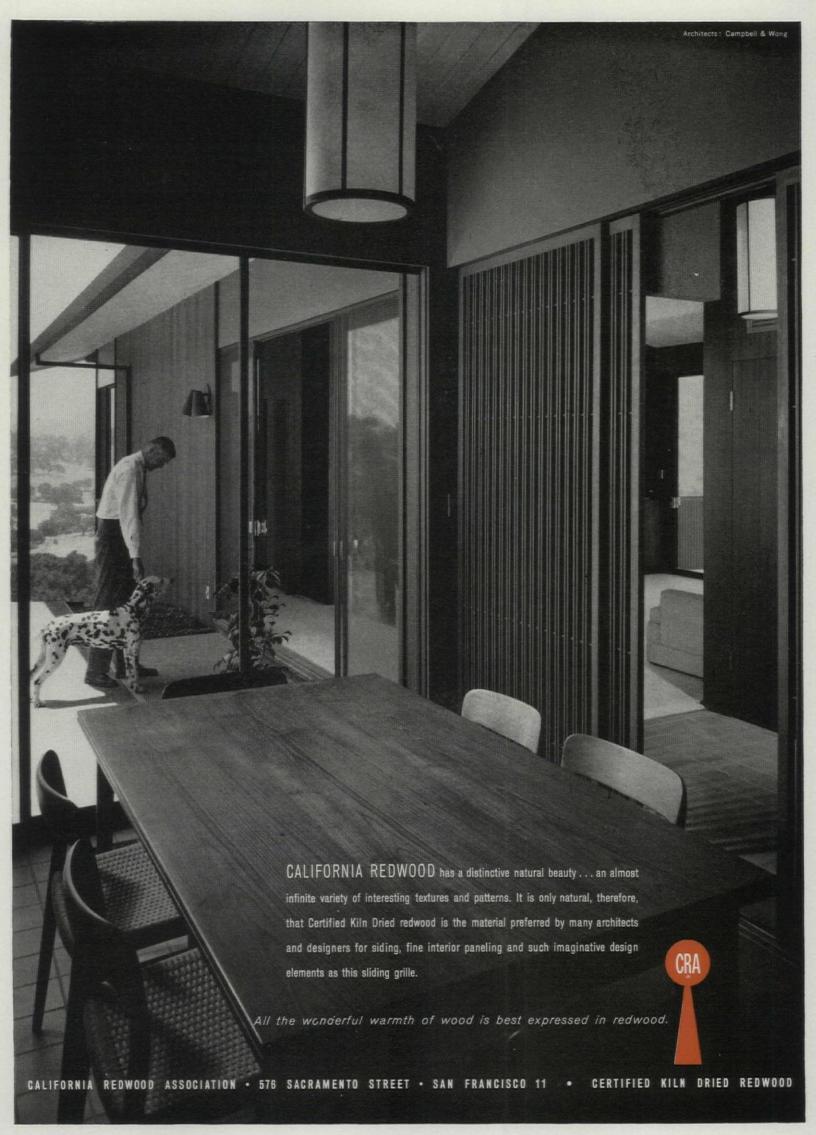
Specify BullDog Pushmatic so your buyers live safer electrically—enjoy a world of pushbutton convenience for years to come!



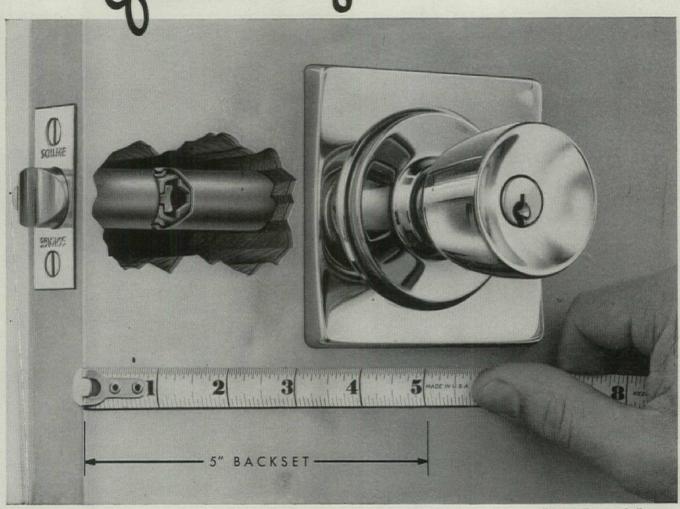
BULLDOG ELECTRIC PRODUCTS DIVISION I-T-E CIRCUIT BREAKER COMPANY

BOX 177 . DETROIT 32, MICHIGAN

In Canada: 80 Clayson Rd., Toronto 15, Ont. Export Division: 13 East 40th St., New York 16, N.Y.



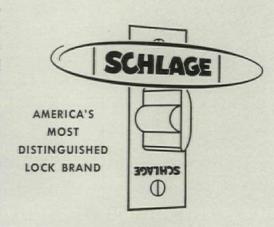
SCHLAGE. LOCKS Mark of a quality builder



Design illustrated: Regent escutcheon with Tulip knob

Schlage beauty locks add grace and distinction to any entranceway. Put the Schlage mark on your homes. Make an important impression on prospects with the 5-inch backset feature; simple as a standard installation. Decorate your doors with handsome, eye-catching Schlage escutcheons.

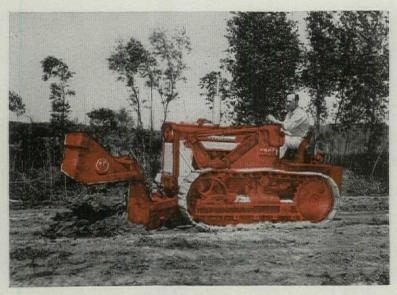
Let us help you merchandise and sell your homes. Contact your Schlage representative or write P.O. Box 3324, San Francisco 19, California. Schlage Lock Company... New York... San Francisco... Vancouver, B.C.



meet DOUG SEIBER... at work in the world's newest plywood plant, Santiam Lumber Co., Doug is pulling veneer from the green chain ... one of the first steps in producing Teco-Tested plywood. Santiam's new plywood plant covers 10 acres... the exterior of all the new buildings are covered with Teco-Tested plywood. Just as Santiam insisted on the best for their own use they will be guaranteeing their customers the best. All of Santiam's plywood will undergo the production line inspection and testing by trained technicians from Timber Engineering Company of Washington, D.C., top rated independent research and testing agency. Always look for the "Struc" mark on Teco-Tested Plywood. This stamp means the plywood complies with F. H. A. structural standards of dependable quality for all load bearing plywood applications.

SANTIAM LUMBER COMPANY





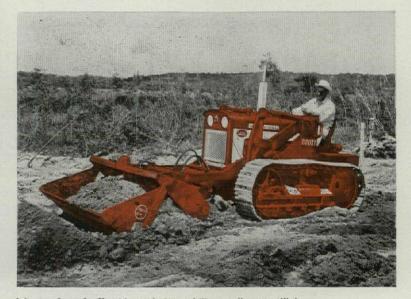
It's a buildozer with exclusive "radius control" of dozing depth which allows you to buildoze with inch-close accuracy.



It's a scraper with the stripping ability and fast, live "boiling action" of large, expensive carry-type earthmoving scrapers.



It's a Skid-Shovel with patented pry-over-shoe break-out action which gives over 5½ tons of break-out force, for prying out stubborn materials, stumps, and boulders.



It's a clamshell with exclusive ability to "surround" loose materials for loading, and to dump sticky materials through the bottom of the bucket.

New T-340 FOUR-IN-ONE gives you versatility unlimited in 3/4 cu yd*size!

Now you can have four-machine utility at the lowest cost ever! New T-340 International Drott Four-In-One combines in one machine the actions of front-end loader, dozer, carry-type scraper, and many-purpose clamshell. With these four machine actions in one, you can handle dozens of specialized jobs single-purpose rigs can't even touch!

The Four-In-One with the new 31 dhp International T-340 crawler makes an unbeatable team for lowest-cost earthmoving and materials handling. The T-340 delivers the most push and pull-power in its size class. Famous Four-In-One Skid-Shovel versatility has never been equaled by any other loader on the market. Together, the T-340 and Four-In-One give you a wider job range and greater

earning capacity than ever before available in the small crawler loader field.

Find out first hand... see the IH dealer nearest you! For his name, and specification folder, write International Harvester Company, Dept. HH-9, P.O. Box 7333, Chicago 80, Illinois.

*1/8 cu yd, heaped.



Roundup:

Starts slip but the drop may be slow and small

The third post-war housing boom seems to have passed its peak. If so, the 1958-59 boom is following much the same pattern set in 1954-55—cresting in the spring of the second year and then turning down. The Census Bureau reports private starts still high with a 1.35 million seasonally adjusted annual rate in July. But this is the lowest rate of the year. The peak came in April with a 1.43 million-a-year rate due in large part to the recession-spawned FNMA special assistance program for low priced houses. As in 1955, tight money and slower sales are combining to squeeze the cream off the market (see pp 48 and 51). But this presages no fast slide. Indeed most experts look for a gradual decline, reaching another plateau early next year at a rate still above 1.2 million. Housing, like the nation's economy, runs in cycles and every cycle has its down side. How soon the industry levels off and/or starts back up depends to some degree on—

How soon will FHA boost its interest rate?

Some insiders predict FHA will wait only until Congress adjourns to boost its Sec 203 interest rate from $5\frac{1}{4}\%$ to $5\frac{3}{4}\%$. Each week of delay now sets builders plans back that much further and it is in the area of future planning—not current building—that the money squeeze is making itself felt most. Discounts on $5\frac{1}{4}\%$ FHA loans are up to 7 points in the West and South and still rising (see p 48). And it's harder and harder to get future commitments even at this price. The result: many builders who can afford to shut down are planning to do just that when current commitments are gone.

FHA has been quietly mulling a proposal to shift its interest rates to a regional basis—low in the East, higher in the Midwest, highest in the West and South. Mortgage men have not been consulted on it yet but many predict such a scheme would be difficult to manage. They still consider a free interest rate—even with a 6% ceiling—the best answer.

Producers probe fee boosts by regional code groups

Product approval fees worry material makers. Most manufacturers ignored the bite until the International Conference of Building Officials (a largely West Coast group) added a \$100 annual renewal fee plus \$10 per month listing fee for products approved under its Standard Building Code (Aug, News.) Now, the newly-formed Housing Industry Council is studying the whole problem. There seems to be a growing trend for more code groups, cities and states with their own codes, to sock producers with product approval fees and then annual renewal and/or listing fees. Even AIA is starting a listing service, at \$35 a year per product. Although cities using the codes are no more bound to heed approvals than the producers are to seek them, most producers find the approvals a competitive necessity. Now they are concerned, not only about the growing cost, but about the delays-up to six months-in going through approval procedures whereby approving bodies "earn" the fees. Some producers say they wouldn't mind paying if they didn't have to wait. But others are wondering-and hoping the council's investigation will help them decide-whether the cost in time and money isn't more than it is worth.

Court support for big-lot zoning grows

Signs are multiplying that builders have lost the struggle against surburbs' tendency to control population by big-lot zoning that freezes out moderate price homes. The Connecticut Supreme Court's upholding of four-acre zoning for New Canaan (Aug, News) is only one. In Arlington County, Va., where Washington's suburban sprawl has already taken all but 8% of the land, apartment builders are running into the same trouble as house builders elsewhere. The county, fearful of becoming what Board Member Ralph R. Kaul, former HHFA defense housing expert, calls "a great metropolitan slum," is turning down all applications pending a population study. And Attorney Fred Stickel of Newark, chairman of the committee on zoning and planning of the National Institute of Municipal Law Officers, says upzoning is "no longer a trend—it's a fact. The courts are pretty much sold on increasing lot size up to 1 to 1½ acres in higher residential areas . . . if there is anything to support the policy of the community they'll support it." Stickel cites recent cases in Massachusetts, Pennsylvania, Missouri, adds: "There aren't as many cases of this kind in the Midwest as [in the East] but it's growing." All of which gives added point to Philadelphia License Commissioner (and one time homebuilder) Barnet Lieberman when he says, "The homebuilders have lost their battle in the courts . . . our court of last resort is the state legislatures . . . We need data on the impact of homebuilding on local government problems, to rebut the critics."

NEWS continued on p 46

NEWS INDEX

46
48
48
51
53
55
55
55
57
57
59
60
49
51
51
57

Second-try bill gives industry what it wants

Senate bows only slightly to President's veto attack on budget-busting. FHA is more hostage than ever

A close look at 1959's second omnibus housing bill, which sailed through the Senate Aug 18, shows that:

- 1. Nearly every segment of the housing industry gets legislative favors that will boost profits. Almost all of these are non-controversial and none will have visible impact on the federal budget. For example: builders get lower FHA down payments in the big \$15,000-\$28,000 house bracket. They get higher FHA mortgage limits on sale housing. They can sell bigger loans to Fanny May. Lenders get higher FHA interest rates on rental housing and co-ops. Savings and loans get permission to edge into land development loans. Realtors (and builders) get their long sought trade-in amendment. Realtors get authority to obtain advance commitments on existing houses from Fanny May. Dealers get another year's extension of FHA Title I repair loans.
- 2. Democrats conceded little of importance in the second bill even though they flopped in attempting to override President Eisenhower's veto of the first one (Aug, News). Spending for public housing and urban renewal is toned down, but the legislation 1) is riddled with little-publicized provisions loosening restrictions on costly and controversial programs like public housing and 2) creates new programs that may cost billions in the future.
- 3. Political control over FHA will be even tighter from now on. Senate Democrats made an effort to slip into the bill what was promptly tagged an FHA "deathsentence" clause. The banking committee approved legislation giving the agency \$10 billion more insuring authority. But it forbade FHA from using agreements to insure—by which FHA has staved off a crisis-producing collapse for ten months. And it forbade FHA to do any mortgage insuring at all after Oct 1 next year.

On the Senate floor, Democratic leaders led a move to ease this new system for holding FHA hostage for the expansion of other, costlier programs. And by a voice vote the Senate agreed to 1) cut FHA's new insuring authority to \$8 billion and 2) let FHA continue to use its roll-over (about \$500 million a month) to insure mortgages after the Oct 1, 1960 cut-off-even if Congress has not given it another lease on life.

Only \$200 million of the roll-over is expiring insurance; the rest is commitment rollover and attrition. FHA's monthly volume now runs about \$1 billion. So the provision means FHA could run at half speed for six months after Oct 1, 1960, then only at onethird volume, if Congress does not act again. Most experts figure this means FHA will again be held hostage for public housing and urban renewal in 1961.

The Senate passed the second-try measure with only two hours committee consideration and only two days floor debate. Swift though this was, it was not swift enough to let the House take up the new housing bill at once, as Democratic leaders originally planned, under suspension of the parliamentary rules. Taking the bill up under suspension looked essential to housing experts if the House was to avert a repeat of last year's bottling up of a catch-all bill in its conservative rules committee.

Second veto?

President Eisenhower-so the word went in Washington at mid-month-would hold his nose and sign the legislation. This expectation was bolstered by the President's press conference comment that "I am not one to refuse to compromise" on housing. He said:

"I do not, by any manner of means, say that

The unpredictable Sen Homer E. Capehart (R, Ind.), senior GOP member of the banking committee, told newsmen: "If he [Eisen-

a bill has to conform in every detail to the desires or convictions that I express." But he added: "I still won't back away from principle, though." And he singled out the inclusion of college classroom loans in a housing bill and "the special arrangements for housing for elderly people" as two items "I thought were particularly objectionable."

"We've decided to try underriding it"



Herblock-Washington Post

hower] vetoes this one there will be enough votes in the Senate to override." The final Senate vote for adoption, 71-24, bears him

When President Eisenhower vetoed the firsttry housing bill (S. 57) on grounds that it was so "extravagant, inflationary, unfair" that "it would do far more damage than good," the Democratic leadership in the Senate adopted an unusual strategy. It had John Sparkman's housing subcommittee hold hearings on the veto message-unusual because the Senate's leaders normally decide whether to try to override a veto or not without the nonsense of more hearings. This time, though, the Democratic leadership wanted to stall-at least through the Hawaiian elections where it expected to pick up two more Democratic votes to override. Besides, stalling would give time to consolidate the Democratic position on the attempt to override, would let the nation's mayors come before the Sparkman committee to take pot shots at the

By early August, Democrats discovered they just didn't have the votes. The very best they could do was to come within three votes of overriding. Hawaii did not help at all, splitting the two new Senate seats between the two parties. It looked as though an override vote would be only an exercise in futility. Sparkman and William Fulbright (D, Ark.) joined the housing subcommittee's Republicans, voted to recommend against an attempt to override, instead to report out a new bill (see next page) trimming their housing plans slightly.

Change in tactics

The substitute bill was duly reported to the Senate banking committee. But then word leaked out that the President might even veto the substitute legislation. Moreover, Democratic "liberals"-Sens Joe Clark, Bill Proxmire, Paul Douglas & others-were champing at the bit. All year, their efforts to swing from the heels at the Administration had been stopped by Senate Majority Leader Lyndon Johnson's overall strategy to blunt issues, not create or foster them.

Irritated by reports of a possible second veto, and under pressure to let the "liberals" have a vote, Sparkman and Fulbright surprised Capitol Hill insiders by reversing themselves, voting with the banking committee Democrats who wanted to try to override Eisenhower. The override recommendation squeaked out of the banking committee 8-7, with Chairman Willis Robertson (D, Va.) and Robert Byrd (D, W. Va.) joining the Republicans.

"They [liberals] wanted an issue," says an insider in Lyndon Johnson's camp. "They wanted to butt their heads against a wall. They wouldn't listen to reason. We told them there wasn't a chance of overriding that veto.'

Pro forma debate

The debate before the vote was listless. merely making a record for posterity. Sparkman, tall in a milk-chocolate-brown summer suit, read a speech from typed sheets-without emphasis or attempt to dramatize. Only a dozen senators were on the floor. Few listened. Other Democrats followed for the override and a few Republicans spoke against it. Then, by agreement reached earlier to limit debate, the reading clerk put the question.

As expected, the effort to override failed. The 55-40 vote was nine shy of the two-thirds majority required to upset a veto. Ohio's Frank Lausche and nine southern Democrats joined 30 Republicans in opposition. Only two Republicans (Javits of New York and Scott of Pennsylvania) joined the Democrats.

Next day (Aug 13), the Senate banking committee went back into a two-hour session, quickly approved a second-try housing bill.

Bundle of goodies

Almost half of the 100-odd changes in existing law made by the second-try bill involve FHA. They are loaded with new ways for builders and other housing men to make money.

Lower down payments for FHA—one of the changes most eagerly sought by the builders—found the Administration in a curious position. President Eisenhower objected to them in his veto as introducing "underwriting provisions of questionable soundness." But HHFAdministrator Norman Mason told the Senate housing subcommittee the Administration would "accept" lower down payments as part of catch-all legislation.

Power to order lower down payments is entirely discretionary with FHA. But FHA Commissioner Julian Zimmerman has indicated he will probably order the cuts if he gets the authority to do so.

The new schedule calls for 3% down on the first \$13,500 valuation, 10% from \$13,500 to \$18,000 and 30% of the balance. Thus the down payment is cut from \$1,400 to \$900 on an \$18,000 house; from \$5,000 to \$3,000 on a \$25,000 house.

The Administration was successfully adamant in opposing boosting the maximum mortgage term from 30 to 35 years for FHA and VA. "The lending industry is not ready to accept it," counseled Mason. Federal Reserve Chairman William McChesney Martin called the longer term (and lower down payments) "inflationary." He contended they would produce an "untimely and unwarranted" pressure on borrowing. "Now is the time to encourage more saving, not more borrowing," he said. Housing's problem, he asserted, "is we've been trying to stimulate it in good times and in bad, and we've almost reached the vanishing point of success unless we give houses away."

The Administration was willing to go farther than the Senate in raising the FHA mortgage ceiling, pegged at \$20,000 since 1954. But senators voted to boost it not to \$25,000, but to \$22,500 for one-family houses.

Other benefits for private housing:

• Mortgage limits are boosted for rental Sec 207, with higher room limits and a new maximum mortgage limit per project of \$20 million, raised from \$12.5 million. Interest rate goes up to 5¼% from 4½% (a rate so low it has been stymying deals).

- Maximum mortgage for Sec 221 relocation housing is left at \$9,000 but boosted from \$10,000 to \$12,000 for high cost areas. (The original bill raised the limit from \$9,000 to \$10,000.)
- Down payments under Sec 220 sales housing (in urban renewal areas) are cut to the same level as Sec 203 with a corresponding boost in mortgage limit. Dollar limits per room and maximum limits of 220 rental projects are raised to the 207 level.
- Limit on size of FHA and VA mortgages Fanny May can buy is boosted from \$15,000 to \$20,000 under the secondary market program and from \$15,000 to \$17,500 under special assistance programs. The limit is lifted entirely for Sec 220 loans.
- A trade-in provision lets a broker or builder get the same size mortgage as an owner-occupant by placing 15% of the mortgage amount in escrow. If no buyer is found in 18 months, this money is applied to reduction of the loan. This provision applies to both Sec 203(b) and 220 sales type.
- Added to the new bill is a provision increasing maximum loan under Sec 213 management-type co-op from 85% to 90% of replacement cost same as 207 and 220. Down payments for 213 sales-type are cut from 10% (5% if half the buyers are veterans) to a flat 3%. Interest rate is raised ½% to 5¼% on management-type; ¾% to 5¾% on sales-types.
- FHA Title I home improvement program is extended to Oct 1, 1960. Both the FHA military (Capehart) housing program and VHMCP are extended to Oct 1, 1961.

How the Senate shaved the housing bill on its second try

President Eisenhower originally asked for an \$810 million 1959 housing bill. Congress voted one costing \$1.37 billion in obligational authority—plus perhaps \$830 million more for public housing subsidies over 40 years. On its second try, the Senate voted a \$1.05 billion measure—but \$100 million of this (for direct loans for housing the elderly and building college classrooms) hinges on subsequent appropriation of the money.

In all, complained Sen Wallace Bennett (R, Utah) as the Senate completed action on the second measure, it had met only seven of President Eisenhower's 22 objections to the original bill. Six others were compromised, nine more ignored. As a result, warned Bennett, "there is still a possibility of a veto." The important changes:

35-year FHA loans are knocked out, in deference to Administration and Federal Reserve objections. This leaves the maximum term at 30 years.

Fanny May is not forced to resume buying special assistance mortgages (chiefly for urban renewal, co-ops and FHA elderly housing) at par. Eisenhower objected that this "would tend to substitute federal spending for private investment." The Senate banking committee recommended instead letting builders pass along to buyers discounts on FHA or VA loans eligible for special assistance by a new method: FHA would add them to its allowable costs in computing the loan, whether Fanny May actually buys it or not. But after Administration aides expressed concern, Sen John Sparkman, Democratic housing leader, himself led a bi-partisan move to delete the new scheme entirely. Omitted entirely is proposed Fanny May authority to make 12-month loans on the security of mortgages. New special assistance funds to buy FHA Sec 213 co-op loans are cut from \$37.5 million to \$25 million, but the \$12.5 million earmarked for builder co-ops remains intact. Deferring to Administration objections, the Senate killed a provision to cut Fanny May fees under special assistance from 11/2 to 1%. But a new section bails out builders whose year-old commitments for FHA Sec 221 and Program 10 units are now expiring. It compels Fanny May to extend special assistance commitments issued before Aug 27, 1958 if the builder would otherwise suffer "hardship," and if the delay in construction arose from "events beyond his control."

Backdoor financing: the Administration now objects to any of it (a new policy), wants funds appropriated annually by Congress for all programs. The Senate compromised by leaving back door financing through Treasury loans in effect on existing programs (notably public housing, urban renewal, college dormitory loans) but requiring appropriations for two new programs (direct loans for housing the elderly and college classrooms—both programs denounced by Eisenhower.)

Public housing is whittled from 45,000 to 37,000 new units. But there is no time limit on building the 37,000. Statutory ceilings on family incomes for admission and continued occupancy are abolished. Instead, local housing authorities (subject to PHA approval) get power to set these and, subject to a 20% gap between upper rental limit for admission and lowest rent on decent private housing, to establish rents. For displaced families, the 20% gap is cut to 5%, instead of abolished entirely as in S. 57.

Housing for the elderly, with its new \$50 million program of direct federal loans (98% for 50 years to nonprofit outfits) at a giveaway 234% rate, remains unchanged. But so does a proviso making this scheme contingent on subsequent Congressional appropriation of the money. This will not happen this year, at least.

Urban renewal spending, which the President called "excessive" before, is speeded up. Instead called "excessive" before, is speeded up. Instead of \$900 million for two years of grants, the second bill authorizes \$650 million which can be allocated immediately. \$100 million of this is available at the President's discretion for cities of 100,000 or less population if he feels they aren't getting their fair share of available funds. This is a direct slap at Eisenhower's veto assertion that "a few large cities could tie up all the funds' because the bill insists renewal grants be passed out on a first-come, first-served basis. Watering this ban on rationing down ever so slightly, the second-try bill lets URA also consider "urgency of need and feasibility." At Administration insistence, a disclosure clause provides that renewal developers, before they get can sign contracts to buy or lease land, must divulge publicly the names of principals, investors and shareholders in each project, plus its proposed financing, total cost, schedule of rentals or sales prices and estimated profit. Cities are allowed to count public provements started up to three years (instead of five as in S. 57) before signing loan-and-grant contracts toward their one-third share of the cost of land write-down. Eisenhower objected that with no retroactivity at all, under existing law, local cash contributions averaged only about 14% of renewal land costs.

College housing: instead of \$300 million, the second bill authorizes \$250 million for loans at interest rates below the Treasury's cost of borrowing. The Administration wanted \$200 million, but at higher rates.

College classrooms: a new \$50 million direct loan program, under the same subsidized interest formula as college housing loans, was made subject to appropriations. The Administration can pigeonhole it by not asking Congress for the money.

Planning scholarships: the Senate bowed to Administration objections, dropped entirely a new program authorizing appropriation of \$300,000 for HHFA scholarships for city planners and housing technicians.

NEWS continued on p 48

Fanny May over-the-market prices produce a deluge of new offerings

Fanny May is again housing's primary—not secondary—market for FHA and VA loans.

As discounts continued their four-month climb in August, Fanny May cut its secondary market prices by ½ point. This still left it 1 to 2 points over the open

House Home exclusive market in the money-shy West and South. Best open market price on the West Coast, for example, was 94 with many reports of 93. Fanny May's new price for a minimum down payment 51/4 % loan: 95 net, after 1/2 point purchase and marketing fee and allowing 50¢ on the \$1 for 2% stock purchase requirement.

Fanny May thus continues to fulfill one of its most critical functions—helping housing over the rough spots in its cycle, making money available when it's tough to get elsewhere. But many a mortgage man also points out that Fanny May is also

helping to support a politically pegged, below-the-market interest rate on FHAs and VAs.

FNMA's price cut is not expected to slow down the flood of new offerings—up 14% over a four-week period. Said one West Coast mortgage banker: "We'll soon be offering whole tracts at one time." Added an eastern lender: "I hear some of the larger shops are putting their loans on a conveyor belt. There's a postman at the end who picks them up and takes them straight to Fanny May." With prices on the New York wholesale market sinking to 91, mortgage men insist even a 2 point FNMA cut would not have stemmed the flow of offerings.

FNMA also cut the price on standby commitments by a full point. New price for a 51/4 % standby is 92; actually only 1/2 point below some current advance commitment quotations on the West Coast.

Outlook: still gloomy

Money from private lenders for FHA and VA loans grows scarcer and scarcer. New York savings banks have stopped buying mortgages for immediate delivery almost entirely—stung again by heavy withdrawals in July. Life companies are buying on quotas but with stepped up quality standards. And they are pushing more insistently for good conventional loans on commercial properties.

Even the Massachusetts Purchasing Group, the New England savings banks' mortgage buving organization, is buving now only in dribbles. Says its chief officer, Robert M. Morgan of Boston's Five Cents Savings Bank: "We have 100 banks in our group now—the most we've ever had. Right now there are not more than five of them buying mortgages—about the lowest number we've ever had."

But there are still only rare reports of homebuilders being hurt by the money squeeze. Most are still working off commitments made last spring. There are more cases of curtailed plans, even a few shut-downs. Reports Mortgage Banker Robert Tharpe of Atlanta: "Builders are discouraged and are slowing down. One or two have withdrawn completely."

One fresh development takes some of the heat off mortgage money: sales of new homes are slowing down in many areas—a dropoff no one seems to blame on tight money but only a lack of buyers. Slowdowns are reported in Detroit, Texas, Long Island, San Francisco, Atlanta, parts of Florida. Cleveland, Chicago and Washington, D. C. Comments Detroit's Harold Finney of Citi-

zens Mortgage Co: "In this case I think slow sales are a blessing in disguise."

In New York, Mortgage Banker John Halperin contends the real impact of tight money there has been on FHA multi-family projects—207 rentals and 213 co-ops. With their frozen 4½% interest rates "there is practically no money at all for them," says Halperin.

One hopeful sign in the money market: prices on government bonds ended their long slide—firmed up in August, although at low levels

Raise the rate

With fixed-interest rate FHAs and VAs so far behind the rest of the money market, demand is mounting for a boost in FHA's. Since Congress just raised the VA rate ceiling from 434% to 51/4% no one has even the faintest hope it will be boosted again this vear. But FHA can go to 6% without asking Congress. Mortgage bankers have again urged FHA Commissioner Julian Zimmerman to free the rate while retaining the 6% maximum. FHA is studying another possibility—a regional rate system which would follow the same state groupings Fanny May uses for its price list.

At mid-month, there were reports FHA would not wait until Congress adjourns before acting—contrary to earlier indications.

While FHA and VA 51/4s are being priced out of the market, more builders are turning to conventional financing from S&Ls. In most cities they still have plenty of money. Land contract sales and second mortgages are also increasing.

The availability of high-priced local money has given the 1959 mortgage squeeze a different look from those of other years. There is virtually no shortage of interim financing. Builders have generally depended on local lenders for construction funds. But in 1956 and 1957 the local institutions couldn't fill the need. This year there has been no problem if a builder has a firm takeout. In a pinch, a standby commitment meets this requirement.

Perils in pricing

Some mortgage bankers may be in more trouble this fall than builders. A few companies reportedly have overextended—made too many commitments on their own at too high a price. With the delivery dates approaching, there are no takeouts at anywhere

near the 95-96 average commitment prices.

Predicts one mortgage banker: "Some companies are going to take a real licking." But a lender disagrees: "You're going to see a lot of them welching rather than take a loss."

House & Home's 16-city monthly mortgage survey brought these capsule comments in August:

Philadelphia: "Our best price is 98 and we aren't getting much business. There's so much savings & loan money available at prices which seem ridiculous to me."—W. A. CLARKE SR.

San Francisco: "The demand for houses is good. Builders are cutting volume because of the cost of takeouts. They could sell more houses than they will if they could get better financing."

—RAYMOND H. LAPIN.

New York: "It's a cruel market. There's less money available and it's very hard to find."—
TOHN HALPERIN.

Detroit: "It's always darkest before the dawn. I think we can look for a reversal of things when the steel strike is settled."—HAROLD FINNEY.

Atlanta: "There is enough money to finance as many starts as the builder can sell. We may have to ferret it out but we find it."—ROBERT THARPE.

Boston: "We've been making all local loans at 5%. Some banks here have already gone to 5¼%. We'll have to soon I think,"—ROBERT M. MORGAN.

Los Angeles: "We're hearing from builders we haven't seen in years. They aren't hurting yet but they will be this fall."—Chris Gebhardt.

Jacksonville: "We're just lovin' Fanny May. We've been sending everything eligible there for 90 days."—John W. Yates.

Chicago: "The FHA-VA market hasn't been red hot anyway. So builders don't have to cut back for lack of FHA-VA money."—Murray WOLBACH.

Washington: "I think there is enough money for the houses that are saleable. But I think a lot of starts are available which are not going to be sold."—HECTOR HOLLISTER.

Denver: "We have never dealt much with Fanny May. You might say price hasn't affected our principle. But in this situation we're going to start soon."—C. A. BACON.

Oklahoma City: "You almost have to take mortgages at a better price than you can sell them for. The local competition [among mortgage bankers] to get loans is on the rough side."

—B. B. Bass.

Houston: "I think prices will keep going down; 91-92 is the best price we'll issue on a commitment now."—DONALD J. McGregor.

Cleveland: "Local lenders are getting a much larger share of the home business than they did . . . We are getting more into commercial loans."—David O'Neill.

St. Louis: "It's business as usual but with a note of caution and at a reduced rate."—SIDNEY L. AUBREY.

Newark: "Many builders believe money will ease in the fall. I don't agree."—Arthur G. Pulls.

MORTGAGE BRIEFS

Rate limits for savings?

Federal and New York state agencies are clamping down on how much interest savings banks and savings & loans can pay their depositors.

Their aim is to forestall a competitive spiral of ever-higher interest rates which might undermine the stability and liquidity of some lenders.

Many a Depression-seasoned banker (Ben Wooten of First National in Dallas is one) insists most of the banks which failed in the 30s had been paying too-high interest to depositors.

The Home Loan Bank Board is planning a backdoor approach to thwart boosts be-

yond the prevailing top of 4%. It has proposed requiring S&Ls with federally-insured accounts to amortize over seven years any fees charged a builder over 1 point for a permanent loan (of any type) and 2 points on a construction loan. S&Ls have to Sept 8 to file objections to the regulation. It would not go into effect until Jan 1.

Some S&Ls have been charging as much as 8 points on a home financing deal. They put the loan on their books at par, add all 8 points to the current year's income. This makes it immediately available for dividends to savers.

In New York, the state banking department has set a 31/2% limit on the rate savings banks can pay depositors. It will allow another 1/4% on savings held for two years or more.

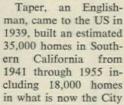
Most New York banks had already announced plans to boost their rate from 31/4% to 31/2% in the fourth quarter.

S&L holding company curb

A bill to curb S&L holding companies looks headed for enactment in Congress-but not soon enough to thwart the newest expansion plans of Los Angeles S&L Baron Mark Taper.

The House passed a bill in late July limiting a holding company to control of one S&L with federally-insured deposits and no more than

> 10% interest in any others. But the bill would not affect existing holding companies. Nor would it stop completion of deals underway, but not closed.



of Lakewood. He started his S&L empire only in 1956. Currently, he is going to the public with a 3-million-share stock issue (priced at \$52,500,000) to raise money for more expansion. His First Charter Financial Corp (formerly Randolph Estates Inc) already owns five S&Ls, controls a sixth, owns five insurance agencies and a real estate brokerage business. Taper owns half the 3 million shares

being sold; his late wife's estate owns the rest.

The Home Loan Bank Board, which asked for the new legislative curbs, reports there are 12 holding companies operating or being formed. They control 40 associations-all stock companies-in California, Colorado, Utah, Texas and Delaware.

The two S&L Leagues both support the bill, insist control of S&Ls should be kept in the hands of local citizens-rather than out-oftown investors.

S&L participation loans

S&Ls are quietly moving their money in steadily larger chunks to localities where it is needed most.

Two years ago the Home Loan Bank Board ruled that S&Ls can use 20% of their assets to buy up to a 50% interest in loans originated and held by S&Ls in other areas. Few S&Ls did so in the first year.

But last year there was a big switch to the participation plan. Now, S&Ls have bought and sold from one another \$227 million in loans, \$47 million of it in the first quarter of 1959 alone-double the volume in the first quarter of 1958. NEWS continued on p 51

tional

Interest

53/4-6

53/4-6

53/4-6

53/4-6 6 6

53/4-6.6

53/4-6

53/4-6 6

51/2 6-6.6 51/2-6

53/4-6

51/2-53/4

54

MORTGAGE MARKET QUOTATIONS—new construction only

(Sale by originating mortgagee, who retains servicing.) As reported to House & Home the week ending Aug. 7 '59.

TAPER

		, , , , , ,	203) (1				VA !	- /45				
Spec Asst VA**	Scdry Mkt FHAxy	30 year	m Down*	20-25 year		10% or n 20-25 yea Immed		City	30 year no to 2% Immed	down Fut	25 year 5% dow Immed		20-25 yes 10% dov Immed	vn or more
96	951/2	95-96	941/2	95-96	941/2	961/2	A	Atlanta	95-96	941/2	95-96	941/2	961/2	8
96	961/2	par-101d	par-101d	par-101d	par-101d	par-101d	par-101d	Boston local	par-101d	par-101d	par-101d	par-101d	par-101d	par-101d
-	-	94-95	94-941/2	94-95	94-941/2	n		out-of-st	94-95	94-941/2	94-95	94-941/2		B
96	951/2	951/2-96	95-96	96-97	95-96	97	961/2-97	Chicago	951/2-96	95-96	96	951/2	97	961/2-97
96	951/2	94-95	A	94-95		96-97	96-97	Cleveland	94-95				96-97	95-96
96	95	941/2-96	941/2-96	96 ^b	96 b	96-971/2	96-971/2	Denver	94-96	94-96	94-96	94-96	96-97	96-97
96	95	951/2-96	951/2-96	n	n	96-96 1/2 1	96-961/21	Detroit	95-951/2	95-951/2			951/2-96	951/2-96
96	951/2	94-95	94-95 в			961	961	Houston	94-95	94-956				8
96	951/2	94	94	94	94	96 1	96 1	Jacksonville	94	94				
96	95	931/2-941	93			96-97		Los Angeles	931/2-946	93				
96	96	98	971/2	98	98	981/2	981/2	Newark	96	951/2	98 •	971/2*	981/2	98
96	961/2	97¤	97s	97g	978	97s	97 s	New York	97 s	97g	97 в	97g	97 s	97 a
96	95	95-96	8	95-96		961/2		Okla City	95-96		95-96		961/2	a
96	96	97	97	98	98	98	98	Philadelphia	961/2	961/2	971/2	971/2	971/2	971/2
96	95	94	921/2-93	96		95 f		San Fran	94	921/2-93				
96	951/2	931/2-96	921/2-95	94-97	931/2-96	95-97	941/2-97	St Louis			•	•		•
96	96	96	95	96	95	96	95	Wash, DC	95	95	96	95	961/2	95

*3% down of first \$13,500; 15% of next \$2,500; 30% of balance. *3% down of first \$13,500; 15% of next \$2,500; 30% of balance.

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wolbach, vice pres, Draper & Kramer Inc; Cleveland, David O'Neill, vice pres, Jay F. Zook Inc; Denver, C. H. Bacon, vice pres, Mortgage Investment Co; Detroit, Harold Finney, vice pres, Citizens Mortgage Corp; Houston, Donald McGregor, exec vice pres, T. J. Bettes & Co; Jacksonville, John W. Yates, vice pres, Stockton, Whatley, Davin & Co; Los Angeles, Chris Gebhardt, asst vice pres, The Colwell Co; Newark, Arthur G. Pulis Jr, pres, Franklin Capital Corp; New York, John Halperin, pres, J. Halperin & Co; Oklahoma City, B. B. Bass, pres, American Mortgage & Investment Co; Philadelphia, William A. Clarke, pres, W. A. Clarke Mortgage Co; St. Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Baukers Mortgage Co of Calif; Washington, DC, Hector Hollister, vice pres, Freedrick 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 coverage of the coverage of th

Quotations refer to prices in metropolitan areas; discounts may run slightly higher in surrounding small 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—insurance companies only. d—on 5% mortgages with some now going at 5½%. e—on 30-year mortgages. f—top price in spread paid only by insurance companies buying on quota. g—includes construction loans, w—FNMA pays 98 for FHA 5½% mortgages of \$13,500 or less after ½ point purchasing and marketing fee and ¾ commitment fee. x—FNMA pays ½ point more for loans with 10% down or more. y—FNMA net price after ½ point purchase and marketing fee, plus 2% stock purchase figured at sale for 50¢ on the \$1. z—price after ¾ point purchasing and marketing fee, plus ¾ point commitment fee: applies only to VA mortgage of \$13,500 or less.

NEW YORK WHOLESALE MORTGAGE MARKET

VA and FHA 51/4s

Prices for out-of-state loans, as reported the week ending Aug. 14, by Thomas P. Coogan, president, Housing Securities Inc.

VA 43/45

FHA 51/4 spot loans

Immediates: 92-94 Futures: 91-931/2

Immediates: 88-89 Futures: no activity (On homes of varying age and condition) Immediates: 901/2-92

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

FNMA STOCK

Month's Month's July 13 Aug. 10 low high 551/4 Bid 571/4 571/2 601/2 Asked 591/4 571/4 591/2 621/2

Quotations supplied by C. F. Childs & Co.

49

with 30 to 50 annual sales...

Dallas Builder Sells 11 Homes In First Week With **Kelvinator FOODARAMA**





Only 41" Wide, 63" High, 25" Deep

NO ORDINARY REFRIGERATOR SELLS HOMES LIKE FABULOUS FOODARAMA BY KELVINATOR

You add much more sales appeal to your homes with Fabulous Foodarama-either built-in or free-standing. All in one cabinet, it combines a 12 cu. ft. deluxe refrigerator and a 6 cu. ft. upright freezer. It lets you offer home buyers a world of convenience and extra capacity, yet its cost compares to that of ordinary combinations! Foodarama builds in easily, too. Doors open flush, and back and sides fit flat against walls and cabinets. Send today for the special Foodarama Builder Plan.

> Sell Homes Faster With America's Most Admired, Most Desired Home Appliance!

Kelvinator Appliances



KELVINATOR DIVISION, AMERICAN MOTORS CORP., DETROIT 32, MICHIGAN



MARKET BRIEFS

Sign of a slide

Is the the optimism which has marked the housing industry since the spring of 1958 fading?

FHA's latest survey of field offices throughout the US shows that less than half the builders are stepping up plans. In several areas—notably the Southeast—many are actually cutting back.

In the moderate-priced home bracket* (which accounts for 60% of starts, according to FHA), this is the trend of builder's plans:

DATE	PLANS				
	Declining	Stationary	Advancing		
July '59	 5%	46%	49%		
April '59	 . Wa -	28%	72%		
July '58	 100	37%	62%		

The solid gold coast

The trend toward land development by publicly-owned corporations (*June*, *News*) has become a stampede in Florida.

Excited by the success of companies like General Development, Arvida and Lefcourt Realty—all big Florida landholders—at least 21 other stockholder-owned corporations have followed. The Miami *Herald* found that these 24 companies have some 52.5 million shares of stock outstanding and own about 500,000 acres.

Many are strictly new outfits whose main business is Florida land. But more are old line companies putting their money into assets which seem to have demonstrated they can 1) make money for their owners, 2) attract investors and 3) push up stock prices.

Some examples: Atlantic Coast Line Railroad, St. Regis Paper Co, Universal Marion Corp (a maker of power shovels), New Haven Clock & Watch Co, Silver Creek Precision Corp (maker of fogging machines and outboard motors) and Royal American Corp (a subsidiary of Graham-Paige).

Rental vacancies (cont)

Rental vacancies have shot up 9% in only three months.

The US vacancy rate reached 6.7% in the second quarter of 1959 (percentage of all rental units vacant) vs the 6.1% in the first quarter. The rate had been hovering close to 6% for two years.

This Census Bureau report substantiates FHA's latest vacancy findings (Aug, News). FHA's check of FHA-financed rental projects shows a vacancy rate of 4%—up 33% from the 2.9% of a year earlier.

Census found a much higher vacancy level in non-metropolitan areas—9.6% vs the 5.1% inside the 192 standard met areas. The rate in the South and West is also 9%, but it's only 3.3% in the Northeast and 6.4% in the North Central states.

Sale units are little changed. Census reports 1.2% vacant in the second quarter vs 1.0% in the first quarter and 1.1% in the second quarter of 1958.

LOCAL MARKETS:

House sales slip in eight cities

Behind the bland, round figures of national starts, local housing markets are showing typically diverse reactions to such influences as labor troubles, tight money, highway construction and population shifts. During the first half of 1959, nearly all of them shared in the high level of starts, enjoyed substantial gains over the corresponding period a year ago. But as summer wanes, sales and starts are dropping in some areas that were strong earlier in the year. A House & Home survey of 20 market areas showed eight—Cleveland, Detroit, Houston, Atlanta, New York, Wichita, Miami—with sales reported slow to poor. But even in these, it was evident that smart builders with the right product in a good location are doing well. Detailed reports from House & Home correspondents:

Atlanta: Builders are doing brisk business, seem optimistic despite warnings by lenders and FHA officials that deepening discounts will cut back production this fall. Starts are 1,363 for the first half, nearly 13% ahead of the 1,207 chalked up in the same period last year. Even with 80-90% of starts speculative, unsold overhang is less than 10%.

Continuing extension of the Atlanta Expressway is bringing subdivisions in numbers to Clayton County on the South, Cobb on the North. Another push to sales is explained this way by an executive of Atlanta Federal S&L: "People have decided prices are not coming down. All the talk of inflation has practically eliminated resistance to home buying now."

"The public is willing to sacrifice gadgets for more space," asserts an FHA official. In Sec 221 (relocation) units, FHA has persuaded some builders to eliminate carports, boost square footage from 850 to 1000 sq ft. "Builders find this makes the houses much more marketable," says FHA.

Long Island: Pleased home builders are finding that they built more than twice as many units in the four counties during the first half than they themselves predicted. Starts are 19,063, nearly 35% over the 14,125 in the first half of 1958. In January, builders said

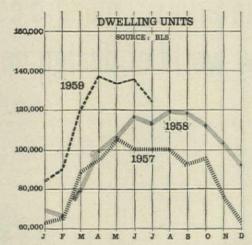
they would probably outstrip their earlier efforts by 15%. In spite of labor pay hikes from 2½ to 4¾%, HBA President Alexander Paulsen says he doesn't "see how production can decline enough during the last half of the year to offset the gains of the first half."

Wichita: Builders' usually accurate semiannual building survey has come up with a glum prediction for midyear: with only 1,340 homes built in the first half (compared with 1,367 for the first half of '58), starts for the year will be a slim 2,471, compared to 3,142 started in '58.

The new forecast trims 21% off the builders' January prophesy that they would build 3,009 homes this year—including more than 1,800 the first half.

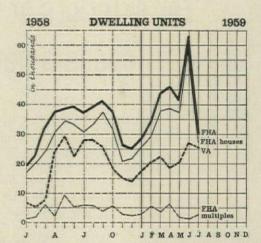
Builders continue to favor the western sector of the city. They built 69.5% of their first-half starts there, plan to build 61.4% during the second half. Most popular price range is \$12-\$15,000, accounting for 31.4% of starts. Runner up is the \$15-\$20,000 range with 25.9%.

Phoenix: The construction industry is still reeling from a series of crippling labor disputes that virtually stopped home building in continued on p 53



HOUSING STARTS slipped in July to 126,000 (124,500 private and 1,500 public) from June's 136,000. The seasonally adjusted annual rate also fell a bit—from 1.37 million to 1.35 million, still a comparatively high rate.

Starts for the first seven months reached 822,300, 35.6% more than the same period a year ago. But the critical difference between the two years is the fact that 1958 started slowly and hit its peak in December while 1959 maintained the '58 momentum through April, then began tapering off gradually. The seasonally adjusted annual rate of private starts for the first seven months is still 1,385,000.



FHA APPLICATIONS on new units plummeted 55% from June to 31,251 in July. Home applications of 28,961 were off 51.9%. But the figures—unexplained—are misleading. June applications were inflated by builders scrambling to qualify units for construction under the old FHA MPRs, rather than the new MPS which went into effect July 1. July applications for FHA project units (2,290) were off 8.7% from June. Total FHA applications are up 18.9% for the first seven months from the same period of '58. VA appraisal requests on new units totalled 26,050 in July, off 4.17% from June. For the first seven months they are up 19.3%.

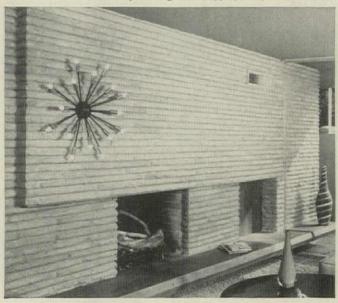
^{*}FHA considers moderate-priced homes to be in the \$14,400 to \$17,700 bracket in the Northeast; \$12,400 to \$19,600 in the Middle Atlantic area; \$10,200 to \$16,200 in the Southeast; \$12,900 to \$19,200 in the North Central states; \$10,900 to \$17,800 in the Southwest and \$12,300 to \$18,200 in the West.



Raked horizontal joints emphasize ground-hugging design of this house



Painted units add visual interest to this contemporary kitchen



Concrete slump block fireplace helps soften a modern setting



Design interest is achieved with coarse-textured block laid in a stacked bond

For exteriors or interiors...modern concrete masonry opens a new world of design opportunities!

New shapes! New colors! New textures! It's newtype living concrete . . . the modern building material that is enhancing home designs everywhere.

Today's concrete masonry suits any style architecture... contemporary or traditional. It blends beautifully with all types of terrain... adapts to all types of neighborhoods.

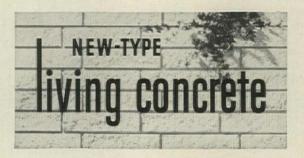
Indoors, too, new-type living concrete means modern living. It's warm, friendly, cheery . . . complements fabrics and furniture . . . creates interesting contrast with metal, wood and glass.

PORTLAND CEMENT ASSOCIATION

Dept. A9-94, 33 W. Grand Avenue, Chicago 10, Illinois

A national organization to improve and extend the uses of concrete

This results in features which appeal to a constantly increasing number of clients and home buyers. Write for free, full-color booklet "Concrete Masonry Homes for Better Living." (United States and Canada only.)



June and July, idled well over half the state's 29,000 construction workers and sent many of them elsewhere in search of jobs.

Almost the entire unsold inventory of homes was absorbed. Used house sales boomed. Starts for first six months totaled 5,673, only 15% over the first-half-'58-total of 4,938. FHA financing dominates, and 75% of houses are built spec. Staggs has attracted interest by breaking traditional builder silence on tax rates, using low rates in his areas as a sales point. Custom builders are experiencing a boom. Many who were idle last winter now have more work than they can handle.

Miami: Lenders worry that builders are overbuilding. Despite almost uniformly slow sales, starts in unincorporated Dade County jumped 50% in the first half over the same period last year. Now, lenders are putting the brakes on speculative building, and pointing



\$8,250 FAST SELLER IN FLORIDA

to the recent bankruptcy of Lindsey-Mundy Construction Co, which left some 500 houses in various stages of completion at a half-dozen sites, as a warning. Whether slow sales are due to slackening influx of population or not, a few builders still seem able to do well. Herbert Heftler has sold some 500 houses since mid-April in a 900-house development in southwest Miami. He offers a three-bed-

room, one-bath house for \$13,000 with FHA Sec 213 financing. In Broward County, Sam Rizzo's Green Thistle Builders sold 710 houses in eight months (concrete block, one bath, 920 sq ft) for \$8,250 and FHA 203 (i) financing—payments of \$44 per month.

Most builders now find that much bally-hooed openings draw big crowds, yield small sales results. Next big opening will be Tom Lively's University City at Boca Raton on 3,000 acres bought from Arvida Corp.

Chicago: A midsummer sales slump has followed a spurt that sent starts for the first half to 26,792—54% ahead of the 17,398 begun in first-half '58 (25% ahead of first-half '57).

Some builders are resorting to giveaways at model openings for the first time in two years. But many are waiting to see how fall sales go. "Maybe we sold too many houses in the spring," says one.

FHA approves 56 more loopholes in MPSs; most ease rules

FHA has okayed a second batch of local acceptable standards—56 local exceptions to its new Minimum Property Standards. As with 23 approved earlier (June, News), almost all of the new exceptions ease the new standards. And in nearly every instance, the LASs let builders continue doing things they have been doing locally for years.

Director Neil A. Connor of the Architectural Standards Divisions cautions that some of these LAS may still be changed—if the local insuring offices ask it. VA has not yet approved all of these exceptions, and VA objections (if any) would probably lead to revisions, because VA has agreed to follow the new MPSs. Through mid-August FHA in Washington had approved these additional LAS:

Front yard slopes: Pittsburgh builders have always insisted FHA slope minimums were too stiff for the hilly Pittsburgh area. The MPSs, require a grade of 2' horizontal to 1' vertical for heights over 30". FHA will approve 1½' horizontal to 1' vertical in Pittsburgh, provided the builder supplies adequate engineering data to support his plan. Two other LASs change lawn cover requirements on steep slopes and stairway tread-riser sizes. Where the slope is 1½ to 1 treads can be 11" instead of 12"; risers 7½" instead of 6".

Clay pipe may be used in the Cleveland and Pittsburgh districts for underground drainage within living units. MPSs require cast iron or copper but the Cleveland and Pittsburgh codes both allow vitrified clay. FHA has added stringent jointing rules.

Row house bedrooms may be smaller in Philadelphia (as in Baltimore) because there are still many 16' lots. Instead of 8', bedrooms may be 7' (interior dimension) to allow two abreast. Another LAS allows smaller garages in Philadelphia row houses: 9'6" instead of 10' wide.

Greater lot coverage is also permitted in LASs for Philadelphia and Jamaica (L.I.)—50% of a lot vs the MPS 30% for a detached house.

For desert areas in the Phoenix district FHA has okayed five LAS which: 1) make lawns optional instead of mandatory on lots of ½ acre or more; 2) let builders provide controlled ponding for irrigation around homes with lawns; 3) make window flashing optional; 4) require gravel stops on built-up roofs, but no eave flashing on other types; 5) set standards for evaporative coolers—used only in the dry desert country. Coolers must be the size recommended by the manufacturer for the area to be cooled. Registers must provide cooling for a gross area not

less than .0055 times the area of the room served by the register.

Alternate nailing technique is permitted in Miami and Tampa for built-up roofs on wood decks. Nails are driven at the bottom of felt roofing sheet and at vertical laps 6" o.c. and between laps 12" o.c. instead of only 18" o.c. at the bottom of the sheet as the MPS provides. FHA has approved this system before in Florida, where it is in general use. It expects to put a nation-wide approval into the next MPS revision.

Concrete and clay roof tile specifications for Miami and Tampa, where such roofs are common, are covered in a new LAS—covering the method of installation as well as basic materials.

Eave & rake flashing of a type manufactured in and used almost exclusively in Florida is approved for Miami and Tampa districts.

Water heaters of a 40-gal capacity are allowed in 1- and 2-bedroom homes in the Miami and Tampa districts. The MPS specifies 52-gal units. Builders insist they do not need such large units in Florida because ground water is warmer.

Septic tanks can be 3" below grade, with sod right on top in the Miami and Shreveport districts. FHA has found that high humidity and heavy rainfall in these areas let grass grow in 3" of soil, so there is no need to have the tank 12" below grade as the MPS requires.

Sheathing paper must be installed on all exterior walls in the Miami, Tampa and Jacksonville districts. Flushback siding must be installed over vertical furring strips. FHA has ordered these LAS because of the wind-driven rain, common in Florida, which leaks under siding, causing decay if siding is installed without sheathing paper.

Horizontal chases up to 5' long are permitted in the Miami district for sink vents because builders must use bond beams in concrete block houses, They take all the roof load.

Decay protection requirements, made optional from office to office in the MPS, are made mandatory in Tampa. (FHA expects to do the same thing in Miami and Jacksonville.)

Hard surface carports are required in the Tampa district. MPSs allow gravel but FHA contends the local gravel in Tampa creates a dust nuisance.

Wood party walls and lot line walls are permitted in San Francisco where they have been local custom for years. The MPS requires masonry—for fire protection.

Frame supports are acceptable for fireplaces in San Francisco—another long time custom—if a ½" asbestos-cement board and ½" steel plate are installed over the framing.

Wind load demands are reduced from 20 psf to 15 psf in San Francisco. FHA says it would approve the same LAS for San Diego and Los Angeles because winds are lighter on the West Coast than elsewhere in the US.

Side yard requirements are cut in San Francisco from 5' to 3' (in the city and Daly City only) when controls assure a distance between houses of at least 6' and at least 4' between roof overhangs. Reason: small-lot plotting would make much land ineligible for FHA detached homes.

Side yard requirements in Los Angeles are cut from a minimum of not less than 10' in both yards to not less than 6' in areas within ¼ mi of the ocean—recognition of the nation's dwindling supply of seacoast land.

Third stucco coat may be applied with a brush instead of a trowel in San Francisco and Sacramento when first two coats are ½" thick. This has been common practice there for years.

Ceiling insulation is not mandatory in San Francisco and San Diego—where FHA says both summer and winter temperatures are moderate. The same LAS was approved for that part of the Sacramento district near the ocean. (It was approved earlier for Los Angeles.)

Denser lot coverage is approved for San Diego, San Francisco and Sacramento. (It has already been okayed in Los Angeles.) For one-family dwellings the limits are now 40% in San Francisco and San Diego, 35% in Sacramento. The MPS limit is 30%. FHA allows greater density because of established custom and because of the prevalence of two-car garages.

Lawn fertilizer in San Diego must have at least 10% phosphorus (instead of 8%) and 10% nitrogen (instead of 4%) because local soil is deficient.

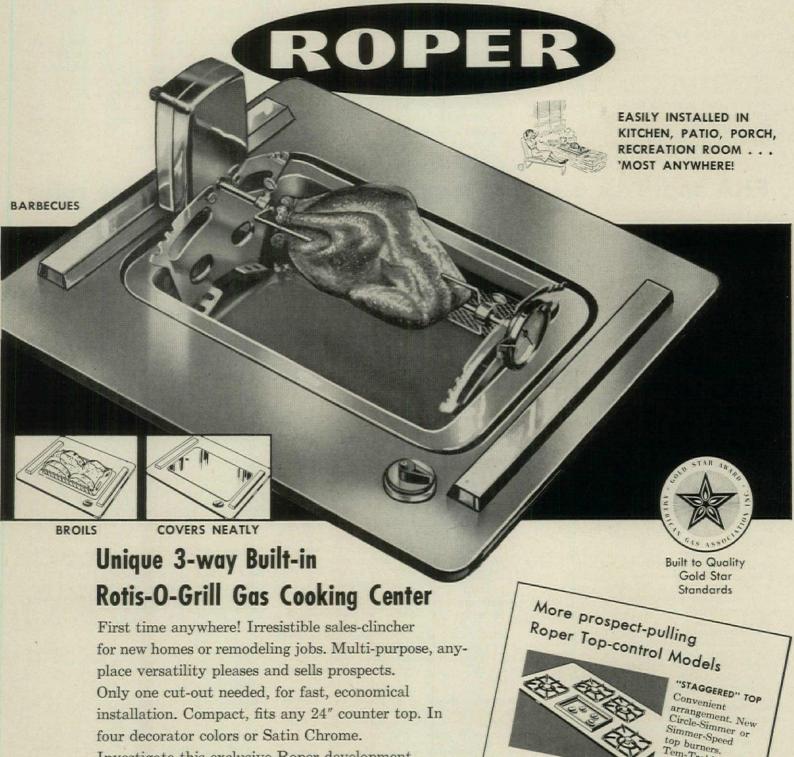
Cesspools, flatly prohibited in the new MPS, are permitted now in Portland, Ore where coarse soil makes them workable. They are not allowed if a public sewer is available or if the area is served by individual wells. (This same LAS has been approved for the Providence district.)

Sand filters, used in conjunction with a septic tank, are allowed in Shreveport where it is common practice to discharge the effluent into flowing streams. Local health authorities also approve this system because the high water table often precludes use of drainage plans which are approved in the MPS.

Septic tank seepage pits may be only 50' instead of 100' from the nearest water well provided the water well goes down through a watertight layer of rock or clay—in Memphis, Knoxville, Milwaukee, Greensboro, and Shreveport (This same LAS was earlier approved for Grand Rapids, Indianapolis, Detroit and Minneapolis.)

NEWS continued on p 55

SENSATIONAL NEW SALES-MAKER!





ROPER ALSO MAKES OTHER BUILT-IN TOP BURNER UNITS IN ADDITION TO A FULL LINE OF BUILT-IN OVEN-BROILER UNITS AND FREE-STANDING GAS RANGES. Write Dept. HH for full details.

Investigate this exclusive Roper development.

GEO. D. ROPER SALES CORP.

a subsidiary of Geo. D. Roper Corporation Kankakee, Illinois

'CLUSTER" TOP Extra compact needs only 26" of space. Controls guarded by raised bezel. Tem-Trol burner is optional.

is optional.

Tem-Trol burner

Washington State upholds individual 'right to discriminate' in home sale

A private individual has a right to discriminate when he sells his own home—even if the house has an FHA mortgage.

So ruling, Superior Court Judge James Hodson in Seattle has held part of Washington State's anti-discrimination law unconstitutional. His decision will be appealed.

The precedent-shattering case had its start last April. Robert L Jones, 50, a \$5,000-a-year mailman, wanted a home near the Unitarian church he attends. He found one, a three-bedroom, shake-shingled, split-level, three blocks away, and priced at \$18,000. But it is located in an all-white neighborhood.

Jones told the owner, Coast Guard Cmdr John O'Meara, he wanted to buy it. The O'Mearas told the Joneses that another party had already committed to buy the house. Mrs Jones and her attorney showed up with a \$1,000 deposit. Though it was refused and the O'Mearas said the house had been sold, the check was left. And the house remained for sale. The Joneses complained to the Washington State Board Against Discrimination—the agency set up in 1949 to administer the state's anti-bias law.

The board held that since O'Meara had an FHA-insured mortgage on the house, this was "publicly assisted" housing under terms of the law. He was ordered to go through with the sale to the Joneses. But in the meantime, O'Meara has been transferred, had sold his interest in the property to the Seattle Real Estate Board which was renting it and fighting his case for him.

The realty board appealed, contending that the law is unconstitutional but offering no testimony. The state board produced Mayor Gordon Clinton, sociologists and business men who supported the principle of the law.

Judge Hodson, in his decision, condemns segregation but adds: "Sociology is not the law."

He warns that the danger involved in protecting and enforcing the right to equality is that "we may seriously invade and curtail the right to freedom of contract."

He explains: "A private individual, acting in his private capacity is perfectly free to discriminate as he pleases. The mere existence of an FHA-insured mortgage on his house is far too tenuous a thread upon which to hang such a drastic invasion of his constitutional right to do as he pleases with his own property . . .

"There is no reason to suppose that persons with FHA mortgages on their homes are more likely to discriminate against minority groups than those who have conventional mortgages or no mortgages or those who are purchasing on contract. The act would prohibit Cmdr O'Meara from doing what his neighbors are at perfect liberty to do. It gives those who have conventional mortgages and those who are buying on contract special privileges and immunities which are not accorded to him (Cmdr O'Meara)."

Regardless how the ruling goes in the Washington Supreme Court, each side has said if it loses, the case will be taken to the US Supreme Court.

Levitt firm loses round in New Jersey bias case

Big Builder Bill Levitt has lost a round in his fight for freedom from selling houses to Negroes in Levittown, N.J.

An appellate court has ruled that 1) the state law against racial discrimination in the sale of federally-insured housing is constitutional, 2) the state division against discrimination has jurisdiction and 3) the contention that a builder should not come under the law when the home buyer is the insured mortgagee was "without merit."

Levitt's firm. Levitt & Sons Inc., whose Levittown, Pa. was the scene of disturbances when a Negro bought a home from a white family last year, was accused of refusing to sell homes to two Negroes. The case was combined with a similar accusation against Green Field Farms of Woodbury.

The builders took the complainants and the state agency to court in an effort to stop administrative action on the cases. The only point they won was that amendments to the complaints which named Levitt and Robert Budd and Horace Peters, operators of Green Field, personally, were barred by a time limit included in the law.

Levitt's firm says it plans to appeal to the state supreme court. Hearings are scheduled in the state division on the original question.

Second blast destroys Negro home in Delaware

Shortly after George Rayfield, a garbage collector, and his family moved into the neat six-room brick house on Bellanca Lane in the middle-class suburb of Collins Park, just south of Wilmington Del., a mysterious explosion wreaked \$3,500 damage to it. Rayfield, who had also been a DuPont laborer for 23 years, was the first Negro in an hitherto all-white neighborhood.

That was in April. After the blast, members of the local Longshoremen's Assn (a largely Negro union) volunteered their labor for repairs. Insurance men paid the Rayfields \$3,500 damages. The local NAACP launched a fund drive. Quiet settled over Collins Park again. Neighbors even began to speak to Mrs Rayfield.

At 1:45 am Sunday Aug 2, while the Rayfields were away, dynamiters blew up the house again. Officials ordered what was left wrecked as a safety hazard. Then it developed that, under a new zoning law, Rayfield would need special permission from the town to rebuild. Local newsmen, surveying Collins Parkers, found them unanimously against giving it.

URBAN RENEWAL:

Texas high court upholds '55 law in first test case

Texas cities have been given a judicial green light for urban renewal.

The Texas Supreme Court has upheld the constitutionality of the state's four-year-old renewal law, under attack by a Lubbock landowner. While this case was pending Lubbock and 35 other cities marked time with slum clearance plans.

The renewal law is modeled after those of many other states.* It lets cities condemn property in a slum area and resell it to private redevelopers. Such a law is prerequisite to most federal renewal aid.

Lubbock started renewal programs for its Negro area in 1956. It submitted plans to a public referendum—as Texas law requires —in November 1957. Voters approved it 1,181 to 160.

R.B. Davis, who owns property in one of the two slum areas, challenged the legality of Lubbock's program in June 1958. He argued that the city had no constitutional right to condemn land for slum clearance because clearance is not a proper "public use."

The district court ruled against him, upheld the basic intent of the law. But the court went a step further and ruled unconstitutional one of the curbs the legislature put into the law. This provision would require a court to decide whether an area is in fact a slum at all when a condemnation suit is tried.

The supreme court supported the lower court on this point also, holding that this was a legislative decision and could not be given to the courts.

NEWS continued on p 57

*The court decision was the second victory for Texas renewal efforts. A bill which would have repealed the 1955 renewal law died in the legislature this year—though it had strong support from some rural legislators who oppose federal aid programs.

COMMUNITY FACILITIES:

Builders outwit Oklahoma City council

An economy-minded Oklahoma City council has decided to make builders pay the cost of water laterals serving new subdivisions.

Since 1932 the city has reimbursed this cost to builders from water revenues over a five to six-year period. The council estimates it can save \$500,000 a year by requiring builders to pay for the laterals. (The city will continue to pay for all mains.)

Average lateral cost is \$2 to \$2.50 per front foot. Lots run 60' to 75' wide. Since builders will add this cost to the house price it means buyers eventually will have to pay from \$120 to \$187.50 more for each house.

It probably will be four or five years before the city begins to show savings from its new policy. Reason: officials miscalculated builder reaction.

Builders were unaware of the planned policy change until it was voted in mid-July. But the effective date was Aug. 1. Any plats filed earlier qualified for the old reimbursement plan. Builders flooded the city with plats for 13,000 lots before the deadline—enough for four to five years. About two-thirds of the homebuilding in the Oklahoma City area is in the city limits. Most of the rest is in incorporated suburbs.

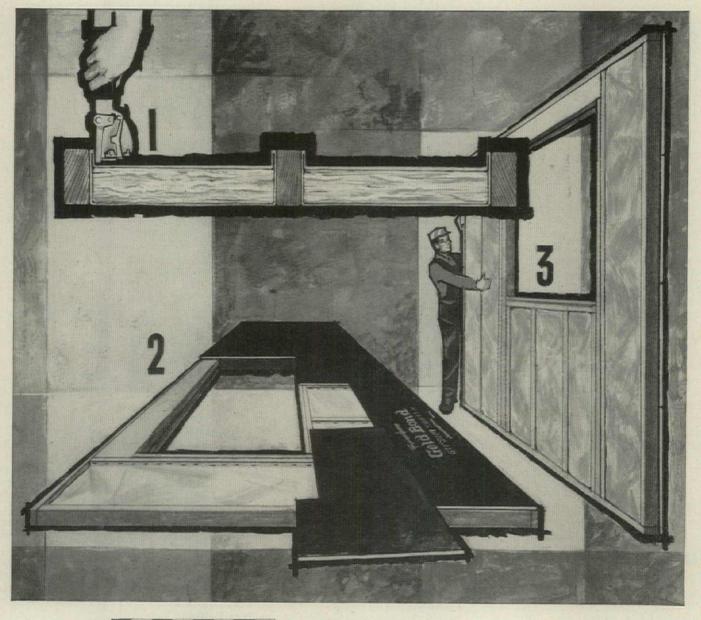
New Reverse Flange Insulation helps you insulate walls faster before erection!

The flange is reversed so it goes on the outside of the stud wall! That means you can apply insulation, (1) sheathing (2) and siding all on one side of the wall before erection! (3) Once it's up, plumbers and electricians can go right to work without interference. Your crews save time and you save money.

Gold Bond's new Reverse Flange Insulation also makes it easier to insulate crawl spaces under floors. You staple the insulation to the side of the joist, with no complicated "reversing" operation. Application directions are in every tube.

Think for a minute how Reverse Flange Insulation can speed up your operation—then ask your Gold Bond® Salesman for complete details, or write Dept. HH-99.

NATIONAL GYPSUM COMPANY, BUFFALO 13, NEW YORK





Bond ... a step ahead of tomorrow

Fat wage boosts bring another jump in house prices

Homebuilders across the US concede they are losing control over their key cost: labor.

While the nation's economists stew over the inflation threat of higher steel wages and prices, union building trades have quietly won hourly wage boosts of

House Home 3% (9.9¢) in the second quarter of 1959 alone. Average hourly wage is now \$3.50, excluding fringe benefits. Total increase in the past year is 4.6% (15.3¢) with virtually no gain in productivity (see below).

Construction wages are now up 70% from their 1947-49 average vs a 24.5% rise in the cost of living.

Impact on house prices from the latest round of wage boosts has been swift. In cities like San Diego and Los Angeles where

the average hourly increase was $22\frac{1}{2}\dot{c}$, most builders have already shoved prices up 4%.

There has been little starch this year in builder negotiations. And few builders have protested price-boosting settlements made by their negotiators. Most agree with Chicago Builder Bruce Schorsch who shrugs: "Fifteen years ago if you'd told me what was going to happen to union wage rates I'd have suggested you ought to have your head examined. Now I wouldn't be surprised if union pay scales rise another 30% in the next 10 years. There's no way to stop it . . ."

A few builders protest that it would have been foolish to risk a strike this year—a good year for builders. Yet settlements were as big last year and even bigger in the slump year of 1957.

Builders can still talk tough although the effect is dubious. The Los Angeles HBA signed a pact with the other three builder-contractor groups in the area pledging that a strike against one would be a strike against all. The HBA adopted a resolution calling for stiff fines against any member who

didn't cooperate in a strike (or lock-out).

As they sat down to negotiate, the AGC in northern California signed a three-year contract with carpenters in the 42-county area outside the San Francisco Bay Area—giving them 20½¢, 20¢ and 20¢ each of the three years.

But professional negotiators in Los Angeles gave carpenters $22\frac{1}{2}\phi$ more an hour each year of a two-year contract. Cement masons got the same plus 19ϕ in the third year of a three-year pact.

These settlements set a pattern which was followed almost to the cent in the four-county Bay area, San Diego and Las Vegas (after a strike). The increases will bring carpenters in all four areas to \$4.02 to \$4.05 in the last year of each contract.

Actually, many builders in the L. A. area already pay well over scale. They must if they want the best men. Builders figure their over-scale help will stay on the job without boosts as high as those made in the minimums.

Will builders get more productivity? Most of them scoff. Several claim productivity has increased in recent years but attribute it to their own innovations and techniques—not to union-fostered work habits.

In Chicago, where carpenters won only 10ϕ more an hour and laborers 25ϕ this year, builders are more generous with their compliments. Says Chicagoland HBA Executive Vice President John Downs: "Labor people are encouraging a full day's work for a full day's pay. You have some enlightened leadership now. But increased productivity is negligible when it comes to offsetting this year's pay raises."

Would a hold-the-line policy gain more for housing—even if it meant a long strike in good times?

A few builders think so. They insist that in time such a course would mean more profit. Says one: "I think some one should stop the inflationary trend but I doubt if it will be builders leading the way. Maybe if some industry like steel sits it out, then when our next round comes up, builders will have enough courage and interest to follow suit."

Here is the Bureau of Labor Statistics tabulation of the past year's wage boosts by trades from July, 1958 to July, 1959:

TRADE	CHANGE	38 10 39	KA	TE LEVELS
	Pct	Cents	Avg	Range
Bricklayers	4.5	17.4	\$4.04	\$2.75-4.70
Carpenters	4.8	16.6	3.63	2.00-4.40
Electricians	3.2	11.9	3.80	2.63-4.35
Painters	3.4	11.0	3.38	1.75-3.70
Plasterers	3.3	12.2	3.88	2.63-4.50
Plumbers .	5.0	18.6	3.88	2.75-4.45
Laborers .	6.1	15.1	2.62	1.20-3.65
All trades.	4.6	15.3	3.50	_

MATERIALS BRIEFS

Producer vs builder

Should homebuilders themselves be footing some of the bill for a national advertising campaign to sell home ownership?

Advertisers and their agencies think so. And they made the point firmly at a session on advertiser-builder relations in the Natl Housing Center. Consensus: before manufacturers spend a bundle of their own cash promoting home ownership, the builders will have to assess themselves to help pay the cost.

Said W. H. Green of Kenyon & Eckhardt, the ad agency: "Why must this job be done only by the manufacturers? We have situations like the Florists Telegraph Delivery . . . putting up \$2 million of their own money to sell the idea of Florists Telegraph Delivery . . . You have Douglas Fir Plywood . . . putting up a very substantial amount of money to sell the idea of better home construction and home ownership . . .

"Yet this, admittedly the largest industry in America, is unable to get up a lousy \$1 million to sell home ownership to the American public . . . It can't get even \$1 a home from members of the association or \$25 from each of the 40,000 members . . . to start an advertising job to the public. My question is why not?"

His statement drew prolonged applause and a comment from Dallas Builder Dave Fox that he has been trying for several years to get NAHB to undertake its own advertising program, without success. "What we want to do," Fox said, "is to get builders and manufacturers to put in what amounts to peanuts per sale to promote home ownership."

Added Kansas City Builder Larry Winn Jr: "I am in wholehearted agreement with this plan. [but] I don't think there are enough builders throughout the country who think the way most of the men and women on this panel think."

The advertiser-builder meeting was sponsored jointly by the Producers Council and the NAHB merchandising committee. The session produced a good many suggestions and exchanges—but no real agreement as to overall advertising policy or recommendations.

\$500,000 promotion set

Edison Electric Institute, which is spending \$500,000 to promote home lighting use this year, is offering builders a chance to tie in with the promotion.

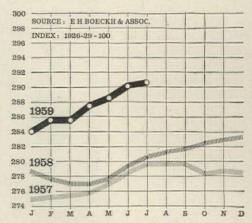
Core of the campaign are four prizewinning contemporary homes—one for each major region—designed by student architects for lighting and electric living features.

Planned for a family of four, the houses are designed to sell under \$20,000 without lot but with all major appliances. They will

be offered as prizes in a \$200,000 national consumer contest this fall.

Builders can get plans for the houses through local utilities.

NEWS continued on p 58

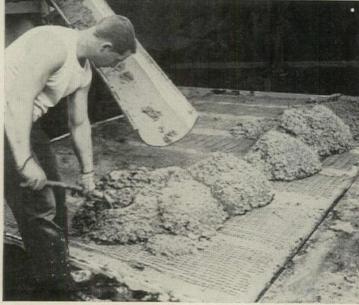


RESIDENTIAL BUILDING COSTS inched up from 290 to 290.6 in July, according to the Boeckh index. Col E. H. Boeckh blames the rise entirely on labor wage boosts. "Materials prices have been practically frozen lately, except for a drop in asphalt shingle prices," he reports. "Some producers are trying to push up their prices but we're in such a competitive market that any price boosts are bringing slower sales. So they have to cut back."

New Electric Sno-Melter



SNO-MELTER, designed for 42 watts per square foot, puts a practical price on snow-free walks, tire tracks for the drive! Heater wire has pre-assembled lead wires and ground. "Roll-out" installation saves time, cuts cost. Write for full facts!



EASY-HEAT, INC., "Electric Anti-freeze Devices"

Dept. 2-H, Lakeville, Indiana

HOUSING POLICY:

HHFA studies what might replace public housing

Is public housing, as the late Sen. Robert A. Taft (R, Ohio) concluded, the only likely way to subsidize poor families into "adequate" quarters?

HHFAdministrator Norman Mason hopes not. And he has started a staff study to try to produce some alternate plans. Working on it are Prof. Ernest Fisher of Columbia University, who is on sabbatical leave, and Asst HHFAdministrator Henry O. Talle, former Republican leader of the House housing subcommittee. Mason hopes to finish the study by Jan. 1.

Mason told the Senate housing subcommittee he feels there is no longer a compelling need for government-built mass housing because the housing shortage is over. "We have many people living in public housing units today who are very unhappy in those units," he testified. "We have to find a better way . . ."

Mason contends there are ways to get more low-income families into privatelyowned rehabilitated urban housing, even single family houses. But not without some sort of federal aid, he concedes.

Rent certificates—long espoused by realtors—are one possibility. But Mason has not endorsed the idea. Low-income families would get the certificates to cover the difference between the rent they can afford and an economic rent in a privately-owned building. One drawback: it could mean a backdoor approach to federal rent controls.

Senate passes cold war vets bill; House shelves it

The cold war veterans bill, which would extend the VA home loan guaranty program to peacetime veterans, looks dead for this year.

The Senate passed it 57-31 in late July. The House veterans affairs committee, aware the Administration opposes the bill because of its potential cost, promptly pigeonholed it.

Besides the home loan benefits, the bill would give men who enter service before the scheduled end of the draft in 1963 educational benefits, unemployment compensation and mustering out pay.

The loan guaranty section would require the veteran to pay a one-shot ½% insurance premium, but it could be included in the loan. VA estimates the bill would give loan rights to 4 million veterans by its expiration date in 1962.

Separation of FHA 213, 207 insurance funds asked

A move to force FHA to separate the mortgage insurance fund of Sec 213 (co-ops) from Sec 207 (rental housing) is underway in Congress, with some chance of success.

Rep Seymour Halpern (R, NY), who introduced a bill to require the division, notes that the loss to FHA reserves under 207 (\$1 million since its birth in 1938) is much greater than that under 213 (only \$30,636 since 1950). By lumping the two funds together FHA is making co-op buyers pay too much on their loans, argues Halpern.

He also contends 213 should become a mutual fund (like Sec 203) since in both management and owner-type co-ops the owners are acquiring equity in their property.

Melvin Baker: big bettor on housing's future

One of the industry's most outspoken critics is also an apostle of its shining prospects

On the mental calendar of Melvin H. (for Houston) Baker, chairman of National Gypsum Co, the year 1963 doubtless appears in bright red letters.

That is when Baker, who in the chancy field of market prophecy has often proved more right than the experts, believes the big housing payoff of the '60s will get under way. About then he expects starts to begin a steady ascent—perhaps to as many as two million a year by the end of the decade. Whether this admittedly optimistic forecast or more conservative ones proves correct, the residential building products industry should, in Baker's view, face its greatest opportunity in history. Most important to Baker, the growth philosophy on which he has staked the future of his company since he took the helm in 1928, will be tested once more.

Like everyone else in housing, Baker has a lot riding on the expected '60s market boom. But unlike many, he is constantly piling the stakes higher.

Bold plans

This Summer, as he turns 74, Baker is amidst a vast expansion program for his already big and diversified* company aimed at getting ready for the '60s. In July he announced plans to spend some \$125 million in the next five years for new plants, acquisitions and increased production at existing plants. Included will be a \$10 million plant in California, putting the company west of the Rockies for the first time. Ultimate goal: "to expand our markets to include the entire North American continent." In the past 12 months alone National has also: 1) acquired some \$85 million worth of existing firms and so diversified into cement and tile; 2) begun operating a \$25 million Great Lakes production network that in 1960 will reach capacity to supply gypsum products for 95,000 homes a year and so meet the expected mid-west boom triggered by the St. Lawrence seaway.

"Growth," says Baker in his quiet but precise way, "has always been a guiding and motivating factor in my life."

To critics who question the wisdom of expanding capacity well ahead of demand—and there have been plenty of them lately—Baker can point to a long and successful record of moving counter to storm warnings in the economy and the industry. The tradition began at the birth of National Gypsum in 1925, when investment firms said the wallboard field was already too crowded, turned down financing. Baker and a team of salesmen peddled stock door to door to raise the company's first \$2

*With assets of \$247 million, including 43 plants in the US and Canada, National Gypsum is second only in the industry to giant US Gypsum (assets \$300 million). National markets some 300 building products in 11 major lines (gypsum, lime, metal lathe, asbestos, acoustical materials, insulation, insulation board, paper, paint, ceramic tile and cement) east of the Rockies. Last year sales were \$163.2 million (vs USG's \$265.8 million for all of US). Projected for '59: \$213 million. Goal for '65: more than \$360 million.

million. In the '30s, when others liquidated, Baker added new products, new capacity, opened new markets. After World War 2, when others braced for collapse, Baker again expanded his output of gypsum board (and dozens of other products) to meet the postwar housing boom. Since 1930, the company has never failed to make a profit.

As one of the few remaining founder-heads of a major industrial firm, Baker presents a unique combination of colorful personality, long experience and, for a materials manufacturer, a remarkably broad and articulate grasp of the housing industry, its problems and its potential.



BAKER
No patience with the status quo

To some degree, his success stems from personal assets that would serve in any industry: a decisive mind that his associates say he uses "like a scalpel to cut through the fat to the core of any problem," a salesman's instinct for persuasion, a competitor's drive.

The man who in the past 34 years has built National Gypsum from a one-plant, one-product midget to its present stature (247th in size among US industrial concerns) is himself a modest 5' 6". He tends to stockiness at 150 lbs, but his energy—so say his executives—tires many a younger man.

Quiet start

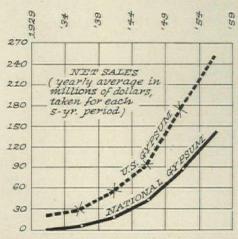
Son of a Tennessee tenant farmer, Melvin Baker grew up in the shadow of the Great Smokies near Sevierville, among lush green meadows, hefty cattle, tall stands of grain. Although he loves the country and returns often to fish or hunt, he learned to hate the endless labor of farming. After attending the one-room Grahams Chapel grade school "Huse," as he was known then, worked his way through a fee high school, then through two years at Carson-Newman College in Jefferson City. He wanted to study engineering, but the school was designed for the Baptist ministry. So at 25 he quit and took a job as assistant to an auctioneer in a warehouse full of slow-moving hardware. With that experience, he landed a job as a screen and sash salesman, later switched to selling beaverboard, a paper-base wallboard, for Beaver Products Co, where he rose to general manager in three years. When the company failed in 1921, Baker joined Manufacturers' Foreign Credit Underwriters in New York City, became vice president in two years. But when an accidental reunion with two former Beaver Products associates in 1925 offered a chance to get back into wallboard and selling, Baker quit his job, plunged into starting National Gypsum.

Direct action

The company history is studded with anecdotes about Baker but three stand out:

- In 1931, when orders fell and the company faced its first real survival test, Baker packed a bag and headed for Chicago, where plans were being laid for the huge Century of Progress exposition. In the very home town of archrival US Gypsum, Baker not only secured an exclusive contract to supply wallboard for the exposition, but persuaded officials to use it on exteriors as well as interiors. Resulting orders kept National's two plants busy for six months, tided the company over its crisis.
- Once, while striding through the company's home office, Baker came upon a department where everyone was taking a morning break. By nightfall, the department was abolished.
- In 1938, seeking funds to build a new \$2 million gypsum plant, Baker invited ten prominent financiers to a dinner in New York, explained his idea. By morning, the project was over-subscribed.

In 1952, Baker moved up to the postcreated for the purpose-of chairman, in theory turned everyday operations over to younger men so he could "plan for the future." In practice, he still keeps a sharp eye on company operations. He demands top performance from his executives-mostly men with Horatio Alger backgrounds similar to his own-who have moved up through the ranks. Although he calls salaries "on the low side" (his own, as reported to the SEC: \$120,984 in '58 vs \$134,000 for USG Chairman C. H. Shaver) he says bonuses, stock options and benefits compensate-plus "opportunities for rapid advancement in a growing continued on p 60



GYPSUM'S STEADY GROWTH is shown in rising sales curves of industry's top two. Betting solidly on trend, Baker built his sales from 11.5% of USG in '29-'34 to 58% in '54-'59.

How industry problems look to gypsum's Baker

organization." Impatient with foot-draggers, he deliberately overloads his men, makes them work hard to get out from under, quickly weeds out those who can't match the pace. He mulls problems briefly, delivers decisions in the soft voice of one long used to command. He insists on an agenda for any meeting he heads, tolerates little time-wasting by socializing, admits that sometimes under stress he lapses into a little colorful Tennessee hill language for emphasis.

Baker lives with his wife, the former Francis Yeager, in Buffalo's best penthouse, is a fond grandfather to the five offspring of his two grown children. A meticulous dresser, two-packs-a-day cigarette smoker, he relaxes with golf, fishing, hunting (mostly duck and pheasant), an occasional good book. Considered one of Buffalo's first citizens, he has lent his energies to numerous church, civic and industry causes both locally and nationally.

Among his current interests is the Buffalo Redevelopment Foundation, which he helped start. With characteristic impatience, he told the second annual Dartmouth College Conference: "The whole scope of urban redevelopment must be considerably broadened and speeded up if we are to prevent the so-called 'gray belts' from engulfing the entire urban complex."

In 1950 he received the University of Buffalo chancellor's medal as outstanding businessman of the Niagara Frontier, has flocks of other citations and degrees. But he readily confesses, "this business is my life."

Underlying his personal qualities, and equally important in his stature in the industry is Baker's thoughtful approach to housing's deeper issues. Samples:

Housing's No. 1 problem: "We are still in the horse and buggy era compared with other industries such as automobiles and aircraft. There are many reasons for this, among them the antiquated building codes and the old-fashioned labor practices. But certainly the rising interest of government in housing and its expressed desire to provide decent housing for all Americans will put pressure on the creation of a uniform housing code for all areas in the nation. Labor gradually will accept modern construction methods."

Government mortgage policy: The "ups and downs in housing starts caused by the government's up and down control of mortgage money through fixed interest rates" has prompted National to diversify in order to separate its profit curve from the starts curve. Of the company's \$85 million in acquisitions this year, \$67 million went for Huron Portland Cement Co, to "give the company an interest in road building, in the construction of airplane runways, bridges, power dams and other types of heavy construction."

Construction methods: "We are in an era in which stereotypes are being discarded and the whole concept of homebuilding is being radically altered . . . Rapid strides have been made in the development of standardized components . . . [that can be] quickly and inexpensively put in place on the job with substantial savings in on-site labor costs." National's own researchers are working on "complete wall panels which incorporate structural elements, insulation sheathing and

prefinished exterior and interior walls in a single unit."

Merchandising: Unless the industry matches the aggressiveness of its competitors for the consumer dollar, "the Joneses . . . may be induced to buy a new car or boat and defer building the home they have been planning . . . The American consumer has grown tired of the same old thing. He has seen the beginning of the space age and submarines that travel under the North Pole . . . because of this it seems to me the public is looking for something new in home construction . . . Our industry has been trying to sell our production instead of trying to find out what the consumer wants and prdoucing it."

Industry capacity: "If we wait for demand to force us to expand, we subject the market to periods of material shortages. This puts a pinch on consumer pocketbooks, causes construction to lower its standards . . . One essential requirement to stability in this or any other industry is a productive capacity equal to or slightly greater than the demands of the market."

Distribution: "One of the problems is to persuade the dealer to buy and carry a full assortment. This can best be met by a large chain of plants which bring the manufacturer close to the market so that the dealer can get quick delivery and thus make it unnecessary for him to carry large stocks."

Industry unity: "We are gradually uniting to deal with the great issues which face us. Just as we are joining forces to wage a big, industry-wide campaign to sell the idea of home ownership, we will preserve this unity and later tackle other mutual problems.

PEOPLE:

Slipher rejoins Burns and Kaiser

Dave Slipher, 47, has resigned as president of Webb & Knapp Housing Corp to rejoin his old bosses: Fritz Burns and Henry Kaiser.

Slipher has been named vice president of

Kaiser-Burns Development Corp, now developing the 6,000-acre Hawaii-Kai resort area near Honolulu. Burns is president of the company and Kaiser is chairman.

Besides his work on this project, Slipher also will assist all of Kaiser's companies gypsum, cement, steel and aluminum—to expand their markets in housing.



SLIPHER

Slipher was a founder of National Homes Corp, the No. 1 prefab firm, in 1940. As technical director of Kaiser Community Homes from 1945 through 1956, he helped to build some 6,000 homes in southern California. He was field service director for ACTION for a year before joining Webb & Knapp.

Two of the East's biggest mortgage servicing companies have merged in Philadelphia.

Colonial Mortgage Service Co has bought all the outstanding stock of the Eastern

Mortgage Service Co. The new firm will service a \$400 million portfolio—ranking it among the nation's top half-dozen.

Colonial Chairman A.H. Weiss and Monte H. Tyson, chairman of the executive committee, become co-chairman of the new company. Eastern President David H. Solms will be Colonial's president.

Eastern was founded in 1938 by the late Nat N. Wolfsohn. He committed suicide in 1956. The company was sold by his estate.

LuReCo vice president resigns in protest to Reynolds deal

Lumber Dealer Phil Creden of Chicago has quit in a huff as vice president of the Lumber Dealers Research Council.

Reason: LuReCo's sales and development contract with Reynolds Metals Co (May, News). Creden, who is advertising and public relations director of the big Hines Lumber Co, calls the tie-up "an adventure in distribution." He predicts it will fail.

The contract in question provides that the LuReCo Service Assn, a LDRC subsidiary, supplies a complete line of Reynolds aluminum building products to franchised LuReCo components dealers at 5 to 15% under the cost elsewhere.

Creden's chief quarrel is with the conflict between a research group's activities and those of a distributor. He also contends that the market prices of aluminum products are subject to such wide fluctuation in negotiation that dealers are actually saving nothing by buying through LuReCo.

Anther noteworthy factor: Hines Lumber Co is a major building supply house as well

Fabian Bachrach



CREDEN

as a lumber company. So Hines, like other distributors, is by-passed by the Reynolds-LuReCo distribution tie-up.

LuReCo President Clarence Thompson of Champaign, Ill was in Europe, was unavailable for comment. Executive Vice President Raymon Harrell, a long time friend of Creden's but still a

staunch supporter of the Reynolds deal, declined comment.

William Gillett, vice president of Fenestra Inc, has been named to a second term as chairman of Building Research Advisory Board. Six new board members were also announced: Appraiser Frederick M. Babcock, Max Barth of the office of the assistant Secretary of Defense, Vice President Peter B. Gordon of Wolff & Munier, Executive Vice President Raymon H. Harrell of the Lumber Dealers Research Council, Dr. Ernest Weissman, assistant director of the UN Bureau of Social affairs and Thomas E. Werkema of Dow Chemical's executive research staff.



Furnaces by Chrysler

Most profitable way to keep a home owner warm...and satisfied

The builder who puts Chrysler Furnaces in his homes will profit in many ways—from low installed cost, and from many others that won't show up on a financial statement. Take them one at a time:

There are two reasons why you can have Chrysler Furnaces installed for less. First, your Chrysler Furnace Dealer offers a special volume sales plan that makes sense to even the most economy-minded builder. And second, your Chrysler Dealer can shave even more off the price because it costs him less to install a Chrysler Furnace. (Chrysler's exclusive package design is the answer—it lets one man handle the job with speed and ease.)

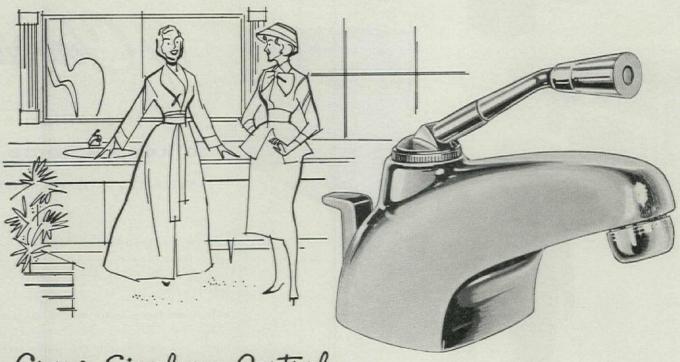
Now the intangibles: First, there are no extra subs to hire, no costly delays on the site . . . and most important, no costly call-backs after the sale. The reason: Your local Chrysler Dealer handles the entire job for you—from scheduling the installations to post-sale servicing. Second, you get complete customer satisfaction. The Chrysler name is nationally advertised, and nationally respected. Customers know a home with a Chrysler Furnace is a quality home. And years after they've moved in, their low fuel bills will remind them how much money you saved them by installing a Chrysler Furnace.

There are more reasons why you will profit—and your customers will be happier—with Chrysler gas and oil furnaces. Your local Chrysler Furnace Dealer would like an opportunity to tell them to you. Call him today—his name is listed in your Yellow Pages.



Airtemp Division, Chrysler Corporation, Dept. L-99, Dayton 1, Ohio Canadian Distributor: Therm-O-Rite Products, Ltd., Toronto, Ontario

no wonder it pays to use ...



Crane Singl-ese Control

... Crane is the plumbing most people want . . . the plumbing they look for when buying a home. Why? Because of products like these, products they know will add distinction . . . quality . . . originality.

That "different" touch that everyone wants! With Singl-ese, one lever controls water volume and temperature. Styled for beauty by Henry Dreyfuss; engineered for long, dependable service by Crane.



Crown Round

A true "classic" lavatory in a circle design. Only 18 inches in diameter, the Crown can be installed in any type of countertop. Singl-ese control. Available in seven Crane colors or white



Westland

Another Singl-ese lavatory built for countertop installation. Big, rectangular basin of gleaming vitreous china; two soap depressions. Only 19" x 20", the Westland is ideal for twin installation.



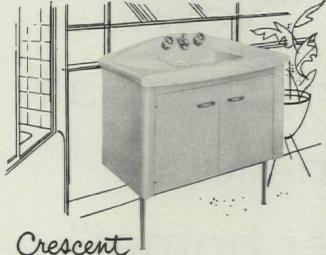
Charlotte

Note the designer's touch in the modified rectangular basin of the Charlotte countertop lavatory. Porcelain enamel on cast iron. Single-ese control. All good rea-sons to consider the Charlotte.

STEP_UP YOUR SALES WITH CRANE®

CRANE

No wonder Crane makes your bathrooms beautiful!

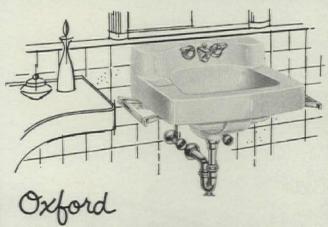


with custom cabinet. A broad sweep of gleaming countertop at both sides of the basin makes the smart new Crescent lavatory truly functional. Smooth, vitreous china with rounded corners and 45° control panel. *Dial-ese* controls. Available in white or Crane colors—with attractive cabinet or legs. Size, 18½″ x 36″.

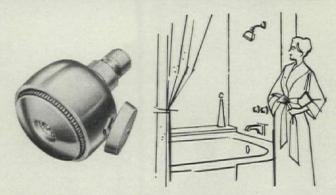


Walsan

Actually makes bathrooms bigger! Takes up less space; allows full-floor cleaning, and carpeting with no special cutting. New flapper valve ends sticking handles and annoying water waste. Tank is completely concealed between 2- by 6-inch studs.



Featuring a modern, 45° beveled control panel and plenty of back shelf space. Two soap depressions; also available without towel bars. This vitreous china lavatory with *Dial-ese* controls will be a source of pride in any home.



Criterion Shower Head

Non-clogging, self-cleaning, adjusts to any size spray. Chrome-plated and brush-finished; resists wear, corrosion and water deposits. A true companion piece to the popular Crane Criterion bath.

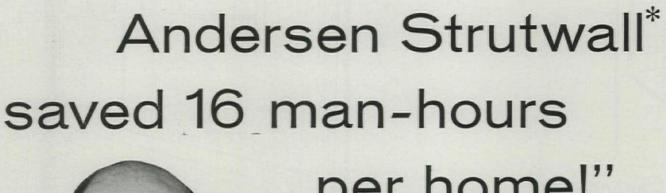
THE PREFERRED PLUMBING

CRANE CO., 836 S. MICHIGAN AVE., CHICAGO 5, ILLINOIS . VALVES . FITTINGS . PIPE . PLUMBING . HEATING . AIR CONDITIONING



Seven steps Instead of 22! Simply cut two load-bearing struts to fit header construction you use. Nail Strutwall to adjacent studs, tilt up with wall. Two-thirds of conventional framing, installing and finishing is eliminated.

"New







in packaged pine paneling



TRADITIONAL STYLING, with small, tight knots, gives a warm, friendly appearance to any type of room. Perfect for Colonial interiors, excellent in many modern decorating schemes.

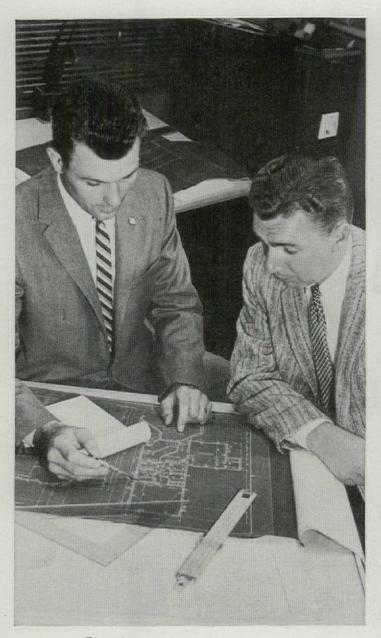
Weyerhaeuser

4-5QUARE

LUMBER AND BUILDING PRODUCTS

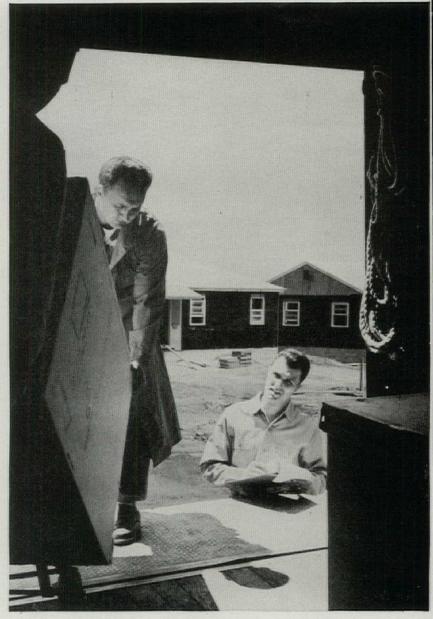
YOUR LENNOX

Offers you service and experience



as a designer:

Your Lennox Comfort Craftsman's comprehensive training by Lennox engineers in factory schools qualifies him to pre-plan with you right from the blueprint stage. His knowledge of heating design can save you time and money. Because he's an expert, he *custom designs* each heating installation to satisfy the individual needs of each home that you build, based on style of house, climate—even the living patterns of today's families.



as a businessman:

Your Lennox Comfort Craftsman is in business to stay. He knows that prompt, perfect installations geared to your building schedules are important to his continued success. He deals direct with the Lennox warehouses and factories throughout the U. S. and Canada. This enables him to get and give faster deliveries. You can count on him to be on the job on time, and to stay there until the job is done exactly!

"Quality goes beyond quality product!"

"Customer satisfaction is as dependent upon service as it is on quality. That's why we are so particular in the selection and training of our Comfort Craftsmen.

'Their engineer training at Lennox factory

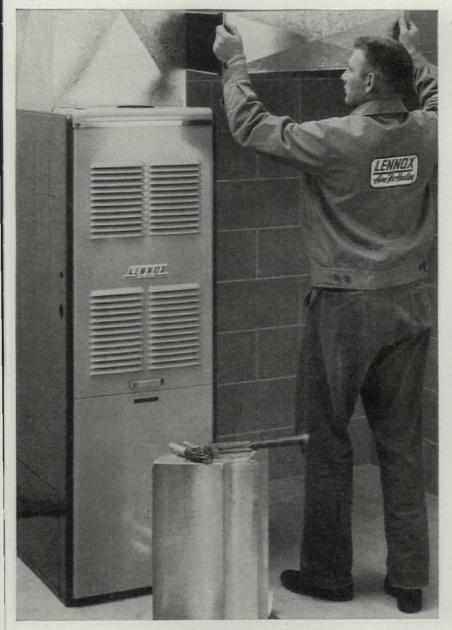
schools makes them experts in service, as well as experts in design.

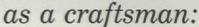
"That expertness is your assurance of satisfaction when you deal with a Lennox Comfort Craftsman!"

John W. Norris, President Lennox Industries Inc.

COMFORT CRAFTSMAN

that will save you time and money!



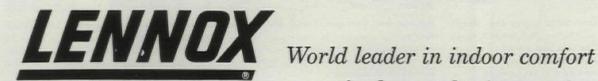


Your Lennox dealer knows that installing a heating or air-conditioning system is more than a simple "plug in" job. Therefore, he personally customengineers each job with a Craftsman's dedication. That requires not only skill, but a complete assortment of heating or cooling units. He stocks the world's largest heating and air conditioning line, from which he selects the exact combination that is best suited to comfort condition your homes.



as a salesman:

Your Lennox Comfort Craftsman's job isn't done until you've made the sale. Even then, he helps you keep your customers sold with a follow-up service program that lasts until he's satisfied the heating unit is operating perfectly. He also supplies professionally planned advertising materials, in-home displays, personalized builder brochures and billboards. His service program and merchandising aids make home selling easier for you!



for homes, business, schools



2 great new window



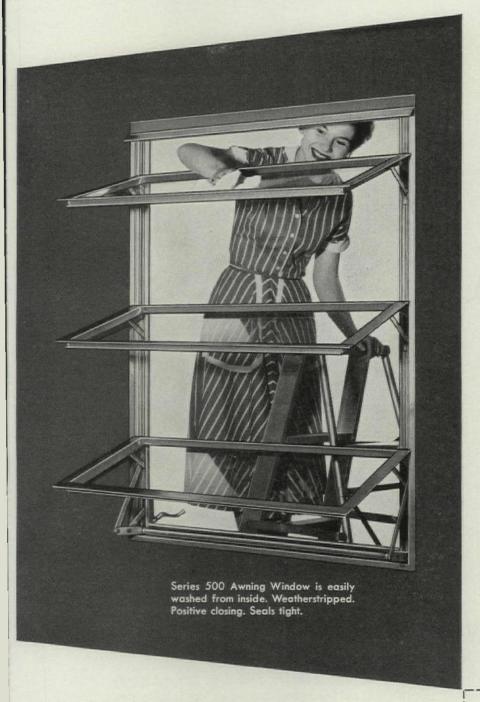
TRUSCON HOLLOW METAL DOORS AND FRAMES add value to your homes. Flush, modern. Install in 15 minutes. One-coat finish painting. You save. All popular sizes for interiors, exteriors. Sliding closet doors, louvered colonial doors, too.

REPUBLIC STEEL KITCHENS offer top kitchen value. Built to stay new, stay easy-to-clean—the one feature most women want most. Fire-safe cabinets for built-ins, drop-ins. Color at no extra cost.

Economical. Send coupon.

SORIES. Now made on new equipment. Edges are cleaner, safer. Flat surfaces flatter, straighter. More than 40 items to reinforce, protect, and add value to your home. Send coupon.

values by Truscon



* Low purchase price

* Traditional Truscon quality

To help you sell like '60 in '59, Truscon introduces two important additions to its new Economy Line -(1) Series 500 Aluminum Awning Window, (2) Aluminum Horizontal Sliding Window.

Truscon builder-conscious designers have engineered excess cost out of both types. These window values are produced specifically to meet the economic needs of home building and light construction -not simply adapted to them. The result is quality you can point to, prices you can live with.

Both awning and slider are available now in a wide range of types and sizes. Accessories are available to assure quick, economical installation in all types of construction. Fast delivery from Truscon dealers, supported by complete stocks in Truscon warehouses.

The building boom has upped production of all Truscon products. The Truscon brand gives you all the advantages of mass-production . . . plus rigid quality

Low purchase price . . . low installed cost . . . complete selection . . . most popular window types . . . high quality . nation-wide warehouse stocks. It all adds up. Try Truscon today.

REPUBLIC

CLEVELAND 1, OHIO

World's Widest Range of Standard, Steels and Steel Products



REPUBLIC STEEL CORPORATION DEPT. HH-7994-"

1441 REPUBLIC BUILDING . CLEVELAND 1, OHIO

Please send me value facts on . . .

- ☐ Truscon Aluminum Windows
- ☐ Truscon Hollow Metal Doors and Frames
- ☐ Truscon Tru-Mesh Metal Lath Accessories
- ☐ Republic Steel Kitchens

Zone_State_



There's always a way to solve a problem

Columbus had a problem . . . how to stand an egg on its end! Architects and builders have problems, too . . . how to find a material that absorbs noise and decorates. Curon* wall and ceiling covering is your answer.

It is the unique way to sound condition while you decorate and insulate your installations. It brings a peaceful atmosphere to Hi-Fi, recreation, family rooms where quiet counts.

CURON wall and ceiling covering is 1/4 inch in depth... adds luxurious texture to walls... gives a modern look that will still be new years from now. It's colorfast, easy to apply, easy to maintain.

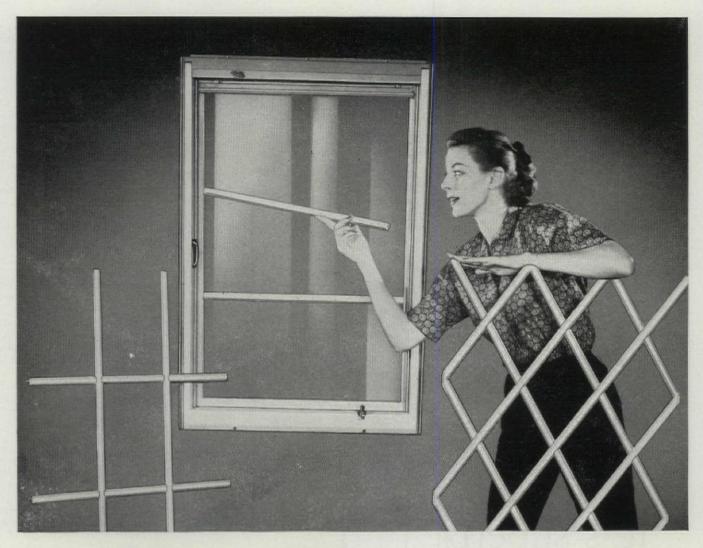
Architects and builders who look forward . . . who plan for the future, want the products they use to be unique,

to give extra prestige to their designs. Be sure and specify Curon wall and ceiling covering for all *your* installations. Call your Curon dealer, or write: Curon Division, Section HH-9 Curtiss-Wright Corporation, 50 Rockefeller Plaza, New York 20, N. Y.



*CURON is the registered trademark of the Curtiss-Wright Corporation for its multicellular materials.

Columbus solved it by hard-boiling the egg and tapping the tip of it.



HOW TO

VARY APPEARANCE OF YOUR QUALITY HOMES

PELLA REMOVABLE MUNTINS give fresh new value to your houses by bringing double advantages to both you and your prospects.

First, these snap-in, snap-out muntins enable you to give similar houses "different" window treatments. They also save construction costs by simplifying painting.

Secondly, PELLA REMOVABLE MUNTINS provide an important detail of traditional style in demand by discriminating prospects. And for user convenience, they take

the annoying work out of cleaning conventional divided panes.

Constructed of clear Western Pine, these versatile muntins are steel-pinned at intersections for lasting durability.

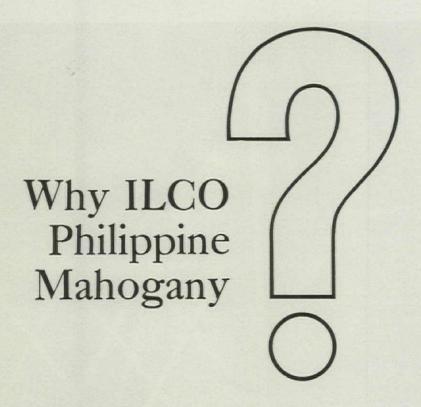
In 3 styles — Diamond, Horizontal and Regular — PELLA REMOVABLE MUNTINS are designed for PELLA WOOD CASEMENT, MULTI-PURPOSE and TWINLITE® WINDOWS. Full details in Sweet's. Contact your nearest U.S. or Canadian distributor or mail coupon today.

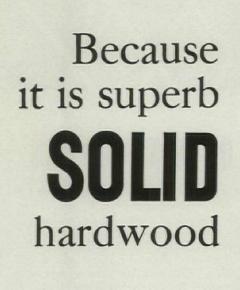




Please send free illustrated facts about PELLA wood windows.					
NAME					
FIRM		(0.1, 1.7, 1.7, 1.7, 1.7, 1.7, 1.7, 1.7, 1			
ADDRESS	TAILS I.S.	Gin State of the			
CITY & ZONE		STATE			

WOOD WINDOWS







And in that brief answer lies the key to the enduring beauty of Ilco Philippine Mahogany. Since Ilco is solid hardwood—not plywood or veneer—each piece, though blending harmoniously with every other piece, is still unique as far as figure is concerned, reflecting different aspects of growth characteristics, grain angles, the subtle interplay of light and shadow. And Ilco produces fine moldings which so perfectly complement the elegance

of this superb natural hardwood paneling.

Two more interesting facts about Ilco. First, because it is kiln dried right at the mill, it has excellent workability . . . resists splitting, twisting and warping. Second, because of the nature of the wood and of superior milling, Ilco takes all types of finishes easily.

So specify Ilco Philippine Mahogany. Your prospective customers will assure you that you've made a wise move.



INSULAR

LUMBER SALES CORPORATION 1405 Locust Street, Philadelphia 2, Pa.

Letters

Urban renewal money

You have handled a difficult subject ["How to stop squandering urban renewal money" H&H, July News] in admirable fashion. I would be at a loss to suggest any changes. I have heard it said time and time again that the money for urban renewal will go down a rat hole unless local governments make it difficult, if not impossible, to make a profit out of slums. Our Build America Better Committee has been hammering away at code enforcement. Realtor Rubloff suggests the tax approach. We would do well to pick up the fight on this as well. Perhaps, your article will point the way. It ought to.

JOHN C. WILLIAMSON, director NAREB, dept of govt relations

Best story

The story about variations in exterior appearances is much the best story in H&H [June p 138] in a long time. This is a most important subject for builders these days. People do seem to want to see different roof lines, a different silhouette, a different mass when they walk down the street.

CHARLES FREEBURG Fairhill, Inc Memphis

. . . on the record

I have to put on record my long and firmly held conviction that House & Home is so good that it just can't be improved.

For quite a while it has been on my "must" list for cover to cover reading and that means I like every bit of it. Naturally, what is of most interest to me is the News section and every month you do a superb job of collecting news that is significant, and presenting it in an accurate, interpretive manner. Your big May issue was really something, but the June issue, which is what you are doing on the average, was just as good. I don't believe there is a single publication, except the Wall Street Journal, that succeeds so well in doing what it sets out to do

in doing what it sets out to do.

George H. Knott

Mortgage Bankers Assoc of America

The quality house

While you do a good job promoting better planning, etc, (H&H, May) most builders in the Dallas area still use \$25 "shotgun" plans even as the basis for their better homes. The first rule of merchandising is to have a product worthy of promotion. It is frustrating and sad to see all kinds of houses built with the same warmed over, ill-planned designs.

GREGORY CAVANAGH, designer Dallas.

All of the members of the Small Homes Council staff felt that your May issue was excellent. Keep up the good work.

RUDARD A. JONES, director Small Homes Council University of Illinois

The May issue of H&H has been placed in our Appraisal Section, and our Appraisal Department is being encouraged to use these standards for a quality house in upgrading construction loans.

W. O. DuVall, president Atlanta Federal S&L Assn



Concealed Toilet Paper Holder. Revolving hood protects, covers paper, lifts at the touch of a finger.



Relaxation Unit luxuriously practical—recessed for toilet paper, cigarettes, ashtray, magazines.



Concealed Lavatory Unit. Revolving door hides soap, tumblers and brushes.



In HALL-MACK's complete selection of bathroom accessories, you'll find many unique, practical ideas such as those shown here. Pioneered by HALL-MACK to meet specific needs, they're designed to provide extra convenience and beauty...to add the touch of luxury that means so much.

Blending easily with any decor and styled for every budget, these quality, gleaming accessories spell customer satisfaction. The bath you design, sell, or install today — in modest abode or palatial setting — will always have the best when you specify HALL-MACK Accessories.

HALL-MACK COMPANY	Division of TEXTRON INC.
1380 W. Washington Blvd	Los Angeles 7, California

ъ.	æ	L	4		o	ı
г	а	г	7	т	9	S

	Please send	vour FREE	color	booklet	of	new	bathroom	ideas
- 1	Fiedac sella	your ritte	COIOI	DOONIGE			Dutimoon	10000

Name_____(PLEASE PRINT)
Address____

_State

Sold by leading plumbing, tile and hardware dealers everywhere

City

NEV RODDIS VENEERED

EXCLUSIVE WOOD BLEND PANELS

MANY WAYS SUPERIOR TO HARDWOOD PLYWOOD ... YET COSTS LESS SPECIAL Timblend, Roddis' amazing man-made board, is now available veneered, TIMBLEND in the most popular hardwoods. New beauty, plus highest warp-resistance CENTER CORE! combine in veneered Timblend to give finer product quality at lower cost. With new, veneered Timblend you'll get all the richness and beauty of your favorite hardwoods, plus all the proven advantages of Roddis' exclusive man-YOUR CHOICE made core. It's this Timblend core that makes the big difference! OF HARDWOOD Because of the unique, controlled density, non-grain construction of this core, veneered Timblend machines beautifully with ordinary woodworking VENEERS! tools or power tools. It can be sawed, drilled, routed and ray wood working smooth, gap-free edges every time. Even lipped edges turn out beautifully! And veneered Timblend has a remarkable dimensional stability that assures highest warp-resistance! Screw-holding ability equals that of the softwoods. Veneered Timblend comes in any of these best-selling woods: Elm, Birch, Maple, Cherry, Mahogany, Oak, Walnut, and many others. Available in 3/4", in common plywood sizes. Other thicknesses and sizes available, prefinished if desired, on special order.

Veneered Timblend is ideal for cupboard doors, cabinets, built-ins, ward-robes, sliding doors, table tops, displays and other hardwood plywood appliance of the control of cations. Excellent end results every time . . . at lower cost. Why not send the coupon today for a free sample of veneered Timblend plus the illustrated brochure: "Working with Veneered Timblend"? deplacement a FREE Roddis Plywood Corporation, Marshfield, Wisconsin-Dept. HH-951

Please rush free sample of Veneered Timblend and brochure: "Working with Veneered Timblend"

FIRM.

STATE



EDITOR-IN-CHIEF Henry R. Luce

EXECUTIVE ASSISTANT Albert L. Furth

PRESIDENT

Roy E. Larsen

EDITOR & PUBLISHER P. I. Prentice

MANAGING EDITOR Robert W. Chasteney Jr.

EXECUTIVE EDITOR Carl Norcross

ASSISTANT MANAGING EDITORS

John F. Goldsmith Walter F. Wagner Jr.

NEWS EDITOR Gurney Breckenfeld

ART DIRECTOR Jan V. White

ASSOCIATES

Edward Birkner, James P. Gallagher David R. Kerr, Kathryn Morgan-Ryan Robert W. Murray Jr.

Richard W. O'Neill, Arthur David Pieper John Senning, Robert Seaver Richard Saunders (Washington) Clifford S. Smith, Paula Treder, Ala

ASSISTANTS

Joan Dirkes, Marcia Frank Natalie F. Siegel Olive F. Taylor, Jenepher Walker

CONSULTANTS

Carl Boester, Miles L. Colean, FAIA Thomas P. Coogan, Ruth Goodhue James T. Lendrum, AIA Leonard Haeger, AIA, David C. Slipher

> PRODUCTION MANAGER Lawrence W. Mester

CIRCULATION MANAGER John E. Pflieger

BUSINESS MANAGER William L. Taylor

DIRECTOR OF MARKETING Arthur S. Goldman

ADVERTISING DIRECTOR Richard N. Jones



Volume XVI, No. 3

HOUSE & HOME is published monthly by TIME INC. Time & Life Building, 9 Rockefeller Plaza, New York 20, N. Y. Yearly subscription payable in advance. To individual or firms (and their employes) 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, S6.00; elsewhere, S9.30. Single copies, if available, S1. All copies mailed flat. Pleas address all subscription correspondence to HOUSE & HOME, 9 Rockefeller Plaza, 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. @ 1959 by TIME INC. All rights reserved.

TIME INC. also publishes TIME, LIFE, FORTUNE, SPORTS ILLUSTRATED and ARCHITECTURAL FORUM. Chairman, Maurice T. Moore; President, Roy E. Larsen; Executive Vice-President for Publishing, Howard Black; Executive Vice-President and Treasurer, Charles L. Stillman; Vice-President and Secretary, D. W. Brumbaugh; Vice-Prosidents: Edgar R. Baker, Bernard Barnes, Clay Buckhout, Arnold Carison, Allen Grover, Andrew Heiskell, C. D. Jackson, J. Edward King, James A, Linen, Rath D. Paine Jr., P. I. Prentice, Weston C. Pullen Jr.; Comptroller and Assistant Secretary, John F. Harvey.

STORY OF THE MONTH

126 What you should know about aluminum for today's and tomorrow's houses

DESIGN

One-of-a-kind houses by Edward Stone and Mosher & Drew 88

LAND PLANNING

Is this new kind of layout the answer to "big-lot zoning?" 116

TECHNIQUES

Here's how pre-cut lumber looks to a dealer and to a builder customer 99

118 How Builder Bob Schmitt keeps accurate, up-to-date cost records

BUILDER STORY

Bill Levitt finds the market eager for bigger and better houses 138

THE MANUFACTURED HOUSE

Does National Home's big deal mean a new deal for the industry? 124

MERCHANDISING

On Long Island no one knows more about selling new houses 108 than Realtor Irving Kern

"Trades are the one sure way to sell more people more new houses" 134

NEW WAYS TO BUILD BETTER

145 Showcase

Technology: shop methods give better plumbing for less 162

What the leaders are doing 175

Now double-hung windows come with double glass 191

Electronic air cleaning means better air conditioning 192

201 Other new products

234 Reviews of new technical literature

NEWS

45 Index to News reports

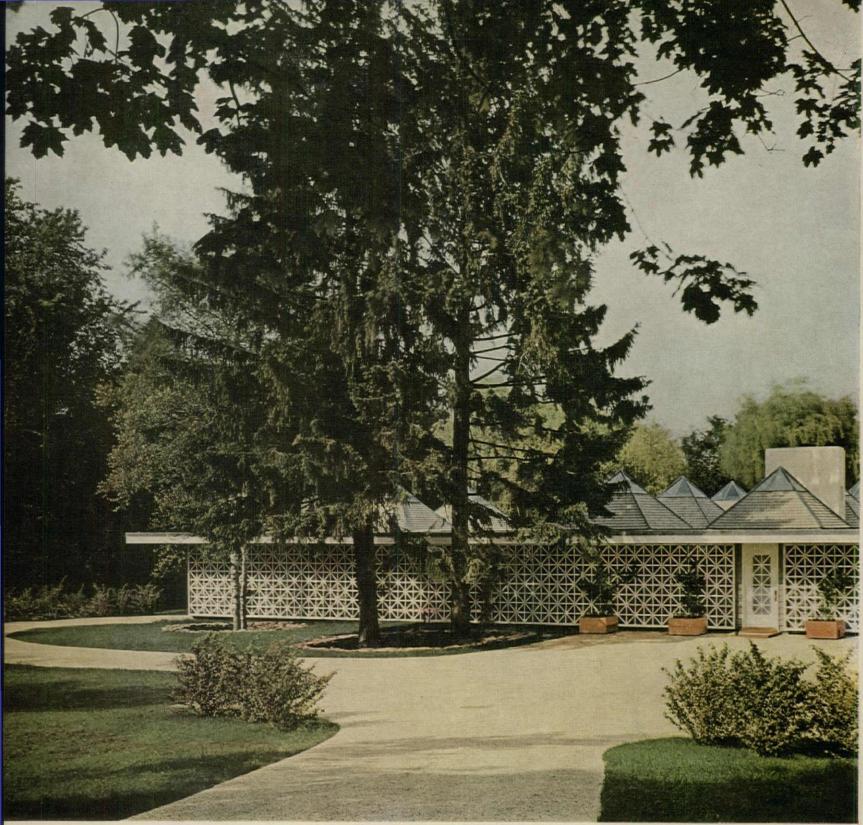
DEPARTMENTS

Letters to the editor 78

240 Advertising index



COVER: San Dieg Roy Dre Architects: Robert Mosher & R Photo: Douglas M. S



GLASS-TOPPED PYRAMIDS (12 in all) and latticed facade turn simple flat roof and shingle house into a highly decorative residence.

Edward Stone puts fanciful ideas to practical use

The latticework and shiny pyramids that brighten this house are more than decoration—they have work to do.

The pyramids, glass-topped, are skylights for every major room in the house (see p 90). The latticework not only gives a pattern to the entrance facade, it screens outdoor-living terraces at either end of the building (see p 92) and makes the house itself seem much longer. For other special details that give this house its special flavor, see p 94.

All the fancy details help make this one of the most eye-catching houses in New Canaan, a town noted for its contemporary designs. This one came into being because Celanese Corporation wanted a house that used throughout products with some kind of Celanese-made ingredient in them, such as the vinyl flooring and the plastic roofing over one of the terraces. And New Canaan Builder Ted Hobbs, though he has done mostly traditional work in the past, has long admired Stone, and was eager to take this house on as a merchant-built venture.

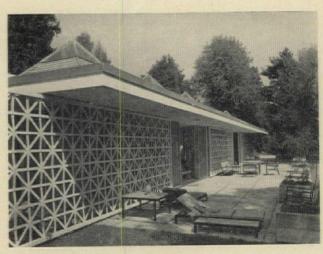
Products were supplied at cost by Celanese wherever practicable, but the basic cost was paid by Hobbs, who is now offering the house on the market.



in his newest house

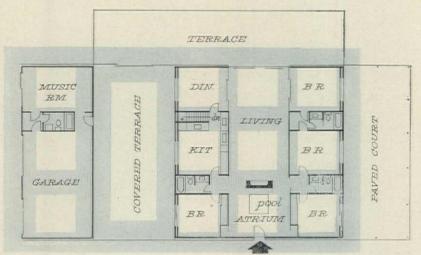
ARCHITECT: Edward Stone
BUILDER: Theodore DeF. Hobbs
INTERIORS: John and Earline Brice
LOCATION: New Canaan, Conn.
PHOTOS: F.M. Demarest

REAR TERRACE is off living room; house hides it from street. Latticework is bolted to house in 8' sections, is removable for painting.





Skylights decorate rooms and roof, bring sparkling varieties of light



At night the base of the skylightpyramids is a lighting cove, so each room has uniform lighting. During the day the glass peaks of the pyramids catch sunlight to bring its changing patterns indoors. And the skylights open up the rooms night and day because they work as ceilings, so space moves upwards.

The outdoor terrace between house and garage is also skylighted, but by a translucent plastic roofing. (See plan, left.)

0 5 10 15 20FT.

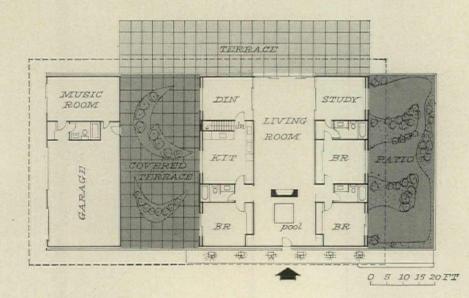


ENTRANCE FOYER is generous (14'x18') in size, allows plenty of room for traffic circulation around reflecting pool.



LIVING ROOM opens to rear terrace, right, while dining room, in background, leads to latticed and roofed side terrace.

Rooms open wide to terraces screened from the road by lacy latticework



The huge terraces at either end of the house (see plan, left) are useful for private outdoor living because the latticework that surrounds the house screens them from public view. The terrace off bedrooms and den (at right in plan) is open to the sky, while the terrace off kitchen and dining rooms has a translucent plastic roofing, so outdoor dining is possible in all kinds of summer weather. Another large terrace, across the rear of the house, is screened from the street by the house itself.



MASTER BEDROOM shares roofed terrace. Shoji screens cover closets; opening in foreground has four sliding panels to close it: a glass door, a screen door, a translucent plastic panel, and an opaque plastic panel.



KITCHEN, also skylighted, has small dining area within it. It too is opened up by set of

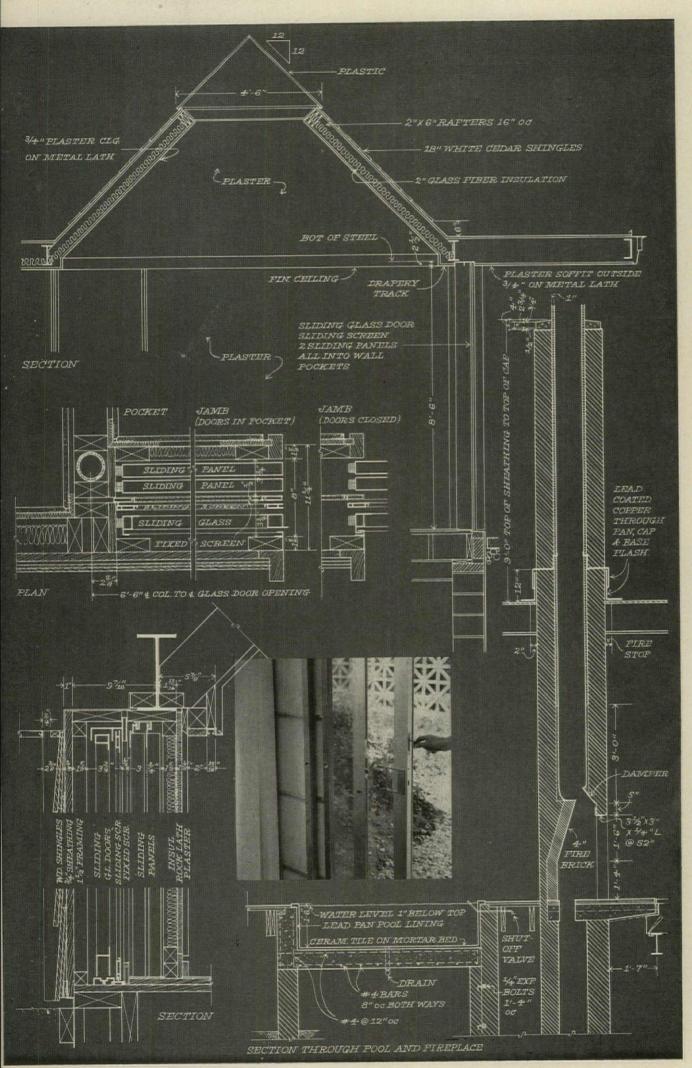
four sliding doors, so there is complete access to roofed dining terrace.



DINING TERRACE is 50' long, latticed across two ends, with house on one side and garage

on the other. Terrace, paved and roofed, is large enough for sitting space too.

details on next page



END



ENTRANCE SIDE of house stretches long and low. Well-designed garage doors, at left, fit into main elevation without usual jarring note.

Western architects create luxury out of simplicity

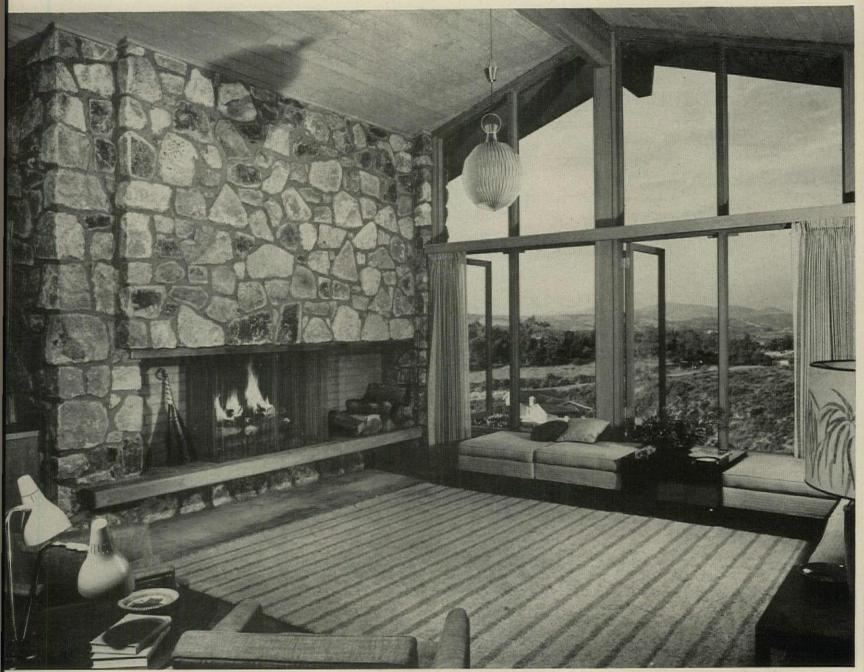


This California house has the luxury of ample space, natural materials, distant views, and well-chosen land-scaping—but all of this fits within the framework of a house that is simply and tastefully designed for informal living.

The exterior of the house emphasizes its simplicity: the walls are unadorned vertical redwood siding; the roof planes are long, low, and unbroken. Materials are held to a minimum; besides the redwood siding, the walls are faced with stone for accent in only two places: at far right and far left of the main facade.

By keeping the design as simple as possible, by emphasizing natural materials, and by opening up the rooms, Architects Mosher and Drew have created a house that follows the tradition of modern Western architecture.

FRONT WINDOWS shown here are only ones that face the street, and they are glazed with translucent glass to insure privacy. Louvers below windows are for ventilation. Siding is natural redwood.



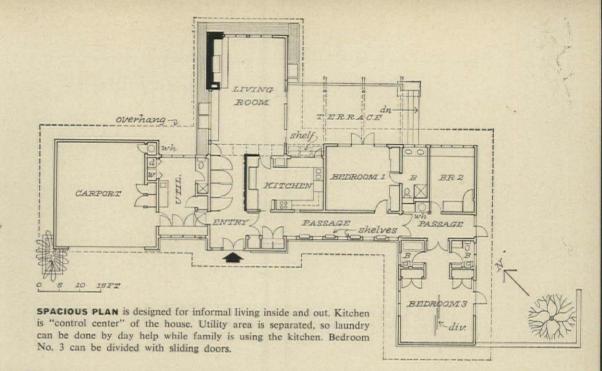
SPACIOUS LIVING ROOM gets extra scope from sweeping view. Room size (18'x27') and view (endless) make huge fireplace possible.

Big rooms and big views give scale to bold-patterned materials

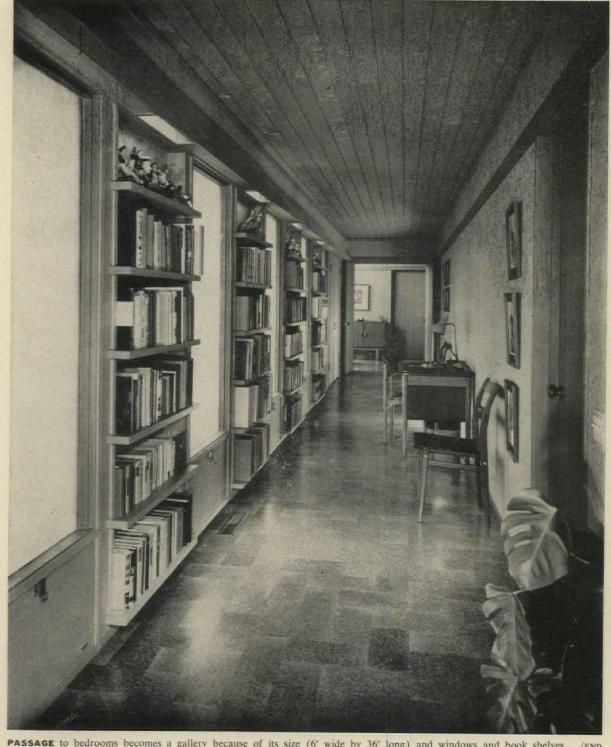


Natural materials like the native stone in the living room fireplace need lots of space to set them off or they become overpowering. Properly combined with spacious rooms like those in this house, natural materials add to the feeling of informal luxury. Actually the house is not large in number of rooms (see plan, opposite) but each room is of such generous proportions that this is by no means a small house—in spirit or in fact. It has 2500 sq ft of living area.

DINING end of living room repeats the stone fireplace treatment. Soffit runs entire width of room, provides soft illumination. Door at left is to kitchen.



ARCHITECTS: Robert Mosher & Roy Drew BUILDER: R.E. Hazard, Jr.
INTERIORS: Ross Thiele & Son
LANDSCAPING: Harriet Wimmer
LOCATION: San Diego, Calif.
PHOTOS: Douglas M. Simmonds



PASSAGE to bedrooms becomes a gallery because of its size (6' wide by 36' long) and windows and book shelves.

In cooperation with LIFE and HOUSE & HOME

THE AMERICAN INSTITUTE OF ARCHITECTS

invites architects, builders, and homeowners to enter their houses in a nationwide design program for

HOMES FOR BETTER LIVING

Award winning houses 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 San Francisco-April 18-22, 1960, and will be publicized in newspapers, on radio and television.

For the past four years AIA has sponsored regional Homes for Better Living Awards Programs in cooperation with House & Home and Sunset (West 1956), Better Homes & Gardens (East 1957), Life (Midwest 1958), and McCall's (South 1959). These regional programs have been so successful in giving recognition to better design and encouragement to architect-andbuilder collaboration that the Institute has now decided to broaden the scope to include all fifty states.

Awards will be made in two categories:

- 1. Houses designed specifically for 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 an individual owner, divided into builder and sold speculatively, divided into three classes according to price:

 - a. Under \$15,000 b. Between \$15,000 and \$20,000
 - c. Over \$20,000

Only houses designed by registered architects and completed since January 1, 1957 are eligible. Entries may be submitted by the architect, the builder, or the owner. Entry fee is \$10 for each house, and there is no limit to the number of houses any individual may enter.

Entries in the 1959-60 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, 1957.

Winners in each category will be selected by a jury of outstanding architects and housing industry leaders. Judges for previous Homes for Better Living Awards have included:

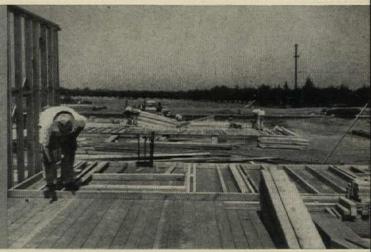
For Custom juries: Pietro Belluschi, FAIA; John Burchard, dean of humanities, MIT; Eero Saarinen, FAIA; Percival Goodman, FAIA; Edward Larrabbee Barnes; Carl Koch; Robert W. McLaughlin, director, School of Architecture, Princeton; Arthur Gallion, dean, School of Architecture, University of Southern Cali-

For builder house juries: Neil Connor, AIA, director of architectural standards for AIA; John Dickerman, executive director NAHB; Carl Mitnick, president NAHB; John Noble Richards, FAIA, president AIA; Edward Fickett, AIA; James Lendrum, head, department of architecture, University of Florida; L. Morgan Yost, FAIA.

Entry blanks must be sent in by January 15, 1960, and the entries themselves must be postmarked no later than midnight, February 13, 1960. An entry blank is printed on page 238. 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.

WHY

don't more builders build with pre-cut lumber like this?



WHY

don't more lumber dealers offer pre-cut lumber like this?



Retlaw

"I don't know why they don't," says Raymond Harrell of the National Lumber Dealers Research Council. And John King of NAHB's Research Institute adds: "I don't know the answer either."

If you quiz a lot of dealers and builders you get a which-came-first-chicken-or-egg answer. Dealers say, "We would pre-cut if the builders would buy it." Builders say, "We don't buy it because the dealers don't offer it." In some areas dealers who might be pre-cutting have gone a step further and are offering panels and trusses. In some areas builders who might be building pre-cut have gone further and are building prefabs. Actually, the West Coast is just about the only place where lots of dealers are selling pre-cut lumber to lots of builders.

And on the West Coast builders who buy pre-cut lumber say it saves them \$100 or more per house.

Take the case of Brown & Kauffmann.....p 104

And the lumber dealers say pre-cutting is a highly profitable business.

Take the case of O'Neill Lumber Co.....next page

SEPTEMBER 1959

Precutting continued



O'NEILL LUMBER CO'S DAVID WIGHT has pre-cut about 4,000 houses for builders in the San Francisco area since 1952.

"Pre-cutting is a wonderful way for a dealer to serve builders"

"Pre-cutting has greatly strengthened our hold on the homebuilding market and raised our profits," says Dave Wight, president of O'Neill Lumber Co.

"Pre-cutting is easy to sell to builders, and easy for a yard to handle with the right men and equipment. It is one of the best services a lumber yard can offer because it saves builders money and gives the dealer a profit on the cutting and on the lumber. Since we began to precut seven years ago, our net has gone up nearly every year. Other dealers were skeptical when we started, but now most volume yards in the San Francisco-Bay area pre-cut and most of the bigger builders build pre-cut. A third of our volume is in pre-cut for about 12 builders, and we added a second yard to handle the added business."

A dealer can make pre-cutting pay off if he can sell 250 house packages a year

Says Wight: "Pre-cutting is a good service to offer to builders of 25 houses or more—with more benefits to the builder the bigger he is. If the dealer can keep production running smoothly at a steady rate, he can make it pay. But he must have a dependable market—say five customers for 50 houses each."

Wight's O'Neill Lumber Co this year will pre-cut about 1,000 houses for a dozen builders. He sells uncut lumber to about 100 other smaller builders.

"I went into pre-cutting," Wight says, "because I saw that most volume builders were doing their own cutting inefficiently. Most big fellows were bypassing dealers, too. They had buying power and production-line methods, but they didn't know their pre-cutting costs. We have showed them that pre-cutting on the job wastes material. They have learned our service saves them an investment in

tools, eliminates problems of planning work for sawyers, and makes it unnecessary to move the cutting yard every time they move to a new tract."

"A 100-house builder can save \$100 a house by getting our loads delivered on site"

Wight estimates that on a typical house his package may cost \$35 more than raw lumber would cost, but this is less than it would cost the builder for waste alone if he did his own pre-cutting. Wight charges about \$1,100 for a package that contains some 60% of the lumber used in a 1,000 sq ft house.

Here is what two builder-customers say about the savings they get by buying pre-cut lumber:

DAVID BURKE SR (100 houses a year): "We save more than \$100 a house. We have almost no waste, and O'Neill grades for us and saves us the culling. Also, we get along with three fewer men."

BLAINE HARPER, South Bay Construction Co: "Precutting has reduced work on the site, and speeds our operation. We now do in three days what took five to do before. Pre-cut eliminates a lot of errors on the job."

Wight does not pre-cut sub-flooring, roof decking, and siding lumber because, he concedes, "some cutting is best done with hand power saws at the site." And he does not plan to take the next step and offer panels to builders. "Component fabrication," he explains, "raises transportation costs two to three times because of all the air you pay for when you ship components."

For details on Wight's pre-cutting operation, see the next pages . . .



Pre-cutting calls for a well organized, well equipped yard

O'Neill Lumber Co has two big yards and handles over one trucks move stock quickly with a minimum of trips. Another million bd ft of lumber a month. The San Mateo yard yard in Redwood City is spread over 2½ acres. Together, the (above) is carefully laid out over 5 acres to let forklift yards stock two to four million bd ft of lumber.





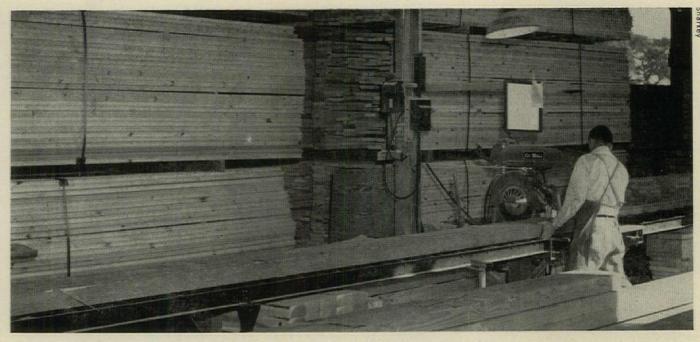
And pre-cutting requires top supervisors

The secret of pre-cutting for builders is tight scheduling and careful planning. Three key men at O'Neill are shown at their jobs.

Foreman W.E. "Red" Poulton (left) schedules cutting and loading to fit the builder's timetable. Ed Robinson (center), pre-cutting manager, checks his control board where he keeps facsimile copies of cutting and shipping lists. At right is W.H. "Bill" McKaig, a former homebuilder, who is key contact man with builder clients. He prepares cutting lists, advises builders on grades of lumber and how to take advantage of special cuts that lower costs.



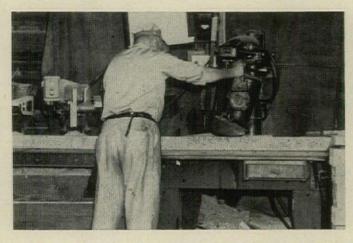
continued

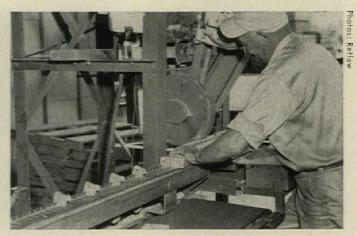


Pre-cutting mostly involves straight cuts in large volume

The 4x12 rafter on the cutting line above is simply being cut to length by one of O'Neill Lumber Co's big radial saws. The saw operator has a cutting list in front of him from

which to work. All cutting is done on three long cutting lines, each of which has two or three saws to permit that many cuts quickly and without need to rehandle pieces.

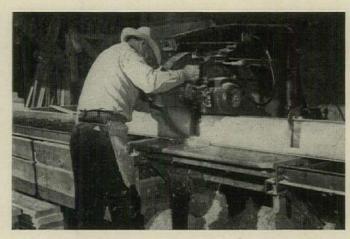




A variety of cutting tools is the dealer's strong point

Most O'Neill saws are 71/2 hp, three-phase radial DeWalts like the one shown at left notching a rafter. The one at right is an air-operated saw designed and built at the yard to

make random length cuts. Other saws include 1 hp or smaller tools to cut 2x4s. Cut pieces move along roller or rubber belts and are marked for use at the end of the line.





Highly skilled sawyers know the end uses of pieces they cut

Each saw operator is also an experienced carpenter who is open use on a porch, the workman selects a piece with top trained to consider the end use of each piece so that all appearance. Photos above show a sawyer, left, notching a boards are the proper grade. Example: if a rafter is for frieze board and another, right, cutting a rafter diagonally.

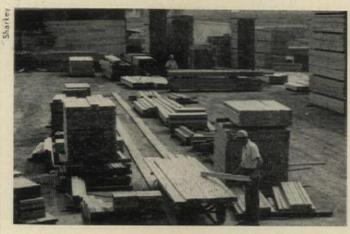




Cut pieces are carefully stamped before packages are assembled

The ends of all pieces are rubber stamped or penciled (left) as a guide for O'Neill loaders and for the builder's crews who lay out the pieces on subfloors at the site. Each builder

works out a code system with Bill McKaig of O'Neill for each model to be built (see p 101). At right: forklift moves marked pieces to assembly line for sequence loading.





Loads are built up just the way the builder wants them

Cut pieces are delivered by forklift to an assembly line (left) where a yardman builds up a load on a dolly that moves down a track to different piles. Pieces are loaded in reverse

order of need at the site. (Some packages for big houses are too tall for this method, must be sub-piled in one spot.) At right, yardmen band a load with steel strap.



Most packages go out in pairs and are dropped between two sites

O'Neill yard. Here they load two pre-cut packages on trucks equipped with rollers for dumping. To be sure the lumber lots are far apart). These forks cost about \$10,000 each.

Two 15,000 lb forklifts are used for many purposes at each is dropped between the right two sites, the dealer works from

Precutting continued



WILLIAM N. CLARKE, production manager of Brown & Kauffmann, supervises construction of 250 houses a year in Palo Alto, Calif.

"We would not try to build without buying our lumber pre-cut"

"We save money so many ways by buying pre-cut lumber, we would never go back to the old-fashioned method of building," says Bill Clarke, production boss of Brown & Kauffmann.

"Pre-cut lumber for one of our four-bedroom houses costs us about \$75 more than buying it uncut, but pre-cut lumber saves us \$150 in wages on framing alone. We save many other ways—well over \$100 a house in direct costs and more in other ways that we find hard to measure.

"One big saving is on investment in equipment. If we had our own yard we would have to tie up \$47,000 in added capital—for a forklift and carrier, saws and tables, a storage shed, several lots, and the paving and fencing for them. When we used to buy wholesale and do the pre-cutting, we had to put the yard smack in the middle of the building sequence to avoid extra hauling, then had to move it frequently to keep pace. That's expensive."

Some of a builder's biggest savings "are intangibes easy to overlook"

Clarke lists important side advantages that come with the dealer's pre-cut lumber:

Less lumber is wasted cutting and weathering. "A builder who pre-cuts for himself loses about 8% in wasted pieces that he has to pay for. He doesn't pay for lumber waste in the dealer's yard, and the yard wastes only 1% because it can use spoiled or scrap pieces on other jobs."

Less lumber is used "because the dealer can make special cuts a builder could not make with equipment he could afford," and lumber is cheaper because the dealer can select the right grade from a bigger inventory.

There is no danger of being stuck with the wrong kind of lumber if designs are changed, or with a big supply if sales slow down. There is more design freedom. Fewer skilled men are needed and labor costs are cut. With less scrap, clean-up is reduced and, says Clarke, "we save \$8 to \$10 a house by not having to cart away scrap which we are not allowed to burn at the site under new anti-smoke legislation."

"You need an efficient lumber dealer and well-trained assemblers for pre-cutting"

Says Clarke: "Both the dealer and the builder have to know exactly what they're doing. Although it might seem to be relatively simple to cut a specified number of 4x8 headers, studs, fire blocks, etc, there is a good deal more to it than that.

"The yard must make up the lumber loads so they arrive on the job in the precise order in which they are needed. Each load must be built up so the laborers who break down the pile will find the pieces they need first on the top of the pile and the pieces they need last on the bottom. The yard also must study the master plot plan of the subdivision so the load will be properly dispatched. Some loads can be loaded two to a truck, but the two loads must actually be next to each other so the truck can make a single drop between the two houses.

"The builder's own crews need to have experience in building with pre-cut lumber. You can expect a certain amount of opposition at first, as there always is when any new building technique is introduced. It takes time to convince the men that the new way is really better. And it takes time to train them to work with code-marked pre-cut pieces, but a man who is trained is invaluable and the time spent on training him is worth the trouble.

For photos and details that show how B&K crews build with pre-cut lumber from floor to roof, see next page.

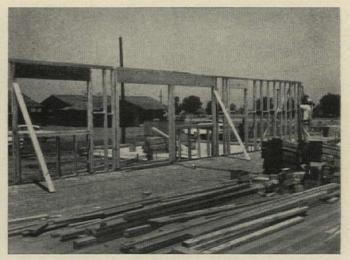




One laborer breaks down a pre-cut package on a floor in three hours

A banded load is dropped by O'Neill Lumber exactly where the B&K site foreman wants it, next to a house where a lay-out man has marked plates and sub-floor (shipped earlier) to show where studs and wall members go. Then one man (right) puts each marked piece where it belongs. Laborers, rather than carpenters, are trained to break down the load.





Pieces are quickly nailed together into wall-length sections

Says Bill Clarke: "Whenever a carpenter sees two pieces of lumber lying at right angles to each other, he spikes them together. It takes a minimum of ten houses for a man to get

familiar enough with pre-cutting to reach his real efficiency peak." Three-man crew nails pieces together (left) to form complete wall sections (right).

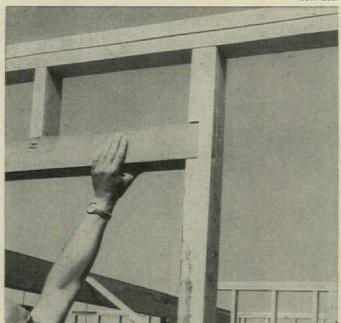




Braces are cut and placed, then other walls go up

Pre-cutting does not eliminate all hand and power cutting on the building job. At left, a man cuts a stud to make a let-in place for diagonal bracing. B&K men cut siding and roof sheathing after it is nailed on, and also a few other pieces. But sawing is strictly limited. At right, two men from the next house help a crew erect an end wall section.

Precutting





Exterior wall and interior partition framing goes up in two days

Time is saved by special cuts like the pre-notched 3x4 buck (photo, left) which eliminates two door cripples and lets B&K put one header block over the door instead of four.

Typical of crew's attitude toward pre-cutting is this remark by the man in the photo at right: "We frame a house in 50 hours. It took 70 at a job I worked on that wasn't pre-cut."





Rafters drop quickly into deeply notched ridges

Measuring and positioning rafters is not necessary because the ridge has been pre-notched to accurate spacing (photo left). After rafters are up, a pre-notched frieze board is pushed into place next to header along exterior wall (photo right). Says B&K's Clarke: "O'Neill Lumber has the right tools and men to make these cuts. It saves carpenters' time."





It takes 45 man-hours to frame the roof with pre-cut pieces

Three carpenters who specialize as roof men put the roof framing on an 1,800 sq ft house in two days. Rafters are set out by laborers. B&K does not use trusses because "they

cannot be built on the sub-floor conveniently and up to now, at least, we've found them difficult to handle because of the variety of roof types and plan variations in our houses."



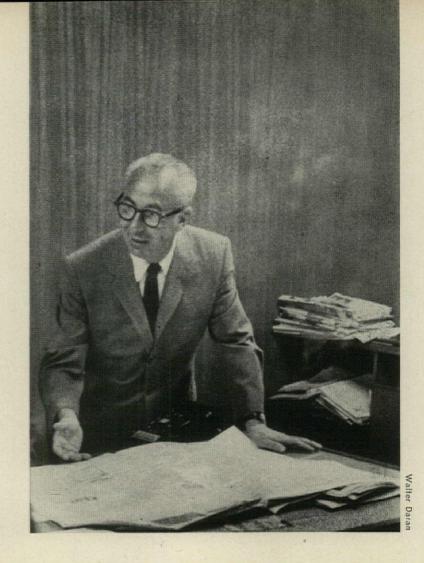
"Only after framing is complete, can we afford to use uncut lumber"

"Our roof decking is bought uncut from O'Neill in a separate load, and nailed and cut at the job," says Clarke. "Siding and sub-flooring is handled the same way. Some on-site cutting like this makes sense. But pre-cutting is what cuts our costs most and saves us the most time. On the first five houses our labor cost may come to \$2,000, but then it drops to \$1,400. With this system we can complete a house in 22

to 24 days. We have found that pre-cutting offers no economy on a single house. A builder must have at least five houses with the same plan before he will begin to realize any savings over the old cut-and-fit method of building." Pre-cutting is one reason B&K is able to turn out 250 houses a year, one of which is the \$21,700 model shown below (see H&H, May p 268).



Reported by Kathryn Morgan-Ryan



On hep Long Island

nobody knows more about selling new houses than Realtor Irving Kern

"You never wonder if he's right," says Builder Seymour Malman. You know he is.

Coming from Malman, that appraisal of Kern is almost an understatement: It was at a development (Harbour Hills, Port Washington) built by Malman and two partners, that Kern set a newhome sales record for Long Island realtors—\$4,200,000 in sales on a single weekend (175 houses at \$24,000 each).

Kern and his Kern Realty Co sell about 1,500 houses a year as sole sales agents for 12 of Long Island's leading builders. Most of his clients have been with him since the end of World War II. Their developments are among the best known on the island. Their price range is wide—from a low of \$11,000 (at 500-home Concord Village) to a high of \$60,000 (at 56-home Wenwood-at-Brookville).

Like other top realtors, Kern advises his builders on every phase of their operations from buying land to furnishing model houses. But unlike most others, he does not include salesmen's pay in his services. He hires and trains a pool of salesmen, but his builders pay the salaries and commissions. Reason: "The best way to get the kind of selling job you want is to control your salesmen. And you can't control them unless you pay their salaries."

Says Builder Jack Parker: "Kern is expensive. But he saves me money in the long run because his vast knowledge of the market helps me sell out fast."

Kern is a lawyer who turned to the realty business in 1945. He is forceful and articulate. He knows how to use words as directives, as clarifiers, as persuaders, and—occasionally—as smokescreens.

He has a way of coining colorful phrases: "I want my builders to realize I'm working on their side of the table."

He has a way of offering advice in short, pithy phrases: "Think in dollars—not houses," he tells his builders. "That's where you make your percentage."

He has a way of expressing himself in sweeping terms: "The most expensive single product a consumer buys in his lifetime (a house) lacks all the conspicuous benefits of every mass-produced, mass-distributed, and mass-demanded product in the nation."

He has a way of using language that comes straight off Madison Avenue: His talk is spiced with expressions like "pre-sell", "consumer acceptance", and "product identification".

But whether he is advising a builder on sales or talking about the broad problems of housing, there is an old-world courtliness in his manner. "When he wants to, Irving can charm the birds right out of the trees," says a rival Long Island realtor. "But don't ever underestimate him. He's as shrewd about selling as any man I ever met."

Here are Kern's 26 basic ideas

on how to sell

houses in a subdivision



1 Plan your sales campaign six months before your opening

"That means that by April you should know exactly how you intend to handle every phase of your selling campaign for models that will open in October," says Kern (above left).

That was how he worked with Builders Malman (right) and Michaelson (center) and partner Harry Weisburd. They decided on a Colonial theme for

continued

Realtor Kern continued

the builders' Soundview Village model, planned ads, signs, display center—even the salesmen's spiels—around this theme. Kern helped plan newspaper advertising around maxims by Benjamin Franklin, Thomas Jefferson, and Andrew Jackson. Even Soundview's four model homes, designed by Architect Herman York, were named after Colonial patriots and presidents.

2

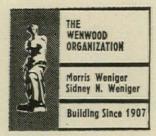
Get the best available outside help

"Don't try to do it all yourself," says Kern. "The builder's first job is to build the best house he can for the money. His next job is to hire as much big-league talent as possible to promote the houses he builds."

Take advertising, for instance. Kern advises his builders to seek the services of advertising agencies who specialize in real estate accounts: "They know the ins-and-outs of newspaper advertising and public relations. They know how to help create and maintain good will."

Kern also supplements the agencies with the best outside "creative" help he can find. He uses the services of a "copywriting studio" headed by Loughton Smith and Carl Fick. Smith and Fick help plan sales themes for many of Kern's builders and write copy for newspaper ads, brochures, and signs. Says Smith: "Our job is to provide crisp, readable literature, to come up with fresh ideas for promoting houses that may range from \$18,000 to \$50,000 in price. An \$18,000-house project requires the kind of advertising that will appeal to a mass audience. A \$50,000 house needs prestige treatment and more specialized handling. Our job is to see that the whole sales campaign is beamed to the kind of buyer the builder hopes to attract."

Says one Kern client, Arnold Praver: "Outside help is a must. As a builder, I've got enough problems on my hands. Kern's kind of teamwork means that while I'm building houses, a real professional team is thinking up ways to sell them."



3

Sell the prestige of your company name

"That's what other manufacturers and retailers do," says Kern. "Get your name in the papers, start people talking about you, associate yourself with quality promotions, brand-name tie-ups. That way you build up the buyer's confidence in your houses before he ever sees them."

A trademark like the one above can also help you capitalize on your company name. Kern suggested the Venus statue to The Wenwood Corp as a quality symbol, also suggested the line "building since 1907" as a good way to impress potential buyers with the builders' experience and know-how. Prior to the opening of a luxury development two years ago, Wenwood got out a 50th anniversary brochure, used the line "50 years of building" in all its ads, generated a lot of newspaper publicity.



4

Use teaser ads as early attention-getters

"They create excitement and suspense," says Kern, "and they attract wide readership. We've sold houses to people who weren't thinking of buying, but who got interested by reading the teaser ads."

The teaser above is the work of copywriters Smith and Fick who used it to start an ad campaign for a Brooklyn development. Says the builder: "We had 4,500 people out the first weekend. Those teaser ads created more curiosity and interest than any other kind of campaign we ever ran."

Kern has a word of caution about teasers: "Don't keep them running for too long. Two weeks is about the longest you can run this kind of ad. Be ready to switch to conventional ads the minute you're sure the teasers have attracted wide notice."

5

Get your newspaper ads in the same place every week

Kern's builders usually advertise on the third page of Sunday real estate sections—an idea Kern says he picked up from Bill Levitt. "You should get people accustomed to seeing your name in the same place week after week," he says. "After a while they come to expect it there. It grows familiar, and familiarity breeds confidence."

6

Change your ad message from week to week

"Don't lose readership (and potential buyers) because you keep saying the same thing in your ads," Kern advises. "Say something new each week. Get a pleasant, conversational tone into your copy. Make your message clear and interesting. Use slogans that are short, crisp, and memorable."

In a series of ads for one Long Island development, Kern began with teasers, switched to full-page ads with a different message each week. Samples: "Heaven Can Wait;" "Location, location, location!" "This could be your Home . . . Your Life."

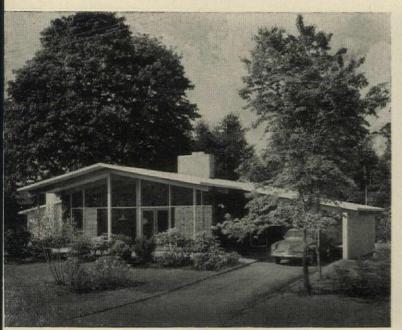
7

Take advantage of ad media that most builders ignore

Kern clients advertise in railroad cars that ply regular commuter routes, in subways, and on disc jockey programs—to catch potential buyers traveling to and from work. He even uses direct-mail advertising aimed at apartment renters who may be in the market for a house.

"There is always a new place to advertise," Kern thinks. "Look around you. Find out where people go, and how they get there. Then take advantage of the media that will attract the biggest part of your population."







8 Build a "newsworthy" model to get publicity

The two houses above were built by Kern clients chiefly for their news value and to get people to the job sites.

The contemporary house at left, designed by George Nemeny for Builders Chess & Siegal, was pictured in every New York City daily paper and won a Regional Merit Award from Parent's Magazine. The Pacifica house, right, designed by Stanley Shaftel for The Wenwood Corp, brought thousands of visitors out to Wenwood's Brookville site.

Richard Averill Smith

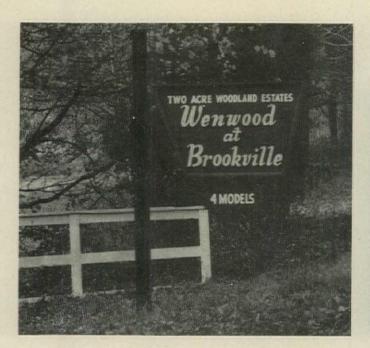


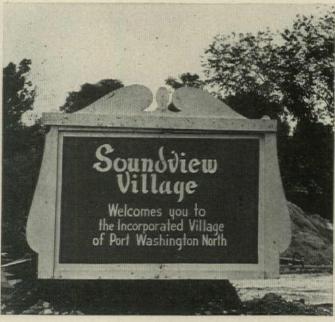


9 Be sure you have designs that conform to local taste

"Most buyers don't want to be pioneers," Kern tells his builders. "They want a sound, conventional house with plenty of attractive, new features, but they don't want to stand out as the odd balls of the neighborhood."

Many people who came to view the Nemeny house (left at top of page), only one of which was built, stayed to buy the more conventional house (left above). And although The Wenwood Corp sold three Pacifica houses (right at top of page), most Brookville buyers preferred long ranch houses like the one at right above.





10 Design your signs to reflect the community's character

"Just as your ads should reflect the personality of your development, so billboards and site signs should carry the impression one step further," says Kern. He tells builders to "make signs attractive, colorful, easily seen, and easily read. Put on just what's important, and leave the details to your salesmen and sales literature."

The Wenwood sign at left—white lettering on weathered boards—is near the entrance to the luxury priced Brookville project. Soundview Village sign, right, carries a Colonial motif (see also p 110 one step further with Chippendale ornamentation carved out of knotty pine board.



Photos: Myron Ehrenberg



1 Use signs to show where community facilities will be

"Show potential customers what they are getting in addition to their house, and show them just where all the improvements will go," Kern advises. "Signs like the one at Soundview Village [above] help people fix locations in their minds, cut down on the time salesmen have to spend in selling the neighborhood."

Says one Kern builder: "Many people feel the proximity of a shopping center is an important factor in choosing a lot. So we like to let them know where everything is going to be. Then they decide how far they want to go to shop."



12

Plan your model-house area as a stage setting

"You want immediate impact," Kern says. "The same kind of impact stage designers look for when they plan the scenery for a play.

"That means leaving the trees, seeing that lawns are smooth and untrammeled, that models look spick-and-span. This kind of stagecraft attracts many people who never had any intention of visiting model homes."

Kern also offers advice about siting models: "Make sure the houses are seen full-face by drivers coming along the road. Never build your models with their sides or backs to the traffic. Your ads and signs were all designed to create an impression on people. Don't throw that valuable impression away by making a mistake at your show area."





13

Think of each model as a show window

"Take a leaf from the merchandising pages of department stores," says Kern.

"Their window displays are created by specialists and designed for two purposes: to stop passersby and to get them inside. Your model should have the same effect. Make it so attractive on the outside, so appealing that potential buyers can't resist coming in. Copy these fundamentals of retail merchandising: interest the customer, get him inside, let him browse, gain his confidence, offer him value, create new things along the way to hold his interest."

14

Avoid a carnival-like atmosphere

"Making a model-house area an amusement center is definitely not my idea of the way to sell houses," Kern says.

"You're not in the business of giving away soft drinks or free donkey rides. Make it clear from the start that you are in the business of selling consumers the most important product they will ever buy. The word 'dignity' is often overworked, but I think we could all use a little more of it in the homebuilding business."



15

Set aside a play area for children

"No salesman can do a proper job if he must deal with parents distracted by children running around the model", says Kern.

"So provide a convenient place for parents to leave their children before they enter the model. Keep it simple like the one [above] at Soundview Village. And be sure it's staffed by someone competent to look after children."

16

Suit your salesmen to the houses they're selling

"The salesman must be at home in the house and with the buyers he's trying to sell," Kern points out.

"Potential buyers who earn \$75 to \$100 per week warm to salesmen who can speak to them on their own level of needs. They don't want someone too fancy. By the same token, never put a salesman who earns \$5,000 a year into a \$50,000 house. You need the kind of man who sells jewelry at Tiffany's. Picking the right salesman means matching the man's appearance and personality with the job."

17

Don't be afraid to pay good men what they are worth

"The salaries you pay are proof of the value you put on selling your houses," Kern says. "If you budget salaries too tightly, you'll have houses on your hands a long time because you have created no incentive for a good salesman. If you pay top people what they are worth, you can get conscientious work and quick sales."

Although Kern's top salesmen draw a basic \$150 per week, their earnings (bolstered by commissions) compare to top salesmen's salaries in other fields.

18

Back up your full-time salesmen with weekend helpers

Kern Realty provides builders with a large pool of part-time salesmen to help out when model-house traffic is heavy.

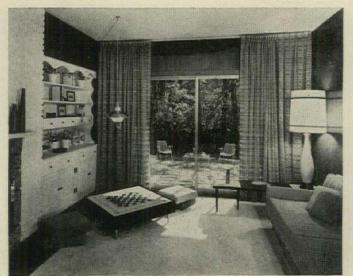
Here is how Vice President Herman Siegal—who hires all Kern salesmen—manages part-time men:

He usually hires young professional men like lawyers and school teachers: "They learn quickly, express themselves well, and are used to dealing with the public."

He sees that they are trained: "Our part-time men get three weekends of training under the supervision of full-time salesmen before they are allowed to approach a prospective buyer."

He recommends that builders pay weekend men a flat rate (\$20 a day) rather than a commission: "This helps avoid competition between part-time men and full-time men, who usually have to handle closings anyway. It also helps us get good part-time people—they know they will be paid for their time whether or not they make a sale."

continued



County Photo Service

19

Furnish your model to attract the buyers you want

Here, for example, is what Kern says about the two models above: "The \$40,000 Wenwood model at left is furnished to appeal to an executive's family. The money is there, but there is nothing obvious about it. The family who lives in this house doesn't have to keep up with the Joneses. They are the Joneses. "The \$19,000 Bayside Country Club model at

right is furnished to attract families who are on their way up. They are leaving old neighborhoods in the Bronx and Brooklyn. They'll tell their friends, 'Come and see us in the country.' Their friends will think the scenic wallpaper is avant garde, but they'll be envious.'

Kern adds this general advice: "Always make sure your house is decorated in keeping with the area, the sales price, and the kind of customers you hope to attract. Furnishings must make visitors feel easy. whether or not they think they can afford the house. Too much luxury is just as bad as too little."





20

Select materials and equipment that have "eye appeal"

The foyer of Wenwood's Pacifica model above is an example of what Kern means when he tells his builders: "Have at least one place where you don't have to explain a thing to buyers-where the appeal is instant and obvious.'

Terrazzo, paneling, glass, wrought iron, brick, wood, tile, mosaic-like wallpaper-all appeal to sight



and sense, Kern thinks, and need no explanation. He says: "Everything you do is designed to act on the public like a series of gentle nudges leading people closer and closer to deciding to put their names on a contract. Give them the feeling that 'this is right' from the time they see your first ad until they buy your house."

Use your brand-name products to sell quality

"Most people automatically associate brand names with quality," says Kern. "So if you are using brand-name products, be sure to display them, and be sure your salesmen point them out as they take visitors through your models.

"When you do this, you will be cashing in on all the pre-selling by brand-name manufacturers in newspapers and magazines, on radio and Tv. Brandname advertising makes a favorable impression on buyers. Transfer this favorable impression to your model houses."

Myron Ehrenberg



Make it easy for prospects to sit down and talk it over

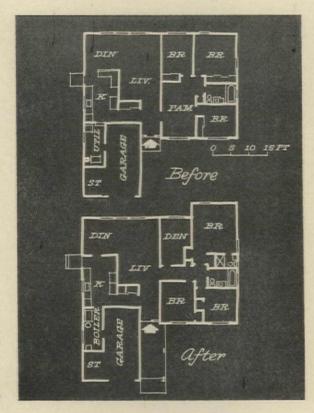
Park benches, like these at Soundview Village, give people a chance to relax, rest, and discuss the models.

"Too often first-time buyers are cautious and let a good house slip away," says Kern. "We try to prevent that by giving them a quiet place to talk right at the site, away from salesmen and other visitors. If people don't feel they are being pressured, we find they usually lose their caution and become eager to buy."

Make your sales office part of the model-house tour

"Don't let people miss your sales office," says Kern.
"This is where you display your products, show alternate plans and elevations, exhibit scale models of your community, and distribute sales literature. And, of course, it is also the place where your salesmen get a chance to talk quietly with likely prospects."

Kern advises his builders to arrange their modelhouse area so that visitors arrive at the sales office after they've toured the models. Some of his builders use the garage in the last model on the tour. Others set aside an entire model house as an office and display center.



24

Don't hesitate to change a model if it doesn't sell

"In fact, it's a good idea to take the insurance of having alternate plans on the boards before opening day," says Kern.

day," says Kern.

At Colony Park, MWM Builders acted quickly when a salesman reported that opening-weekend crowds went through a model (see "before" plan above) too fast and made few favorable comments. Kern, the builders, and the salesman met on Monday to discuss changes. They decided to add an extra bath, make family room into a bedroom, include more storage (see "after" plan). Five days later the model was ready for visitors. The changes boosted the price by about \$500—but also made the house a top seller.

25

Speed up your close-outs by making special offers

"That's what department stores do when they want to clear out their inventory to make way for new stock," says Kern.

He tells his builders: "Remember, everybody loves a bargain, so to sell your last few houses fast, offer them at reduced prices or include extras" (like the finished rumpus room in the Concord Village closeout ad, above right).

Kern thinks most builders don't move fast enough on close-outs: "You need an aggressive program to get rid of the last few houses in a development.



Otherwise, you have the continuing worry of vandalism, and you need a full-time salesman on duty just to sell two or three houses."

26

Ask your buyers what they thought of your merchandising

"Their answers will help you do a better selling job in your next development," says Kern.

He helps his builders work up questionnaires to find out what their buyers liked or didn't like about their sales methods: "Even a satisfied buyer can have a few complaints worth considering."

A typical questionnaire circulated by the builder of a 250-home development covers four pages, asks more than 40 detailed questions about everything from advertising to salesmen. Here are some sample questions:

On newspaper advertising: Did any one particular ad "sell" you on coming out to see our models? If yes, can you recall the headline or theme of that ad? In what newspaper did you see that ad?

On directional signs: In your opinion were our road signs and directionals (check)—readable? attractive? too large? well located?

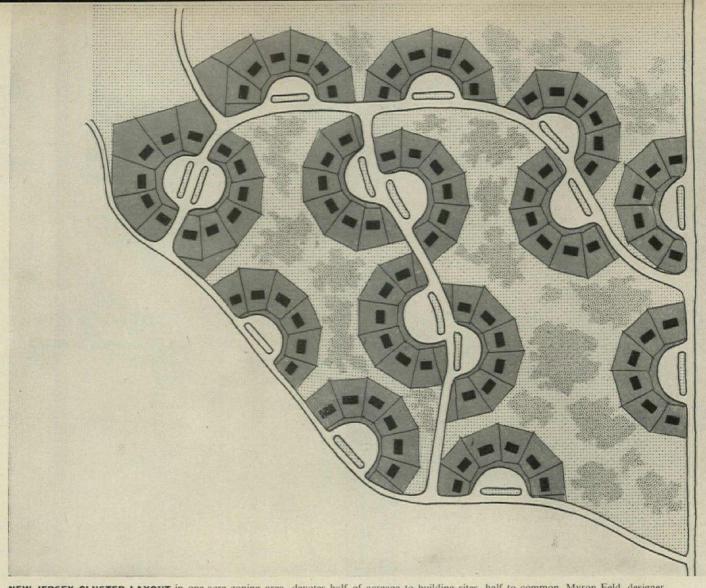
On layout of exhibit area and grounds: Is the arrangement of parking, models, office, and connecting walks (check)—practical? impractical? if impractical, explain,

On model homes: Did decoration and furnishings of our models live up to your expectations? If not, name another model-home decoration job you liked better. Which of our four models do you feel is most handsomely decorated?

On display house and sales office: Did you like our office-conference facilities? In our office were you rushed? Did the office suggest to you that you could expect satisfaction with this builder?

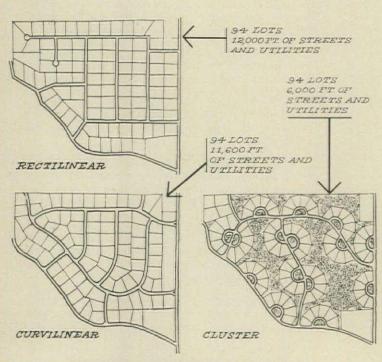
On literature: We attempted to dramatize in words and pictures what life would be like in our community. Did the booklet succeed in this respect?

On salesmen: Compared to other developments you have visited, would you rate our sales representatives (check)—better informed? not as well informed? More courteous? Less courteous? Overaggressive? Not aggresive enough? /END



NEW JERSEY CLUSTER LAYOUT in one-acre zoning area, devotes half of acreage to building sites, half to common. Myron Feld, designer.

Is this new idea for subdivision layouts



REDUCED DEVELOPMENT COST because of fewer streets, shorter utility runs, is shown above. The three layouts for the same piece of ground all provide the same number of lots.

An idea for cluster-type subdivision layouts suddenly appeared this summer in several widely separated parts of the US.

The cluster-type layout groups house sites around parking courts, leaves half or more of the acreage in its natural state for use as a common (see illustrations). The number of lots is the same as in an ordinary layout.

Land planners, builders, local planning boards, and developers quickly hailed the new idea as a potential solution to two problems that plague almost every rapidly growing US community. The problems: 1) the disappearance of open countryside; 2) the high cost of "big-lot" land development.

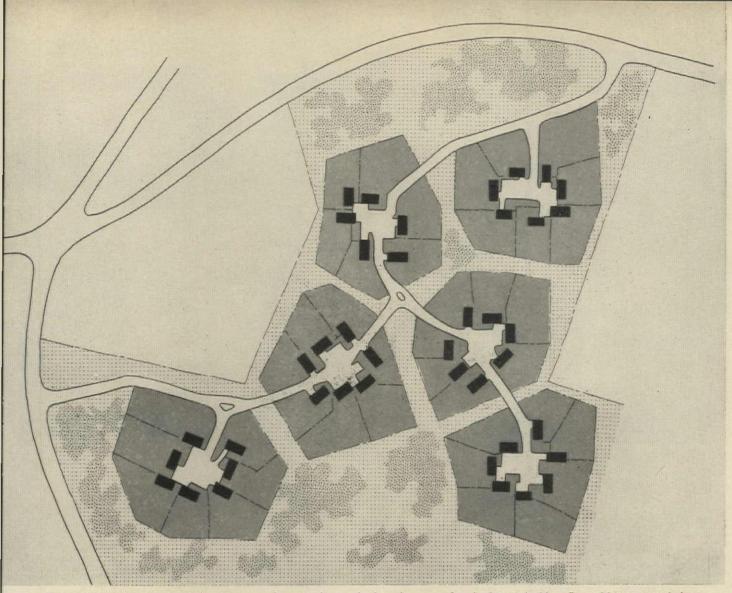
Here are the advantages of the cluster layout:

Cluster layouts preserve the rural character of the land by retaining stretches of open fields and stands of trees, and by leaving brooks, hillocks, and similar natural assets undisturbed. The common is owned by the municipality or by a private association.

Cluster layouts reduce development costs for areas zoned for big lots by cutting road and utility costs in half (see comparative layouts, left). The layout also cuts costs by allowing the developer to bypass natural obstacles in the site.

Cluster layouts meet "big-lot" zoning requirements based on density control, but would require changes in the law where minimum lot size is the basis.

The layout answers homebuyers' objections to the high cost of maintaining the large yards that go with "big-lot" zoning. Other advantages to the homeowner: 1) planned privacy; 2) excellent play areas for all ages; 3) better parking facilities.



ST LOUIS CLUSTER LAYOUT in one-acre zoning area, has roads through center of each cluster. Architect Roger Montgomery, designer.

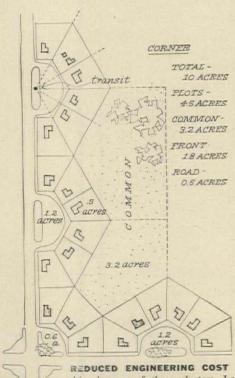
a good answer to "big-lot" zoning?

Different versions of the idea were published this summer by LIFE (Edmund Bacon's plans for Far Northeast Philadelphia), American City (Myron Feld and Stephen Sussna's plan for a development in Raritan Township, N.J.), and in The Small Homes Council's Short Course Report (Architect Roger Montgomery's scheme for a project in St Louis County).

First cluster project may be started this fall

Developer Richard Reichman of Ballas Development Corp hopes to break ground for his cluster layout project in St Louis County this month (see drawing, above). He expects to release land to a local builder a cluster at a time. A cluster plan by the same designer (Roger Montgomery) is being considered by John H. Klein in Portland, Ore. Sussna Associates of Trenton, N.J. has designs (still in the paper stage) for Howard Fox Enterprises in Stamford, Conn., and for planning boards and developers in Tennessee, Minnesota, and California. Sussna's plan for the Raritan Township subdivision (shown above left) has not yet been approved by the builder. Edmund Bacon's plans for the Far Northeast section of Philadelphia are being worked out with 20 private builders.

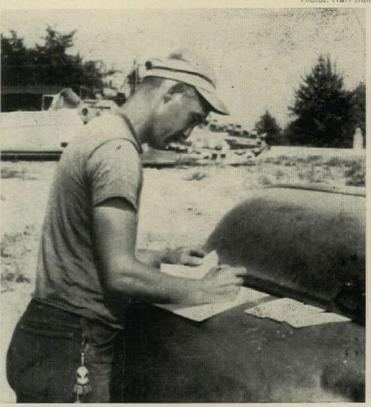
About cluster-type layouts, a New Jersey local planning board official said: "It looks like the practical answer to our problems." And Neil Conner, head of FHA's Architectural Standards Division, commented: "FHA is sympathetic; we are for any such plan which gives people a better place in which to live."



REDUCED ENGINEERING COST is seen in this close-up of three clusters. Lot lines for six lots can be established from one transit setup. An expert says costs would drop 66%.



WORKER fills out daily slip showing his time on each job.



FOREMAN fills out daily labor and materials reports.

'It's easy to keep useful cost records,"

"Useful cost records give you the facts and figures you need in order to build better for less," says Schmitt, who consistently undersells his competition (see box below).

"You can't get these facts and figures from payrolls and materials invoices. But you can get them by setting up a simple cost-accounting system like the one I use."

Schmitt's system is tailored to his building operation. But any builder—large or small—can capitalize on the big idea and the basic rules behind it.

This is the big idea:

On each job, write down man-hours of labor and units of materials as soon as they are used. Funnel your figures back to the office at the end of each week. Turn the figures into records that break down the cost of each job as it is being done

How much extra paperwork does this mean?

"Actually, not much," says Schmitt. "Each worker fills out

a daily time slip. Each foreman adds up man-hours and keeps track of materials used. And a \$70-a-week clerk spends about half his time turning out cost records. But the extra effort more than pays for itself."

Here are some of the things that Schmitt's cost records do for him:

Because they give him a set of unit cost figures, they help him price out a house before it is built—"even before we know the precise floor plan or the exact materials takeoff."

They help him set a completion date on his next house.

They help him decide how many men he needs on his next job: "So we don't waste money by hiring too many men or by paying overtime because we hired too few."

They help him get better work out of his men: "We use cost records to set a par (or standard time) for every operation, and our men shoot for par."

Schmitt is a builder with ideas other builders can use

Bob Schmitt is chairman of NAHB's Research Institute, builds 100 houses a year in Berea, Ohio. This is the fourth han story in which he has figured prominently.

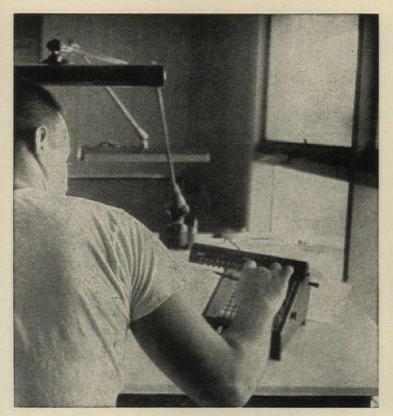
The first—"\$3,000 below FHA" (Jan, '57)
—told how Schmitt streamlines his build-

ing methods to cut his costs.

The second—"How to save \$1,000 a lot by using your own machines" (Feb, '57) —was Schmitt's report on how he develops his own lots.

The third—"We copied Bob Schmitt: there's money in his method" (Feb, '59) —told how 20-house builders, Don Cook and Nils Johnson, use the lessons they learned from Schmitt to undersell their Youngstown market.

Of Schmitt's cost accounting, Cook says: "It's as valuable to us as his building methods. The only hard thing about cost accounting is to get it started. Once it's going, it's simple to operate. Any builder can work efficiently with a cost-accounting system two months after he adopts it."



CLERK works up preliminary cost records every week.



BOSS, Builder Schmitt, reads records to check on his costs.

says efficient Builder Bob Schmitt

Here are Schmitt's 12 rules for setting up a cost-accounting system:

- 1. Get daily reports on labor and material used.
- 2. Record material as it is used-not as it is delivered.

"For example: we write down how many pieces of plywood it took to cover a roof—not how many were unloaded at the site. We don't count on the materials invoice. It probably includes more—or less—material than was actually used."

3. Record labor by hour and by house-not by the day.

"Man-hours per house are the only accurate measure of labor output. A day's pay does not assure you that a job was done."

4. Don't mix man-hours and materials units with dollars.

"You can't get a meaningful cost picture on a pay-out basis. Unless you look behind the dollars and cents on payrolls, invoices, and subcontractors' bills, you'll never know how much of what you got for your money."

5. Break each job into its important parts.

"We divide each job into three phases—foundations, framing, and finishing. And we divide each phase into as many as 30 different items. Job breakdowns are like a magnifying glass. The finer the breakdown, the greater the magnification—and the easier it is to pinpoint troublespots and bottlenecks."

6. Make your foreman responsible for getting costs.

"This keeps them cost conscious and convinces their men that they are keeping score. It takes our foremen only a few minutes a day to tally time slips and record materials used. Sure, foremen don't like paperwork, but the proper forms (see next pages) can make it a breeze." 7. Keep all your figures on a weekly basis.

"If you let figures pile up too long, they become stale and meaningless. Our weekly recaps help us keep track of work in progress. They are like a hole-by-hole score on a golf course, and they tell us if we are over or under par."

8. Keep all costs on a square-foot basis.

"This lets you make close estimates of the cost of a house without knowing item-by-item costs."

9. Separate unusual costs from basic costs.

"Our basic costs are the costs of our standard house—three bedrooms, 1½ baths, two-car garage, and fireplace. These costs are the yardsticks with which we measure all our work. Our unusual costs are for extras, like extra wall paneling, extra cabinets, extra built-in furniture. We keep them separate because we don't want them to distort our standard costs."

10. Compare your present costs with past averages.

"We keep up-dating our average square-foot cost by basing it on the last ten houses we've built. This gives us a rolling standard against which we measure the costs of houses under construction. If we find that costs are getting out of line on a house, we find out why and take action."

11. Spread your overhead over your whole operation.

"Here's how we allot our overhead costs: we add up our overhead items for the previous year, then divide by the total square footage of all houses built during the year. This gives us an over-head cost per square foot, which we simply add to the direct costs of the houses we're building."

12. Design your forms to speed up paperwork.

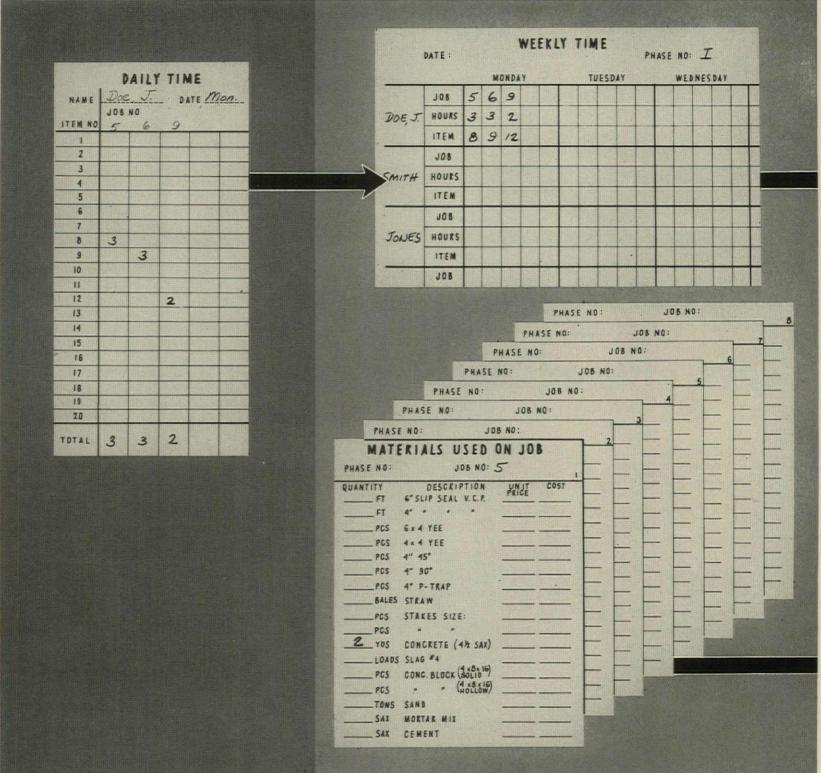
"Needlessly complex forms can tangle up your paperwork. They can confuse your workers, confuse your foremen, confuse your clerk, and even confuse you. So keep your forms simple—the less writing required, the better. And make them easy to read."



WORKER fills out daily slip



FOREMAN adds up time slips, totals materials used



DAILY TIME: Each worker fills out a slip like this every day and turns it in to his foreman who checks its accuracy. In the example above, John Doe, in the foundation crew, notes by code numbers that he has spent three hours laying a footing (identified by Code No. 8) on Job 5, three hours laying block (Code No. 9) on Job 6, and two hours laying heating tile (Code No. 12) on Job 9.

WEEKLY TIME: Each foreman uses this sheet to keep a running account of all work done on each job by each of his men. In the example shown above, the foreman records that on Monday John Doe spent three hours on Job 5, three hours on Job 6 and two hours on Job 9; he also notes the time spent by Smith, Jones, etc on each job. At the end of the week the sheet goes to the office, where it is used to make up the payroll and the labor-time recap sheet.

MATERIALS USED ON JOB: Each foreman keeps records of the materials he uses on each house. He turns in his report after his crew has finished working on the house. The office clerk enters unit costs and total costs for each material. In the example the foundation foreman reported that he used 2 yds of concrete for the footing on Job 5.



CLERK
makes up reports on labor time and material used

			LA	OR	TI	ME I	RECA	AP					1					TO	TAL LA	BOR	COST		
PHASE I								JO	B NO	:					1	J08	PHAS	EI	PHA	SET	PHA	SEI	TOTAL
DATE	1	2	3	1	5	6	7	8	9	10	11	etc			二,	JOB							
9/5-4/11					38½ 38½										ν	5	883.00		884.00		1581.78		
4/12-4/18					51/2																		
4/19-4/25	COLUMN TWO IS NOT THE OWNER.				512																		
26-5/2					45 96½																		
5/3-5/9	PHA	SE I		L	ABO	R	:051	RI	ECA	P	JOB	NO:											
	DA	STATE OF THE PARTY OF	1	2	3	4	5	6	.7	8	9	10	и	UNIT	7	W							
	4/5-	5/2	120 12	91 265.72	1M 1/2 33439	1764 515.30	281.78							2.92									6
	5/2-	6/5																					
																						- 5 W	
	1																						
												of Street, or other Designation of the last of the las	AND DESCRIPTION OF										
																		TOT	AL MA	TERIA	15 COS		
																	I PHASE				LS COST		I TOTA
																JOB NO	PHASE			TERIA		T SE III	TOTA
																	1373.50			SEI		SE III	TOTA
																NO			PHA	SEI	PHA	SE III	TOTAL
																NO			PHA	SEI	PHA	SE III	TOTAL
																NO			PHA	SEI	PHA	SE III	TOTAL
																NO			PHA	SEI	PHA	SE III	TOTAL
																NO			PHA	SEI	PHA	SE III	TOTAL
															1	NO			PHA	SEI	PHA	2E III 32	TOTAL
					-										4	NO			PHA	SEI	PHA	SE III	TOTAL
															1	NO			PHA	SEI	PHA	2E III 32	TOTAL
																NO			PHA	SEI	PHA	2E III 32	TOTAL

LABOR-TIME RECAP: Once a week the clerk totals the man-hours on each job. The top line of the example above shows 38½ hours on Job 1 from April 5 to April 11. On the next three lines, the clerk enters weekly totals plus cumulative totals. By the end of the fourth week (May 2), the cumulative total on Job 1 was 96½ hours. The same procedure is repeated for the four weeks starting May 3. If he wants to, Schmitt can analyze labor time by the day, week, month. But he finds that a monthly analysis is usually adequate. A separate Labor Time Recap sheet is used for each of three phases (foundations, framing, finishing).

LABOR-COST RECAP: Once a month, the clerk totals the cost of the labor in each phase (foundations, framing, finishing) on each job by multiplying the man-hours worked by the average hourly rate for the phase. He can total the cost more often if necessary. A separate sheet like the one above is used for each phase.

TOTAL LABOR COST: When a house is finished, the clerk totals the labor cost for each phase of Schmitt's operation. In the purely hypothetical case above, the labor costs of Job 5 are \$883 in Phase 1 (foundations), \$884 in Phase 2 (framing), and \$1,581.78 in Phase 3 (finishing). These costs include not only the basic house but also a porch, which is classified as an extra (see next page).

TOTAL MATERIALS COST: When a house is finished, the clerk also totals the materials cost for each phase. On Job 5 (the same hypothetical case as the one showing labor costs), materials costs are \$1,373.50 in Phase 1 (foundations), \$4,029.50 in Phase 2 (framing), and \$2,625 in Phase 3 (finishing). Here, too, costs include the basic house plus extras (see next page).

continued

CLERK turns foremen's reports into meaningful cost records

												DTAL	LABOR	LESS	EXTRAS		
											PHA	SEI	PHAS	EI	PHAS	E III	TOTAL
									JOB SQ FT	J08 N0	LABOR	COST/ SQ FT	LABOR	COST/ SQFT	LABOR	COST/ SQFT	
									1500	5	828.50	,552	759.00	,506	1443.53	.963	
								5	7								
								//									
							/									And L	
							//										
						/	/.										
		EX	TRAS	(LABO	R & MAT	FERIAL	s)							141.5			
J08 J	0.8	PHA	OR DESCRIPTION OF THE PERSON O	Delignor (Control of Control of C	SEI	DESCRIPTION OF THE OWNER, OR THE OWNER, OR THE OWNER, OR THE OWNER, OWNER, OWNER, OWNER, OWNER, OWNER, OWNER,	DESCRIPTION OF THE PERSON OF	TOTAL									
SQ FT N	0		52.02		MAT	25.00					Name of the last						
1500	5	55,00	55.00	125.00	200.00	137.25	120,00										
	20000000	CONTRACTOR OF THE PARTY OF THE					STATE OF THE PARTY OF THE PARTY.										
												TOTAL	MATER	IALS	LESS E	XTRAS	
											PHI	ASE I	PH	ASE I	PHA	SEM	TOTAL
									JOB SQ FT		PHI	ASE I	PH	ASE I	PHA	SEM	TOTAL
										NO	MAT	COST/	MAT	COST/ SQ FI	PHA	SE M. COST/ SQ FT	TOTAL
									SQ FT	NO	MAT	COST/	MAT	COST/ SQ FI	PHA MAT	SE M. COST/ SQ FT	TOTAL
									SQ FT	NO	MAT	COST/	MAT	COST/ SQ FI	PHA MAT	SE M. COST/ SQ FT	TOTAL
									SQ FT	NO	MAT	COST/	MAT	COST/ SQ FI	PHA MAT	SE M. COST/ SQ FT	TOTAL
									SQ FT	NO	MAT	COST/	MAT	COST/ SQ FI	PHA MAT	SE M. COST/ SQ FT	TOTAL
									SQ FT	NO	MAT	COST/	MAT	COST/ SQ FI	PHA MAT	SE M. COST/ SQ FT	TOTAL
									sq म (5000	NO 5	MAT	COST/ SQ FT > .879	MAT	COST/ SQ FI	PHA MAT	SE M. COST/ SQ FT	TOTAL
									SQ FT	NO 5	MAT	COST/	MAT	COST/ SQ FI	PHA MAT	SE M. COST/ SQ FT	TOTAL
									sq म (5000	NO 5	MAT	COST/ SQ FT > .879	MAT	COST/ SQ FI	PHA MAT	SE M. COST/ SQ FT	TOTAL
									sq म (5000	NO 5	MAT	COST/ SQ FT > .879	MAT	COST/ SQ FI	PHA MAT	SE III COST/ SQ FT /. 670	TOTAL

EXTRAS (LABOR & MATERIALS): The clerk breaks out the phase-by-phase cost of the extras on each job. Here is the phase-by-phase cost of a porch, the extra on hypothetical Job 5 (see previous page): \$55 for labor and \$55 for materials in Phase 1 (footing and slab); \$125 for labor and \$200 for materials in Phase 2 (framing and roofing); \$137.25 for labor and \$120 for materials in Phase 3 (doors, windows, paneling).

TOTAL LABOR LESS EXTRAS: On this form, the clerk enters the phase-by-phase labor cost of the basic house. Example: on hypothetical Job 5, the basic cost in Phase 1 is \$828 (a total cost of \$883 less \$55 for extras). Then the clerk enters the cost per square foot. Example: on Job 5 (a 1,500 sq ft house), the basic square-foot cost in Phase 1 is 55.2¢ (\$828 divided by 1,500). On this form, the clerk also figures a phase-by-phase cost average for several houses. To get the average square-foot cost of framing labor (Phase 2), for example, he divides the total Phase 2 costs by the total square footage of the houses built. This gives Schmitt a quick check on what jobs were out of line so he can find out what went wrong and avoid it in the future.

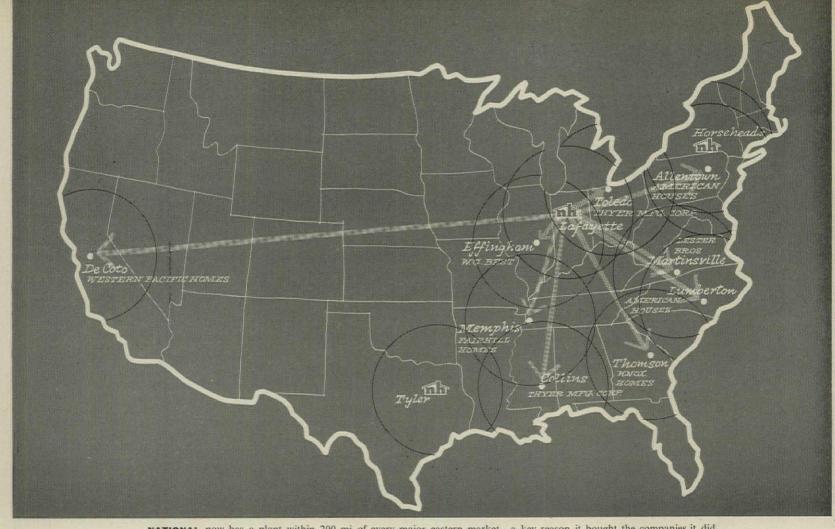
TOTAL MATERIALS LESS EXTRAS: This form is used to record the materials cost of the basic house in the same way as the form above it is used for labor costs. The clerk figures phase-by-phase cost averages on a square-foot basis.



BOSS
gets complete cost picture from this summary

FLOOR AREA 1500 JOB NO 5 LOT 3500.00 ELEC COST 466.50 DRY WALL FIN 22500 FINANCING OVERNEAD 1500.00 TOTAL 5691.50 PHASE I MATL 373.50 LAB 883.00 PHASE I MATL 4023.50 PHASE II MATL 4023.50 PHASE II MATL 1858.75 TOTAL 11,206.75 TOTAL 1,206.75 PHASE II MATL 1,206.75 PHASE II MATL 1,206.75 PHASE II MATL 1,206.75 TOTAL 1,206.75 PHASE II MATL 1,206.75					SUMM	ARY					
LOT 3500.00 ELEC COST 466.50 DXY WALL FIN 22500 FINANCING OVERHEAD 1500.00 TOTAL 5691.50 PHASE I MATL 1373.50 PHASE I MATL 4029.50 LAB 883.00 PHASE II MATL 22625.00 TOTAL 1376.75 TOTAL 1,376.75 PHASE II MATL LAB PHASE II LAB PHASE II LAB TOTAL 1,376.75 SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 1/8,500 TOTAL COST 17,068.25				Total							
ELEC COST 466.50 DRY WALL FIN 225.00 FINANCING OVERHEAD 1500.00 TOTAL 5691.50 PHASE I MATL 1373.50 PHASE I LAB 883.00 PHASE I LAB 884.00 PHASE II LAB 1581.75 TOTAL 1/376.75 PHASE I LAB 1581.75 TOTAL LAB 1681.75 TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18,500 TOTAL COST 17.06825	J08 N0	5							12 Sa (25 %)		
DRY WALL FIN 22500 FINANCING OVERHEAD 1500.00 TOTAL 5691.50 PHASE I MATL 1373.50 B83.00 PHASE I MATL 4029.50 LAB 884.00 PHASE II MATL 1581.75 TOTAL 1581.75 TOTAL 1436 PHASE II MATL LAB PHASE II MATL LAB PHASE II LAB PHASE II LAB SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18,500 TOTAL COST 17.06825											
FINANCING OVERHEAD 1500.00 TOTAL 5691.50 PHASE I MATL 1373.50 BB3.00 PHASE II LAB BB4.00 PHASE II MATL 2625.00 PHASE II LAB 1581.75 TOTAL 1,376.75 PHASE II LAB PHASE II LAB PHASE II LAB PHASE II LAB CONTRACT TOTAL 5600 EXTRAS AFTER CONTRACT TOTAL COST 17,068.25											
OVERHEAD 1500.00 TOTAL 5691.50 PHASE I MATL 13.73-50 883.00 PHASE I MATL 4029.50 884.00 PHASE II MATL 2625.00 PHASE II MATL LAB 1581.75 TOTAL 11,376.75 PHASE I MATL LAB PHASE II MATL LAB PHASE II MATL LAB TOTAL LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES 16,500 TOTAL COST 17,068.25		225.00									-
TOTAL 5691.50 PHASE I MATL 1372.50 PHASE I MATL 4029.50 A84.00 PHASE II MATL 1376.75 TOTAL 11,376.75 PHASE I MATL LAB PHASE I MATL LAB PHASE I MATL LAB PHASE I MATL LAB TOTAL LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18,500 TOTAL COST 17,068.25		150000						THE RESERVE			+
PHASE I LAB 883.00 PHASE I LAB 884.00 PHASE II LAB 884.00 PHASE II LAB 1581.75 TOTAL 1,376.75 PHASE I LAB PHASE II LAB PHASE II LAB PHASE II LAB CONTRACT TOTAL SALES PRICE 16,500 TOTAL COST 17,068.25	OFFICE	1500.00									7
PHASE I LAB 883.00 PHASE I LAB 883.00 PHASE II LAB 884.00 PHASE II LAB 1581.75 TOTAL 1,376.75 PHASE I LAB PHASE II LAB PHASE II LAB PHASE II LAB CONTRACT TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL COST 17,068.25	TOTAL	5691.50						PER PROPERTY.		20 30	
PHASE I LAB 883.00 PHASE I MATL 4029.50 PHASE II MATL 2625.00 ITOTAL 1/376.75 PHASE I LAB PHASE II LAB PHASE II LAB PHASE II LAB PHASE II LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT PRICE 19,500 TOTAL COST 17,068.25							No. of the last	4			
PHASE II MATL LAB PHASE II MATL LAB PHASE II LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE PRICE PRICE 18,500 TOTAL COST 17,008.25		1373.50								For street	1
PHASE II MATL 1/376.75 PHASE I MATL PHASE I LAB PHASE II LAB PHASE II LAB PHASE II LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18,500 TOTAL COST 17,068.25	PHASE I MATL	4029.50									
PHASE I MATL PHASE II LAB PHASE III LAB PHASE III LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18,500 TOTAL COST 17,068.25	PHASE III MATE	2625.00									
PHASE II LAB PHASE II LAB PHASE II LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18,500 TOTAL COST 17,068.25	TOTAL								Mark Tilling		
PHASE II LAB PHASE II LAB PHASE II LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18,500 TOTAL COST 17,068.25											13
PHASE II LAB PHASE III LAB TOTAL SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18,500 TOTAL COST 17,068.25	LAB										
SALES PRICE 18, 500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18, 500 TOTAL COST 17, 068.25	THASE ILAB					10000					
SALES PRICE 18, 500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE 18, 500 TOTAL COST 17, 068.25											
SALES PRICE 18,500 EXTRAS AFTER CONTRACT TOTAL SALES PRICE TOTAL COST 17,068.25	TOTAL			DE SELEC	A Company		1 FL NO 341				
EXTRAS AFTER CONTRACT TOTAL SALES PRICE TOTAL COST 17,068.25											1
CONTRACT TOTAL SALES PRICE TOTAL COST 17,068.25		18,500									+
TOTAL SALES 18,500 TOTAL COST 17,068.25											
TOTAL COST 17, 068.25	TOTAL SALES	10 000								1 2 20 17	
	TOTAL COST									A CHARLES	
		PREMI									

SUMMARY: This sheet sums up all the costs on every job and shows Schmitt how much money he will make on each. Example: on Job 5—the hypothetical house mentioned previously—his profit would be \$1,431.75. Summing up his cost-accounting system, Schmitt says: "It really caught on fast. The workers soon became familiar with the job-item numbers that applied to them. The foremen soon learned to check time slips quickly. The clerk soon got used to keeping records. And I soon found I could check on my costs at any stage of any job. The results are amazingly accurate and informative."



NATIONAL now has a plant within 200 mi of every major eastern market—a key reason it bought the companies it did.

Does National's big deal mean a new deal for the industry?

National Homes is now close to being what its name implies—a national operation.

It can put its own house or one from one of its seven new subsidiaries into every major metropolitan market in the eastern half of the US, plus Texas and California. This puts National in competition in markets where prefabs never had a stronghold.

The merged companies-National, Knox, American, Thyer, Lester Bros, Fairhill, Best, and Western Pacific-will start close to 45,000 units this year, a dollar volume of \$100 million. This is 4.3% of all the single-family, non-farm houses expected to be started in the US this year and 60% of all prefabs. National is now one of the 300 largest US corporations with assets of \$60 million, and 4,000 employees.

Its purchasing power, already the greatest in the industry, is even greater now. Its built-in economies are expanded as it carries industrialization of housing another big step forward.

And, most important, the vast stable of services it offers its dealers is now extended to the dealers of the seven other companies. They get help in land acquisition and development, help in financing and merchandising. These all-important items enable them—with minimum investment and minimum risk—to compete on equal or better terms with most professional builders in the US.

If you're a conventional builder, this prediction from National's hard driving Chairman Jim Price may give you pause: "Our [National's] goal is 50% of all housing starts by 1975." And he confidently adds that some of today's biggest conventional builders will be his biggest dealers long before then.

Why merge? The map tells the story—

In some centers National has captured so much of the market that it has reached a saturation point (eg, 72% of all the new homes in Indianapolis). To expand, it had to build its own new plants in new areas or buy competitors. The Prices—Jim and his brother George, National's President—decided to buy.

With an eye on the map, they started looking in May—made five deals in six weeks. The one criteria besides location: earnings had to be \$1.50 a share if figured on the basis of National stock converted from the company's own stock. Now National has a factory within 200 mi of any metropolitan area in the eastern half of the US. In Mid-West cities where it is already strong, it hopes to grab more sales by creating new Best or Thyer dealerships—under their own names. In the South, East, and West, where it has been weak, (it sold only 956 homes in these areas last year), it now has seven plants and seven brands to meet the competition.

Why were the other companies eager to take National's offer? Explains Jim Price: "Everyone had the same problems: lack of money for automating production and for finding better sales techniques and methods. We were able to convince them they could go much further with us than

stumbling on alone. With all the tools we'll give them they should do tenfold."

The deal cost National 739,387 shares of common stock and \$479,000 in cash, or a total value of \$16,700,000. But the Price brothers retain control. They own 26% of National's voting stock. And they control more than 50% in a voting trust which includes the stock given the principal owners of the merged companies.

JIM PRICE: "These plants didn't have an engineered house before because they had no volume. They would sell anything anyone wanted. We're changing all that."

All of the acquired companies retain their name and present management. Due to be voted to the National board of directors: Charles Freeburg of Fairhill, Pete Knox, W.G. Best, Lawson Lester, and Bob Thyer—all of them now salaried National employes (\$25,000 to \$30,000 per year average) as well as stockholders. Here's what National paid for each company: Thyer, \$479,000; Knox, 325,098 shares of National 'A' common stock; Lester Bros, 238,464 shares; W.G. Best, 138,825 shares; Fairhill, 17,000 shares; Western Pacific, 20,000 shares (paid to T.J. Bettes Co, Houston mortgage banking firm). American Houses, bought earlier by Knox, was included in the Knox purchase price.

All seven subsidiaries will be independent — but 'National-ized'

Though National is giving some discretion to its subsidiaries, all design, accounting, advertising, purchasing, financing, and merchandising help will be handled in Lafayette.

The Prices have already ordered conversion of each of their new plants to National's 4'-module scheme. The others use a nominal 4' system but it varies at ceiling heights, corners, lead studs, and windows. So the jigs will be changed.

There will be no more customized houses. "National is really the only prefabricator in the country," claims Price. "The others build panels to fit any builder's plan. We don't and neither will any of our subsidiaries."

The new plants—with but two exceptions—will not be building National Homes. National's architects, Charles Goodman, Royal Barry Wills, Reginald Roberts, and Emil Schmidlin, will design separate lines for each company.

Price explains: "They won't be duplicates of ours. They

Price explains: "They won't be duplicates of ours. They will have variations—carry through the characteristics which gave them whatever individuality they had before."

The only two exceptions in the separate-line policy will be the new Regency aluminum houseline, and Kahlercraft, National's shell house. Kahlercraft remains a separate division. All 12 plants will be equipped to build them on order.

National is setting up branches of National Homes Acceptance Corp—already the third largest mortgage banking company in the US—in all the areas served by its subsidiaries.

"We've already been buying land and putting up development money [50% of land cost; 75% of development cost] for these companies," Jim Price reports. He estimates each \$1,000 National lends means one more house package sale.

National will train both company salesmen and dealer salesmen. A merchandising school is being set up at the University of Georgia to match the facilities in Lafayette.

Two of National's iron-clad rules will be imposed on the subsidiaries: 1) there will be no "stealing" of builder-dealers from other prefabbers and 2) all house packages will be sold for cash at 100% list price; no discounts for cash.

You'll see the Prices in new places doing new things

National now owns the Knox mobile-home business, plans to build a new plant for it, and even expand in this area later. Within two years National plans to build its own lumber mill on the West Coast, pre-cutting all lumber for National and subsidiaries. The pieces would be shipped by water to East Coast, Gulf, and Great Lakes ports. Estimated net saving: about 15% on lumber costs.

National plans three more plants, one in Florida and eventually two more in California. In fact the new aluminum Regency line was designed with Florida in mind. But the Florida models will have redwood framing. Says Price: "With this house we can beat the pants off CBS [concrete block-stucco]."

Price is negotiating with John MacArthur, president of the Bankers Life Insurance Co, to provide the houses in big tracts MacArthur owns near Palm Beach and Sarasota. MacArthur has also offered to build a plant near Palm Beach and lease it to National.

The Price brothers think 1960 will be a big year for their aluminum models. They estimate 56% of 1959 sales will be aluminum-skinned models. They predict this will hit 70%

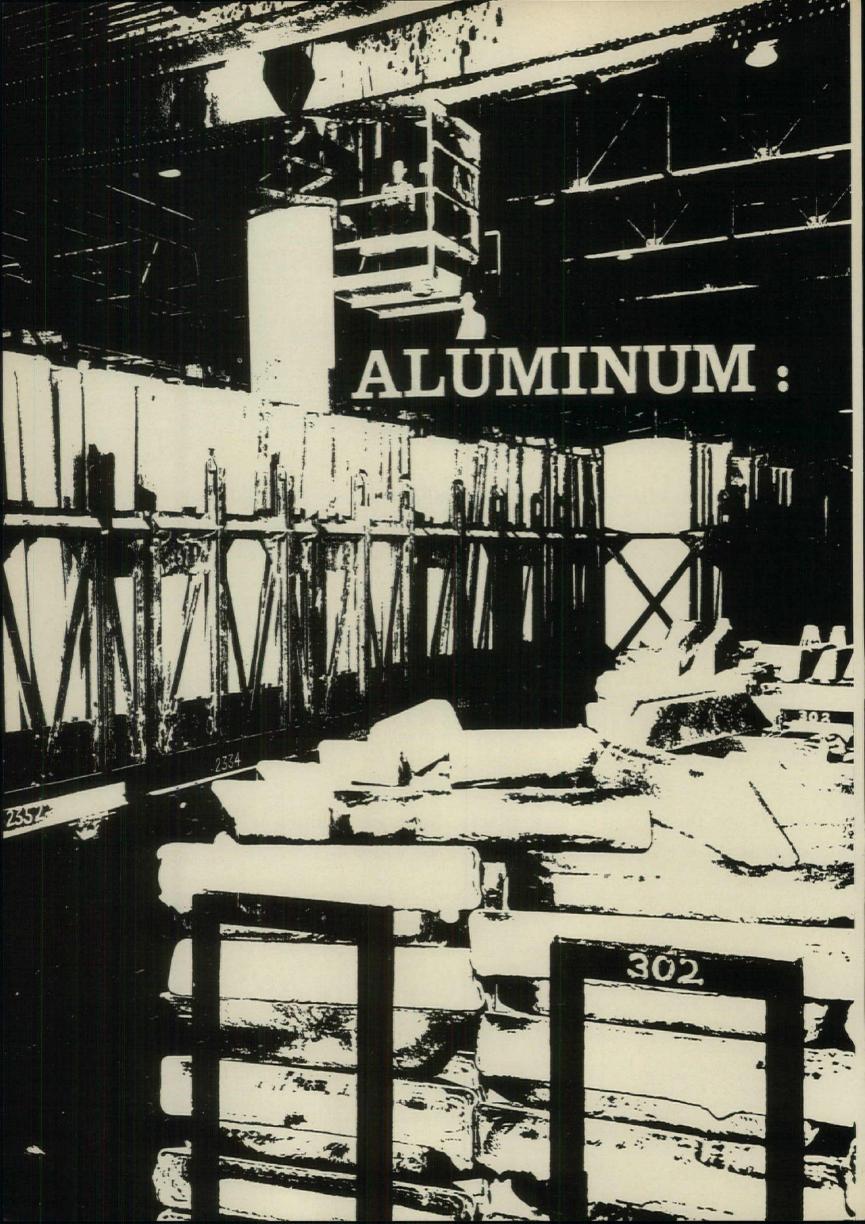
in 1960. For 1960 they have what Jim calls "the biggest technical advance in housing in 100 years." The aluminum house will have aluminum roof, doors, windows frames, and exterior trim as well as siding. The siding itself will have a baked, flat, lucite finish, developed for National by duPont. Price says it will never need repainting. By 1960 National expects its use of aluminum to hit 3.6-million lbs a month vs the 101,783 lbs a month in 1958. (For more on aluminum houses, see p 126.)

This is typical of what is happening at National. Founded in 1940, it built its 65,000th home five years ago. It's built

100,000 since then. Along the way Jim and George Price have become wealthy men (Jim's 1958 salary plus bonus: \$297,075; George's \$220,906). But personal wealth is not their ultimate ambition. That goal remains ahead: to produce half the new houses in the US.



GEORGE PRICE: "In next year's line we'll be offering our aluminum houses for the same price as our wood ones."



it has suddenly boomed as a major building material

This year building will take by far the biggest single share of aluminum production—450,000 tons (more than twice the tonnage that is going into defense production).

And the biggest share of building's tonnage is for housing. Housing is using aluminum in familiar items like windows and gutters and hardware and storm doors—but, more to the point, for the first time housing is also using a significant quantity of aluminum in what can truly be called "an aluminum house."

This means that two multi-million-dollar projects of the aluminum industry are really beginning to pay off:

- 1. The industry's research effort to develop new alloys and new finishes and new fabricating methods and new products for homebuilding.
- 2. The industry's promotional effort to sell consumers on the many advantages of aluminum and to sell the housing industry on the metal's many applications to new houses and apartments.

These two huge programs were started by the aluminum industry as long ago as World War II—when it became plain that the industry would need new outlets for its war-expanded capacity. The Korean war further expanded capacity and further intensified the industry's effort to find peace-time markets. Today, with eight North American producers in the field, defense needs—measured against an ever-expanding production capacity—are shrinking every year, making more and more aluminum available to housing and other industries.

Today, there is no question about the public's acceptance of aluminum:

More and more builders report that aluminum is now a strong selling point to new-house buyers.

More and more builders report they are using more and more aluminum.



Today aluminum is cutting a big slice of the market where traditional materials once had all the edge

This year, production of aluminum-clad houses is up 4,000%.

Actual figures are less exciting, but they indicate a strong trend: 20,000 aluminum-clad houses will be built this year vs 500 in 1958.

The 20,000 aluminum-clad houses use aluminum in vertical or horizontal siding, in aluminum-faced sheathing, and in roofing, soffits, and fascia.

The biggest single appeal of most aluminum cladding products now on the market is that they will not deteriorate—they give the homeowner savings in maintenance of up to \$6,000 over a 30-year period, experts claim.

Four special properties make aluminum a superior cladding

1. Aluminum can take and hold more finishes better than almost any

other material. Why? Aluminum actually protects the finish rather than requiring the finish to protect the aluminum. Aluminum's tough, solid surface is good for paint, baked-on enamels and plastics, porcelainizing, anodizing, and vinyl laminations, all in a wide variety of colors. Painted aluminum can be easily repainted, and the new 20-year plastic finishes can be refinished in the field when necessary.

- 2. Aluminum is easily handled in big sheets. (An aluminum roof weighs one-seventh as much as some composition roofs.) In production houses, siding and roofing time may be cut 80%.
- 3. Aluminum sheet is easily formed (on big brakes, or in roll-forms). No sawing, planing, sanding, curing, etc, is needed.

4. Aluminum can be used in ways that traditional materials can not be. For instance, aluminum bevel siding can be made with vents on its bottom edge to vent the whole exterior wall. On roofs and walls aluminum's reflecting properties can cut air conditioning operating costs as much as 25%.

There are, of course, drawbacks to aluminum as a cladding material. If left natural, aluminum's oxide film in time will darken. In seacoast or industrial atmospheres certain alloys may corrode seriously—so before you use aluminum in corrosive atmospheres be sure you check with the producer to make certain you are getting the right aluminum to meet your special conditions.

There is also a question of dents and noise, but if the aluminum cladding is thick enough or backed up properly these problems are minimized.







IT'S EASIER TO FASTEN







© Ezra Stoller

Aluminum fits today's building without requiring new methods

It can be worked like a metal or like wood.

Like wood, aluminum can be sawed, planed, drilled, or it can be nailed, stapled, screwed, or bolted. Like most metals, aluminum can be welded and cut by torch. An extra advantage: aluminum can even be cold welded with special gripping tools that fuse two pieces of metal under great pressure.

The new cladding products are usually easier to work with than many of their traditional counterparts. Says St Louis Builder Larry Behymer, "Since our tradesmen have gained practical experience with aluminum, we find that we require less installation time with aluminum cladding."

New tools being developed for aluminum promise to cut building time even more. An outstanding example is the one-operation rivet gun developed by Alcoa for their new sheet roofing (see picture above and H&H, Jan, (p 127). With one hard squeeze a rivet is shot through three pieces of aluminum, fastening them all together.

However, producers point out the best way to work with aluminum is to design your houses so that standard aluminum products can be used in standard sizes, without cutting.

Prefinishing gives aluminum an extra advantage for prefabbers

Because aluminum provides a better surface than most materials for paint and plastic finishes, prefabbers can safely prefinish more of an aluminum house. (You have to work to chip a good finish on aluminum.) Result to the buyer: all the advantages of aluminum at no premium in price over traditional materials. In the plant the prefabber can control finish quality, keep his costs down. He eliminates a good part of his dealer's field painting costs.

Prefabbers also find production goes faster with big sheets — rather than boards— of aluminum. And finally, it's much cheaper to ship a house package with a lot of aluminum instead of heavier traditional materials.

Producers are helping builders specify, use, and sell aluminum

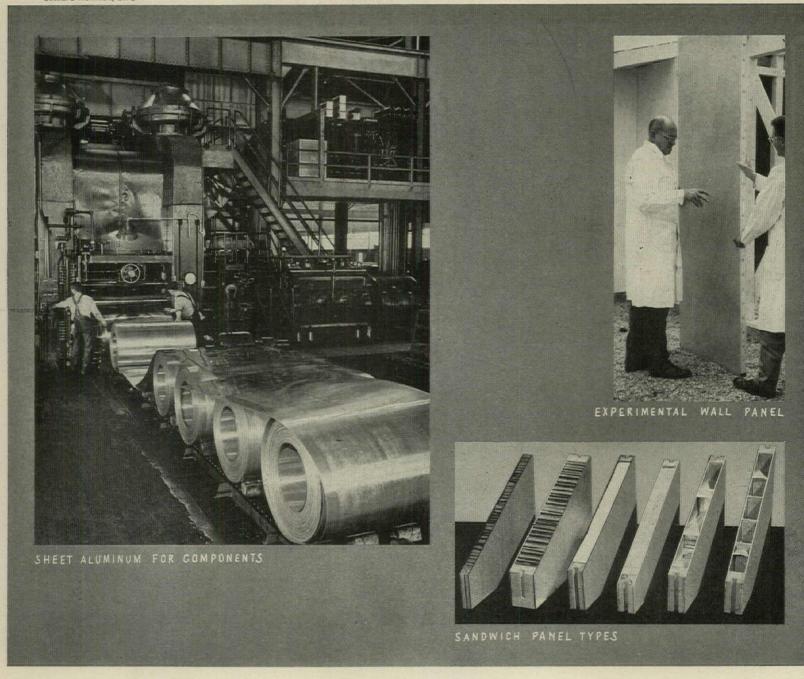
The big four aluminum companies—Alcoa, Reynolds, Kaiser, and Olin—all

do three things for builders: 1) They have engineers available in every major residential area to help solve special problems for builders, building officials, and architects; 2) They all will provide some local advertising, and they frequently help staff model houses to explain to prospects the whys and wherefores of aluminum; 3) They all have big national promotion budgets that build up aluminum's sales appeal.

A HOUSE & HOME survey of builders who have built aluminum houses shows that sales of aluminum models often run ahead of standard models, and that an aluminum model is a drawing card that will push a builder's total sales—aluminum and conventional.

The most startling example of how aluminum helps sell is the current record of National Homes. Not only does National credit their aluminum houses for stimulating a record sales year—45% better than 1958, but 56% of their total sales will be in aluminum clad houses. (For other news of National Homes, see p 124.)

To see aluminum's future in housing, turn the page



Tomorrow aluminum will come from the factory in new forms and systems that will cut building costs

Up to now, producers admit, "we have taken aluminum cladding only as far as the transitional stage."

But soon, they believe, they'll be marketing the more logical aluminum structural sandwich panel. It should result in a real cost reduction.

Here's how aluminum men explain it: "Up to now, while we've been winning acceptance for aluminum, we've been using aluminum to imitate other materials. This is not the best way to use it. Even big sheets of cladding do not take full advantage of the metal. Sandwich panels do use all the properties aluminum brings to cladding, plus all of aluminum's tensile and compressive strength. Big all-purpose panels, in one piece, eliminate all need for using studs, sheathing, siding, insulation, vapor barrier, drywall, and two layers of paint."

It takes a lot of work to perfect a

panel that promises so much, and the whole aluminum industry is experimenting with wall and roof components made of aluminum skins over paper honeycomb and foamed plastic cores. (See H&H, Dec '57, p 142; Jan '58, p 121; Aug '58 p 94; Dec '58, p 141; Feb '59 p 142A.)

New panel systems are moving into pilot production

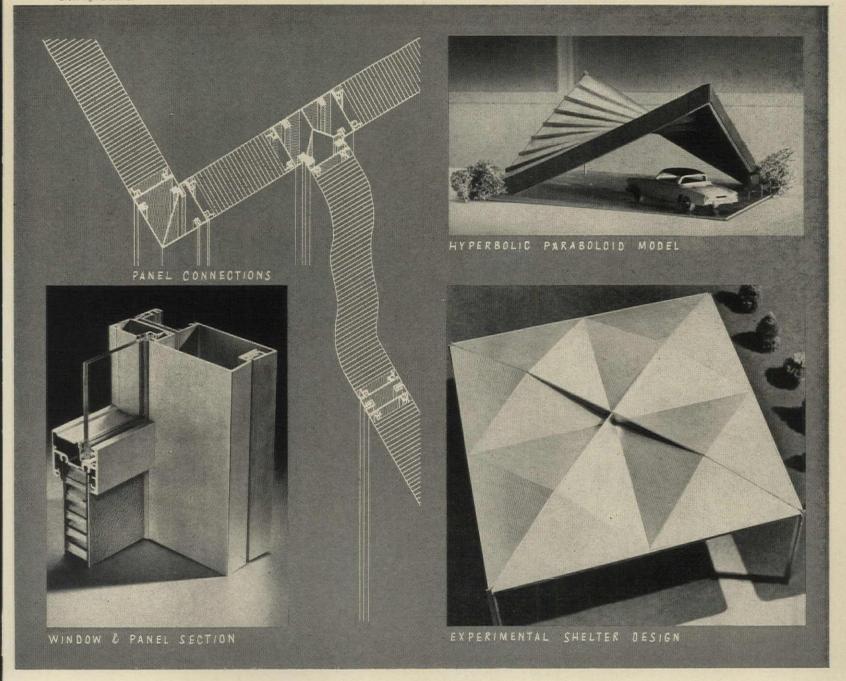
Alcoa, the first producer off the boards, uses pilot machines to produce their Alply panel at \$1.25 a sq ft. This is a structural wall panel with aluminum faces, a polystyrene foam core, and a number of alternate joining systems.

Mass production of this type of panel on new, continuous fabricating machinery could bring costs well below \$1 a sq ft. Reason: the new fabricating machinery would take full advantage of aluminum's flexibility. The idea is to feed two spools of aluminum sheet through a press and foam a styrene core as the sheet moves through. With a machine like that, 8' high panels could be made in any desired length.

But producers estimate that a continuous panel-forming machine may cost \$500,000, and they'll need a good market to justify the expense.

Aluminum makers are gearing experiments to housing needs

To make sure they can get a good market, producers are checking their plans with housing people all the time. They are finding that the ordinary rectangular sandwich panel is not the answer to everything builders need. Special panels for special uses will have to be part of the producers' stock.



The following components, some on the drawing boards, some already in the testing labs, are being developed in collaboration with builders or prefabbers. You may find all of them in commercial production in the early '60s:

- Complete entrance door panel system with aluminum door and extruded snap-in-place frame, pre-hung;
- Pre-painted aluminum siding panel, laminated to insulation, with light weight interior finish, for use with post and beam framing;
- Aluminum ceiling panels in anodized, porcelainized and baked-on plastic colors, perforated for acoustic control, with air conditioning ducts.
- Aluminum interior finish panels for bathrooms and kitchens in all colors;
- Roofing panel product that functions as starter-strip, eave overhang, gutter;
- Bermuda roof plank, 18" wide, with folded over front edge acting as a purlin, and with foamed styrene or urethane backing under the aluminum skin;
- Extra thick structural roof panels, ridge to eave, in 2', 4', and 8' widths, with pressure tape joint seal over panel edges, no fascia or soffit needed;

- Folded plate roof system, full span or ridge to eave, with a plastic valley gutter between panels;
- Hyperbolic roof panel system in aluminum stress-skin sections.

Standardized panels need not mean standardized design

On the contrary, aluminum experts point out that these new panel systems will add flexibility to design.

Because of the nature of the panels and their connectors, a builder starting 50 houses should be able to build 25 different models almost as easily as only five.

A single panel could be used interchangeably in the roof, exterior walls, or interior partitions. And specialty panels, such as door panels, could be interchangeable with ordinary panels in the system.

To fit panels to different floor plans, roof slopes, open or closed planning, the builder would need only different connector extrusions for corners, wall intersections, roof angles, or straight sections.

The drawing, above, shows how this principle is used in a system developed by Panelfab of Miami. In this system

all the panels are the same, only the connector extrusions are different. In military or temporary housing, components would be demountable for use any number of times.

The two models illustrated at the right show how flat panel sections cut into strips (top) or triangles (bottom) might be used to form new and different shapes.

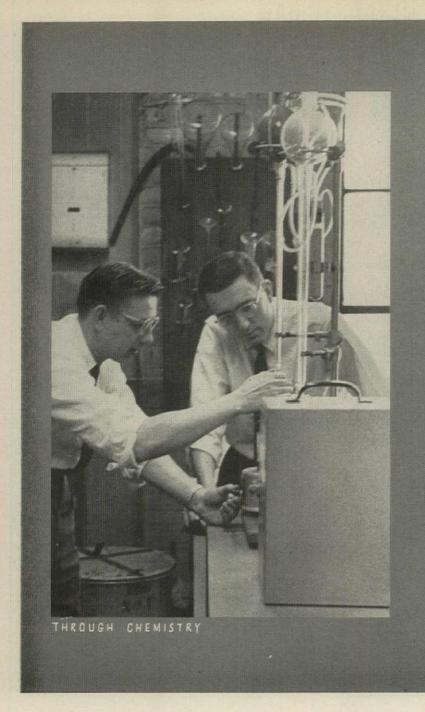
Traditional materials will play a big role in the new components

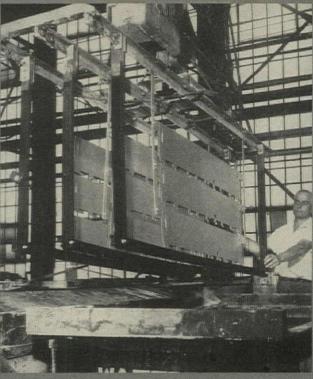
No panel is an all-aluminum product: panel design depends on a lot of other materials.

A sandwich panel acts like an I-beam, and the aluminum skin works well in tension, but is of little use in compression unless there is a backup board or a good core glued to the faces to prevent them from buckling.

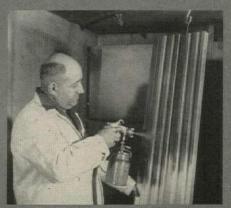
Without plywood, adhesives, foamed plastics, asbestos cement, fiberboards, laminated plastics, paper honeycombs and other metals, aluminum could not hope to gain the position it seeks in tomorrow's panel systems.

To see more of the future, turn the page





WITH NEW PROCESSES



WITH NEW FINISHES

Tomorrow continuing research in aluminum promises a new technology that may revolutionize housing

In the late '60s you are likely to see:

- Aluminum in new shapes for shelter, for appliances, for storage, for built-ins.
- Aluminum in new alloys as strong as steel, as malleable as lead, as brilliant as chrome.
- Aluminum in new textures for new decorative approaches inside and outside the house.
- Aluminum in new finishes for bathrooms, for kitchens, even for floors.
- Aluminum with new physical properties for plumbing, for electrical service, for heating and air conditioning.

Research projects to reach these ends are now in the lab

Alcoa alone is spending in excess of \$17 million a year on research and development to make aluminum more versatile than it is already.

But not all of the industry's projects are aimed at glamorous goals; some of them pertain to practical, everyday problems. For instance, one big problem is the application of aluminum pipe in plumbing. Today certain alkaline waters will make tiny pinholes in most aluminum alloy pipes. However, new alloys produced by aluminum metallurgists may solve this problem, and when these alloys can be produced competitively, homebuilding should see a big drop in plumbing costs.

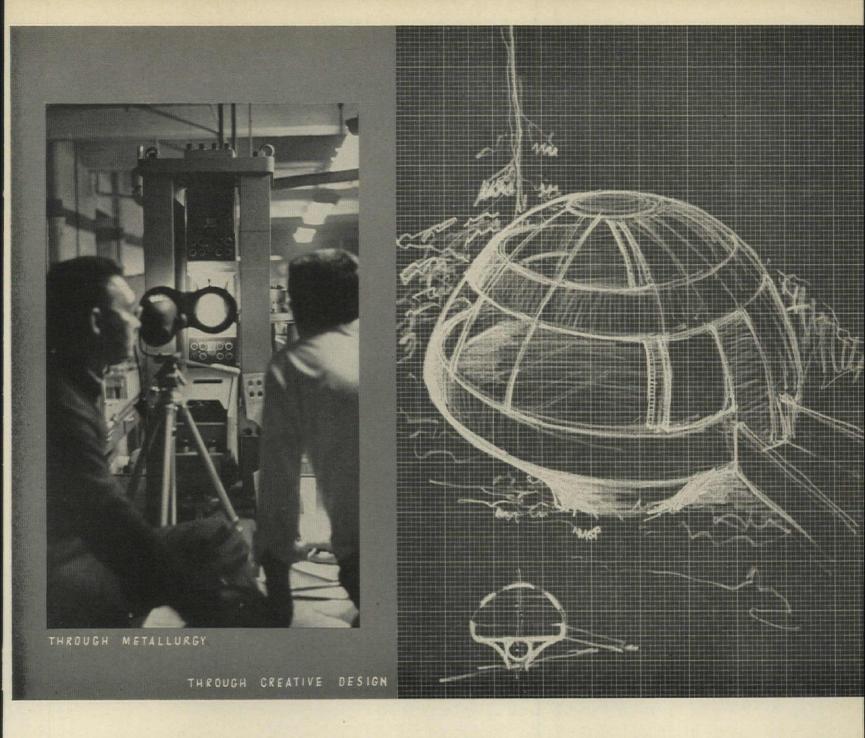
Exact estimates of how much aluminum pipe may cut plumbing costs are impractical. But, as an indication, ordinary aluminum pipe today costs one quarter as much as copper or copper alloy pipe. Savings may be partially offset because aluminum is likely to need more fittings than flexible copper tube which can be easily bent around almost any corner.

New finishes are being planned to give aluminum even longer life

In the big producers' labs, new and better finishes promise to make obsolescent even the good new 20-year plastic finishes that came on the market just this year. The goal is to toughen up the plastic finish to extreme hardness.

Other research projects are tackling more immediate needs:

1. New anodizing processes to make aluminum countertops that can take the hardest use. In these processes, deep anodizing builds up an extra heavy aluminum oxide film which is extremely strong. (Aluminum oxide is one of the toughest compounds there is. It is used



as a binder in diamond grinding wheels.)

2. Lightweight plumbing fixtures. Porcelainized aluminum fixtures could reduce shipping and installation costs: one man could carry in all the fixtures for a two-bath house in less than 15 minutes. Colorful, porcelainized bathtubs and basins have already been made experimentally, and producers have lowered porcelainizing costs from 60¢ a sq ft down to 20¢ a sq ft in just the last two years.

A long range project along the same lines is the design of sectionalized bathrooms assembled completely from three or four big aluminum units, porcelainized for color and for long life.

Aluminum systems may make possible truly industrialized houses

The one real way to get housing costs down is to build the house completely in a factory, all housing experts agree.

First step toward this goal may be to produce in the factory a mechanical core that can easily be inserted within a field-assembled house shell.

Aluminum's light weight makes it ideally suited for mechanical cores that can be handled by truck-mounted hydraulic hoists. (The basic strength-weight ratio of aluminum is about three times that of structural steel.) Plumbing, electrical, heating and cooling equipment, and all appliances, might be factory assembled and shipped as one big core. The core weight could be 50% less than for one framed in wood and using steel appliances, standard plumbing, and standard heating and cooling equipment.

Day after tomorrow—a new world of aluminum houses?

For factory-built house shells, there is a wide range of ideas. See the drawing above, right for a sample.

Here is how aluminum engineers are thinking about a hemispheric industrialized house of tomorrow: structural system could be based on brilliantly colored anodized extrusions. Each outside skin panel between extrusions could be a combination storm window, screen, shutter, and awning made of a lightweight assembly of aluminum sheet, screen, extrusions, and plastic. Sunlight and heat gain would be controlled through a dome shaped roof with telescoping aluminum or polarized glass panels. Plumbing might be stamped into

an aluminum wet wall to take a preformed plumbing tree that would need only two connections in the field: one to an outside supply and the other to drain lines.

Heating and cooling may become structural elements in floor

There is no good reason why weather conditioning should be added to the shell of the house as an afterthought. So designers think of putting ducts and plenums to work as structural elements that literally support and form the floors and foundations of their houses. (Aluminum ducts have less heat gain and less heat loss than conventional galvanized steel ducts.) Aluminum coils could heat and cool air, and electrostatically charged aluminum plates might filter out dust and pollen.

Supplementary heating and cooling panels of aluminum in new thermoelectric systems could be spotted in bathrooms and entrance foyers. Radiant panels of woven aluminum fabrics might be hung in living areas.

In fact, almost anything seems possible to the engineers who today are planning new ways for you to use aluminum tomorrow.

"Trade-ins are the one sure way to sell more people more new houses than ever before"



So says JOHN M. HESS, the man in the picture above. Hess has never been on either end of a trade-in deal, but he probably can tell you more about trading than anybody else in the country.

In the past two years Hess has traveled the US talking about trading to house traders, to NAHB, FHA, and VA officials, to non-trading builders and realtors, and to mortgage bankers. He knows why some builders and realtors trade and why others don't. He knows what banks and government officials think about trades. He knows how you can make money by smart trading and how you can go broke by taking in the wrong house.

And Hess knows a lot about the homebuyers' end of trading. He has talked to hundreds of homebuyers—traders and non-traders. He knows what they like about trading and what they are afraid of. He knows where you can find your best prospects for trades.

Why did Hess become an expert on trade? "Because," he says, "trade-ins are of major significance not only to homebuilding but to the American economy as a whole." And economics is Hess's business. He is assistant professor of marketing at the University of Colorado's School of Business, and he made trade-ins the subject of a 460-page thesis for his PhD degree from Stanford University. (To help Hess finance his research, Minneapolis-Honeywell Regulator Co gave him a grant-in-aid.)

As part of his research, Hess sent out detailed questionnaires and conducted personal interviews with 101 traders who handled a total of 2,673 trades and sold a total of 15,337 new houses in 1956. He also talked with 105 families who traded in old houses for new ones in 1956 and 1957. And—to get general consumer reaction to trades in an area where trading is highly publicized—he interviewed 441 homeowners in Redwood City, California.

Among Hess's 647 major interviews, one still stands out in his memory. A homeowner, wildly enthusiastic about trades, told Hess that he got "a wonderful price" for the old house and found the new house "a real bargain." But that wasn't all. "Our builder," said the happy man, "traded almost without fee." When the amazed Hess asked how the builder could afford to give such value and consideration, the owner answered simply, "He couldn't. He went bankrupt."

Despite this obvious warning against trading before you understand the tricks of the trade, Hess believes that the right trade-in plans are safe and highly workable and can lead to "comfortable profits for builders and realtors of almost any size."

Starting on the next page, Professor Hess tells what you need to know to make these profits.

Trading is already a multi-million dollar business and can quickly grow many times bigger

In 1956 trade-ins were involved in at least \$250 million of house sales. Today the figure may be closer to a third or even a half billion. Big as it is, trading so far barely scratches the potential market.

Although one in three of today's families who buy a new house has an old one to trade, only one in 100 actually trades. But in new-car sales, 85 of every 100 buyers trade. With the right trade-in programs and the right promotion, there is no reason why three-fourths of homeowners who want a new house should not trade.

Trade-ins help people buy a new house sooner than they had planned

I interviewed 105 families who had traded houses. A third of them said they would have been in the market for a new house earlier had they known sooner about trade-ins; one-half of these families had made no attempt to sell their houses before trading.

Another independent survey made in Dallas showed that one-half the families who intended to move within two years "would be inclined to buy a new house sooner if they could trade-in their present house on a new one."*

Trading firms know how much trading helps their new-house sales. Two-fifths of the 101 firms I interviewed thought that "many" or "almost all" of their customers would not have been in the market for a new house if the trade-in plan had not been available. So good trade-in programs can be a major factor in inducing more and more families to "trade-up" out of their old houses.

Trades not only increase the size of the total market, they increase your market

Half of the traders I interviewed thought that "many" or "almost all" of their customers would not have bought a house from them if they had not had a trade-in plan. In other words, the plan closed the sale for customers who otherwise would have bought a competitor's house.

Many traders think that builders of houses, like dealers in cars, will have to trade to stay in business.

Says San Diego builder John Severin, whose company is among the nation's ten largest traders: "We wouldn't consider starting a new tract of homes without a trade-in program. The market is getting to the saturation point where a builder is going to have to trade one house

every time he sells another. We're going to have to sell the people who already have a house."

Says Seattle Realtor William McPherson, another of the ten largest traders: "The blush is off the first-time buyer. Builders are going to have to aim their selling at the trade-in market or go under."

Testimony from buyers is also impressive:

Nearly three-fourths of the families who traded said that trades were "extremely important" in their decision to buy the specific house they finally purchased.

Only 6% of the families denied that the trade-in plan had any influence in their selection of a new house.

The number of families who are ready to trade may be much larger than you think

Between $\frac{2}{3}$ and 1-million homeowners move each year to other houses in the same county. All these homeowners are potential trade-in customers. How many actually trade depends upon the effectiveness of trade-in promotions and on the existence of favorable trade-in terms.

Young families with low old-house equities are prime trade-in prospects

Homeowners between 30 and 40 years of age, with two or three children, make up the best market for trades. These prime prospects have lived in their present homes less than ten years.

It is highly significant that nine-tenths of the families I interviewed who had traded houses, and three-fourths of the families who were interested in trading, had lived in their present houses less than ten years; and, over half in each

group had lived in their present houses less than five years.

These families have low equities:

Half the trade-in purchasers had equities of less than 40% of their house value. The equity in the old house amounted to less than 20% of the value of the new house in half of the transactions and less than 40% in 80% of the transactions.

And most trading is done by families who own a house valued between \$7,500 and \$15,000.

Many more people would trade if they had a better understanding of trading

The effect of trade-in promotion is shown by my survey of Redwood City homeowners. Early in the interview, owners were asked if they were interested in trading: 18% were and 12% did not know. The other 70% were not interested. After some advantages of trading were explained, the number interested in trading *increased to 32%*.

^{*}Jerry E. Drake, Marketing Potential for Residential Construction in the Dallas Metropolitan Area, (doctoral dissertation, The University of Texas, 1956.)

But trading costs still scare off a big part of the potential market

A large part of today's potential trade-in market is concerned about unfair prices of the new house, the old house, or the trade-in service.

The trading fee is often the major stumbling block for traders. The customer wants to trade, but he doesn't want to pay a big price for the privilege.

Four out of five families interested in trading were willing to pay a 5% fee for trading, but only 3% thought they would pay 10%, and the idea of a 15% fee shocked them all. The 15% figure is not uncommon in

the business today. Obviously, it is making the job of selling trade-ins tough.

To minimize this resistance, trading firms must lower their costs, and they can only do this by having a trading operation which is efficient and economical in every respect. In any case the services which the homeowner receives must be dramatized.

Nearly all homeowners who are interested in moving and aware of trading, would trade if the terms were reasonable.

Too many builders and realtors hesitate to take the first step

Many builders are not trading because they are waiting for a local realtor to set up a trade-in program they can use. This may save the builder a lot of energy, but he may never get to trade.

And many realtors are dragging their feet on trade-ins because they lack faith in their trading ability—especially in their ability to appraise houses effectively—or don't have the capital required for trading. Few of those who do have capital have an inclination to enter an enterprise where there is substantial risk. So far, the rewards of trading have not been great enough to induce many realtors to expend the energy or undertake the risk needed to establish a trade-in program.

Financial agencies, too, should be taken to task for lagging behind in the trade-in field. They do not need to sell their money today, so there is no great immediate incentive for helping builders or realtors set up trade-in programs.

So trade-in leadership has fallen to builders—by default if nothing else. Builders probably have the greatest obstacles to overcome, but so far they have also had the greatest potential benefits.

Here are three good ways you can organize your business to handle trades

Trading is based on three main functions: selling the new house, selling the old house, and taking risk on the old house.

All other functions, such as appraisal, financing, and reconditioning are subordinate to these three, and can be performed within or outside your firm without changing its basic character.

You can perform the three major functions within your firm or you can depend on other companies to undertake one, two, or all three of them. But be sure that you make up your mind in advance on this important point.

1. You can operate within your present set-up or team up with a realtor

And if you are a small-volume trader you can probably operate most simply and effectively without substantial modification or expansion of your organization. Over half the 101 trading firms I interviewed performed all three trading functions for themselves.

It is often difficult to find a realtor who will give full cooperation, but one-third of the 101 trading firms interviewed had some type of cooperative arrangements with realtors.

Few realtors will take risk for the builder and when they do, they are often unduly conservative in appraising old houses. Three-fourths of the builders who used realtors to sell traded houses carried the full risk; 10% of the builders shared the risk with the realtors or made other arrangements. When realtors do take a risk on the old house, they are much

more likely to be very energetic about trying to sell it.

Four-fifths of the builders who used realtors paid realty commissions of five per cent for selling the old traded house. Any homeowner can get the same rate, so the builder gets no break for his repeat business. But if the builder does not pay the full commission, he may not get the selling support he needs to move the old house quickly.

But realtors have real advantages to offer builders. A top realtor can provide a builder with an established and experienced sales staff. Realtors are active in the old-house market and know it well; in some cases, they provide the only adequate source of market coverage.

2. You can establish a separate trades staff in your own organization

Firms which do a large volume of business and handle all trading transactions themselves may find a separate department or subsidiary helpful. Either set-up can be simple in make-up and control. In some companies a separate subsidiary or department has been set up for each major function:

old-house sales, new-house sales, and risk-bearing.

But beware the dangers of poor communications and poor cooperation between your new- and old-house-sale subsidiaries. At least two trade-in plans that used this set-up are known to have failed.

3. You can organize a secondary trading firm outside your present organization

Secondary trading firms are designed primarily to facilitate trading for builders or realtors by providing funds for their operations, taking risk on trades, and sometimes serving as a clearing house for trades.

Builders, realtors, investors, or any combination of these three can set up secondary trading firms.

Trade-in Homes of Baltimore is a typical composite organization. Its principals include two realtors, presidents of two savings and loan associations, an attorney, and three builders.

Realty Investments, Inc was formed by nine Milwaukee real estate brokers; its voting stockholders must be licensed realtors and must belong to the Milwaukee Listing Exchange, but outsiders may invest in non-voting common stock.

Some firms are organized to serve only their owners; others look for business from any trader. Gordon Williamson of Detroit, for example, believes a realistic program requires that the builders and brokers being serviced by a secondary trading firm have a financial interest in the firm. Trade-in Homes of Lexington, Ky. insists that all trades by its "cooperating" builder stockholders be handled through the company, which guarantees in return to take any home offered by its members at 90% of the FHA appraised-valuation.

On the other hand, Trade-in Homes of Baltimore will accept trades from any builder. They handle trades for 40 builders; but old houses must, in every case, be listed exclusively with Realtor Mal Sherman.

Most secondary trading firms are organized to provide capital and bear risk, but some also handle the sale of the old house and act as realtors.

Although there are few secondary trading firms at present, they will probably grow in importance. They offer a means of securing funds for trading operations and of relieving trading firms of risk. If the formation of secondary trading firms becomes widespread, trading—especially by builders—will be enormously accelerated.

Here are the three trade-in plans most popular with today's traders

There are three basic trade-in plans—the straight, the guarantee, and the conditional.

Trading under any of these plans has several general advantages. Trading is a competitive sales tool, a means to increase profit, a way to aid financing the construction and sale of the new house, and a means of assuring more house sales. There are disadvantages too, but many of these are caused by lack of information or lack of managerial ability, rather than by inherent disadvantages of the trading method.

1. Straight trades are simple exchanges of equities and are easy to understand

The straight trade-in plan is the simplest of the three because specific prices are set on both the new and old houses and equities are merely exchanged. Salesmen and prospects readily understand this plan.

The principal disadvantage of the straight trade is that a price barrier is immediately established between the trader and his prospect, and the customer has no opportunity to secure a higher price for his house. Straight trades require precise appraisal and more capital than other types (see *p* 228), and the selling problems, risks, and transfer costs are magnified because the trader "owns" each house.

Despite magnified risks, straight trades were taken by more than 60 of the 101 trading firms who contributed information to my survey; but this method of trading accounted for only one-fourth of the 628 completed transactions. Of the 38 companies using just one plan, 18 say they use the straight trade.

2. Guarantee trades give the buyer a better break than any other plan

That's because they involve a trader's promise to purchase a customer's old house at a given price, if it has not been sold by the owner by a specified date.

This promise is given in return for the customer's contract to buy a new house from the trader. The basic terms may be modified by changing the duration of the contract, the date the title passes, or by including an advance of cash or credit. The typical guarantee contract has a duration of 60 or 90 days, but a few traders use terms extending up to six months.

Credit advances are implicit in almost all guaranteed trades. Interest is seldom charged on credit advances but usually is charged on cash advances (when realtors or other third parties are involved in the trade).

The guarantee trade-in plan is highly flexible and both the trader and the prospect are assured of the other's maximum cooperation in selling the old house. Once the prospect understands the plan, he finds it highly acceptable because it assures him of a specified price for his house, but permits him to sell for a higher price if he can. Like the straight trade, a new house sale is assured.

Traders like a guaranteed trade, too, because it is probable that the house will be sold before title must be taken. This

Look how Bill Levitt is meeting the changing market:

More house, more money, more value

Like most builders across the country, Bill Levitt has found that his market has been changing—prospects want a bigger and better house and they are willing to pay for it.

And like many smart builders across the country, Bill Levitt has been changing his houses with the market. Less than a year from the day he opened his third Levittown (in N.J.), he:

- 1. Increased the living space in each of his three new models (shown opposite) either by adding more living space or finishing off living space originally left unfinished. (He even abandoned the "expansion-attic" model that made him famous and originally built his huge volume.)
- 2. Increased the price of each of his three new models. To cover the cost of making his models bigger, Levitt upped prices from \$500 to \$750. When the models were introduced (at the low point of the recession) Levitt's prices were as low as he could make them, and one model had the lowest price tag (\$11,490) he had offered for years. Today, the lowest price tag is \$11,990; and two models are selling fast at prices above \$13,000.*
- 3. Increased the value in each of his three new models. The original models had lower sq ft prices (\$8.23 to \$10.40) than any houses Levitt had ever built. But as the models grew in size and price, their price per sq ft of living space dropped still lower, so the revised models offer even more house for the money than the original models.

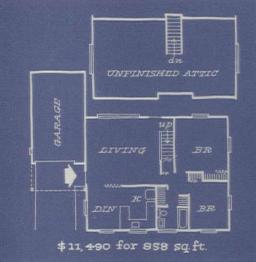
Here is how Levitt changed each of his three models

Change No. 1: Levitt's 1½-story model was originally offered with an unfinished attic (one of the most popular features in his first Levittown on Long Island). At \$11,490, this model sold so slowly that Levitt discontinued it only two weeks after opening, now offers only a completely finished version, with two bedrooms and a bath on the upper floor, at \$11,990. (For photo and plans of the 1,419 sq ft house, see top row opposite.)

Change No. 2: Levitt's 2-story model was originally offered as a three-bedroom house, at \$13,990. But many prospects who liked the space in this 2-story model (1,700 sq ft) wanted four bedrooms. So, last December, Levitt enlarged the house by 70 sq ft, fitted in a fourth bedroom, upped the price to \$14,500. This change reduced the sq ft price from \$8.23 to \$8.19. (For photo and plans, see center row opposite.)

Change No. 3: Levitt's 1-story model was originally offered in a 1,200 sq ft version at \$12,490. Its sales quickly fell behind the other two models (though total sales were still well ahead of Levitt's 350-house-a-month building schedule). Anxious to increase the sales of his 1-story house (to maintain a balance of the three models along his streetscapes), Levitt gave the model a new exterior (see photos, bottom row opposite) but kept the same plan. This failed to stir up enough sales. (Levitt post-mortems this way: at 1,200 sq ft, the house was not big enough for the market, and at \$10.40 a sq ft, it was not enough house for the money compared to the 1½-story at \$8.44 and the 2-story at \$8.19.) So he discontinued this model, brought out a completely new 1-story with 200 sq ft more living space. And despite a price boost of \$750—to \$13,240—within two months the house was Levitt's best seller. (For plan and selected details of this model, see p 142.)

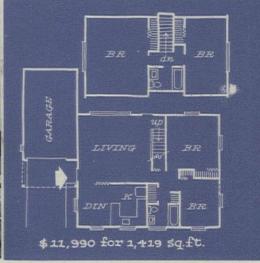
^{*}This reflects the trend in national statistics: Housing Economist Miles Colean estimates that over 24-million families today could qualify FHA to pay at least \$12,000 for a house.



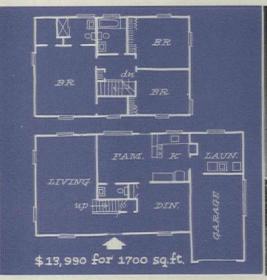
Original, "expansion-attic" plan



Revised, four-bedroom plan



Change No. 2. 2-STORY MODEL



Original, three-bedroom plan



\$14,500 for 1770 sq.ft. Revised, four-bedroom plan



Change No. 3. 1-STORY MODEL



\$12,490 for 1200 sq.ft.

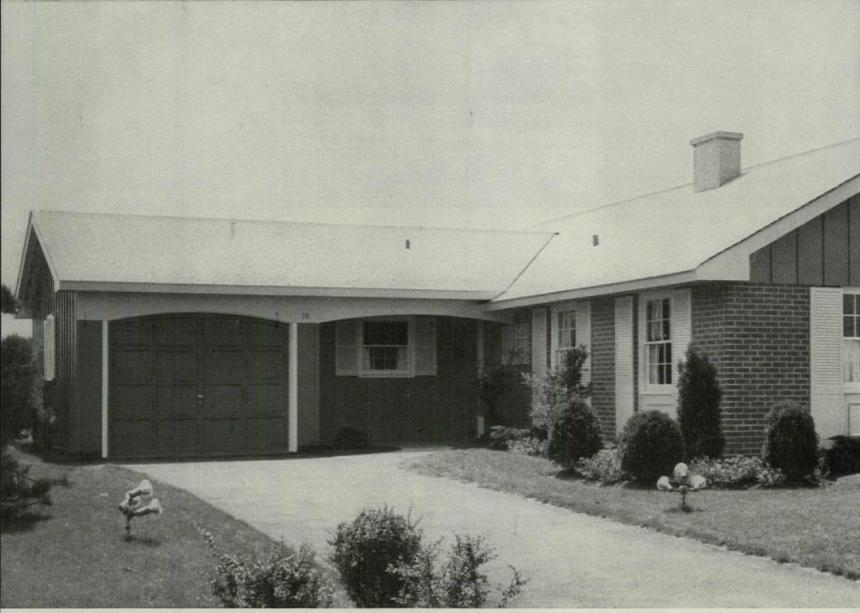
To see brand new, enlarged 1-story model, turn the page

Original and revised elevations (now discontinued) Original plan (discontinued)

ADDED SPACE

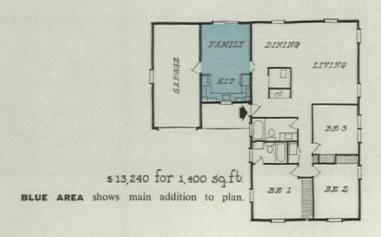
LAUN

H&H Staff



EXTERIOR is similar to smaller, discontinued model. Major changes are in the plan, orientation to the street, and roof line.

Here is Levitt's latest best seller—a new one-story model



Bill Levitt says it is the best value in a 1-story house that he has offered in 30 years of building.

At \$13,240, it is also the highest-priced 1-story house Levitt has ever offered.

And it is the new best seller in Levitt's three-house line (see preceding pages), even though its sq ft price is well above the sq ft price of his 1½- and 2-story models.

Why is this new 1,400 sq ft model such a fast seller?

- 1. It has a family room—the first time Levitt has offered this feature in a 1-story house. (His 2-story model in N.J. has a family room, his 1½-story does not.)
 - 2. It has easy access for indoor-outdoor living. The family



at \$9.45 a sq ft

room is open to the rear yard through sliding glass doors. This is the only model in Levitt's New Jersey line which has this feature.

3. It has a formal dining area in addition to an informal dining area in the family room.

And, as in all Levitt houses, the price includes a minimum 65' x 100' lot, kitchen and laundry appliances, screens for all windows, and complete landscaping.

To make the 1-story model look bigger amidst its $1\frac{1}{2}$ - and 2-story neighbors. Levitt gave it a higher (6-in-12) roof pitch, oriented the house so the gable of the main living area (rather than the lower garage gable) faces the street.



U-SHAPED KITCHEN opens to family room. Window overlooks entry.

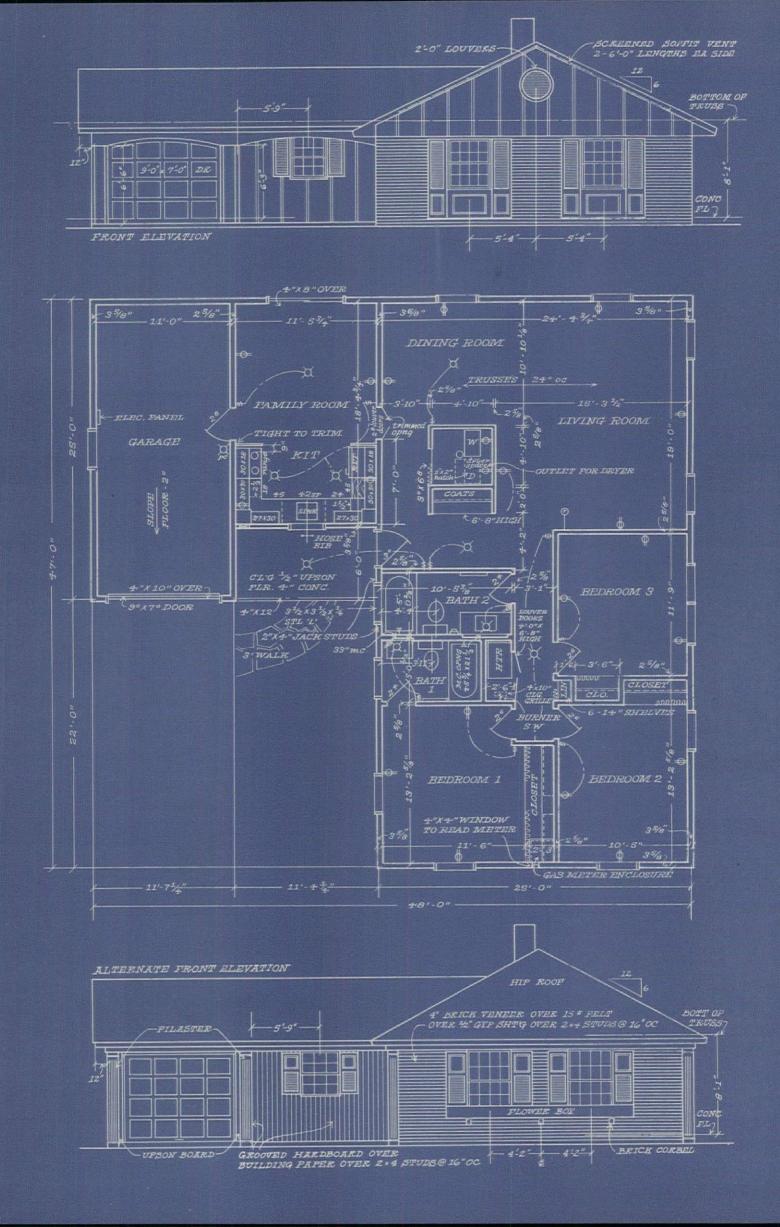


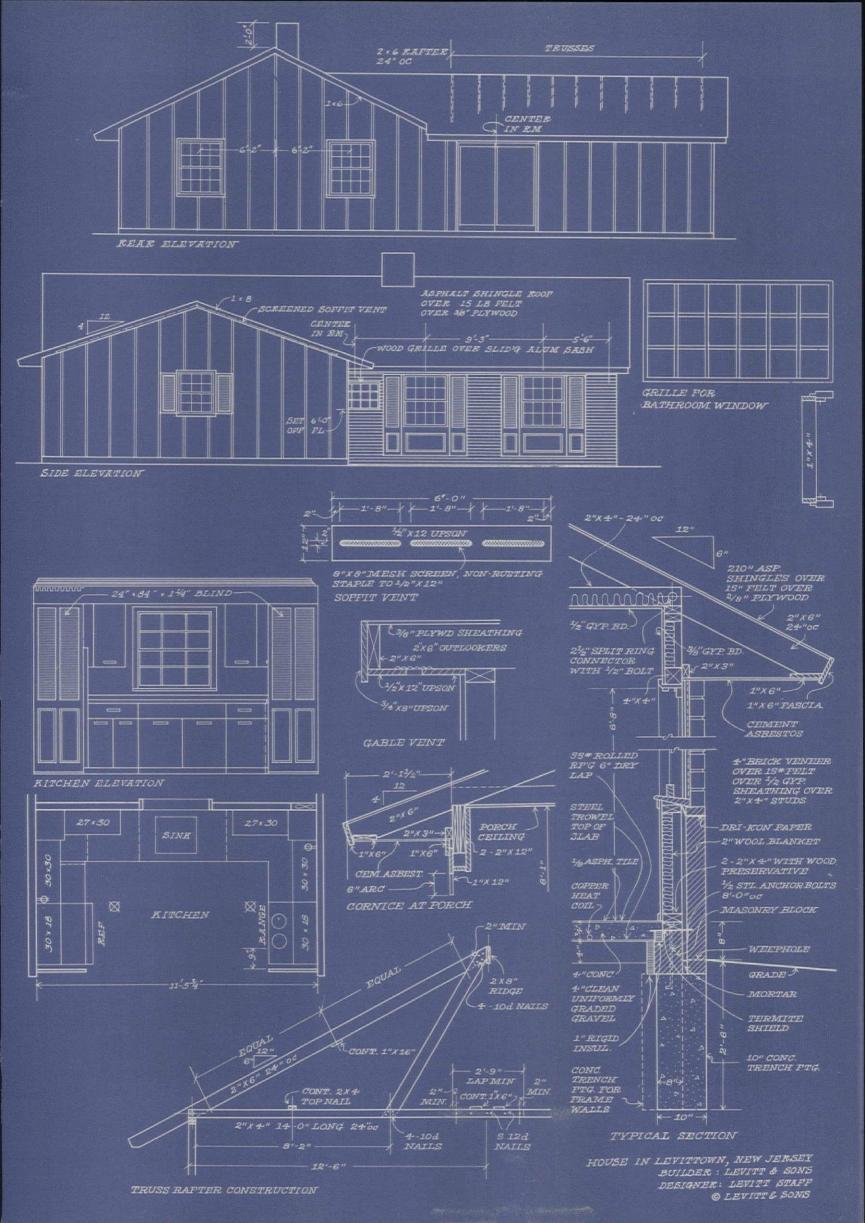
FAMILY ROOM opens to rear yard through sliding glass doors.



FORMAL DINING AREA opens to kitchen through louvered doors.

For selected details from this house, turn the page





let's sharp the pencil As a builder, you know the public's demand for more and more value at less and less cost. Neat trick if you can do it - and you can - if you really sharpen your pencil.

Leigh makes a wide range of building products specifically designed to help you offer more home-selling value at less actual cost. Let's take the new Leigh Adjustable Wardrobe Shelf, for example, and compare it with the national average cost a finished wooden shelf and closet pole:

LEIGH ADJUSTABLE WARDROBE SHELF VS	. WOODEN SHELF AND CLOSET POLE	
MATERIALS	MATERIALS	
Leigh shelf \$4.00	Shelving\$1.13	
(supports included)	Supports & Trim	
LABOR	Wooden Pole	
Installing	LABOR	
TOTAL COST\$4.37	Cutting, fitting, trim-	
	ming, and installing , 2.25	
	Sanding, priming &	
	painting 1.80	
	TOTAL COST\$6.23	

You have just saved \$1.86 per closet while offering your customers a highly attractive, warp-free shelf with baked enamel finish and built-in clothes carrier!

A free booklet, just off the press, proves specifically how each of many other Leigh building products can effect profit-building savings and help sell homes faster

Write for your copy today - see your Leigh dealer soon!

FREE-24 PAGES OF IDEAS TO CUT COSTS AND SELL HOMES FASTER

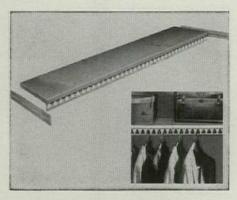




BUILDING PRODUCTS
Division of Air Control Products, Inc.

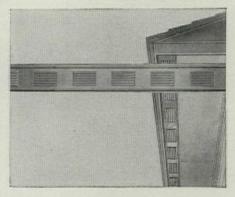
1759 Lee Street

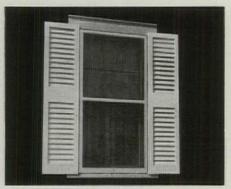
Coopersville, Mich.



ADJUSTABLE TRIMVENT Alumiwith built-in clothes carrier, ivory baked sizes for closets from 23" to 84". Free booklet shows how you save \$1.86 per closet.

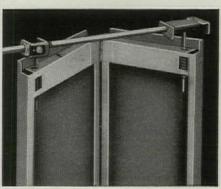
WARDROBE SHELF num Strip Ventilator - replaces a board in the soffit. enamel finish. Five 'looks like trim, provides large free area. 8-ft. lengths. Free booklet shows how you save \$3.24 per home.





ORNAMENTAL FULL-VU FOLDING enamel finish, how you save

SHUTTERS in au-thentic louver de-lutionary traverse signs. Rustproof rod instead of top aluminum, baked track. 18 minutes to install-can't come choice of colors, out of alignment. Free booklet shows Free booklet shows how you save \$8.10 per window. \$13.70 per closet.



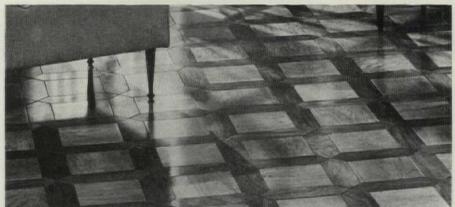
In Canada: Leigh Metal Products Ltd., 72 York St., London, Ontario

TO BUILD BETTER

A monthly report on home building ideas, products, and techniques

Starting here

New products



Monticello floor block is a new low-cost version of the flooring in Thomas Jefferson's home. It is laid in matched or contrasting woods in a pattern of square blocks separated by mitered bands. Squares are 9"x9"x½", bands are 4"x13". Laminated blocks are prefinished, can be laid in mastic over concrete or wood subfloors. Price varies with kind of wood; \$2.50 a sq ft for all oak.

Wood-Mosaic Corp, Louisville. For details, check No. 1 on coupon, p 239



Ventilating skylight combines a fiberglass reinforced skylight with a 108 cfm squirrel cage blower. Skylight is available in self-flashing or curb-mounted models in a choice of five colors. Aluminum frame finishes off ceiling opening with or without ½" cubical diffuser. Designed for 20"x20" opening. Retail price: \$59.50 and up.

Consolidated General Prods, Houston. For details, check No. 2 on coupon, p 239



Versatile range hood, called Selecta-Matic, is newest in NuTone line. Slim hood adapts to any of three blowers—deluxe or standard vent fans or a wall fan. Built-in controls compensate for voltage variations. Filters remove easily for cleaning (see photo). All hoods are 21" deep, 30", 36", 42", or 48" wide. All power units are concealed, do not protrude below or above hood. Come in copper or satin anodized aluminum, stainless steel, and two copper enamels. Hoods cost \$20 to \$61, power units \$34 to \$52.

NuTone, Cincinnati. For details, check No. 3 on coupon, p 239

And on the following pages

Technology

Shop work makes better plumbing at lower cost . . . An easy way to build multiple plywood roof vaults . . . New way to get tough, colorful surfaces . . . page 162

What the leaders are doing

Built-in under the roof TV aerial . . . Show buyers how to landscape . . . Is there a trend to separate dining rooms? . . . Colored kitchen appliances gain in popularity . . .

page 173

Publications

Better paperwork on FHA loans . . . Ideas for bathrooms, better lighting, using large-size tile . . . Catalogs on hardware, insulating windows, colored bathrooms . . .

page 234

More

New products

Double-hung windows with insulating glass . . . Electronic air cleaners aid in complete air conditioning . . . Laundry appliances, ovens and cooking tops, structural and door hardware . . .

page 191



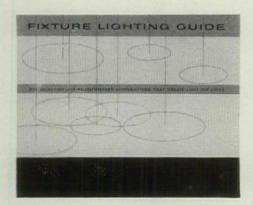
Light for Living





WHAT'S MISSING from this picture for you? Part of the profits! There are a lot of profitable "built-ins". But you don't have to look hard to see that what's missing is the lighting. And the right kind of lighting—Light for Living—can be a profitable part of any job.

LIGHT FOR LIVING in this kitchen transforms it—makes the home more appealing. To-day more and more up-to-date builders are using attractive fixtures and built-in lighting to make their homes easier to sell—and for more money.



SEND FOR GENERAL ELECTRIC'S FIXTURE

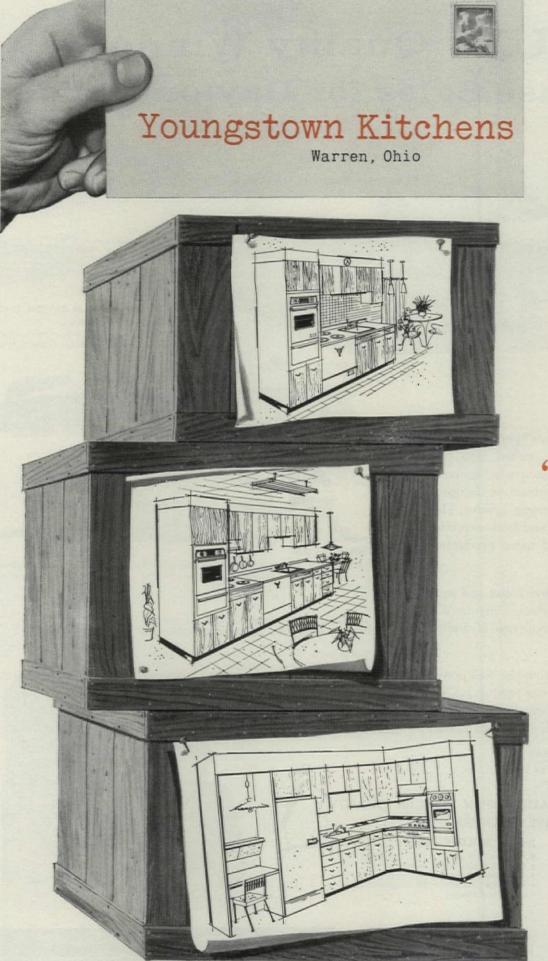
LIGHTING GUIDE—You'll want this all new 40-page color booklet. It shows how to: handle soffit, canopy, cove, cornice, valance, and wall bracket lighting • install luminous ceilings and luminous wall panels • select, group and merchandise fixture combinations • use lighting specifications easily, accurately • and much, much more! Send \$1.00 to General Electric Co., Large Lamp Dept. L-108 X, Nela Park, Cleveland 12, Ohio.



BUY G-E AND SEE

Progress Is Our Most Important Product





Be sure to see Youngstown Kitchens new mar-resistant laminates.

Just send us your building plans

WE'LL SAVE
YOU MONEY
WITH A
QUALITY
"PACKAGED
KITCHEN"
TO FIT YOUR
INDIVIDUAL
NEEDS

You'll be amazed how much better a kitchen you can build...how much more value you can offer in your model home...if you let us "package" a kitchen for you. Our experts, with years of experience in the building business, will work from your plans, rough sketches or budget specifications to create a kitchen with every feature to help you sell your homes.

"Packages" can be prepared almost overnight from the world's largest selection of kitchen components...including new mar and stain-resistant laminate styles in our Woodcharm line. Ask your Youngstown Kitchens representative to show you the new book of "Packaged Kitchen" styles and planning suggestions.



American-Standard, Your Builder Dept. HH99, Wa Please send me full deta		
Name		
Firm Name		
Address		
City	Ci-t-	

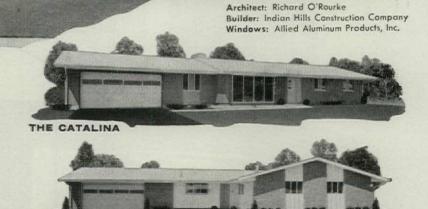
PENGUIN Quality Windows Help Increase Sales for Dayton Builder

Penguin Aluminum Sliding Windows typify the dozens of quality construction features packed into these \$20,000 bracket homes. 200 of them are being erected in Dayton by the Indian Hills Construction Company. President of the firm, award-winning builder, Herb Simon has pioneered in the use of quality construction, de luxe extra features and brand name products in homes of moderate cost.

In Belleview Estates, houses move faster and easier with greater buyer satisfaction where Penguin Windows offer visible and salable evidence of built-in quality.

Learn how you too can benefit from the "sell power" of these outstanding windows in your production built homes. Add prestige, quality, performance and appearance with Penguin aluminum rolling windows at once.

Refer to Sweets L. C. File 6A



BELLEVIEW ESTATES, COMMUNITY OF 200 FINE HOMES IN DAYTON, OHIO.

THE AVALON

Both homes are equipped with Penguin Rolling Aluminum windows throughout. The Catalina also features the unique Sapphire operating picture window, 6½ ft. x 12 ft.

ART PETERMAN, VICE PRESIDENT AND HERB SIMON, PRESIDENT OF INDIAN HILLS CONSTRUCTION COMPANY MR. SIMON SAYS: "Belleview Estate is an archi-

tecturally planned community of quality homes. The outstanding features of Penguin Windows contribute to their livability and are recognized immediately by our customers. The windows come assembled, glazed, and inspected ready for job site installation, which saves valuable time."



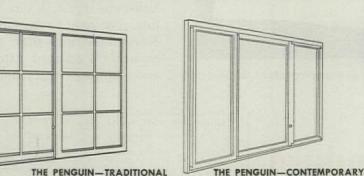
BUILDER AND BUYER BENEFIT ALIKE WHEN PENGUIN QUALIT WINDOWS ARE SPECIFIED

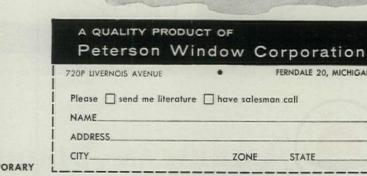
HOME BUYERS ENJOY ...

- Self storing storms and screens Prowler-proof ventilation—locks in two open
- Smoothly operating sash—rides on rollers Sash lifts out for easy inside window washing

HOME BUILDERS LIKE . . .

- Assembled and glazed ready for installation Attached anchors for fast installation
- Aluminum sash—save painting costs Adjustable track allows sash realignment after plastering if required





ALSO MAKERS OF SAPPHIRE AND PARAGON WINDOWS AND DAISY SLIDING GLASS DOORS



Homes sell faster — at full price — when they feature "the light idea" by Virden. This new concept in home lighting enables you to provide the right lighting mood for every occasion, to bring out the full beauty of your built-in features, to safeguard and protect, inside and outside the home. It's a quality feature you can demonstrate, lets you sell day and night.

And the wonderful thing about "the light idea" is how little it costs! For only a little more it gives your home an exciting, wanted sales feature, worth far more than its small cost!

Put "the light idea" by Virden to work selling for you. See your local Virden distributor. He is listed under "Lighting" in your telephone book. Or mail the coupon below for a copy of our new "light idea" catalog. 52-pages in full color show-

ing the new line of Virden lighting plus dozens of "light ideas" for you to use.



Virden

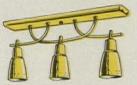


A Division of the John C. Virden Company
Cleveland 3, Ohio
In Canada, John C. Virden Co., Ltd., Toronto, Ontario

Which of these four Virden "light idea" fixtures will add new sales appeal to your homes?



New! Sunshine Ceiling! For kitchen or bathrooms. Complete packaged units, 4' x 4' and 4' x 6'. Installs on regular ceiling, V-8044.



New! Accent Lighting! Add glamor and sales appeal to your built-ins. V-6290 shown is just one of a dozen designs.





Virden Lighting, Dept. HH
5209 Euclid Avenue, Cleveland 3, Ohio
I want to know more about "the light idea". Mail me your nev
"light idea" catalog and the name of my local Virden distributor

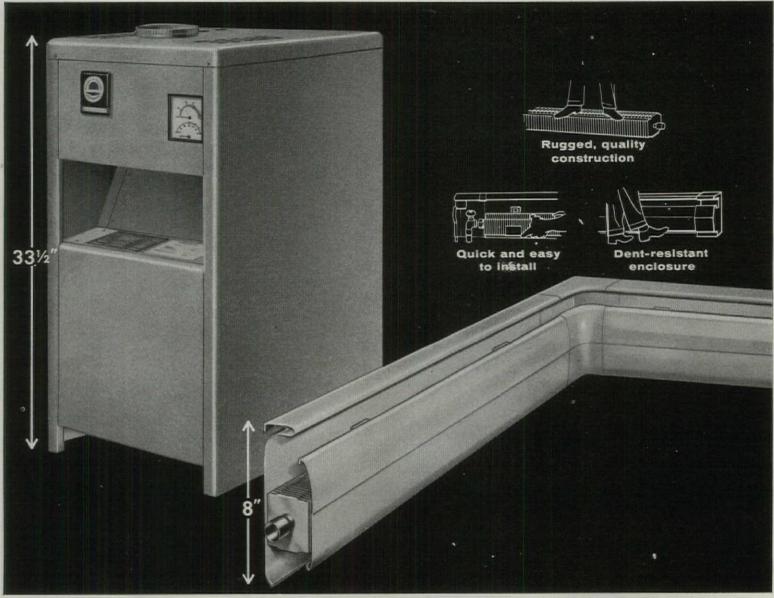
Name____

Address ______ Zone ____State _____









ADD EXTRASELL to your houses economically—with hydronics'

Buyers quickly recognize American-Standard hydronic heating as top quality. Here's why it adds *extra* appeal to your house.

Compact Heatrim baseboard panels allow the decorating freedom of full-length draperies and any furniture arrangement. Heating is uniform, draft-free throughout the house, even in rooms with window walls. Heatrim comes in four lengths, which means minimum cutting. Installation time and space are saved by extending the copper tubing through walls.

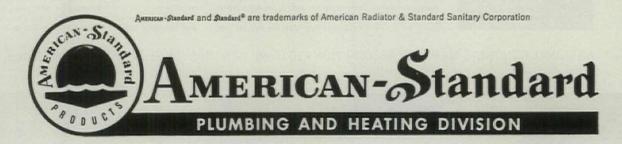
The new G-2 gas boiler is so compact and attractive it can be installed anywhere—even where space is limited

and on combustible floors. When you install a G-2 with built-in water heater, you save the cost of a separate water heater. Boilers ordered "packaged" arrive with all accessories and controls factory-mounted and wired for fast installation.

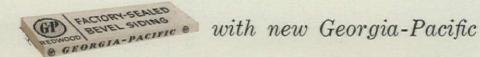
Give buyers the draft-free, economical comfort of hot water heat at little, or no, extra cost. They know it, recognize it, want it.

For more details, see your heating contractor or write AMERICAN-STANDARD, PLUMBING AND HEATING DIVISION, 40 W. 40th Street, New York 18, N. Y.

*The science of heating and cooling with water

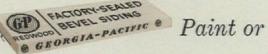


Cut paint costs, damage loss



Factory-Sealed Bevel Siding. G-P immersion-sealing process eliminates

on-the-job priming - saves up to \$40. per M feet!

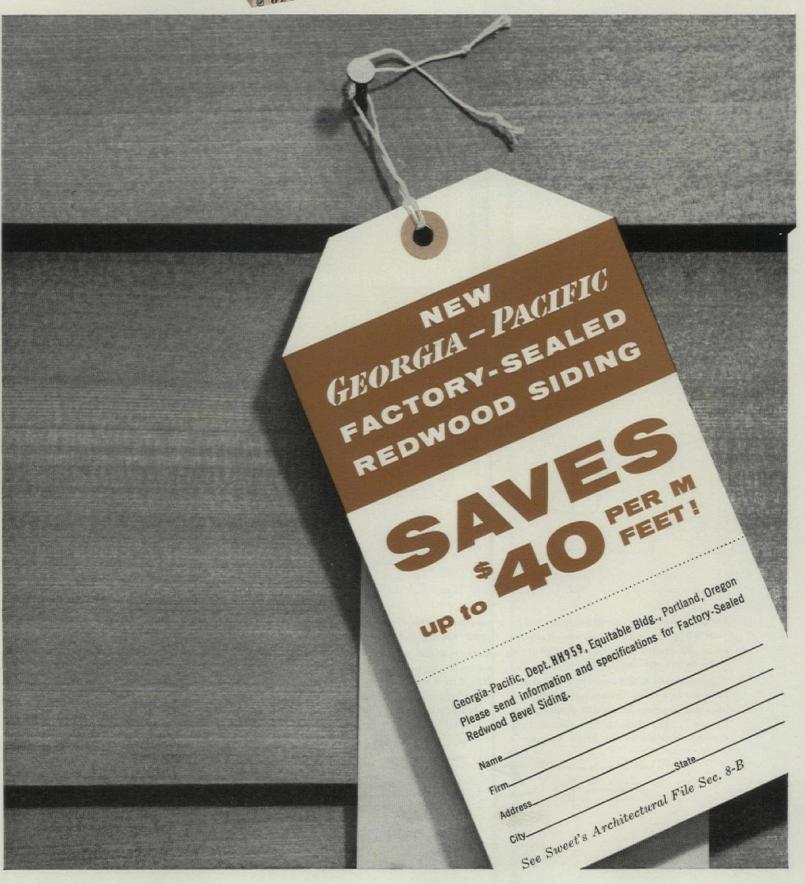


stain finish-coats flow on faster, cover better, last longer. New plastic-coated,

heat-sealed package

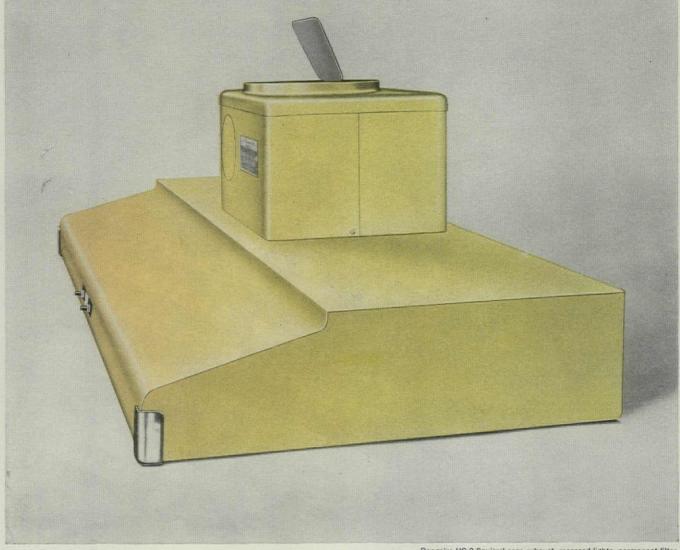


cuts handling time and damage loss!



A PRODUCT OF RANGAIRE BUILDER-ENGINEERING RESEARCH

DISTINCTIVE DESIGN AND QUALITY YOU CAN INSTALL WITH PRIDE!



Rangaire UC-2 Squirrel cage exhaust, recessed lights, permanent filter

Styled to excite your prospects, priced to fit your budget-nationally advertised Rangaire offers the widest selection of range hood styles, colors and sizes anywhere.

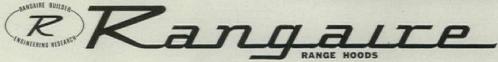
A great favorite with homebuyers, Rangaire's lustrous wipe-clean finishes and distinctive lines add luxurious beauty and dignity to any kitchen . . . and there are no hard-to-clean exposed parts under the hood. Rangaire's

powerful, trouble-free exhaust unit removes greasy smokes and odors instantly.

Easily installed, with all color-matched accessories in one package and no extras to buy, Rangaire is a favorite with builders, too. For a quality plus you can point to, with pride, install a Rangaire in the home you're building now. Call your friendly Rangaire dealer today - you'll be glad you did.



For further information write Dept. H2 Roberts Mfg. Co. Cleburne, Texas





Mr. Sirpilla's Plain Center Estates, Canton, Ohio, will have 200 homes of various styles. All new houses in the project will feature G-E Remote-Control Wiring.

"G-E REMOTE-CONTROL WIRING HELPED ME SELL HOUSES DURING THE '58 RECESSION-WHEN MANY BUILDERS WERE HAVING TROUBLE"



"One twist of the dial, and 12 lights come ON" says Pat Sirpilla (left)—as Ellis Bush, electrical contractor, demonstrates the G-E master selector switch.

... Mr. Pat Sirpilla, Sirpilla Construction Co., Canton, Ohio

"When the market for new homes tightened up in 1958," says Mr. Sirpilla..."I asked my electrical contractor, Ellis Bush, for something to give my project more sales appeal. He hit a real gold mine for me by suggesting General Electric Remote-Control Wiring!

"This G-E system is so far ahead of the ordinary 'snap-switch' wiring that people saw in other houses around here, that it helped me sell right on schedule—just when other builders were having trouble.

"Everybody who comes into our homes is intrigued by the smooth appearance of the G-E Remote-Control switches—impressed by having a switch at every door, so there's no backtracking to turn lights ON or OFF. And the master switch that turns ON 12 lights from one spot in the garage or bedroom is the clincher!

"People who have bought my houses are so impressed with the system that they're turning out to be my best salesmen! You can bet I'll put G-E Remote-Control in all the homes I build this year."

Ask your own electrical contractor or General Electric distributor about this wiring that helps sell houses fast! Meantime, send for your free copy of the new "G-E Remote-Control Wiring Book for Builders." Write General Electric Company, Wiring Device Department, Providence 7, R. I.

Progress Is Our Most Important Product



Exclusive from the Oregon Mills of



NEW ALLWOOD ALL

The first engineered siding that is dimensionally stable

Builders get important savings in both material and labor costs with Hines Allwood Allweather Siding. Made of tempered hardboard tightly laminated to a tough veneer cross ply and a lumber core for high dimensional stability and rigidity. Precision-cut standard 8' lengths, 12" wide, reduce waste. Self-aligning feature permits fast, easy application by one man. Extra fast with two men.

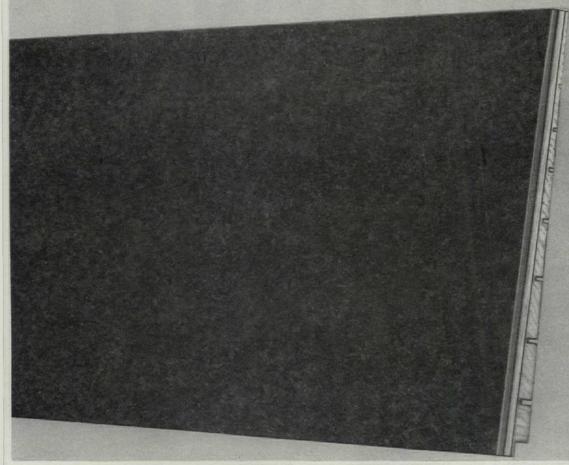
Because of its combination of the best properties of hardboard, plywood and lumber—engineered in Hines own research facilities at Hood River, Oregon—Hines Allwood Allweather Siding greatly increases structural strength of wall. Exterior glue between plies. No snaking or buckling between nailing points. Tempered hardboard surface resists abrasions and hammer marks. Can't split, sliver or check. Takes less paint, holds it better. Pentachlorophenol water-repellent preservative protects all sides and edges against insects and decay, prevents wicking. Sold nationally in protective package. Send now for free samples.



BUILDER REPORTS 20% SAVINGS

Vincent Rodway, carpenter contractor, used Hines Allwood Allweather Siding on a model home at 2150 Glenview Rd., Wilmette, Ill. He says: "My estimate of $20\,\%$ savings is conservative. The saving on material alone over ordinary siding was tremendous. My waste was less than $10\,\%$. The standard length, with no shorts, saved time on labor, of course. There was no need for splicing."

HINES



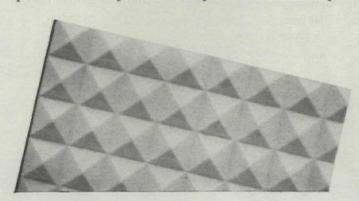
- One man can put it up
- Minimum expansion and contraction
- No splitting
- Less waste
- More coverage

Rabbeted lower edge makes Hines Allwood Allweather Siding self-aligning, leaves 11½" of face exposed for greater coverage and attractive modern appearance. Application requires no wedges or furring strips.

WEATHER SIDING!

HINES ALLWOOD SHADOBORD

New decorative hardboard costs barely more than ordinary hardboard. Newest of 10 Hines Allwood Hardboard decorative panellings. Adds the customer appeal of decorative panelling to building or remodeling jobs at unexpectedly low cost. Most complete selection of embossed patterns offered by any hardboard. Varied sizes and thicknesses, standard or tempered, Available anywhere. Use coupon to send for free samples.



Just call or write the man from

HINES

Edward Hines Lumber Co.

Sawmills at Hines, Westfir, Dee & Bates, Oregon. Other plants: plywood, Westfir; hardboard, Dee; millwork, Baker & Hines, Oregon. Engineering & Development Division: Hood River, Oregon.

Address_



Send for actual samples today

Edwa	ard Hines	Lumber (Co., Special	Products	Dept.
200 S	. Michigan A	ve., Chicago	4, 111.		

Please send me complete information and samples of:

Name_____

Hines Allwood
Allweather
Siding

Hardboard decorative

Company Hines Allwood

panellings

Both new

City____State___

IN CHICAGO...

Al Rubin, leading masonry contractor, gets maximum crack resistance with

KEYWALL

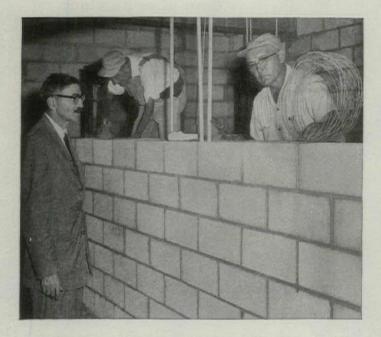
galvanized masonry reinforcement

"You just can't beat Keywall," says Al Rubin, 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."

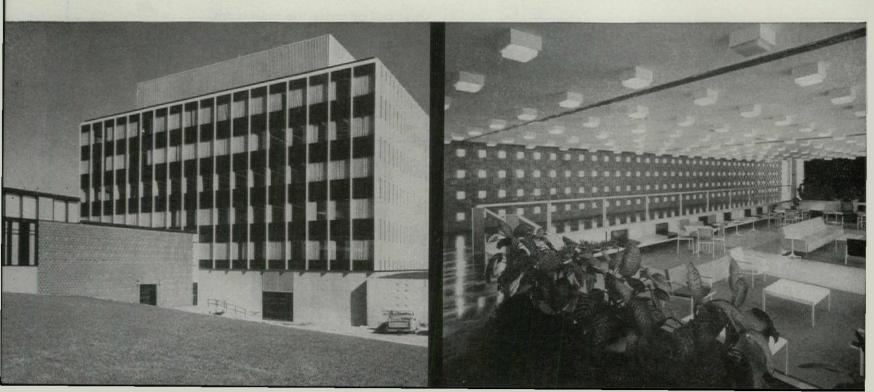
By using Keywall masonry reinforcement on his jobs, Rubin gets stronger walls with greater crack resistance. This is one of the reasons he's recognized for quality masonry by leading Chicago architects and builders.

Rubin'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. Rubin (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.

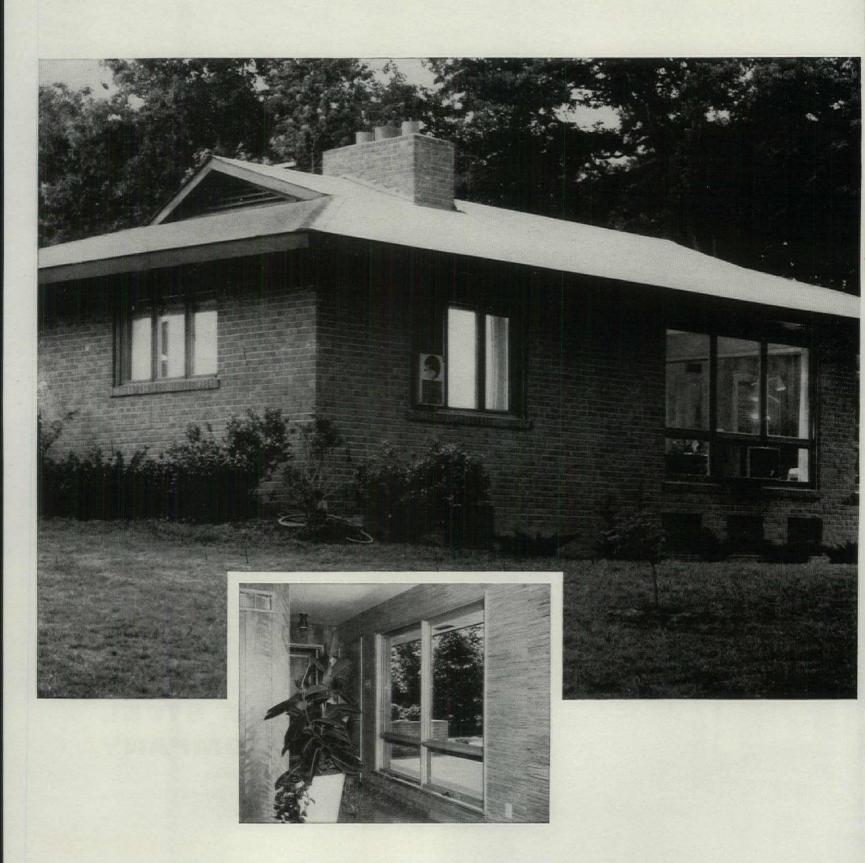




Peoria 7, Illinois

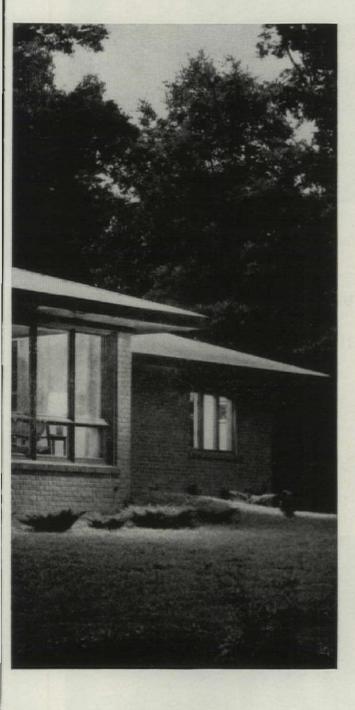
Keywall ● Keycorner ● Keymesh® ● Keystrip ● Welded Wire Fabric ● Nails

"I have found it costs considerably less to install with TWINDOW than to make the same



a large window area area a solid wall,"

says builder Spencer L. Dickinson, St. Louis, Missouri.





Mr. Dickinson builds about 10 better-type homes a year in the St. Louis, Missouri, area. Many of his homes are designed to take advantage of a particularly fine view and to remove the feeling of separation between indoors and the outside. And in certain homes he has made allowances for the future inclusion of air conditioning.

Both of these requirements have given Mr. Dickinson considerable experience with Twindow. He sums up his observations in these words: "Homes built for future air conditioning require Twindow when they are created, to insure efficient operation of the air conditioning unit. Twindow adds beauty, insulating value and the viewing area demanded by the buyers—at no extra cost over the same area with a windowless wall. In fact, I have found it to cost considerably less to install large window areas and include Twindow than to make the same area a solid wall."

Why not explore the possibility of incorporating more sales appeal, greater comfort, and lower cost in the homes you build by including Twindow in their design? We shall be pleased to send you our free booklet which contains valuable information on the sales points, handling and installation of Twindow. Write to Pittsburgh Plate Glass Company, Room 9211, 632 Fort Duquesne Blvd., Pittsburgh 22, Pennsylvania.

TWO TYPES OF TWINDOW



TWINDOW—METAL EDGE. This type is ideal for large windows and where maximum insulation is needed. It's made up of two panes of ½" clear-vision Plate Glass, with a ½" sealed air space between. Its stainless steel frame, a TWINDOW window the feature, eliminates bare edges . . . makes handling safe, quick and easy.



TWINDOW—GLASS EDGE. This type is just the thing for modern window-wall construction. Having exceptional insulating properties, it is constructed of two panes of ½° PENNVERNON®—the quality window glass—with a ½'s° air space between, TWINDOW glass edge units are available in popular sizes for a variety of window styles.

TWINDOW®

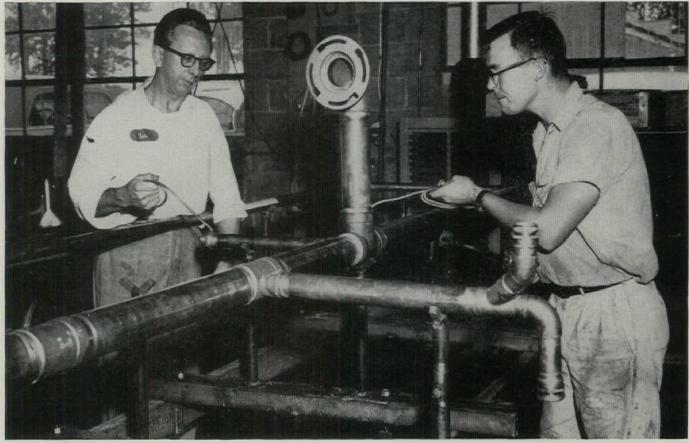
... the windowpane with insulation built in



PAINTS . GLASS . CHEMICALS . BRUSHES . PLASTICS . FIBER GLASS

PITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED



BIG ASSEMBLY JIG in plumbing-fabrication shop permits soldering of reports National Homes. Jig holds tree at convenient working height, waste and vent tree four times as fast as by conventional field methods,

can be adjusted for trees of different shapes.

Shop methods like these can give you better plumbing at half the cost

They come from the nation's biggest prefabber, but they are the kind of methods that make sense for any plumbing contractor who does production-house work.

National Homes says efficient production methods (most of which are shown here) are the main reason why it can provide a complete plumbing system (tub, lavatory, toilet, sink, water heater, piping, and local hookup) for a one-bath

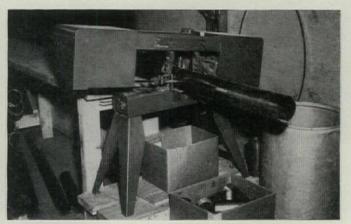
house for \$450. Put together at the site by conventional methods, the same system would cost \$900, National claims.

The key to these better methods is shop fabrication of the entire plumbing tree-a practice that might be more widely followed were it not for the problems of local codes. Doing the whole job in the shop permits the use of equipment that saves labor and assures tighter fitting joints.

Power tools like these simplify tube-cutting jobs

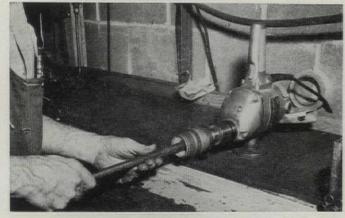


RADIAL SAW makes 1,000 cuts an hour on water-supply tubing-"is so much faster than hand cutting," National says, "that a comparison is difficult." Adjustable stops on table are set for standard tube lengths. After each pass by saw, air jet pushes cut pieces down incline in foreground and leaves table free for next cut.



BAND SAW makes 75 to 100 cuts an hour on drain tubing-is 15 times faster than conventional hand cutting. Tubing (3" or 4") rests on bench (behind saw); cut-off pieces drop into box in foreground. National says use of band saw assures square cuts, which make for tight joints when lengths of tubing are assembled.

Power tools like these simplify tube-cleaning jobs

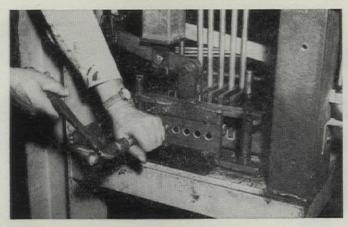


BENCH-MOUNTED HAND DRILL chamfers and deburrs 500 to 700 supply tubes an hour—is ten times faster than tools normally used for these jobs. The ½" drill, mounted upside-down, has a chuck that was adapted to take a standard plumber's reamer and chamfering tool. It is used only on ½" and ¾" supply tubing.

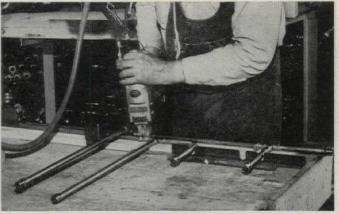


ABRASIVE BELT cleans 100 to 400 tube ends an hour in preparation for soldering—is more than ten times faster than manual cleaning. Supports in foreground take most of tube's weight, but permit slight pressure between tube and belt. Abrasive wheel at left is driven by belt and used to clean insides of fittings before soldering.

Clever work-holding devices like these simplify a variety of jobs

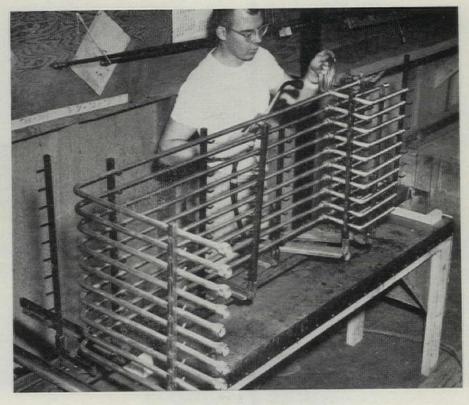


FLARING VISE holds five tubes, lets one man flare 60 to 70 tubes an hour—five times the output with one-at-a-time flaring. Vise is closed and opened by pneumatic piston above operator's left hand (pushbutton controls are out of picture at left). Like other work-holding devices shown here, this one was made in shop from scrap metal.



STAPLING GUIDE, made of notched angle iron, holds supply trees for hot and cold water in correct alignment while they are fastened to board. Useing pneumatic stapler, one man can fasten 35 to 50 trees an hour. Board, which becomes part of house at site, holds tree rigid during shipment, thus protects it from damage.

soldering stand holds ten supply subassembles, allows worker to solder 100 to 150 joints an hour—three times more than by soldering subassemblies one at a time. Fingers on uprights support tubes. Uprights are bolted to angle-iron arms, which are bolted to bench. Uprights and arms can be repositioned to take different subassemblies,



Technology continued on p 166

Kitchen dining area. Notice how clean whiteness of Insulite Roof Deck matches appliances and tables.



Home is built on three-foot module with four roof heights. Highest is over the living room.



Photos by Ernest Silva, courtesy Living for Young Homemakers

Builds Japanese-type masterpiece with Insulite Roof Deck throughout

Before even selecting a lot, Ernest Silva, owner of this unusual home, spent five years doing research on Japanese architecture.

It's easy to see that his builder, Ralph Lill of Rochester, N. Y., and architect David Leavitt, A.I.A., have helped him make the most of his ideas. They have also helped Mr. Silva take full advantage of Insulite Roof Deck's exceptional decorative and practical characteristics throughout the home.

Inside and out, its clean, white finish adds to the beauty of this remarkable home. Insulite Roof Deck's 4-in-1 functional advantage economically provides decking, insulation, vapor barrier, prefinished ceiling—all in one. Its superior washability enables it to retain its bright, new appearance.

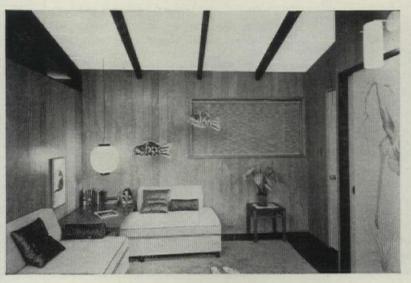
Save money, add beauty like this to homes you build with Insulite Roof Deck. See your lumber dealer for facts, or write: Insulite, Minneapolis 2, Minn.

build better, save labor, with

INSULITE. Roof Deck



Insulite Division, Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota



Oriental influence is built into every room of home. Note how Insulite Roof Deck blends with decor.



Night photo shows how Insulite Roof Deck provides a built-in feeling of continuity throughout.

Builder Ralph Lill (left) and owner Ernest Silva are extremely pleased with Insulite Roof Deck. Mr. Lill says, "It's easy to work with. Goes on fast."







TOP SKIN is nailed to ribs. Note box beams under ends of the ribs.

Here is a simple way to build multiple plywood roof vaults

You no longer need highly skilled labor, expensive glue presses, or a fully equipped shop to build vaults like the ones shown here—you can build them on your custom-house site with carpenter labor. And you can build them for a little more than half the cost of usual shop fabrication.

Only three steps are required to roof over the area:

- 1. Span the area with box beams. The ones shown here are 21' long, 12" deep, and are set on 6'8" centers. They are made of 2x4s with stiffeners (2x4s and 4x4s) 2" oc. This frame is covered with 5%" medium density fir plywood glue-nailed to each side.
- 2. Span the box beams with arch ribs. The ones shown here are 3'6" oc, and

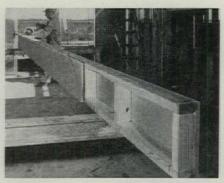
are made of six plies of ½" fir plywood. Rib ends are beveled to fit into beveled troughs above the box beams. Ribs of adjoining vaults butt against each other.

3. Cover the ribs. Here 3/8" A-C fir plywood is nailed on top, 1/8" perforated Masonite is nailed to the underside. Four 4'x7' sheets of plywood are used on each vault, with long sides parallel to the box beams. The perforations in the hardboard underside allow the roof to "breathe," and improve acoustics. Top surface is plastic emulsion roofing and white marble chips.

The vault system was designed by Houston architects Zimmerman & Wisdom. The builder, Fleishman Bros, reports that labor for the four vaults (covering an area 25'x14') cost \$190.



LAMINATED RIBS are nailed to beveled trough. Trough is held 8" above box beam by a 2x4 under each rib. Ends of vaults are glazed after construction is finished.



BOX BEAM is fabricated in the house, then lifted into place. The room under vaulted area is kitchen and family room. The rest of the house has a flat roof.

FHA okays LuReCo panel with built-in header

The header, built into door and window panels, does away with the need for a continuous double 2x6 header formerly used with the LuReCo system.

Recently adopted by LuReCo, the new window and door panels were developed by the Small Homes Council (for details, see H&H, Mar, p 179). LuReCo says the built-in header—a nail-glued, semi-box girder—saves \$1 per wall panel because:

- 1. It saves lumber—7½ board feet per panel.
- 2. It eliminates the use of lag bolts (formerly used to fasten headers to window and door panels).
- 3. It saves labor—roughly 3 manhours per house (formerly needed to place lag bolts).

Headers on solid wall panels are standard 2x4 plates.

Can pile shakers do the job of pile drivers?

That question should interest any builder who puts his houses on piles in marginal land—muddy, swampy, or sandy soil, for instance.

Engineers in the Soviet Union have come up with an answer: vibration machines that wiggle piles into the earth. The Russians say their vibrators work 2½ times faster than conventional air or steam pile drivers. They have been used in a variety of soils to sink piles up to 20' in diameter to a depth of 115'. The pile-shaking principle is not new, but the Russians get the credit for perfecting the method.

Here is a new way to get tough, colorful surfaces

A masonry-like surface can be applied to plywood, fiberboard, etc with a new coating system being developed by B&B Chemical Co, Cambridge, Mass. The cost: as little as 25ϕ a sq ft, according to the developer.

Not yet on the market, the system is still undergoing field tests. But it should be a lifetime material, B&B says. This is how it works:

A urethane resin is mixed with a catalyst (two-pot system), and an aggregate is added. The heavy slurry-like mixture is applied to a roof deck or to wall panels lying flat. Result: a durable, weatherproof surface.

Colored urethane resins can be used to provide solid-color panels. And clear urethanes can be mixed with colored aggregates to produce terrazzo and mural effects.

Urethane mixes can be applied at temperatures up to 100F and down to freezing. /END



Now in the High-Fashion look:

Flintkote flooring

Flintkote's Fall Collection brings high fashion to flooring — and tells your prospects about it in national magazines. Full-page, full-color advertising by Flintkote features famous Interior Designers like Ceil Williams and Michael Greer (above), Virginia Whitmore Kelly and Eugene Tarnawa. Each designer chooses combinations of Flintkote Floor Tile — to show how beautifully Flintkote Flooring goes with smart interior schemes.

In Flintkote's Fall Collection you will find a floor for every need — Flexachrome* vinyl-asbestos tile, flexible vinyl tile, Tile-Tex* asphalt tile, and rubber tile. There's a beautiful tile for every *Registered trudemark, The Flintkote Company

purpose — and in each of them you'll find the qualities Flintkote Flooring is famous for — purity and richness of color, and rugged, stand-up-and-take-it durability.

This fall remember: Flintkote has the product . . . Flintkote has the promotion! Get the payoff that comes with national advertising support! The Flintkote Fall Collection *idea* will help you sell *more* new homes!

The Flintkote Company, Flooring and Adhesive Division, 30 Rockefeller Plaza, New York 20, New York.

America's Broadest Line of Building Products



TILE-TEX PRODUCTS



"We are converting land inventory to profits with quality Pease Homes"

"We have been sold ahead for two years and are operating smoothly on our planned program," says Charles Mouch, President of Hinde Development Company, Inc., Sandusky, Ohio. "Our Fairview Lanes development of 408 home sites is one-third completed. Our customers are proud of their Pease Homes...they're our best salesmen. The original planning provided by the Pease staff has paid off with an attractive neighborhood, a fine financing program—and with profits!"

Pease offers land developers and builders with F. H. A. approved lots, a sound program for a quicker conversion of LAND to liquid profits.

- Complete F. H. A. Processing and Financing Service, includes securing...(a) F. H. A. conditional commitments; (b) construction money; (c) mortgage loans.
- Customized Architectural Service...to produce quality homes best suited to your market.
- Personalized Model Home Merchandising and Promotion...a complete model home package including advertising aid, display material and professional advertising assistance.

For more information, write or phone William Stricker, General Sales Manager, and arrange for a sales representative to call.

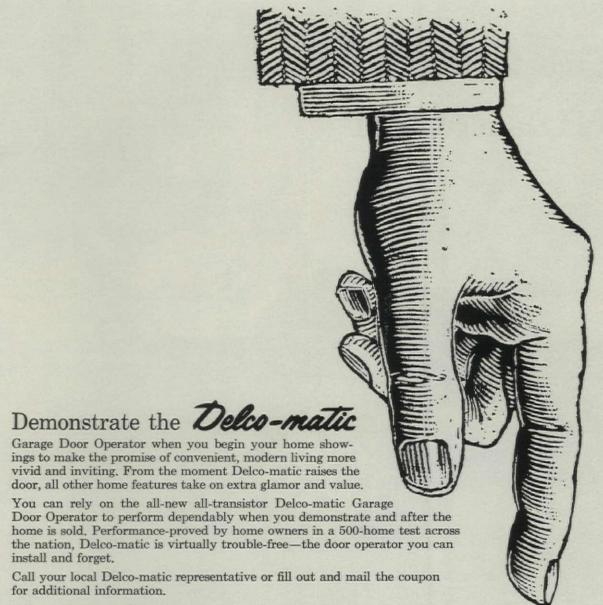


PEASE HOMES

and Building Materials

935 FOREST AVENUE

HAMILTON, OHIO



Delco-matic Garage Door Operators are sold, installed, warranted and serviced

by Crawford Door Sales Company, the nation's leading garage door specialists.

START SELLING YOUR HOMES RIGHT



	DELCO PRODUCTS
Division o	General Motors Corporation Dayton 1, O
	DELCO
	PRODUCTS
	Division of General Motors Corporation Dept. HH-9, Dayton 1, Ohio
	Please send more information on
	Delco-matic Garage Door Operators
Name	
Company_	
Address	
Aug. 033	
	State



Homes built on concrete slab need the warmth and resilience of OAK FLOORS

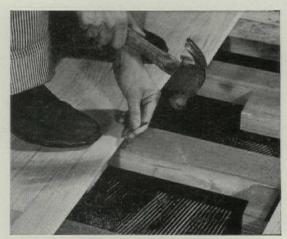
A concrete slab with a composition floor covering is cold, hard, uncomfortable and unhealthy. In residential construction, it can be a barrier to sales, a cause of buyer complaint and dissatisfaction.

You can overcome these objections by installing Strip Oak Flooring nailed to screeds laid in mastic on the slab. Oak's high insulating quality keeps out slab chill. Its natural resilience provides restful comfort underfoot. And the beauty and durability of Oak Floors make them preferred over all other types. The screeds-in-mastic method of installing Oak Floors over slabs is easy, fast and inexpensive. Try it in your slab-onground homes for greater sales appeal.



Write for free Installation Manual.

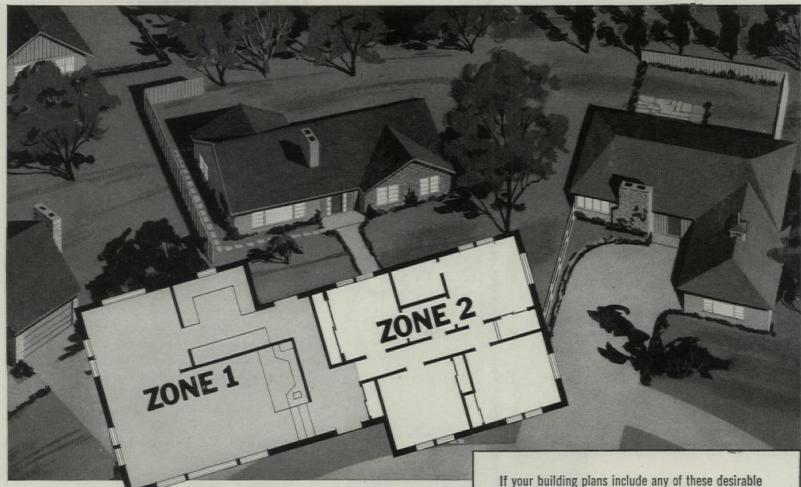
NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION
838 Sterick Building • Memphis 3, Tenn.



Install Strip Oak Flooring over concrete this fast, low-cost way.

For ideal comfort, extra sell in quality homes...

2 furnaces 2 zones



If you are building new homes that are larger than most and have certain desirable features, your customers can be more comfortable with *zone control* heating . . . dividing a home into two or more comfort zones, each with its own thermostat and heat supply.

Comfort zoning can be accomplished four ways: (1) two furnaces, each serving a separate zone, controlled by its own thermostat, (2) one furnace serving two or more zones, each with its own thermostat, (3) two small boilers each controlled by its own thermostat and (4) one boiler serving two or more zones, by means of separate water valves or circulators controlled by separate thermostats.

Honeywell is promoting and pre-selling 2-zone & 2-furnace heating to your customers with ads in Better Homes & Gardens and House Beautiful. Tie-in-Get a complete merchandising kit with promotional materials to help sell comfort zone heating. Give your customers an extra reason to favor your homes.

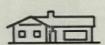
Call your heating contractor or your nearest Honeywell office. Or write: Minneapolis-Honeywell, Department HH-9-117, Minneapolis 8, Minnesota.

Honeywell

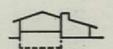


First in Control

If your building plans include any of these desirable features, you may want to include 2 furnaces or 2 zones for complete heating comfort.



Large picture windows often mean greater heat gain or loss.



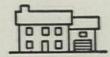
Split-level homes are a puzzle for one thermostat to control.



Living and sleeping areas often require different temperatures.



Spread-out floor plans cause wide temperature



Rooms over garages often need extra heating or cooling.



Finished basements or family rooms require tailored temperatures.

Another new development using

B.F. Goodrich Chemical raw materials



1¼" diameter pipe of Geon rigid vinyl is being installed by Illinois Power Company in gas lines leading to homes at Decatur, Illinois. In addition, ¾" vinyl pipe is being inserted in reamedout 1¼" iron pipe understreets to avoid breaking the pavement to repair leaking gas lines. Kraloy Plastic Pipe Company, Los Angeles, California, makes the pipe. B.F.Goodrich Chemical Company supplies the Geon rigid vinyl.



Now gas comes home through pipe of Geon

The pipe in this natural gas distribution system is made of Geon rigid vinyl. Years from now it will be feeding gas to homes just as efficiently as the day after installation. This pipe stays smooth inside and out because it is not affected by the corrosive influences that affect ordinary pipe. No problems from salt water, chemicals, acid or alkaline soils, or galvanic corrosion.

Conduit or pipe made of Geon provides high tensile and impact strength. It stands up under pressure, resisting effects of fungi, bacteria, moisture, heat or cold. It makes a big hit with installation crews, since it is so light weight and so easy to install.

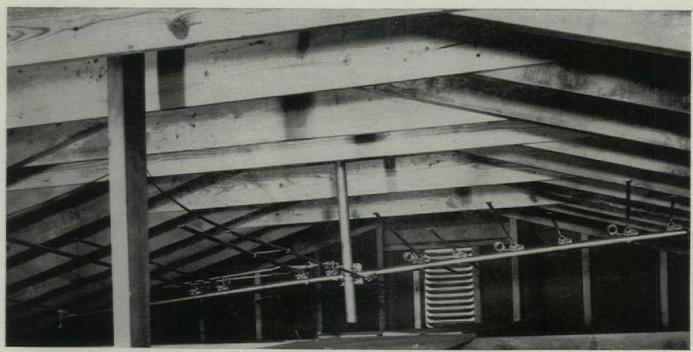
Engineers are taking advantage of the properties of versatile Geon polyvinyl material for this and many other types of applications. For information, write Dept. FB-2, B. F. Goodrich Chemical Company, 3135 Euclid Ave., Cleveland 15, Ohio. Cable address: Goodchemco. In Canada: Kitchener, Ontario.



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



GEON polyvinyl materials - HYCAR rubber and latex - GOOD-RITE chemicals and plasticizers



AERIAL FOR TV SETS is installed after roof is up but before ceiling is covered.

"It costs only \$35 to hide the aerial if you build it into your new model"

That is what Builder George Hyam paid a local subcontractor to furnish and install the big aerial shown above. And the Pennsburg, Pa. builder strongly recommends on under-the-roof aerial as an unusual and highly successful conversation piece.

"The day is long gone when a homeowner gained status by sticking a TV aerial on his roof," Hyam says. "In fact, today just the reverse may be true. And in any case there is no excuse for spoiling roof lines with ugly contraptions. Our houses are 40 miles from TV stations, but it only cost me \$35 for an under-the-roof aerial that can serve two TV sets, one of them the \$700 color set we include in all our houses."

Hyam's new model house is full of special features from roof and attic on down. He has built in about \$4,000 of appliances and other equipment in the \$35,000 house. All 100 buyers of his

\$18,000-\$35,000 houses will get the following: aerial and color TV set (photo below, right); radio-intercom system; steam bath compartment and sun lamp in one bathroom; outside floodlighting system controlled from master bedroom; kitchen with refrigerator-freezer, counter mixing center, tilt-down burners, oven, exhaust fan, and garbage disposer. Higher-priced houses have washer-dryers.

All models are Presidential prefabs, with a few Hyam extras

The builder includes a sundeck off the master bedroom in the model shown. All closets in all models are cedar lined. All buyers get an 8'x8' "cold cellar" that Hyam says is easy to convert into an H-bomb shelter.

All features listed are included in mortgages, financed by Red Hill s&L.

What the leaders are doing



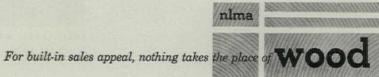
SPLIT-LEVEL MODEL has three bedrooms, 2½ baths and 1,660 sq ft of living space.

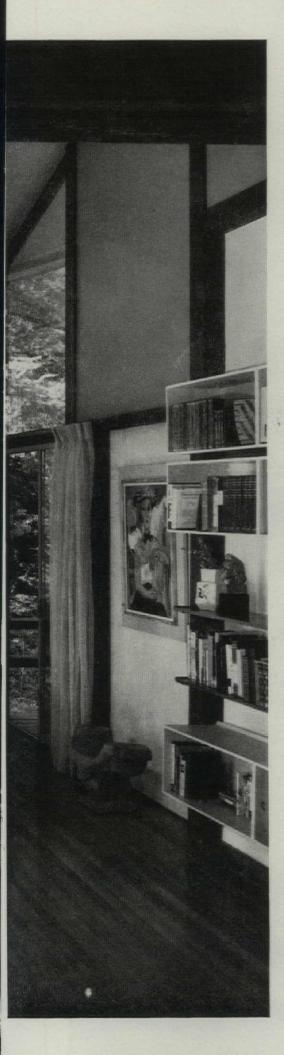


IN-THE-WALL TV SET is new RCA unit built into fireplace wall. Below it is firewood bin.



This interior uses wood posts, beams and ceiling in bold framing and exterior-style patterns to give a spacious pavilion feeling. Smith & Williams, architects.





For distinctive interiors in homes of any price . . .

built of WOOD means built to sell

Make wood your best selling tool. Wherever you use it in the interiors of your homes—paneling, flooring, posts, beams, ceilings—wood adds a richness, a feeling of quality that says *home* to your prospects.

Wood says *value*, too. Value to you in its versatility, workability, economy of construction . . . value to your customers in the beauty and durability they get for their money. Tract homes or custom jobs, you sell more houses and make *more dollars per house* when you build with wood. For more information on better homes of wood, write:

NATIONAL LUMBER MANUFACTURERS ASSOCIATION Wood Information Center, 1319 18th St., N.W., Washington 6, D. C.



This traditional room uses wood liberally in the mantel, paneling, flooring and built-ins for an atmosphere of warmth and comfort. Lorenz Schmidt, architect.



Horizontal paneling here, rising to wood ceiling and beams, accents wall width and highlights modern decor. Edward B. Hawkins, architect.



FORMAL AND INFORMAL GARDENS in the back yards of Edward Carr's new models in Springfield, Va. cost the builder about \$1,500 a house.

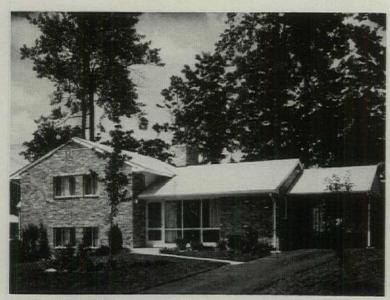
It pays to show buyers how to plant their lots, says Eddie Carr

It pays, he says, because selling houses is so much easier when buyers can see how handsome their homes will be when land-scaped. And it pays because buyers with a do-it-yourself urge can see how easily they can do the work (with detailed plans Carr gives them).

That is why the ex-NAHB president spent

\$3,000 to landscape the back yards of two new models. And he gives buyers a good start on their landscaping by including four flowering trees and 28 shrubs with each house.

One indication that Carr's accent on landscaping pays off is the way his buyers have improved a nearby tract in the past four years. Pictures below show two houses Carr built then and partially landscaped. He gave buyers full sets of gardening plans which most owners have followed closely. This has greatly enhanced the neighborhood's appearance and helps the builder show prospects what the future holds for them in houses they buy today.



AFTER FOUR YEARS, owners of this Carr house in North Springfield, Va. have landscaped it handsomely, following plans furnished by the builder.

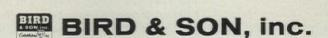


LANDSCAPING PLAN for this four-year-old house came from Landscape Architect Harry E. Ormston. His plans for various lots are still offered.



In ad after ad in the Saturday Evening Post we're telling prospective homeowners that Bird Wind Seal Shingles give them more wind and weather protection than any other for the money—

Are you using them as a plus sales value on your homes?



East Walpole, Mass. Shreveport, La. • C

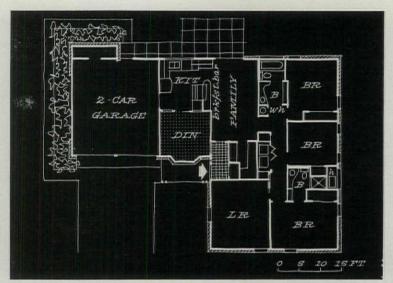
Chicago, III.
 Charleston, S. C.



The sun sets these spots of adhesive into sticking action, sealing every Wind Seal Shingle down in a mighty grip.



HOUSE HAS 1,377 SQ FT of living space and two-car garage for \$15,000.



L-SHAPED PLAN has foyer that leads to living, family, and dining rooms.

"The dining room makes this house our buyers' favorite"

The floor plan and design of this house have many strong points, but its Texas builder is sure that the separate dining room is what makes this model the most popular of six he is offering in Dallas' biggest new development.

This house is the only one of the six that has a separate dining room. The next most popular model has a dining area that comes close to being a separate room.

Otherwise, all six models offered by National Real Estate Development Corp in its well planned Northland community are much alike. All have between 1,125 and 1,550 sq ft of living space, and all are priced between \$12,500 and \$15,500. All were designed by Architect Milton Barrick.

Says Sales Manager Bob Glatter: "We know from buyers' comments that the separate dining room is making our Dorngate model the favorite. It surprises them that they can get a formal dining room in this price class. We can offer it because Barrick's plan is so good. The dining room doesn't rob much space. Buyers still get a big family room open to the kitchen as well as a living room, bigger-than-average bedrooms, and two full baths. I have seen many trends in Dallas, and I now see a definite trend toward separate dining rooms."

But nationally, there is as yet little evidence of a similar trend

That is what House & Home learned when it queried builders and realtors in 14 cities across the country to ask whether they were finding increased interest in a separate dining room.

Answers reveal no signs of a trend to the dining room in average-size homes in ten markets. Only in Gary, Ind. and the Boston area is a definite trend beginning to appear for separate dining rooms in builders' average-size new houses.

Here is a round-up of replies from 12 builders and two realtors:

Robert Berg, Mobile: Smallest house with separate dining room is 1,100 sq ft at \$14,500. No trend toward separate dining room in houses under \$25,000.

Jack Worthman, Fort Wayne: Smallest house with dining room 1,500 sq ft, costs about \$22,900. Some increase in popularity of separate dining room, especially in higher priced homes.

Robert Schleicher, Gary: Smallest house with dining room about 1,100 sq ft, selling for \$13,500 plus land. There seems to be a trend toward dining rooms.

Realtor Sam G. Russell, Denver: Formal dining rooms only in houses with 1,700 sq ft up, priced \$30,000 up. Extension of kitchens to family rooms prevalent here. Usually no dining rooms at all when family room is adjacent to kitchen.

T.G. Barber, Mansfield, Ohio: 2,000 sq ft smallest house with completely separate dining room, priced at \$25,000-\$30,000. Dining room trend only in over \$20,000 range.

Raleigh Smith, Houston: At 1,700 sq ft of living area and \$18,000, dining room becomes important. At 2,000 sq ft and \$20,000, dining room becomes necessary. Trend toward separate dining room is growing.

Realtor Martin Cerel, Natick, Mass.: Smallest house with separate dining room in Boston area has approximately 1,000 sq ft of living space in \$15,900 house. There is trend toward dining rooms.

Alan Brockbank, Salt Lake City: Trend is away from separate dining room. Have seen them in no new houses except custom built in the higher than \$25,000 class.

George M. Pardee Jr., West Los Angeles: In my opinion, there is no trend toward separate dining rooms. Richard Willard, Bellevue, Wash.: All our homes at \$14,000 to \$18,000 have dining ells except colonial, which has separate 9'x11' dining room. Have not observed trend to them.

A.F. Johns, Tampa: Buyers of small houses here prefer dining area in kitchen.

DeWitt R. Lee, Long Beach, Calif.: Smallest size home with dining room has about 1,250 sq ft, in range from \$14,000 to \$15,000. No trend to separate dining room, trend is rather to combination dining and family room.

Morgan Earnest, New Orleans: No definite trend toward separate dining room, but rather toward family room with space for dining. Some small volume builders in older sections of city still build two-bedroom houses with separate dining room in 1,000 sq ft houses.

Ernest Zerble, Mason City, Iowa: Separate dining rooms in our market are used only in custom-built deluxe homes. Eating areas are provided in the kitchen, family rooms, and L-shaped living rooms. I'm presently building three- and four-bedroom homes in the \$30,000 bracket and none have separate dining rooms. No trend to them here.

Leaders continued on p 180



out. Had a good crew of men.

Henry put up a model house. Quality Nobody told him and he never found workmanship cellar to attic. "No trouble selling this and plenty more like it," mused Henry. "Heck of a lot for the money!"

people. "Ah-h-h-h!" sighed Henry. "Really in business now."

Sad as it is to report, Henry wasn't in business at all. Good as traffic was, Henry couldn't get anybody-any-

Henry was a builder. Good one, too. where near the dotted line. "What Selling shoes or shirts. Hammers or Knew building business inside and have I left undone?" wailed Henry. "Where did I go wrong?"

> out. But you, dear reader, for reading this far, certainly deserve to know where Henry goofed.

Poor Henry hadn't included one, Came opening day. With it hordes of single, nationally-advertised Brand Name-anywhere in his house. Roofing was by - - - - -, Inc. Siding by ---- Co. Even the door latches were a product of the Brothers - - - - -

houses. Brand Names give assurance of quality. Carry weight. Impress people. Provide something to point to with pride. Most important to you-Brand Names help sell more housesand sell 'em faster. Ask any builder who uses them.

Now the \$64 question. Why be like poor Henry and build houses with unknown materials? Are the pennies you save (if you do) worth it? Why not use nationally-advertised Brand Names (like Orangeburg and Flint-We say Brand Names are important! kote) and end up successful!

This message is presented by Orangeburg Manufacturing Co., the folks who practically invented Brand Name selling in pipe. Be sure your homes feature genuine Orangeburgthe Brand with the Silver Band.* Root-Proof Pipe and Fittings for house sewer lines, downspout run-offs...Perforated Pipe for foundation drains, septic tank filter beds. Orangeburg Manufacturing Co., Orangeburg, N.Y., Newark, Calif. A Division of The Flintkote Company, Manufacturers of America's Broadest Line of Building Products.

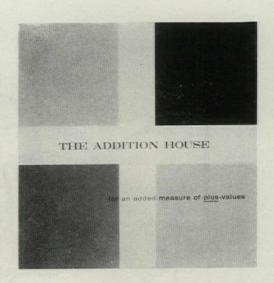


Secret of Success Make a product of unquestionable quality and advertise that fact nationally yearafter-year. The Orangeburg ad above, one of a continuing series, appears in LIFE, Sept. 14, reaching an estimated audience of 32 million.



Goodyear model is promoted as "the Addition house"

The split-level \$21,500 house at left is loaded with quality materials and equipment, and Builder George Goodyear of Charlotte, N.C. has taken special care to make sure all his prospects know it. The exnahr president named it his Addition model to suggest all the "plus" features. A plus sign is used as the background on all newspaper ads and merchandising material, as seen on the brochure cover at right. Also this symbol and slogan were used on 48 signs in and around the model to draw attention to product, appliance, design, landscaping, and other plus items.





Reed merchandises value of guarantee on plastic pipe

Builder Harry Wes Reed (center), one of New England's top merchandisers, has added another "first" in the Hartford area. Here he watches as Flintkote Co's Treasurer James McCauley gives a Reed homebuyer the very first 20-year guaranty bond on plastic cold-water pipe made by Orangeburg Mfg Co, a Flintkote subsidiary. The polyethelene pipe cuts jet well piping costs an average of \$200.



Aluminum "turtles" display products at Houston's Parade

The turtle-like objects are geodesic domes of aluminum covered with nylon and connected in tandem. They made almost as big a hit as the houses in the Houston Parade (H&H, July p 122)—for the good

reason that they permitted the product exhibition space to be air conditioned for the first time. The structures are manufactured by Capital Products, which also produces aluminum windows.







Fairytale folk almost come to life to draw prospects to San Jose tract

Stone & Schulte has spent \$5,750 on 17 displays representing fairy tales, on the theory that its best prospects are parents of small fry addicted to Mother Goose and

the like. Two of the displays at s&s's Ravenswood model homes site features housing problems in fairyland—Peter's pumpkin shell (left) and the old woman's

shoe (center). The castle wall (right) helps keep crowds inside once they arrive. s&s expects to sell 2,000 houses this year in and around San Jose, Calif.

Leaders continued on p 182



RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Wash. • 550 Burrard Street, Vancouver 1, B. C.

For complete application details on Certigroove cedar shakes, see the current Sweet's Catalog . . . or send coupon . . .









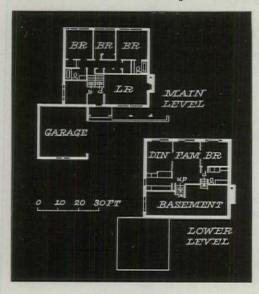
Name____

Address

City____Zone__State__



This front-to-back split-level features an "adult level"



At first sight, this new model by Builder Irvin A. Bleitz in Glencoe, Ill. seems to be all on one level. But it actually has no less than four levels, each planned for a different family function.

The front entrance is on the "adult level," with the living room on one side and a "parents' retreat" on the other. The family activity level is a half-flight lower and includes kitchen, family room, and guest room which all open through sliding glass doors onto a rear terrace. Another half-flight below (not shown on plan) is a "project level" for children's play, workshop, and storage. The top level has three bedrooms, all with wall-length closets, and two full baths.

This model is one of eight which back up on a forest preserve bridal path and lake. They are priced up to \$52,500.



A new house can double as a dramatic display center

Jewel Builders simply left out interior partitions in one of its Columbus, Ohio houses, and substituted sliding glass doors for one whole wall, to convert the model into a handsome showcase. Displays include cutaways of appliances, construction details, and pictures of various models. The show helped Jewel sell 100 air-conditioned \$13,750-\$15,250 houses in a three-week period this summer.

Record of complaints helps Fox & Jacobs

One sure way to maintain quality, say Fox & Jacobs in Dallas, is to keep tabs on complaints by the kind of product and brand name involved. By doing so, F&J found that almost 80% of all callbacks involved either doors or windows. The builders changed brands, buying "a better door for less money and paying a little more for a better window." Ike Jacobs says "we made a net saving because so many callbacks ended."

Colored appliances gain in new houses

Two new manufacturer surveys indicate colored kitchen appliances are gaining fast over white in today's new houses.

Waste King Corp reports that in recent months over half of its dishwashers have been sold with colored front panels—copper, stainless steel, and painted or natural wood. White was chosen by 42% of buyers and was No. 1 among 24 choices in dishwasher panels. But the company points out that most white panels went into remodeled homes to match older white appliances. Analysis of the sales shows 24.4% of buyers chose wood panels, 20% copper, and 12.7% stainless steel. Finishes in wood panels broke down as follows:

PAINTED WOOD	17.1%
yellow (four shades)	4.46%
pink (three shades)	3.75%
turquoise	3.57%
prime coat only	2.80%
brown (two shades)	1.15%
tan	0.74%
charcoal	0.37%
brushed chrome	0.26%
NATURAL WOOD	7.6%
white birch	3.6%
ash	1.70%
red birch	1.48%
walnut	0.53%
oak	0.26%

Allegheny Ludlum Steel Corp reports the trend to colored kitchens has greatly helped sales of stainless steel sinks. A survey of the manufacturers shows sales of these sinks are growing fast, and the steel firm predicts seven out of ten new houses will have stainless steel kitchen sinks by 1969.

Kingsberry reports building time cuts

Kingsberry Homes collected some useful data on prefab vs conventional construction time at a recent meeting of its dealers in Fort Payne, Ala. Dealers who formerly built conventionally were asked how long it had taken to perform certain operations. Here are their answers, as an average, with the prefab company's time figures on the same operations in its plant:

	CONVEN-	
OPERATION	TIONAL	PREFAB
	(MINU	TES)
Preparing a door for hanging.	. 24	1
Hanging a door	. 24	8
Trimming a door	. 42	2
Installing and trimming a		
window	. 35	7
Hanging a door Trimming a door Installing and trimming a	. 24	1 8 2 7

END

This timely message from Johns-Manville will run in Life, September 7 and Better Homes and Gardens, September, reaching 10,730,000 homes

Your Number One investment opportunity today is ir own home

WHERE is the best place today to put money and have it grow?

This question, as never before, is the concern of millions of thinking Americans. Some are trying to find the "ideal" growth stock. Others are seeking "capital gains."

Many, we believe, are overlooking this surprising fact—U.S. Government figures show that family homes, by and large, have appreciated in dollar value over most other forms of investment.

Houses built as long as twenty years ago, kept in good condition, have doubled and even tripled in price.

Houses of recent date have also kept pace, mounting in market value, year after year.

Regardless of the age of your home, you are indeed fortunate to hold this ideal "blue chip" investment, a safe hedge against future inflation, and one that pays you daily "dividends" of security and happiness beyond measure in dollars.

So, if you want to have more in your home to enjoy, don't be reluctant to make the investment. It's simply good business-because the dollars you spend usually increase its market value. And you have that rare thing today, ample credit for home improvementsat low interest rates.

Many new building products are so easy to apply that you can "do it yourself" during otherwise idle weekend hours. So your own time becomes an investment too.

But whatever home improvements you're thinking of, we do urge you to do it now. Keep your No. 1 investment up-to-date. Remember - when you look for the ideal place to put your money-there is truly "no place like home."

a. Q. Fisher



A message in the public interest from JOHNS-MA



Sell women who decide which houses husbands buy with STANLEY Ceramic CABINET HARDWARE

Kitchen cabinet pulls alone won't sell houses, but deserve your consideration because they HELP sell houses. Women desire colorful, decorative, easy-to-clean cabinet pulls. Stanley Ceramic Cabinet Hardware will fulfill this desire.

Three House & Garden colors in brushed silver or brushed bronze finishes will suit any taste, complement any interior decor.

... and Bi-Fold Doors with STANLEY HARDWARE

Bi-Fold doors are *wanted* for modern door styling and space-saving convenience. Equip them with Stanley Bi-Fold Hardware No. 2989 (concealed hardware) and No. 2983 (surface mounted hardware). Easy to hang and easy to adjust for perfect fit after hanging. Adjustable from either side.

Always look to STANLEY for leadership. Use Stanley Hardware in your homes and let prospective buyers know you do. STANLEY is a name they know . . . a name they associate with QUALITY Stanley Hardware, Division of The Stanley Works, Dept. I, 29 Lake Street, New Britain, Conn.

Deserving a place in your plans for progress

HARDWARE ALUMINUM EQUIPMENT WINDOWS

AMERICA BUILDS BETTER AND LIVES BETTER WITH STANLEY



This famous trademark distinguishes over 20,000 quality products of The Stanley Works—hand and electric tools

builders and industrial hardware • drapery hardware • door controls • aluminum windows • stampings • springs

- coatings - strip steel - steel strapping-made in 24 plants in the United States, Canada, England and Germany

This Gets action

DURABLE,
DESIRABLE,
SALEABLE...

STAY-NEW KITCHENS by Republic

EPUBLIC STEEL KITC	HENS
EPT. C-7871A, BUILI	DER INFORMATION DEPARTMENT
028 BELDEN AVEN	JE - CANTON 5, OHIO
Send more informateel Kitchens.	ation today on your STAY-NEW
Name	Title
Company	
Address	

Today's home-buyers have stated their preference. They want durable, stay-new kitchens – kitchens that will remain beautiful...easy to clean...a joy to live with. That's exactly what you give them when you install quality kitchens by Republic.

City

DURABLE—Republic kitchens offer the strength and ease-of-cleaning you would expect from all-steel construction. No place for dirt to hide. No sharp, damage-inviting edges or corners. Amazing Perma-Finish baked enamel wipes clean in seconds... won't crack, chip, peel, or abrade.

DESIRABLE—Beautiful to begin with, beautiful for the life of the house. Republic's wide selection of components makes it easy to achieve customized, personalized kitchens. Attractive, high-quality hardware. Gracious, low silhouette.

SALEABLE—Recognized name... outstanding features... proven eye-appeal. Built and styled to stay new. Plus the most-wanted colors—yellow, turquoise, pink, or white—at no extra cost. All this has made Republic Steel Kitchens the *sales leader*.

See for yourself. Design your next kitchen around the big Republic Steel Kitchens line. For full information and specifications — without obligation — contact your Republic distributor or return the coupon above.

REPUBLIC STEEL

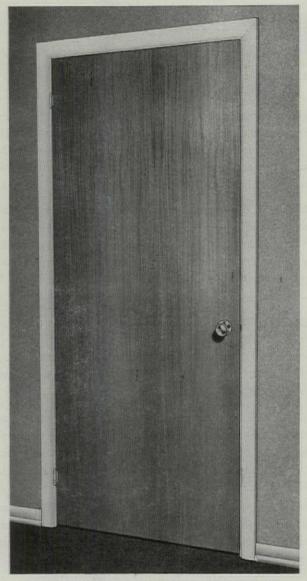
CANTON 5, OHIO

YELLOW . TURQUOISE . PINK . WHITE



Compare the QUALITY and COST ... You'll Use ...

READY HUNG DOORS!



READY HUNG DOOR INTERIOR & EXTERIOR UNITS

(Interior shown) Fit any construction — any wall thickness, Lock nailed header joint, Machine-made trim mitres, Selfaligning "Magic Circle" Hinges-matching lock & strike plate.

Quality, Economy, Beauty, Efficiency . . . all in a single precision-engineered package. That's what you get when you use Ready Hung Doors. Completely assembled door-with frame trimmed on both sides and hardware installed, arrives in perfect condition. Easily installed in less than 20 minutes. Adjustable jambs for any wall thickness. Styles for every need . . . priced to save you money.

Delivered Fully Assembled

Install in 20 minutes!



READY HUNG DOOR BY-PASSING

Two-Point bolt suspension of track insures trouble free operation - eliminates bent tracks, loose suspension screws, 90% of door hanger adjustment. Special header-jamb eliminates need for rough



READY HUNG DOOR **BI-FOLD UNITS**

No tracks top or bottom to bind or limit opening; leaving entire opening 100% usable. Unique spring-controlled folding action that's smooth, easy, automatic, completely silent. Self-aligning "Magic Circle" hinges. No unsightly hardware in view on EITHER side.



Magic Circle Hinges with matching lock and strike plate, add exclusive charm and sales appeal to every home . . . at no extra cost.

Remember - you save on labor - you gain in quality. Look into it today . . . we're certain you'll choose Ready Hung Doors too!

first with the finest in door and frame packaged units eady Hung ® DOORS

READY HUNG DOORS ARE MADE BY THESE LEADING WHOLESALERS

ALBANY, N. Y.
Iroquois Millwork Corp.
BILLINGS, MONT.
BUILLINGS, MONT.
BUI

CHICAGO, ILL.
Morgan Sash & Door Co.
CINCINNATI, OHIO
Acme Sash & Door Co.
CLEVELAND, OHIO
The Whitmer-Jackson Co.
Massillon, Ohio DAYTON, OHIO
Dayton-Akron Sash & Door Co.
LOS ANGELES, CALIF.
GRAND RAPIDS, MICH.
Porter-Hadley Co.
Burbank

HOUSTON, TEXAS
Southwest Sash & Door Co.
HUNTINGTON, W. VA.
Iron City Sash & Door Co.
INDIANAPOLIS, IND.
Midland Bldg. Industries, Inc.
KANSAS CITY, MO.
Rust Sash & Door Co.

MARION, IND.

General Millwork Corp.

NEW YORK, N. Y.

Bailey-Whalen Co.
West Orange, N. J.

OAKLAND, CALIF.

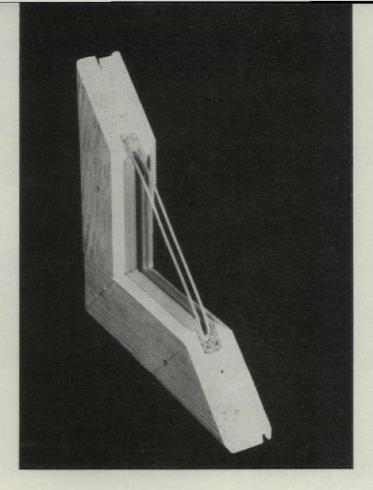
Ready Hung Door Mfg. Co.
PITTSBURGH. PA.
Iron City Sash & Door Co.
Southern Supp.

SYRACUSE, N. Y.
Iroquois Door Co.
TOLEDO, OHIO
Allen A. Smith Compar
TORONTO, CANADA
C. Lloyd & Son Limits
Ready Hung Door Corp.

Ready Hung Door Corp.

Ready Hung Door Corp.

SPRINGFIELD, MO. Southern Supply Co., Inc. SYRACUSE, N. Y. Iroquois Door Co. TOLEDO, OHIO Allen A. Smith Company TORONTO, CANADA C. Lloyd & Son Limited

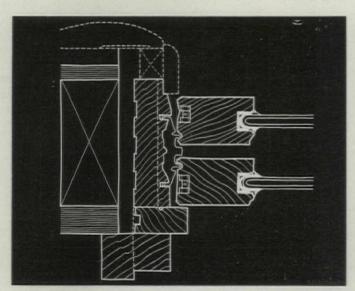


Now you can get double-hung windows with double glass

Windows like these have been available as quasi-custom products for some time, but now six major window makers have added insulated double sash to their regular lines.

The new windows are made possible by the use of 5/8" GlasSeal Thermopane—because it is lighter, standard balances and jamb liners can be adapted to hold the load. With these windows you can offer buyers year-round insulation to go with year-round air conditioning, without sacrificing window ventilation. You save on overall costs because heating and cooling equipment can be scaled to the fully insulated house. Your buyers are saved the nuisance of hanging and storing separate storm windows. And the unit cost is comparable with that of single-pane sash plus storm window.

Six companies join in launching the program. Each company will make the windows to suit its own design detail. The listing (right) shows what each is offering.



CROSS SECTION shows how beaded jamb liners seal out the weather between sash and frame. Glazing channel seals glass in frame.

Binswanger & Co, Richmond, Va. White Ponderosa pine sash are toxic-treated. Full jamb liners and fourway weatherstripping is anodized aluminum to take up swelling or shrinking that comes with changes in atmospheric moisture. Four concealed block and tackle balances. Wood bead and putty glazing.

For details, check No. 4A on coupon, p 234

Caradco, Inc, Dubuque, Iowa. Top model of new series of three double-hung units will have double glass. Unit is clamp glazed with flexible vinyl gasket. Horizontal weatherstrip is also flexible vinyl. Patented jamb liner provides weathertightness and overhead balances give easy operation. Sash are removable. For details, check No. 4B on coupon, p 234

Curtis Companies, Clinton, Iowa. New unit is added to Silentite line. Two-pane styling or snap-in inserts. Frames and sash are toxic-treated Ponderosa pine; jambs are grooved for balancing springs, double Z weatherstrip and flexible side bars. Meeting rail weatherstrip is metal leaf type, sill weatherstrip is metal and vinyl. For details, check No. 4C on coupon, p 234

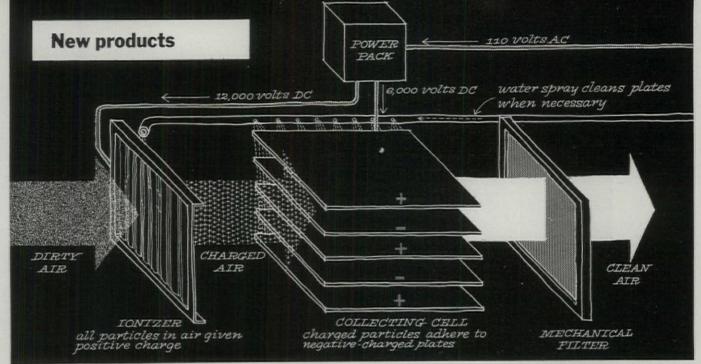
Farley & Loetscher Mfg Co, Dubuque, Iowa. Standard or take-out models have clear lights or snap-in inserts. Toxic-treated frames and sash are groove glazed. Units are fully balanced and weatherstripped. Available in standard or take-out models. Wood or aluminum framed screens to match are available. For details, check No. 4D on coupon, p 234

Royal Glass & Millwork Corp, Englewood, N.J. Basic double-hung Ponderosa pine window is rabbeted for 5/8" Thermopane. Jambs are set for drywall or plaster, Full jamb anodized aluminum weatherstrip all around. Unique balances. To be sold complete with aluminum screens.

For details, check No. 4E on coupon, p 234

Woodco Corp, North Bergen, N.J. Double glass will be used in adaptation of R-O-W deluxe removable window. Unit is toxic-treated water-repellent Ponderosa pine. Full length side slides are aluminum; right side is stationary, left side has springs and fiberglass insula-tion. Weatherstripped all around. Overhead balances. For details, check No. 4F on coupon, p 234

more New Products on next page



supply high voltage direct current; grid of fine wires to charge dust;

ELECTRONIC PRECIPITATOR has five working parts: power pack to metal plates to attract and hold dust; water spray to flush plates when dust piles up; mechanical filter to keep water from blowing downstream.

Electronic air cleaning means better air conditioning

Thanks to new developments in air cleaning you can now offer buyers of year-round air conditioning what one manufacturer calls "automatic housecleaning."

Specifically, you can offer homeowners easier housework, better health, and savings in maintenance as high as \$1000 over ten years. It is not necessary to repaint or repaper to get rid of adhered dirt, and cleaning drapes, slipcovers, etc, is needed only after four years. Better heating-cooling efficiency saves up to 30% in fuel bills. Asthma and hay fever are virtually eliminated and colds much reduced.

What is an electrostatic cleaner?

Any filter that makes use of static electricity to attract and hold dust can be called electrostatic, but only filters which have a high voltage imposed on the filtering medium give the efficiency necessary to get the results described above. These filters are found in two highly competitive systems: the plate-type precipitator illustrated above and the charged media filter shown on page 195.

Plate-type precipitators: These devices for home use are scaled-down versions of the air cleaners used in industry to gain dust-free atmospheres. A bank of ionizing wires puts a negative charge on all particles in the circulating air stream. Positively charged plates then attract and hold the charged particles as they pass between them. To keep the plates working efficiently, the dust must be washed off, automatically or by hand, every two weeks or so.

Advantages include high efficiency—as high as 90% in a properly sized, properly maintained system. Operating costs are low-power packs draw only 25 to 30 watts of electricity. Filters do not need replacing-dirt is flushed off permanent filter plates. Precipitators help keep down odors-they put out some ozone, an effective odor killer. They catch the fine contaminants that escape mechanical filters.

Disadvantages include large size and weight-precipitators are all bulky, are not built into the furnace conveniently, so are sold as separate appliances. They cost more to begin with and a little more to install. They must be flushed off with warm water every few weeks for optimum efficiency.

Charged media filters: These devices use a flat or folded fibrous medium on which a high voltage is imposed. The dust particles are not charged before reaching the filter but are stopped by a combination of mechanical and electrostatic action. The area exposed to the airstream is usually four or

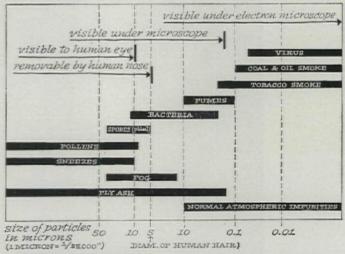
more times that exposed by the usual mechanical filters.

Advantages: As filters get dirty they stop more dust not less. They cost less to buy and install—no water or drain connections are required. They are somewhat smaller and lighter, come as part of year-round conditioner package. The device is shut down for a shorter time to replace filters, needs

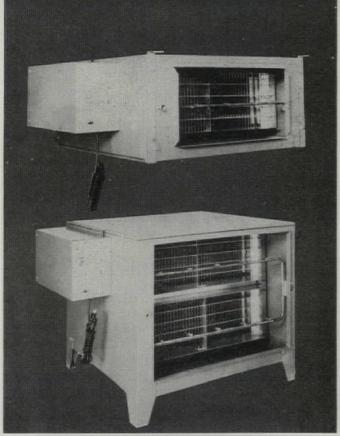
Disadvantages: At their best they are less efficient-the peak is about 70% as against 90% for plate type. Air circulation is impeded as filter loads up. They cost more to operate-media need yearly replacement at \$15 to \$25. They do not get rid of odors.

Do these cleaners do the whole job?

Both types of cleaner can be improved by the addition of an activated charcoal stage since neither is effective against gaseous contaminants or as effective against odors as activated charcoal. Charcoal filters, like the fibrous filters in charged media equipment, need expensive yearly replacement. Sterilizing lamps are sometimes added to systems to increase their effectiveness against airborne germs, but the more efficient the filtering the less need for germ killing devices. Efficient filters remove bacteria and viruses down to .001 micron in size (see below).



AIRBORNE PARTICLES range in size from pollens and plant spores of more than 5 microns (which even mechanical filters will stop) to viruses and smoke at .001 microns only an efficient precipitator will stop.



Westinghouse Precipitron, the first electronic dust precipitor, has recently entered the home market with two models: one handles 600 cfm to 1,200 cfm at 25 w, for horizontal or vertical mounting; one handles 1,200 cfm to 2,400 cfm, at 30 w, for horizontal mounting. Power pack has selenium rectifier. Wash water control is semi-automatic. Smaller unit size is 1534"x31"x4214". Retail prices: \$353 and \$547. Westinghouse, Sturtevant Division, Boston.

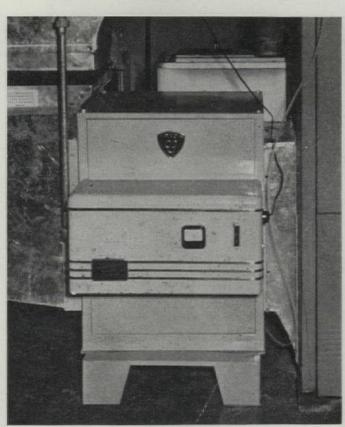
For details, check No. 5 on coupon, p 239



York Div, Borg-Warner makes three sizes of drawer-type precipitators to handle velocities of 1,200 cfm, 1,600 cfm, or 2,400 cfm, to cover most heating plants in the upper-middle market. Input is 15 w. May be used in horizontal or vertical mounts. Power pack uses two standard rectifier tubes. Cleaning cell has lint screen in front of cell, no blow-by filter. Sold only through York distributors.

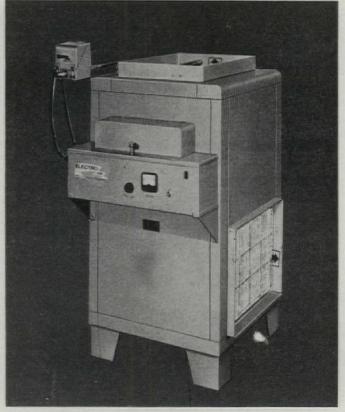
York Division, Borg-Warner, York, Pa.

For details, check No. 6 on coupon, p 239



Trion, Inc, the pioneer in home-size electronic cleaners, now has five units to handle less than 2,000 cfm. Lowcost LCT is drawer-type 25 w unit, handles 500 cfm to 1,000 cfm, mounts horizontally or vertically, costs \$219 list. Smallest flush-off type handles 800 cfm to 1,000 cfm at 50 w, mounts horizontally, costs \$345 list. Next larger sizes list at \$490 and \$540. All Trion power packs use two vacuum tube rectifiers. Trion, Inc, McKees Rocks, Pa.

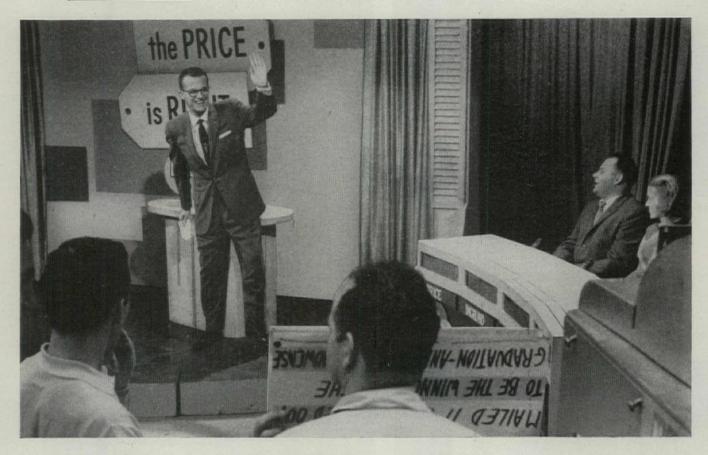
For details, check No. 7 on coupon, p 239



Electro-air Cleaner Co, now largest home-unit maker, has three home-size lines: drawer-type Universal for 800 cfm to 1,500 cfm, at \$229 to \$337; low-cost flushoff Tec line for 800 cfm to 1,500 cfm at \$233 to \$372 list; and flush-off Compact line for 800 cfm to 2,000 cfm at \$273 to \$605. All have selenium power pack with tungsten lamp ballast, run at 25 w or 30 w. Automatic, semi-automatic, or manual cleaning. Electro-air Cleaner Co, McKees Rocks, Pa.

For details, check No. 8 on coupon, p 239

WATCH BILL CULLEN SELL FLINTKOTE PRODUCTS AND YOU TO OVER 20,000,000 VIEWERS!



NBC's "The Price is Right" features the fabulous Story Book House starting September 9 through September 30. Don't miss it!† House below awarded to winner.

Now, you're represented on TV—you and thousands of others like you who build with Flintkote.

Over 20 million TV viewers—thousands of prospects in your own area—will see a variety of Flintkote products in actual use. Seal Tab* Shingles . . . Van Packer* Chimneys . . . Stalwart* Sheathing . . . Insulating wool . . . Flexachrome* flooring . . . these and other Flintkote

†Cheek your paper for time and station

products will be described to help pre-sell them for you! And that's not all.

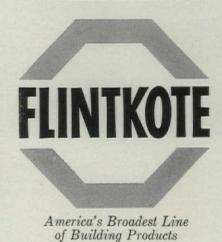
Over 18 million magazine fans will read about Flintkote building products. A 12-page section on the Story Book House—in full color—will appear in Modern Screen, Photoplay, TV-Radio Guide, Modern Romance, True Story and other magazines starting in October.

All this adds up to greater awareness of Flintkote quality ... greater prestige for you locally as a builder who uses quality Flintkote products.

*Registered trademark. The Flintkote Company



FLINTKOTE STORY BOOK HOUSE—More than 200 builders across the nation are using the Story Book House as a showcase for Flintkote Building Products. How about you? For information write The Flintkote Company, Building Materials Division, 30 Rockefeller Plaza, New York 20, New York.



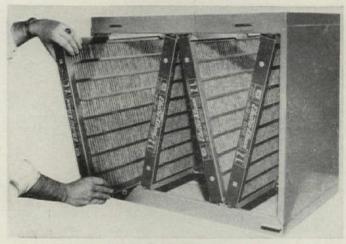


Charged filters fit furnace ductwork

AAF's Electro-Klean filter-the most widely used electrostatic air cleaning system—is sold separately by AAF or as part of a furnace package by seven furnace manufacturers. In this system, a folded fibrous medium is charged with 3000 volts, is used in banks of four to eight cells for furnaces of 100,000 to 266,000 Btuh capacity. Unit face area is about 24"x24", depth 22" to 55". Retail price: \$189 to \$370. Cell replacement cost: \$4 per unit.

American Air Filter, Louisville.

For more information about the separate unit, check No. 9A on the coupon, page 239. For information about furnace packages, check the following numbers: American Furnace (9B), Chrysler (9C), Delco (9D), GE (9E), Lennox (9F), Mueller (9G), Peerless Mfg (9H).



CHARGED FILTERS are used in multiple banks to expose the widest possible area to the air stream



FILTER AREA from a single Electro-Klean cell is spread out above. Greater area gives filter an advantage over mechanical filters.

continued on p 197



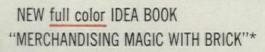
BRICK...is a magic merchandising material that can help you sell!

Smart home buyers . . . like smart home builders understand the proven values in beautiful brick!

The Surveys prove it... Buyers want BRICK HOMES, 2 to 1 over a second choice! They want BRICK's sturdy construction, fire safety, freedom from maintenance, rich texture and color, and all season security.

Brick is more than a mere construction material. It can also be a powerful selling material so why not let it work for you.

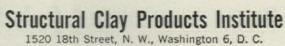
For prestige exteriors and smart interiors . . . whether modern or traditional, low cost or luxury . . . to sell homes quick build with brick.



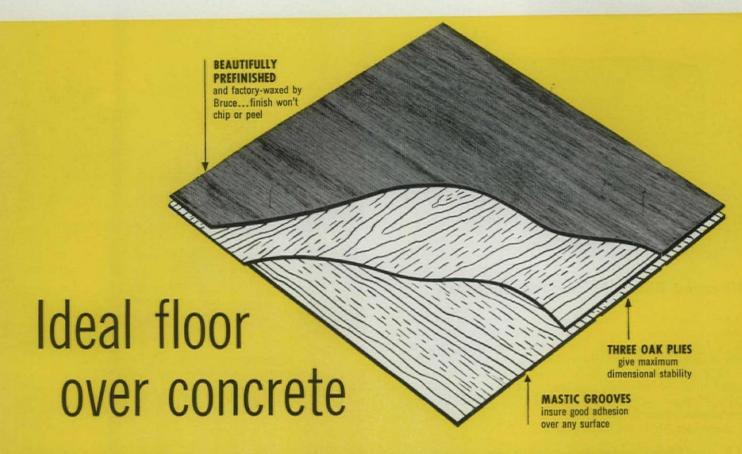
Tells how you can sell houses FASTER!

Your brick supplier has some excellent merchandising ideas and materials that will help make your homes more saleable. Call him today and ask for a copy of the new booklet "Merchandising Magic with Brick"

*Winner of Exceptional Merit Award 1958 Ideas for Homebuilders Contest.



MERCHANDISING



New Bruce Laminated Oak Block



Modern, inexpensive floor lays like tile over concrete or plywood

- Cross-laminated under heat and pressure with waterproof glue
- No surface dampproofing necessary when laid on slabs on grade constructed to FHA or VA specifications
- No expansion space necessary
- Lower in cost than most types of synthetic flooring materials
- Easily applied on wood or concrete subfloors in Bruce Everbond Cold-Stik mastic (no heating required)
- Ideal for private residential and commercial construction
- Smart, modern parquet pattern
- Manufactured in 9" x 9" squares, ½" thick
- Carton-packed for protection and easy handling and storage

Bruce Laminated Oak Block

... designed for modern construction

E. L. BRUCE CO., Memphis, Tenn. BRUCE



World's largest maker of hardwood floors

Find out about this low-cost oak floor today!

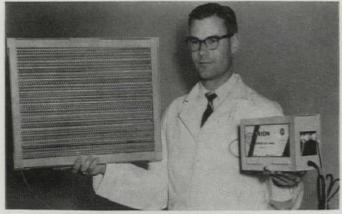
E. L. Bruce Co.

1778 Thomas, Memphis 1, Tenn.

Please send literature on Bruce Laminated Oak Block.

Name

Address_



Trion DFL has an ionizing section and a replaceable charged collector, has 640 to 1000 cfm capacity. Thin collector section fits into 2" thick area, can be vacuum cleaned to add to useful life. Unit draws 25-w. Gauge indicates when filter needs replacing. Price: \$169 to \$184.

Trion Inc, McKees Rocks, Pa.

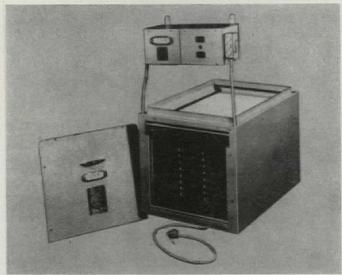
For details, check No. 10 on coupon, p 239



Radex Dustronic uses aluminum mesh mechanical filter in front of charged "venetian blind" collecting plates, does not have ionizing section. When dirty, plates are removed from case, flushed off, coated with a dust adhesive, and returned to case. Made with 8 to 40 plates for cfm of 1,200 to 6,000. Two-tube rectifier.

Radex Corp, Chicago.

For details, check No. 11 on coupon, p 239



Mamco Corp Health-Air combines a mechanical filter, three charged and four grounded aluminum foil plates, and an activated carbon "venetian blind" filter. No ionizing section. Power pack uses rectifier tubes. Mounts horizontally or vertically. Price: \$200, filter replacements \$20.

Mamco Corp, Racine, Wis.

For details, check No. 12 on coupon, p 239

New Products continued on p 201



A COMPLETE & POSITIVE "ONE-PACKAGE" DOOR SEALING SYSTEM BY DURAflex...EXCEEDS FHA MPS REQUIREMENTS!



plus
VINL-STOP WEATHERSTRIPPING

The combination of these two fine products provide the first practical means for effectively weatherstripping the entire doorway!

FIELD PROVEN BY OVER 2,000,000 INSTALLATIONS!

- Positive sealing *
- Fast, economical installation
- No callbacks due to faulty operation

*When installed in accordance with manufacturer's recommendations

For complete information and samples, write to:

The DURAflex Co., Dept. DSS-500
3500 N.W. 52nd Street - Miami 42, Florida

NAME

COMPANY

POSITION

ADDRESS

CITY

ZONE

STATE

flex

U.S. Pat. 2,718,677 Can. Pat. 545,851
Other U.S., Can., and Foreign pats. issued and pending

BETTER BUY

IR-OD-UV

WOOD Gliding WINDOWS



The best millwork houses in the country are franchised to manufacture R*O*W windows. Strategic plant locations allow dealers to give you faster delivery—better value.



Because sash lift out for separate painting on a bench or easel, painting time can be cut in half. Frames can be primed separately. With sash removed, one man can install any but the largest R*O*W windows.



Removable wood windows are as much a part of modern living as automatic hot water. Climbing ladders or balancing on sills is old-fashioned and dangerous.



Cleaning glass accounts for more than 80% of all window "maintenance". This household chore can be done safely, in half the time, if you install R*O*W windows.

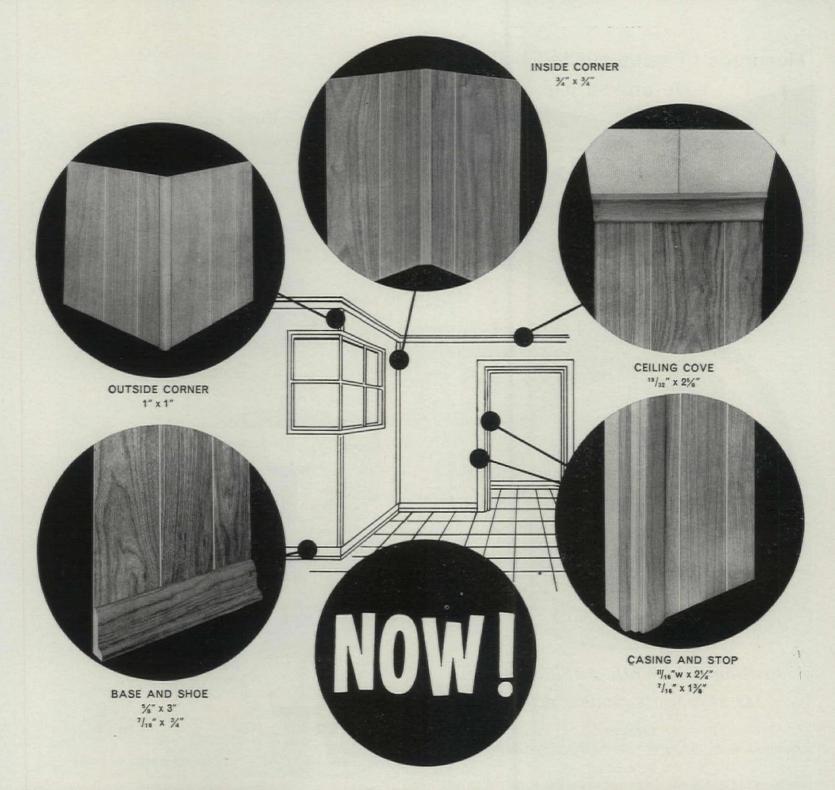


Your best salesmen are satisfied owners. You can be certain of weather-tight, trouble-free performance when you install beautiful R*O*W Removable Wood Windows.



R-O-W and HIGH-LITE are the registered trademarks of R-O-W Sales Company.

R.O.W SALES COMPANY . 1300-9 ACADEMY AVENUE . FERNDALE 20, MICHIGAN



Poly-Clad Plywall Prefinished Moldings

Complete line of 9 prefinished molding styles in 12 finishes, eliminates staining and matching problems

At last the expensive, time-consuming problem of staining and matching moldings to prefinished paneling is ended. Nine new Poly-Clad Plywall Molding styles (including ¾" and 1" battens) match the wood grains and color shades of all twelve Poly-Clad Plywall finishes. And, they can be used with other types of prefinished paneling and wall coverings.

Plywall.

This complete line of prefinished, Poly-Clad Plywall Moldings satisfies a long-wanted need in the industry. They end the problems of hand finishing. *No more guesswork*. And you save time and money!

Write for full details today! -----

PLYWALL PRODUCTS COMPANY, INC.

Dept. H, P. O. 625, Fort Wayne, Indiana

Write your name and address below and mail to Dept. H, P. O. 625, Fort Wayne, Indiana

NAME

ADDRESS

Hundreds of sales-minded builders





In-Sink-Erator offers selling power far beyond its modest price...

because ...

experience shows that women thoroughly dislike garbage mess.

because ...

delegates to the Women's Conference on Housing voted the garbage disposer their most-wanted appliance—by as much as 3 to 1—on a list of wanted home features.

because ...

by survey, 7 out of 10 women who own an In-Sink-Erator name it their favorite or next-to-favorite appliance.

because . .

dramatic In-Sink-Erator national advertising in VOGUE, HOUSE BEAUTIFUL and SUNSET and powerful merchandising aids really help you sell!

For a disposer for every need, see our catalog in Sweet's light construction file; Sweet's architectural file; call your plumber; or write, wire or phone In-Sink-Erator Mfg. Co., Dept. HH-99, Racine, Wis., originator and perfecter of the garbage disposer.



Builder and Buyer agree:

Modern Outdoor Gas Lightsgive a home a special glow



This "warm welcome look" helps sell your houses faster—yet costs you very little!

"Beautiful 'come-on' "says the builder. Gas lights give a real look of style for very little money—and post or wall bracket mounts mean you can put them anywhere, easily.

"So lovely" says the buyer. Modern Gas lights have a look of prestige—of luxury. Yet you can assure prospects they cost little to use, like all Gas appliances.

Dependable, non-glaring, and warmly flattering to house and grounds—modern outdoor Gas lights make a wonderful difference in the appeal of a home—enhance the desirability of an entire housing development.

AMERICAN GAS ASSOCIATION

Free Booklet: for complete information, write Arkla Air-Conditioning Corp., Gaslite Sales Division, Little Rock, Arkansas.



ONLY GAS

do do

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

New products

start on p 191



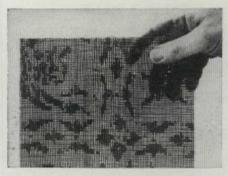
Kentile greek-key pattern is one of several new inlays for vinyl and Crystalite tile floors. Strips are 4½" wide, 12" long in standard .080" and ½" gauge, come in gold and white, silver and black, white and black.

Kentile Inc, Brooklyn.
For details, check No. 13 on coupon, p 239



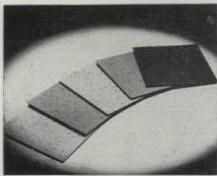
Azrock carpet tones are newest style in company's vinyl asbestos line. Pattern looks like texture and nap of carpeting, comes in brown and beige, cream and beige, rose and brown, and two-tone gray. Standard 9"x9" tiles, 1/16" gauge.

Uvalde Rock Asphalt, San Antonio. For details, check No. 14 on coupon, p 239



New plastic panels from Barclite imbed decorator fabrics in reinforced resin. Shown above is "Florentine Lace." Other designs include stained glass motifs, silk screen prints, black ink line drawings.

Barclite Corp, New York City. For details, check No. 15 on coupon, p 239



Goodyear countertop comes in five new gold metallic patterns and one allcopper style. Base colors include beige, aqua, gray, black, and pink. Goods come in 36" or 45" wide rolls.

Goodyear, Akron.
For details, check No. 16 on coupon, p 239

continued on p 204

"For winter warmth and summer

coolness we use insulation faced

with *REFLECT ORAY



Builders in "the know" are rapidly switching to insulation materials faced with REFLECT-O-RAY for a very simple reason. It provides a more efficient means for keeping homes cooler in summer, warmer in winter—at lower cost. Like the movie screen reflects light, so does REFLECT-O-RAY reflect heat. Its millions of highly polished aluminum flakes

bounce heat rays back toward their source, inside or out where they should be. REFLECT-O-RAY is a natural "breather" sheet, too, that safeguards against damaging condensation build-up. Take a tip from America's leading builders — ask for and use insulation materials made with REFLECT-O-RAY. They assure yearly comfort everyone can afford.

*REFLECTIVE "BREATHER" SHEET FACING

FOR INSULATION BLANKETS AND BATTS UTILIZING ON THESE AND OTHER FAMOUS BRAND INSULATIONS:

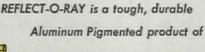














THE APPLETON COATED PAPER COMPANY
APPLETON, WISCONSIN

G-E's PP MEANS

Here's a way to help net you higher profits. The program is G-E's "Planned Profit Package" . . . and it starts with your decision to install a General Electric Kitchen. G-E's "PPP" adds value to your house, saves you money from start to finish. And . . .



POWER OF G-E BRAND PREFERENCE

Among home buyers . . . G-E brand preference studies show most women think G-E makes the best home appliances. Among appraisers . . . Lending institutions in all parts of the country use General Electric's higher quality as a basis for granting higher appraisals. This puts a greater value on your house . . . means more profit for you.

PLANNING AND STYLING HELP

Your G-E distributor or dealer has a Custom Kitchen Design service to help you with layouts, perspectives, color coordination. A G-E builder sales specialist will assist you in planning your kitchen, show you how to save space and money. This means more profit for you.

SAVINGS ON LABOR AND INSTALLATION

New G-E "Straight-Line" appliances have built-in look without built-in expense. Flat backs and sides on all appliances. Each fits flush. Each is designed for easy, convenient installation. Made to fit any kitchen layout, any house . . . this means more profit for you.

MORE PROFIT FOR YOU...

Only General Electric offers you this "Planned Profit Package"



PRODUCT AVAILABILITY

100 G-E distribution points in every part of the country assure you wide selection and availabilities no matter where you are. All deliveries scheduled to fit *your* convenience—no long waits, no needless "storing." G-E has the kitchen you want, when you want it. More profit for you.

COMPLETE MERCHANDISING PROGRAM

A special Model Home Program gives you a variety of merchandising tools, plus widespread "Success Story" advertising and publicity assistance to help you create model home traffic. With G-E's extensive home promotion program, you'll get faster sales . . . more profit for you.

G-E PRODUCT SERVICE

Once G-E appliances are installed your General Electric distributor or dealer relieves the builder of all product service responsibility. No appliance repair or maintenance worries. This means savings after the sale . . . more profit for you.



Your local utility company has a Medallion Home Program. By tying in with this program, you'll get more prestige and many promotional advantages—a valuable competitive selling edge. General Electric's "PPP" gives you faster sales, more profits with each house you build.

Progress Is Our Most Important Product





ent-a-Ridge provides:

INCREASED VENTILATING CAPACITY

18 sq. inches of net free area per lineal foot increases air circulation and cuts attic temperature.

VENTILATION AT THE LOGICAL SPOT

Heat and moisture rise to the ridge of the roof. Vent-A-Ridge provides a natural escape route.

GREATER WEATHER PROTECTION

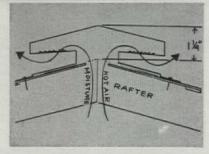
Small 1/8" reversed louvers on the under side of Vent-A-Ridge provide perfect protection from rain and snow. Tested under hurricane conditions.

ECONOMY IN CONSTRUCTION

Eliminates cutting and framing openings & ridge shingles. Available in 8', 9' & 10' lengths. Reduces labor, installs in minutes. Simply leave 1-1/2'' air gap at the ridge and cover with Vent-A-Ridge.

@ A BETTER WAY TO VENT ATTICS

Why better? Because with the exhaust at the peak of the roof you get maximum "stack height" and faster air movement that can cut attic temperature making a house easier to cool. (Meets FHA requirements)



	WRITE TODAY for complete information H-C PRODUCTS COMPANY P.O. Box 68 Princeville, III.
mc	Please rush me literature on Vent-A-Ridge.
products co.	Name
Princeville, III.	City
A Product of Home Comfort Mfg. Co.	* Trade Mark of Home Comfort Mfg. C

H-C PRODUCTS	COMPANY	P. O. Box	68	Princeville, III.	V -102
Please rush			Vent	-A-Ridge.	
Address					
City					
oldie	A Tonda N	1-4-5 W		Min Co	

New products

start on p 191



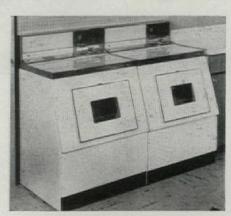
New Frigidaire laundry line has seven washers, five dryers. All have wash-andwear cycles. New features include a radiant drying system, a new soak-and-wash cycle, more automation. Custom dryers have new Filtrator that eliminates outside venting and plumbing, automatic moisturecontrolled or timed drying.

Frigidaire, Dayton. For details, check No. 17 on coupon, p 239



New Maytag combination is sized to give best tumbler action for both washing and drying. Unit washes at 52 rpm, spin dries at 305 rpm. Enclosed condensation system needs no vent. Air from drying load is guided through condenser where moisture and lint is removed by a coldair mist, then recirculated to heater. Countertop high (36"), 34" wide, 251/2" deep.

Maytag Co, Newton, Iowa. For details, check No. 18 on coupon, p 239

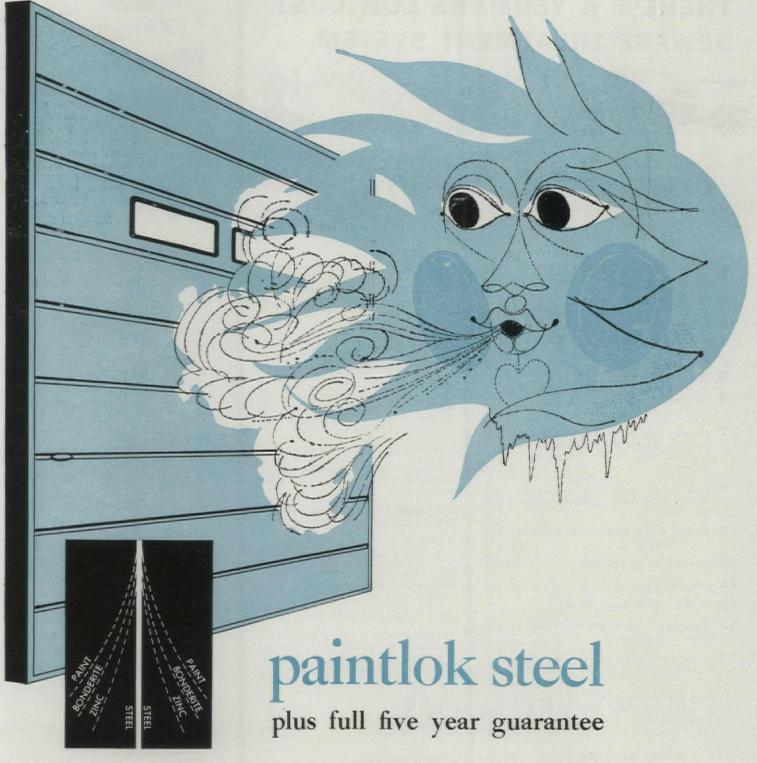


Westinghouse laundries come in three lines, have new simplified controls for up to 11 pre-set programs of washing and eight of drying. Washers have multi-speed agitators, triple rinsing, self cleaning, 10-lb capacity, overload control. Dryers handle 20 lb of damp clothes, run on either 115-v or 230-v, have 5400 w elements.

Westinghouse, Mansfield, Ohio. For details, check No. 19 on coupon, p 239

continued on p 206

FEATURE QUALITY AT LESS COST



Plus eight other exclusive features! All at a highly competitive price from Berry—world's largest manufacturer of residential garage doors. Each feature helps you impress and sell prospects... and helps you keep customers satisfied.

Paintlok steel, for instance, means that Berry doors won't swell, shrink, peel, check or rust . . .

whatever the weather or climate. Easy installation saves time and man power. And you're protected by Berry's five-year guarantee. Choose from one-piece and sectional models in sizes to meet almost any specification. Trim and window lites optional. See your distributor or write: Berry Door Corporation, 2400 E. Lincoln, Birmingham, Mich. In Canada: Berry Door Co., Limited, Wingham, Ont.



Mr. Builder. .for 1 home or 10,000 THERE'S A YEOMANS LOW-COST SEWAGE TREATMENT SYSTEM





For SINGLE Homes CAVITETTE® Miniature "City Type" System

For 10 or MORE Homes **CAVITATOR®** Full Scale "City Type" Plant

Easier to Finance at Prime Rates Because They Are Fully Approved

- 1 Banishes septic tanks.
- 2 Eliminates health hazards.
- 3 Opens up low-cost land.
- Qualifies for federally insured home
- 5 Increases loan value of homes.
- No unpleasant odors, no clogging, no backup.
- Handles waste from garbage disposers, detergents from automatic washers, ALL modern home appli-
- New selling feature for countryside homes gives faster turnover at better price.
- Service policy with dealers prevents call backs.
- Operates in all climates.
- 11 Installs fast.
- 12 Models for all home sizes.
- Completely warranted by manufacturer and installer. 13
- 14 Nationwide sales and service network.

- 1 Builders find that original cost of Cavitator community systems is up to 40% less than for individual septic tanks.
- 2 With community systems, local governments often permit builders to use smaller lots . . . thus more houses share original cost of the
- Community systems improve the value of homes (both to owner and lender) . . . make them easier to sell.
- Plants are small . . . can easily camouflaged to look like a home. can easily be
- Factory engineer supervises installation, trains operator, tests performance.

PREFABRICATED PLANTS AVAILABLE FOR SMALLER SUBDIVISIONS

- 1 Packaged . . . shipped as a complete plant ready to lower into place.
- 2 Easy, low-cost installation requires only simple excavation and concrete slab.
- 3 Goes in fast, starts up fast.
- 4 Factory assembly offers the lowest cost way to provide this type of treatment by reducing engineering and on-site construction time.

Cavitette® and Cavitator® are registered Yeomans trademarks

YEOMANS

Specialists for 60 Years in Sewage Handling

2003-8 N. Ruby Street, Melrose Park, Illinois



TO KNOW ON HOME SEWAGE DISPOSAL

DISPOSAL

Published especially for builders, this fast-reading booklet gives the solution to any problem you might meet in home sewage disposal. Covers single-home systems, central plants, temporary facilities, connection to municipal lines, different types of terrain, lift stations, and health considerations for one to 1500 homes. Not technicall Forty pages, full of helpful illustrations. Fill out this coupon fer your free copy of "The Homebuilder's Guide to Effective Sewage Disposal."

Yeomans Brothers Co.

2003-8 N. Ruby St., Melrose Park, III. (Suburb of Chicago)

Title or Business		
Company		
Street		
City	Zone	State

TG-5805

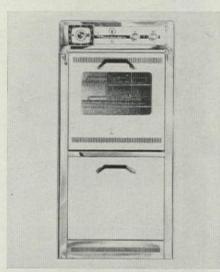
New products

start on p 191



Dixie electric cooktop has control knobs recessed below countertop. All four burners have automatic sensing elements to keep pan heats at temperatures set by thermostatic control knob. Standard knobs offer seven heat settings. Unit installs as drop-in in any cabinet 24" or wider. No front opening is needed.

Dixie Products, Cleveland, Tenn. For details, check No. 20 on coupon, p 239



Thermador bi-level oven is full twocompartment unit in a 24" width, with 18" upper oven complete with built-in rotisserie, and 12" lower oven with large capacity broiler. Each oven has separate thermostat control and separate light. Interiors are stippled porcelain enamel, exterior is metallic or colored enamel, or white. Price \$416.25 to \$426.25.

Thermador, Los Angeles. For details, check No. 21 on coupon, p 239



New Preway Wallchef is a deluxe gas oven with an 18,000 Btu burner automatically controlled. Clock-controlled flamefree ignition built-in rotisserie; 5,916 cu in. capacity. Ovens are made in stainless steel, copper, and four enamel colors. Unit fits a 40½"x21¾" cut-out, 23½" deep. List price: \$295.95.

Preway Inc, Wisconsin Rapids, Wis. For details, check No. 22 on coupon, p 239

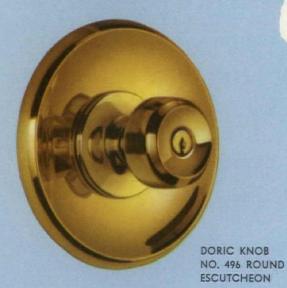
continued on p 210

JUST PENNIES MORE THAN THE CHEAPEST ... DOLLARS LESS THAN THE HIGHEST ...









NATIONAL LOCK set



only the finest quality lockset gives you all these advantages

- · Skillfully-styled knobs and escutcheons to blend with every type of architecture and decor.
- · "Panic-proof" design to permit emergency exit when inside knob is turned right or left, even when locked from the outside.
- · Pin tumbler lock construction to assure maximum household security.
- · Emergency release on bathroom doors to prevent accidental "lock in" by children.
- Cold-rolled steel lock case and mechanism (no die cast parts) to provide troublefree service, long-term lock life.

The quality that's inherent in NATIONAL LOCKset reaps big dividends . . . striking beauty, added safety and security, greater convenience in use, longer dependable service without "call backs" for costly repairs. Naturally, NATIONAL LOCKset quality costs a little more than the very cheapest, but the few pennies it takes are well worth the extra value.



HARDWARE DIVISION

NATIONAL LOCK COMPANY ROCKFORD, ILLINOIS

Distinctively new CABINET HARDWARE CREATIONS by Medalist



Custom

Closely examine the quality features of Medalist cabinet hardware. Note the fresh designs of the "Capri" and "Custom" lines . . . the skillfully reproduced "Provincial" line . . . so correct, right to every authentic detail. Shown here are only a few of the many modern and period cabinet hardware groupings by Medalist.

Complete HOME-MERCHANDISING AIDS PROMOTION KIT available FREE!



Complete kit contains sample lockset display card, key presentation folder, knob hanger, hand-out folder, cabinet hardware hang-tags, consumer folder and newspaper mats. They're designed specifically for use with open house events and model home showings. Also included is a full-color brochure describing how decorative and functional hardware can be used most effectively. These many selling aids explain why quality hardware by Medalist was chosen for the prospective buyer's new home. Order blank facilitates ordering reasonable quantities for distribution to builders. Write to ...

Medalist HARDWARE DIVISION NATIONAL LOCK COMPANY ROCKFORD, ILLINOIS



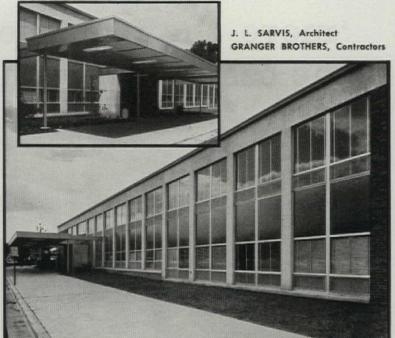
New system can save you dollars!

At last, you can eliminate the time, labor and materials that go into built-up roofing, and meet FHA requirements. Now you can combine the insulating and decorating advantages of strong insulating roof decks with beauty and weather-resistance of asphalt shingles. Even on low-slope roofs you can apply asphalt shingles to USG Insulating Roof Deck. For more information about this money-saving development, see your U.S.G. dealer, or write Dept. HH-92, 300 West Adams Street, Chicago 6, III.

UNITED STATES GYPSUM

the greatest name in building





America's Architects select
VAMPCO ALUMINUM WINDOWS,
Curtain Walls and Entrance Doors
for Modern Homes, Schools, College
and Commercial Buildings

The attractive new Kellogg Center at Michigan State University, Lansing, Michigan (pictured above) has Vampco 2000-series 2" Aluminum Curtain Wall fenestration and Vampco Aluminum Entrance Doors. It is a fine example of how architects and builders are using Vampco Aluminum Windows, Curtain Walls and Entrance Doors to provide modern, streamlined beauty . . . functional design . . . structural strength and durability. This is one of over 12,000 schools now using Vampco Aluminum Windows.

Vampco Aluminum Windows for every type of construction are available in casement, combination casement, awning, intermediate projected, curtain walls of varying sizes and thicknesses, heavy ribbon, window walls, glass block and custom designed types. Vampco also manufactures a complete line of Aluminum doors, frames, side lights and transoms. For complete illustrated literature, mail coupon below, today.

VALLEY METAL PRODUCTS CO.

PLAINWELL, MICHIGAN





MUELLER BRASS CO.
PORT HURON, MICHIGAN

A NAME THAT MEANS THE VERY FINEST IN LIFELONG ALUMINUM WINDOWS



VALLEY	METAL	PRODUCTS	COMPANY
Dept.	HH-99,	PLAINWELL,	MICH.
☐ Send	Resident	ial Window	Catalog.

	Send 60-page Industrial-Institution
	Window Catalog.
	Card Cardala Wall Caralan

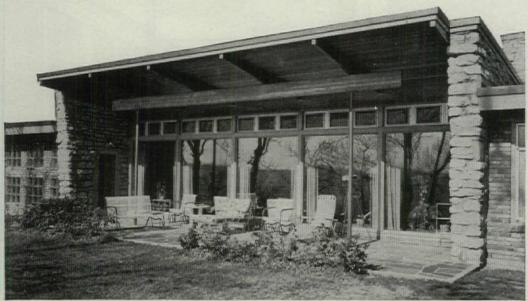
			- May 12	
	Send	Curtain	Wall	Catalog.
		F-4	D	Catalan

Send	Entrance-Door	Catalog.

NAME													•
COMP	NIV												

ADDRESSZONE. STATE....

'more than pleased with the beams and wood deck'



EUGENE IMBUS RESIDENCE, Cincinnati Architects: Garriott & Becker, Cincinnati. The five $3-7/16'' \times 11\%'' \times 32'$ beams are tapered for overhang and supported by a $3-7/16'' \times 11\%'' \times 28' \ 8\%''$ longitudinal beam.

Rilco laminated wood beams and deck bring much to a home—warm beauty, functional form, strength without bulk — at suprisingly low cost. The rich beauty of wood blends with virtually any architectural style . . . and laminated members retain their appearance — age gracefully, resist warping, splitting, checking. Brawny too — Rilco members withstand impact or temporary overload without permanent damage.

Rilco beams are available in sizes difficult or impossible to obtain in solid construction — flat, pitched or tapered beams with or without cantilevered overhang. Standard-size beams are carried in stock, assuring prompt delivery plus the economies of mass production.

For more information about Rilco laminated members and deck contact your nearest Rilco office.



RILCO LAMINATED PRODUCTS, INC.

W 843 1st National Bank Bldg., St. Paul 1, Minn.

DISTRICT OFFICES:

Tacoma, Washington; Fort Wayne, Indiana; Newark, New Jersey





"a good percentage of successful projects (with Rilco)"

Richard Schmitz residence, Storm Lake, Iowa.

Architects: Smith, Voorhees, Jensen, Silletto & Associates. Des Moines.

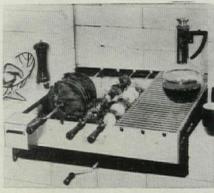
Rilco beams are 71/8" x 145/8" x 41'.

"more than pleased with the beams and wood deck" Edgar Ervin residence, Junction City, Kansas.

Ten Rilco laminated beams: 17' 4" x 43/4" x 3-7/16". Nominal 2" x 6" Rilco Deck completes the roof system.

New products

start on p 191



Burr-Southern barbecue for indoor or outdoor use has one 24" heavy duty spit, two spit forks, six stainless steel skewers, and a two-section 24"x25" grill. Distance between coals and grill is adjustable. Firebox and sidewalls are 12 gauge steel. Chain drive powers spits. Required opening 26½"x24½", 6" deep.

Burr-Southern, Anaheim, Calif. For details, check No. 23 on coupon, p 239



Chambers' twin units total 21 cu ft of built-in freezing and refrigeration. Units are self-defrosting. Each unit has separate controls, systems, and compressors. Compressors may be mounted behind grilles above units or in a remote location. Units come in copper or chrome finishes to match Chambers built-in ovens, ranges, dishwashers and vent hoods.

dishwashers, and vent hoods.

Chambers Built-Ins, Chicago.

For details, check No. 24 on coupon, p 239



Big built-in wastebasket is part of an 18" wide cabinet 24" deep, 34½" high. Also included a single shallow drawer. Plastic basket 11"x15"x20" is suspended from slide attached to cabinet door, is strong enough to hold bottles and cans. Lid is included. Cabinet is part of Mutschler's series M500.

Mutschler Bros, Nappanee, Ind. For details, check No. 25 on coupon, p 239

continued on p 212

Why settle for less than you get with

Rō-WAY OVERHEAD DOORS?



There's no need to sacrifice quality for economy in the garage doors for your homes! Not when you install Ro-Way overhead doors. Because Ro-Way garage doors are quality-built through and through—yet competitively priced!

And you can prove it to yourself by comparing Ro-Way with any other make. You'll see that Ro-Way materials are superior quality... that Ro-Way hardware is generally heavier gauge, yet trimmer...that Ro-Way craftsman-

ship is unsurpassed.

And you'll see that Ro-Way operation is free and easy, smooth and quiet. For the specially designed track, ball bearing rollers and tensionbalanced springs mean responsive performance at the lightest touch.

So why settle for less, when you get so much more with Ro-Way doors? Call your Ro-Way distributor for full details—he's listed in the Yellow Pages.

For added convenience, install the RO-WAY Model 80 Electric Operator with push-button or remote radio control.

there's a Ro-Way for every Doorway!

RESIDENTIAL . COMMERCIAL . INDUSTRIAL



Only a GARAGE offers:

COMPLETE PROTECTION

FINISHED APPEARANCE

EXTRA STORAGE SPACE

EXTRA ROOM

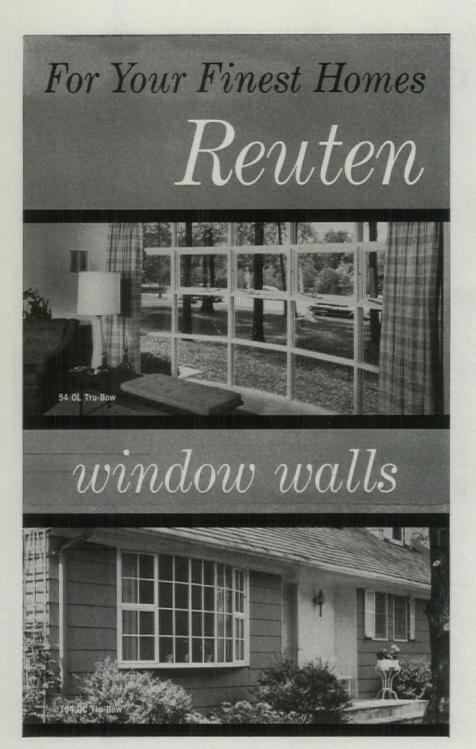


ROWE MANUFACTURING COMPANY

1110 Holton Street, Galesburg, Illinois

New products

start on p 191



REUTEN Tru-Bows and Tru-Walls . . . quality wood windows . . . enhance the beauty of homes in any architectural style. The OL Tru-Bow (top picture) fits perfectly in a Modern setting; the OC Tru-Bow (second picture) adds charm to a Colonial house. Four additional styles and over sixty combinations of sizes, pane shapes, and vent positions can be ordered. Both Tru-Bows and Tru-Walls meet custom quality standards and are stocked by regular millwork jobbers.

See our complete catalog in Sweet's A or LC files, our display in the Architects Building, 101 Park Ave., New York City, or write for additional information.

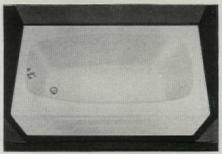


FRED REUTEN INC.



Mixet Safespout combines a single offand-on and volume knob, a lever to regulate temperature, a lift knob to divert water from tub to shower, and a safety stop to keep heat at safe level. Unit eliminates faucets and mixing valve, is entirely outside finish wall, goes up with tightening a single screw.

RCB Mfg Co, Montebello, Calif. For details, check No. 26 on coupon, p 239



New Kohler tub has a straight front and machine ground edges on ends and back. Cast-on bottom supports ease leveling tiling-in rim gives a waterproof joint with wall. Design features two corner seats and two corner shelves, wide flat bottom. Enameled castiron, it comes in 5' left or right recess models in white and seven colors.

Kohler Co, Kohler, Wis. For details, check No. 27 on coupon, p 239



Venus tub enclosure is new low-priced unit in the ShoDoCo line. The enclosure fits all 5' recessed tubs. It is glazed with 7/32" patterned rolled glass, framed in bright Alumilite-finished aluminum. List price of the 5' Venus is \$89.90.

Shower Door Co of America, Atlanta. For details, check No. 28 on coupon, p 239

continued on p 214



Let's face it, Mr. Builder . . .
the lady insists on a "modern-as-tomorrow" kitchen, tailored to fit her family needs and household routine. And that's where the Qualitybilt line shines. With over 120 types and sizes of units to select from, she can have every modern convenience she desires . . . in any arrangement, large or small . . . and still have the exact style, whether it be traditional or modern, her home decor demands. She'll love the economical elegance of Qualitybilt cabinets, too. Every unit is true "cabinetmaker" quality, built to give daily service and years of beauty.

ARRANGEMENT AT NO EXTRA COST!

Look up your nearby Qualitybilt Distributor... get the complete details TODAY!

It costs no more to install the finest.

FARLEY & LOETSCHER MFG. CO.

DUBUQUE

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

IOWA



BEFORE YOU INSTALL ANY FLOORING

Read this about HARRIS BondWood®

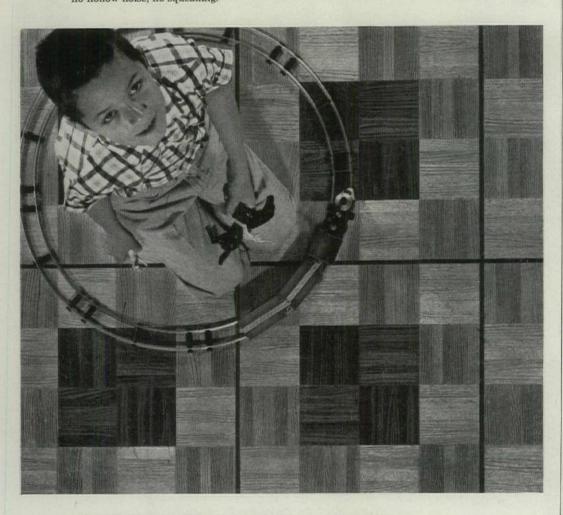
THESE FEATURES SAVE YOU MONEY!

SOLID HARDWOOD FOR ADHESIVE INSTALLATION-goes down and stays down in exclusive Harris Adhesive Mark 10 over concrete or wood.

GREATER STABILITY-Bond Wood changes grain direction every 434" resulting in a minimum of contraction and expansion.

TIGHTER FIT-Exclusive adhesive and unique construction prevents shifting-makes BondWood the most stable parquet ever designed.

ELIMINATION OF SQUEAKS-BondWood is solid hardwood, without tongue and grooveno hollow noise, no squeaking.



THESE FEATURES MAKE YOU MONEY!

You'll find that BondWood's many advantages are immediately apparent to Home Buyers. Here's a parquet that lets you offer .

UNLIMITED PATTERNS-BondWood can be installed in a variety of patterns-plain, with divider strips, with insets, etc. Available in Oak, Walnut, Maple, Beech, Cherry and other domestic and imported hardwoods.

NO DIRT-CATCHING CRACKS-Bond Wood units are unbeveled, square-edged, with flush joints-no gaps, no cracks to catch dirt.

THICKER, LONGER WEARING SURFACE-Bond Wood's wearing surface is 81.8% thicker than laminated block. Gives years of extra life.

BondWood units are $5/16" \times 19" \times 19"$, composed of 16 squares, $434" \times 434"$, consisting of several small slats and held together with paper which is removed during installation.

Send for free brochure today. See our catalog in Sweets

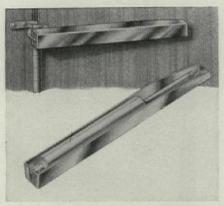


HARRIS BondWood®

HARRIS MANUFACTURING CO., DEPT. HH-99, JOHNSON CITY, TENN.

New products

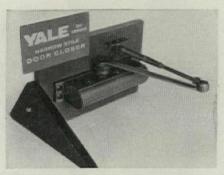
start on p 191



Light-duty closer for interior doors helps solve air-conditioning zone problems. Hydra-Close needs only screwdriver installation on the butt hinge pin. Unit needs no oiling, no adjustment. Comes in five surface-mounted or concealed types for left or right hand operation. Suggested list price for 30" door models: \$2.95.

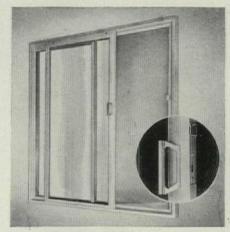
T&R Service & Mfg, Crystal Lake, III.

For details, check No. 29 on coupon, p 239



Yale 50 Series closers are lighter duty version of standard 80 series, have same horizontal silhouette, modern styling. Features include full rack and pinion mechanism, two-speed control, self-lubricating bearings, cast aluminum case. Also available with fusible links and hold-open de-

Yale & Towne, White Plains, N.Y. For details, check No. 30 on coupon, p 239



Acorn DorWal 1100 is a new heavygauge door to take 1" insulating glass at a moderate price. Deep baffle jamb sections align out-of-square installations, rigid hollow meeting rail eliminates bowing. Corners are triple screwed; nylon rollers are adjustable. Weatherstrip is double pile. Automatic locking latch and night lock are included. Price for 6' door with 1" insulating glass: \$150 fob Detroit.

Acorn Aluminum Products, Detroit. For details, check No. 31 on coupon, p 239

continued on p 216

Practical PLUS feature

For your homes

No-DUCT HOOD

Purifies Kitchen Air...
Without Vents or Ducts!

Now you can offer prospective home buyers the comforting assurance of completely, permanently grease-and-odor-free kitchens... without any of the problems and expense of duct type installations!

A completely new kind of kitchen hood, the Nautilus uses a special Activated Charcoal Filter (plus a grease filter)—that removes all odors and contaminants—recirculates clean, pure air! It's the same principle that enabled the atomic submarine Nautilus to stay under water two months without new supplies of fresh air!

Easily, quickly installed anywhere in the kitchen of your

*Patent Pending

sample home, the Nautilus Hood fits any layout—and, because it requires no costly, space-wasting ductwork or outside vents—costs less than other units!

- Eliminates cooking fumes, odors, grease and smoke.
 Even strong odors like fish and cabbage disappear!
- Modern design—quiet operation! Handy push-button controls operate fan and enclosed fluorescent light!
- Complete range of sizes and finishes.

Free Promotional Material Available!

Get all the facts mail coupon today!

M	R INDUSTRIES, INC.	1111-
50	rth LaSalle Street, Chicago 10, Illinois	
	ASE RUSH ME FULL INFORMATION ON THE	
	ULOUS NEW NAUTILUS NO-DUCT HOOD!	1
Nam		_
Posit		-
Firm.		-
Add		-
City.	ZoneState	_

New products

start on p 191



For Homes



for Commercial Buildings...

ULTRA-PANE insulating glass

with exclusive Metal Edged channel Saves you Time and Money!

Only Ultra-Pane is licensed to use the amazing new "T" channel (pat. pend.) in the manufacture of insulating glass. Only Ultra-Pane can bring you these features without the ungainliness and added weight of an encompassing "U" channel:

V ideal for all glass

I eliminates cut hands

V makes unit more rigid

V neater appearance

T eliminates rough edges

V eliminates chipping

V installed in half the time

T easier and faster to putty

1 1/32" tolerance maintained

Remarkable Demonstration

Glass-to-metal sealant used in Ultra-Pane Insulating Glass holds up under strenuous torture test.*

A production-run unit of Ultra-Pane was put to this test: The channel was twisted out of shape, shattering the glass ... but because of Ultra-Pane's special sealant, the glass did not break free from the channel. Any insulating glass must be absolutely airtight and watertight. Any leakage, however slight, destroys the insulating value and clarity of the unit. Ultra-Pane has a seal so strong and permanent that it withstands not only these severe lab tests, but also practical field tests . . . Ultra-Pane, for instance, needs no pressure valve when being transported over high altitude areas.

*A demonstration sample channel, dramatically twisted as shown at right, will be sent to you on request so that you may examine the amazing glass-to-metal bond available only with Ultra-Pane's unique and exclusive sealant.



HERMETICALLY SEALED

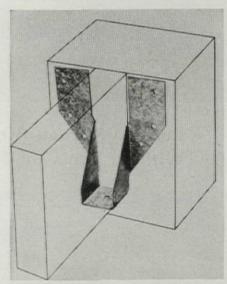
guaranteed for all U.S. climates

ULTRA-PANE: 19220 Miles Ave., Cleveland 28, Ohio Phone MO 3-7610



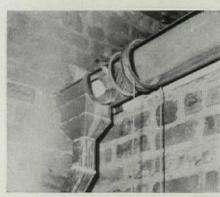
Fire warning kit is packaged by Walter Kidde. Six fire-sensing elements, powered by 6-v battery or ac-dc power pack, are connected to alarm bell and horn. Elements react to 135F temperature (180F in attic), sound warning when fire breaks out. Each detector monitors 2500 sq ft, sounds alarm and lights pilot on control panel when fire breaks out. Price \$99 retail.

Kidde Alarms Inc, Clifton, N.J. For details, check No. 32 on coupon, p 239



Donley joist hanger fits flush with beam after joist is in position, is ideal for repair or remodeling. Supports are made of 14-gauge corrosion-resistant steel, are punched to take heavy nails. They are made in two sizes to take nominal 2" or 4" lumber.

Donley Bros Co, Cleveland. For details, check No. 33 on coupon, p 239



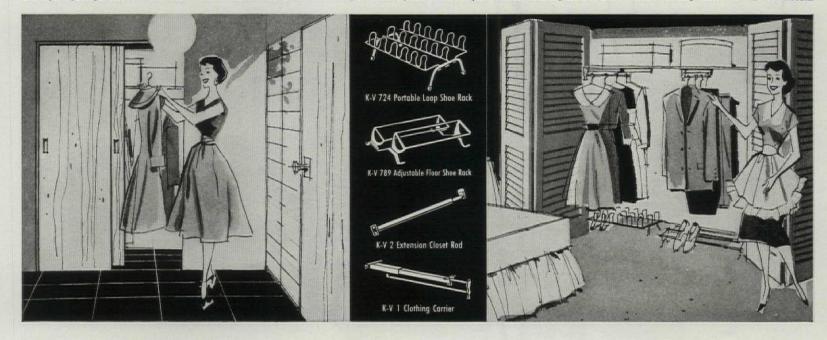
Easy-clean eaves trough has built-in rotor to dump debris from trough. Rope-operated rotor is placed at leaderhead, will handle up to 30' sections. Gear is designed to fit 5" half-round gutters. Cost of leaderhead \$5.85, rotor \$1.36, other parts in proportion.

Ralph Tripp Co, East Orange, N.J. For details, check No. 34 on coupon, p 239

continued on p 218

K-V 858 Sliding Door Hardware. Years of troublefree operation. Everything for simple installation in compact package. Fits 3/4" and 13/6" doors. K-V 2 Extension Closet Rod. For shallow closets. Quickly installed. Won't sag even under heavy Ezy-Fold Concealed Hardware. Keeps doors of any weight from sagging. Adjust with hardware in place without removing doors or trim.

K-V 1 Clothing Carrier. Virtually doubles closet space. Easily installed. Brings a whole wardrobe into easy reach. 10" to 48" models.



For closets and kitchens KV gives you more of what you're looking for!

Top Quality # Easy Installation # Trouble-free Performance ...and the best known line in the business!

> With an eye to more efficient use of space, more and more builders and contractors are specifying K-V Closet and Kitchen Fixtures, and sliding and folding doors installed with K-V hardware. They know these top quality fixtures are easy to install, provide scores of years of trouble-free performance and give homes strong customer appeal. Ask your K-V sales representative for the complete story on K-V fixtures and hardware.

pans right at hand, but neatly out of sight.

K-V Kitchen Fixtures. Homemakers love the way K-V kitchen fixtures keep towels, cups and pans right at hand, but neatly out of sight.

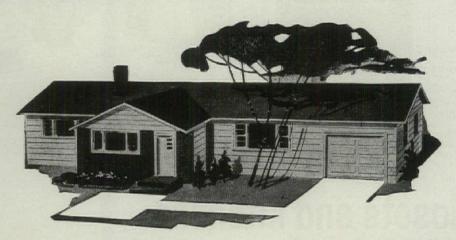
K-V 790 Disappearing Pan Rack. Holds 14 pans, strainers, was called the fixtures keep towels, cups and pans right at hand, but neatly out of sight.

K-V 790 Disappearing Pan Rack. Holds 14 pans, strainers, was called the fixtures. Was disappearing Towel Rack. Towels slip surface. 1/2" adjustment. Gives perfect alignover ends of three chrome bars. Ball-bearing caping. Capinet. Length 20"; width 51/4". Bright chrome.



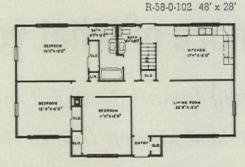
5ord QUALITY

Can Sell More Homes for YOU!
... because FORD builds
QUALITY in at the blue-print level!



offers you

built-in
savings, too!



Here's how . . .

You save on-site labor costs:

FORD delivers component units . . . pre-planned, pre-cut, pre-assembled . . . a complete package, ready to erect. FORD lays finish flooring, applies drywall, does wiring, applies trim in the factory.

You save time:

FORD precision fabricated units insure accuracy of fit, speed of erection; FORD HOMES are ready for decorating in just 24 hours!

You save on materials:

FORD quantity purchasing, factory fabrication and production line methods reduce cost of materials; FORD precision engineering insures maximum liveability with minimum maintenance.

FORD HOMES are approved for F. H. A., V. A. and conventional type mortgages; accepted by leading building code authorities.

Get your share of the quality market . . . deliver a better home for less money . . . with the complete FORD QUALITY package!

For full details, write today on your own letterhead.

IVON R. Ford INC., MC DONOUGH, N. Y.

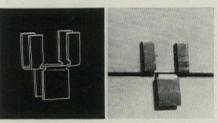
New products

start on p 191



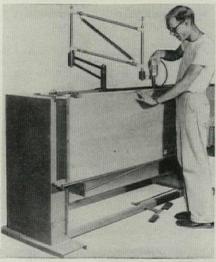
Airless spray painting has been added to the DeVilbiss line. New equipment can handle light or heavy fluids, gives sharp edges and solid coats. Portable unit includes pump, cart, tank, agitator, pump elevator, Teflon-lined hose, carbide-capped spray gun. Gun has .011" to .018" orifice, works under pressures of 1800 to 2400 psi.

DeVilbiss Co, Toledo. For details, check No. 35 on coupon, p 239



Plywood sheathing clip eliminates the need for edge blocking when 3%" plywood is used on roofs. Clips are stamped from .047" SAE 1010 steel, are claimed to reduce deflection to 1/16" or less, under 400-lb loads applied within 3" of the clips. Clips for 5/16" and 34" plywood will be available later.

Panel Clip Co, Dearborn, Mich. For details, check No. 36 on coupon, p 239



Doormaking equipment from Turn-A-Bore includes a new jig for applying hardware (above). Door, already mortised and drilled in Turn-A-Bore door machine, is clamped in jig, is quickly flipped from edge to edge so hinges and locks can be screwed on with radial-arm screwdriver. Also new, a jamb and stop machine to align edges of split or one-piece jambs.

Turn-A-Bore Equipment, Fort Worth. For details, check No. 37 on coupon, p 239

continued on p 220

"For Second Time Home Buyers We Use

George S. Goodyear, Charlotte, N.C.

"We want homes that literally grow out of the ground, with warmth and beauty that take full advantage of the hilly terrain in our Mountainbrook development," says Mr. Goodyear. "When you're building for second and third time home buyers as we do here, you want the materials that fit the type of architecture. That's why it's wood windows for us."

BEST BUILDERS' GUIDE TO WINDOW QUALITY



The American Wood Window Institute Seal on the windows you install is your customer's assurance that they conform to the specifications of new FHA standards and are:

Correct in design • Properly constructed • Preservative treated • Properly balanced Made from carefully selected kiln-dried lumber • Efficiently weatherstripped.

MEMBERS-Woodwork Group

MEMBERS—Woodwork Group
Andersen Corporation
Anson & Gilkey Co.
Biltbest Corporation
Caradco, Incorporated
Continental Screen Co.
Curtis Companies, Inc.
Farley & Loetscher Mig. Co.
Grinnell Sash & Door Co.
Hurtig Mig. Co.
Grinnell Sash & Door Co.
Huttig Mig. Co.
Corp.
Huttig Mig. Co.
Companies, Inc.
Long Bell Division
Malta Manufacturing Co.
Missoula White Fine Sash Co.
Missoula White Fine Sash Co.
Philips Co.
Philips Co.
Philips Co.
Western Pine Mig. Co.
Western Pine Mig. Co.
Western Pine Mig. Co.
Western Pine Mig. Co.
White Pine Sash Co.
MEMBERS—Lumber Group

MEMBERS-Lumber Group

MEMBERS—Lumber Group
Alexander-Stewart Lumber Co.
The Anaconda Company
Associated Lumber & Box Co.
Bate Lumber Co.
Bate Lumber Co.
Bate Lumber Co.
Brooks-Scanlon, Inc.
Cal-ida Lumber Co.
Cascade Lumber Co.
Cascade Lumber Co.
Collins Pine Co.
Crane Mills
Diamond Gardner Corp.
Georgia-Pacific Corporation
Glichrist Timber Co.
Cdward Hines Lumber Co.
Cdward Hines Lumber Co.
McCiloud Lumber Co.
McCiloud Lumber Co.
McCiloud Lumber Co.
Oregon Lumber Mills, Inc.
Talos Forest Products
Raiph L. Smith Lumber Co.
Southwest Lumber Mills, Inc.
Talos Forest Products Co.
Tarter, Webster & Johnson, Inc.
Tite Knot Pine Mills
U. S. Plywood Corp.
— California Divison
Warm Springs Lumber Company
Western Pine Association
Weyerhaeuser Sales Co.
Winton Lumber Co.



onderosa Pine woodwork

An Association of Western Pine Producers and Woodwork Manufacturers

39 S. LaSalle Street

Chicago 3, Illinois

New products

start on p 191



This "Extra" SAVES You Money on every closet in every house you build!

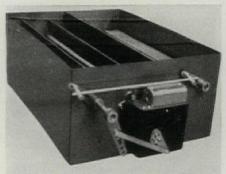
Unlike many of the "extra" features that give your homes added sales appeal, Float-Away Closet Doors actually save you one-third of the cost of every closet opening in every house you build. How? Add your costs for doors, hardware and jambs, plus the cost for framing down to door height from the ceiling, plus the cost for wall returns on the sides. Compare this with the cost of Float-Away Closet Doors large enough to extend from plaster wall on one side to plaster wall on the opposite side and from floor to ceiling. You will prove to yourself that you do a better job for less. Float-Away doors are shipped with all necessary installation hardware and are furnished in flush or louvered panels. Painted room color they make even a small room appear larger. Additional storage space in the top and complete access to the entire closet area is provided.



Phone or wire collect Trinity 3-3111 for complete information and prices.

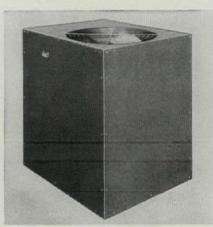
FLOAT-AWAY DOOR CO.

Formerly Berry Door Co. 1173 Zonolite Road, N.E. Atlanta 6, Georgia



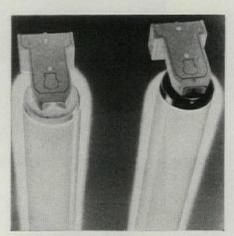
Two-zone plenum gives area heating and cooling from single system. Zone-Pak has double-damper activated by standard Honeywell control, opens either or both chambers as heating-cooling load demands. Units can be designed to fit any forcedair system. Complete unit is priced at \$65.

Ryniker Steel Prods, Billings, Mont. For details, check No. 38 on coupon, p 239



Bryant gas-fired conditioner is now in production. Units include an absorption refrigeration machine installed outside the house and upflow, downflow, or blower cooling coils installed in heating system. Model 36-450 has cooling capacity of 36,000 Btuh from a heat input of 120,000 Btuh. Equipment cost: somewhat higher than equal electric system; installation and operating cost: somewhat lower.

Bryant Mfg Co, Indianapolis. For details, check No. 39 on coupon, p 239

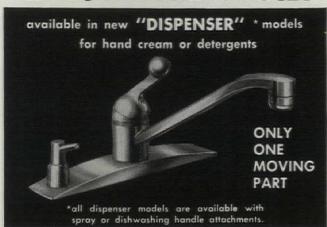


Full length lighting is supplied by the newest development in fluorescent tubes, 40-watt units light up from contact to contact including translucent plastic end caps. Extended area gives 3200 lumens as against 2650 in older models. Price of new lamp is \$1.45 vs \$1.30 for older type.

Westinghouse, Bloomfield, N.J. For details, check No. 40 on coupon, p 239

continued on p 222

Deta BALL FAUCET SINGLE HANDLE



The national trend is toward single handle faucets . . . and the single handle trend is for DELTA . . . the ONLY FAUCET with ONLY ONE MOVING PART.

DELTA is competitively priced . . . simply installed (actually easier than old fashioned faucets) . . . and literally DEPENDABLE.



IN CANADA: EMCO LIMITED 16 Branches across Canada

Literature available upon request.

Detta FAUCET CORPORATION GREENSBURG, INDIANA



The beautiful fireplace in this award home, designed and built by Mitchell and Coffin of the Chestnut Hills Estates, was built around Model "A" HEATFORM, the warmair circulating fireplace unit. This is one of the many hidden values have helped the sale of their homes.

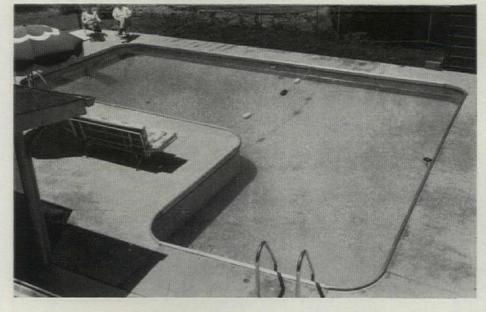


Five HEATFORM models of various sizes are available to accommodate any design of single or multiple opening fireplace. WRITE NOW FOR FREE DETAILED CONSTRUCTION INFORMATION, OR ENCLOSE \$1 FOR 52 PAGE 11" x 81/2" **BOOK CONTAINING VALUABLE INFORMATION PLUS 88** HEATFORM FIREPLACE DESIGNS selected from NATIONAL CONTEST.

SUPERIOR FIREPLACE COMPANY

Dept. HH-4325 Artesia Avenue Fullerton, California

Dept. HH-601 North Point Road Baltimore 6, Maryland



Now, new "L" shape makes this unique SWIM QUEEN pool sell even faster

HERE'S HOW IT'S PUT TOGETHER

 $3\frac{1}{2}$ foot fiberglass panels bolted together at 3', 10'or 12' intervals, reinforced with galvanized steel braces with patented built-in coping locking pool panels to cement walk around the pool, perman concrete floor - utmost simplicity of assembly.

Here at last is a pool that has licked both the construction and maintenance problems of ordinary pools by combining the new miracle product fiber glass and ageless concrete.

Pool owners in key areas throughout the U.S. who have enjoyed their Swim Queen pools for five or more years report they look absolutely brand new. They are unaffected by severe winter weather and they never need painting or calking.

Pool builders are enthusiastic too. They point to construction economies due to Swim Queen's exclusive simple-to-install design. Only with Swim Queen do you get all these important features:

- Thoroughly engineered by long experienced pool contractors.
- As beautiful as a tile pool and as maintenance-free as a pool can be.
- · Exclusive built-in splash-proof coping.
- Fast installation, utmost simplicity of assembly, no expensive forms.
- · Guaranteed for five years.
- Complete pools as low as \$2395
- · Complete line of pool equipment
- Nationally Advertised
- · Complete sales aids
- Complete engineering service
- · Yearly profits on repeat pool equip-
- Variety of shapes available



WRITE TODAY FOR BROCHURE, "THE ADVANTAGES OF A SWIM QUEEN FRANCHISE."

Swim Queen Pool Co. 300 N. Waukegan Ave. Glenview, Illinois

Address

City & State

Proven... BIGGEST SALES ASSET YOU CAN ADD TO YOUR HOMES...

NEVAMAR carefree KITCHENS

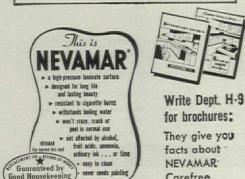


Built For Lifetime Service with NEVAMAR Surfaces Inside and Out

NEVAMAR Carefree KITCHENS are proven eye-stoppers... give you a positive selling feature that will make your homes the first choice. Home buyers everywhere are being thrilled by the NEVAMAR lifetime surfaces, the choice of eye-delighting wood-grains and fine quality features built into every unit. These features plus stunning good looks make NEVAMAR Carefree KITCHENS the proven way to put "SOLD" signs on your homes.

FOR THE MASS HOME MARKET— Winn-Maid KITCHENS

Build the luxury look into budgetpriced homes. Winn-Maid kitchens feature NEVAMAR fronts...positive sales-makers



NEVAMAR carefree KITCHENS, INC.

KITCHENS.

New products

start on p 191



Prefabbed carport is designed to withstand extreme weather. Single-skin aluminum panels combine with heavy extruded aluminum framing so a 10'x20' roof is certified to hold up to 6,000 lb load. Assembled without bolts, screws or any hardware. Built-in gutters and downspouts.

Panelfab, Miami. For details, check No. 41 on coupon, p 239



Stock aluminum cupola serves as housing for attic ventilators, exterior lights, horns, telephone bells, hi-fi speakers, etc. Sides and roof are sheet aluminum, joints are stainless steel, finish is baked enamel. Fits any roof pitch. Cupola is \$42.50 fob Detroit; cock, horse, anchor, or sailboat weathervane adds \$12.

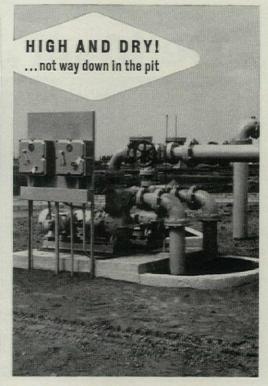
Garland Mfg Co, Detroit.
For details, check No. 42 on coupon, p 239



Cedar shake panels in four types are new in Northeast. Panels are No. 1 red cedar shakes backed with either insulating board or perforated Sisalkraft. Joining strips are flat or interlocking. Panels are 48" long by 18" deep, give 14" exposure. Panel-lock types are self aligning; backer board types can be used directly on studs.

Nat'l Shake Panels, Fairview, N.J. For details, check No. 43 on coupon, p 239

Publications start on p 234



Twin installation of model 14A2-B at a sewage treatment plant, Clair-Mel City, Tampa, Fla. Controls alternate pumps at regular intervals.

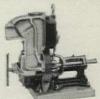
GORMAN-RUPP SEWAGE PUMPS

cost LESS TO BUY — Self-priming in lifts up to 15', positive in action, nearly completely non-clogging. High and dry, their installed cost has allowed savings of as much as 50%.

cost less to maintain — Almost no maintenance needed! No need to service by entering pit or raising pump. Just a turn of the wrist and the end plate is off.

PERFORM WHERE OTHERS FAIL — In lift stations and sewage plants, these Gorman-Rupp units have shown amazing records of savings . . . operating where others have failed. Let us show you examples.

2", 3", 4" and 6" pumps—connected to your power or ordered complete with power units. Write for complete specifications.



FAST-ACTION END PLATE— Exclusive end plate releases for access to impeller and wear plate. Twovane open impeller specifically designed for handling spherical solids.

THE GORMAN-RUPP COMPANY

305 Bowman Street . Mansfield, Ohio





for Sales Managers and Sales Representatives

Due to rapid expansion of our nationwide network of manufacturing facilities, we have openings for Regional manufacturing facilities, we have openings for Regional Sales Managers to supervise sales activities in the New England States and Colorado, and for Sales Representatives in outstate Massachusetts, Boston, Washington, D.C., Baltimore, South Carolina, Upper New York State, Ohio, Detroit, Michigan, Iowa, Kansas City, New Orleans, Louisiana, Houston, Beaumont, Port Arthur and San Antonio, Texas, to service existing and establish new Builder-Dealers Antonio, Texas, Builder-Dealers.

Remuneration on liberal commission basis. Drawing account available after performance established.

Proven management and creative sales ability essential, with knowledge of real estate, residential construction, FHA/VA procedures and mortgage financing desirable. Potential earnings for Sales Managers up to \$30,000—for Sales and the same \$15,000 for Sales Managers. men \$15,000 to \$20,000. Send brief resume to Howard Trinz, Vice President, 2001 North Westwood, Toledo 7, Ohio.

SCHOLZ HOMES, INC.



DOORS AND SOLID BRASS FRAME!

- · Blends with any decor.
- Picture window view of fire.

- Comfort Radiates gentle, even heat with no floor drafts.
 - Burn wood, coal or gas.

- Convenience Piano hinged doors open easily.
 - Control fire with sliding draft doors.

· Protects against sparks, smoke, soot and dirt. Guaranteed.

Treasured In Fine Homes Everywhere! Sizes to fit any opening. complete details . . . Write Dept. H959

MANUFACTURING CO., Akron 9, Ohio



ANSWER AMERICA ANSWERS YOUR TELEPHONE 24 HOURS FVFRY DAY

Don't miss any prospects . . . increase your volume . . . reduce your overhead. Offices everywhere, Answer America's efficient secretaries are on duty 7 days a week around the clock. It won't be necessary for you to have a staff during off hours and week-ends. Your sales force will be able to make more appointments and calls. This new network of telephone answering exchanges offers local and regional service throughout North America. For complete information, look for Answer America in the white section of your telephone directory or call Information. . . for service in other cities, write Answer America.

ANSWER AMERICA, INC.

55 East Washington Street, Chicago, Ill.

RA 6-2339



11 Foundations

Pouring 9 to 11 house foundations a week is a regular occurrence in the sparsely populated area of Logan, Utah. In fact, Morris J. Smith, the concrete contractor, and his crew with about 5,000 square feet of Symons Steel-Ply Forms have poured more than 400 foundations in 2 years. The ply-wood has not been turned and is still good for many more pours.



4277 Diversey Avenue, Dept. J-9, Chicago 39, Illinois

Please send folder giving the complete Morris J. Smith story.

Name	
Firm Name	
Address	
-	



A distinctive tiled bathroom like this adds the sales punch home builders are looking for today. Walls: 23 Pink Blush. Counter Top: 8½" x 4¼", 97 Gardenia. Floor: Pan-O-ramics 3003-35, 1½,6" squares in Pink, Shell Pink, Rose Shadowflash and Lilac. Color Plate No. 90.

BATHROOMS...PACKED WITH SALES APPEAL

Bathrooms bright with new and unusual color combinations... tiled bathrooms that offer new and exciting decorative effects add that important plus appeal you need to sell homes fast today.

In American-Olean's new color booklet "Color Planning with Ceramic Tile", you'll find a wealth of brand new color combinations for bathrooms, powder rooms, other rooms... decorative tile treatments worked out by top American designers and never used before.

They're all yours right now-for the asking. Just fill in and mail the coupon.

American-Olean 1410 Cannon Av	
Please send me	your new booklet "Color Planning with Ceramic Tile".
Name	
Company	(Please Print)
Address	
711111111111111111111111111111111111111	



AMERICAN-OLEAN TILE COMPANY—EXECUTIVE OFFICES: LANSDALE, PA. FACTORIES: LANSDALE, PA., OLEAN, N. Y. MEMBER: TILE COUNCIL OF AMERICA, PRODUCERS' COUNCIL

Cater to a Miss-and your house can't miss!



Go ahead, let them touch the wood. Weldwood paneling is so beautiful they can't help running a hand over it. This is the one paneling that's finished for you in 18 separate steps. You can actually feel the difference.



ul room will appear In ads in the September 14 issue of Life and September issues of Better Homes and Gardens and House Beautiful, Eye-catching rooms like this sell Weldwood paneling to your prospects.

What girl, daughter or mother, could resist a bedroom like this? Charming? Yes. Smart? Yes. Neat? Yes. Weldwood paneling makes the perfect backdrop for the individual room that girls from three up want for

And, naturally, this Charter Birch paneled room offers the Weldwood virtue of easy maintenance. Walls wipe clean in an instant.

Never need redecorating, either. And fit so beautifully with any kind of furniture.

It costs so little extra to finish that bedroom in beautiful Weldwood paneling-but how it adds to the house! So much more beauty, quality, charm . . . and salability. See all the varieties of Weldwood paneling at your Weldwood lumber dealer's or any Weldwood showroom.

Soft and Hardwood Plywood Doors • Lumber • Finishing Materials

SEND	FOR	FREE	PREFINISH	IED	PANELING	BOOK
ited	State	es Pl	vwood C	ore	oration	

54 W. 44th St., New York 36, N. Y. H&H9-59

se send me:
"Weldwood Prefinished Paneling For Fine Interiors,"
"The Profile Paneling For Fine Interiors,"

WELDWOOD® WOOD PANELING

Products of UNITED STATES PLYWOOD CORPORATION

minimizes both the capital requirements and the risk.

These advantages are offset somewhat by the guarantee plan's apparent complexity, and by the ease with which a trader can overcommit himself financially.

More firms (66%) used the guarantee plan than either of the other plans. Fifteen of the 17 large-volume traders use this plan; and the guarantee plan accounted for 40% (1,054) of the completed trade-in transactions made by the 101 trading firms interviewed.

3. Conditional trades are a lay-away-house plan

Under the conditional trade-in plan, you simply reserve a new house for a prospect while he attempts to sell his old one. Because of its simplicity, lack of required capital investment, and absence of risk-taking on the old house, conditioned trades are widely used. They involve no appraisals and can be used by any firm willing to take a new house off the market for 15 to 90 days.

Though conditional trading demands little of the trader, it also has little to offer. Neither the trading company nor the homeowner is assured of a transaction. Because it is widely used in slow, competitive markets, the plan offers the trader little advantage over his competitors. In some instances, conditional trading may even place the nonspeculative builder in a speculative position.

Although conditional trades were used by only about one-half the 101 trading firms interviewed, they accounted for 37% or 991 of all completed trades carried out by the firms.

Make sure you understand the risks as well as the benefits of trading

In trading as elsewhere, the greater the risk the greater the profit.

Some companies are content to trade conservatively, appraise cautiously, and earn a small return. Others will incur large risks to achieve the larger profit possible in volume trading. Most firms compromise, contenting themselves with moderate returns for taking moderate risks.

Although they believe that the risk of trading is more than offset by extra profits, most traders agree that trading is risky. Two-thirds of the firms surveyed indicated that trading involves more risk than their normal building or realty operations. About one-third of the firms thought the risk was about the same. Three builders and two realtors contended that trading actually minimized their risks—all five were fairly large-volume traders.

In general, large firms have the advantage in minimizing risk because they can average losses, and have more specialized personnel. The small firm, however, has the advantage of being able to give every trade personalized attention. Any firm can minimize risk by accepting in trade only houses which it knows it can readily sell, and for which an accurate market price can be determined easily. These limitations, however, also limit profit.

Bad management can increase your risks

You increase your operational risk by poor appraisal and discounting procedures (see p 230), by holding houses too long to get a predetermined and unrealistic price, by investing more in repairs and renovation than can be added to the sale price, and by taking homes which cannot readily be refinanced through your normal lending channels.

Operational risks are, at least in principle, within the direct control of management. Beyond these are market risks or risks of price decline. Such risks cannot be controlled and are not easily estimated. A sudden decline in the market, such as that encountered at the end of 1953, might well try the financial strength of any firm that trades in volume.

Any trade-in plan can be risky

The conditional plan is the least risky of the three but there is some possibility of losing the sale of the reserved new house. Because title is always taken in the straight trade, there is a possibility of loss on each trade. Fewer homes are actually taken in guaranteed trades, but there is great potential risk because of the future commitments involved. It is especially important that tight controls be applied to guarantee trade-in programs.

The industry seems generally to have accepted the estimate that only about one in ten guaranteed trades is actually taken over. While many firms operate below this level, the industry average, based on my surveys, is 18%—almost double the accepted figure.

Small-volume traders fared even worse and took in more than one-third of their guaranteed houses. Large firms averaged 7%. The record is spotty, however, indicating that management skill is probably more important than volume. About one-fourth of the traders in each size group (small: 1-15 trades per year, medium: 16-50, large: over 50) had taken title to no guaranteed trades and over a third in each group had taken title to less than 10%.

Whatever their size, traders should remember that in certain circumstances they may suddenly be required to make good on all their outstanding guarantee trades.

Make sure you know how to get the most profit out of every trading angle

Profit can come from investments in repairs, from the old house, or from trading fees and funds advanced for trading. All of these are peanuts, though, compared to the profit generated by a larger volume of new-house sales.

Volume traders agree that they are not primarily concerned about the profit on any single transaction. They calculate their profit on the over-all operation and on the sales volume which trading helps them to achieve.

Detroit trader Gordon Williamson, for example, makes no

attempt to profit on the old house for he prefers to get his earnings from the extra sales commissions trades develop. Jules Saxe of San Francisco finds that trading makes it possible for him to increase his sales volume even when his competitors' volume is declining.

If trading can help you increase your volume of business by 10%, 20%, 30%, or more, or can help you realize a full return on all the houses you are already selling, here is profit indeed.

Trading helps boost profits on new-house sales

Beyond increasing volume, trading opens up several additional avenues to profit on the sales of new homes.

Arthur K. Hellerman, Milwaukee builder, finds, for example, that he can *maintain* the prices on his new homes and sell them in slack times by temporarily offering higher prices for trade-ins.

Other firms have found trading a successful and inexpensive way to open and close projects.

Finally, the acceptance of trades may permit savings on financing costs.

Profits from old houses are not rare

Allan Brockbank, Salt Lake City builder and realtor, reports an average profit of \$400 on each old house to which he takes title. Edward Rose, a Detroit trader, has lost money on only one old-house sale. And Leland Lee Construction Co finds that its chain trades of old houses return a greater profit on "time, energy, and capital invested" than any other part of its business.

Of the trades analyzed for this study, over half returned at least the 5% margin necessary to cover transfer and selling costs and 30% of the old houses were resold with a profit of over 11%. Fewer than one-fifth sold for less than the trading firm had invested in them.

Only a few of the traders did any major repairs or renovation on old houses; those who did take this extra risk were apparently well rewarded.

A word of warning about old-house profit: Don't expect to make money from repairs, fees, or the old house without cutting off a large part of your market. You create ill-will with homeowners when you make profits this way. So regard any profits from the sale of the old house as a bonus, and be prepared to accept an occasional loss as a normal business expense.

What's the profit percentage in trades?

Presumably, every conditional trade-in transaction is profitable, but there is no such uniformity in straight or guaranteed trades

For this study, 506 straight trades were examined. Of these, 254, or one-half, were profitable; the firms broke even on 175, or about one-third; and lost money on 76 or 15%.

On 884 guaranteed trades the record was even better: 646, or about three-fourths were profitable; the firms broke even on 200, or nearly one-fourth; and lost money on only 38 transactions (4%).

What about keeping trades for income?

In many instances, traders want to keep traded properties for income.

In some cases this is a good investment, but such properties should be clearly separated from trading property, and traders should be aware of the "opportunity costs" of the money invested in such houses. (Opportunity costs relate to the return you could obtain from the same investment elsewhere.)

You should also make sure that the investment is counted at full market value—not merely on the basis of price paid.

For example, an old house with a quick market value of \$10,000 and a mortgage of \$8,000 is taken in trade for \$9,000. The trader has \$1,000 cash in the house, but his basis for computing opportunity cost is approximately \$2,000 because he could sell it and net that much.

Here is how you can finance trade-ins—it's not as hard as you may think

Many firms say they don't trade because they lack financing or financial knowledge.

Too often, financing is a false bogy man. The experience of successful traders indicates that the capital requirements for trading are not as high as you may think.

Although capital requirements vary sharply, you should be able to handle three or four straight trades per year on an investment of \$2,500.

With careful timing and good luck, you might handle up to 10 or 15 guaranteed trades per year on this investment. In practice this means that guaranteed trades can be made for an average investment as small as \$200 or \$300 per traded house.

These figures are annual averages and apply to firms which handle at least a dozen houses per year with excellent timing and management. The investment in individual transactions is likely to run as high as \$2,000 to \$3,000 per transaction.

It is important to remember that in guaranteed trading you cannot predict, absolutely, the number of traded houses to which you will have to take title. But you can reduce capital outlay requirements by selecting houses in which the owner has an equity smaller than your profit on the new house.

Where to go for interim financing

Many builders today say interim financing is the chief problem of house trading.

You need funds to handle an old house from the time you take it in trade until the time you sell it. And it is

usually not practical to refinance most old houses taken in trade until they are resold.

One place to get capital: the bank. Banks cannot make adequate loans directly on traded property, but may lend funds against your over-all assets. You can arrange for a line of credit at a bank and key your trading program to the bank's loan limits. Yet only 14% of the trading firms interviewed had utilized commercial bank loans to finance their trading operations. It appears that banks have been neglected in favor of more expensive financing because traders are reluctant to ask for bank credit or are simply unaware that so convenient a source of funds exists.

Second mortgages are also a source of interim financing. They are expensive but may be profitable if they make volume trading operations possible. In some instances you can also improve your working capital position by refinancing old, traded houses which have high equities. Certainly the best way to keep working capital available is to keep moving the old houses taken in trade as rapidly as possible. If you must take a loss on a house, recognize it early, and take it early—otherwise you are compounding the loss.

Fifty percent of the trading firms said that more than three-fourths of their traded houses were refinanced.

Only 20% resold more than three-fourths of their houses under existing financing. One-half used government-insured loans, and at least 60% of the traded houses were resold with FHA or VA-supported refinancing.

Conventional loans, while more convenient, are small and carry a higher interest rate than insured loans. Some 60% of the firms supplement their conventional financing by taking second mortgages.

THE WORLD'S LARGEST

Laminated Plastic Panels for Countertops

by CONSOWELD!



Consoweld's new JUMBO panels save time, money and materials for builders and remodelers!

Look, no seams! It's another big Consoweld difference that now gives countertops the "custom-look." It is a new kind of glamour feature that has exciting appeal to home buyers.

Only Consoweld makes top-quality laminated plastic panels in this super size. You use only one or two panels. It saves installation time and effort—and materials.



Nothing protects or beautifies countertops and other decorative surfaces better than Consoweld. It is a hard, solid laminated plastic that resists heat, wear, scratches and scuffing—never needs painting, easily wipes sparkling clean with a damp cloth.

It's amazing how the durability and distinctive beauty of Consoweld can help you sell your houses easier and faster, and "clinch" remodeling jobs for you. For full details about Consoweld's patterns, sizes, colors—and name of your nearest distributor, mail the coupon now.

CONSOWELD CORPORATION, Wisconsin Rapids, Wisconsin

Please send me details on Constops and name of nearest dist		ted plastic counter-
Name		
Firm		
Address	Mark of C	
City	State	
Please check type of business Architect □ Builder □	Dealer □	Other HH

Make sure your appraisals are accurate and realistic for your market

To make resale easy and profitable your appraisal must accurately reflect the market value of the old house. But it is not enough that your appraisal be accurate. Your customer must be convinced that he is receiving a competent, unbiased appraisal on his house.

Ninety percent of the traders interviewed made at least some appraisals through their own companies.

Their key reasons: low cost, and speed. If you control the appraisal source you can often get an immediate appraisal and close a transaction while the prospect is still in a buying mood. Your own appraisals may be suspected by customers, but your surest defense of them is that you expect to be in business a long time and so you cannot afford to be less than honest in your customer dealings.

About one-third of the surveyed companies use a company appraiser, another two-fifths use their salesmen or company principals, and one-fifth use the appraisals of cooperating brokers-most of whom also handle the

Outside agency appraisals—FHA, VA, professional appraisers, or financial institutions-are highly acceptable to the customer because they are "independent" appraisals. But outside appraisals may be more costly and slower than appraisals made within the firm, and they may not be specifically oriented to current market value.

Some outside appraisals were used by most of the traders I talked with. About one-fourth had used FHA valuations, about one-tenth had used va appraisals, and one-tenth had used independent professional appraisers.

How much discount from appraised value should you offer on a trade?

The purpose of the appraisal is to establish an accurate market value for the house. The discount from the appraised valuation should cover the trader's expenses for the trans-

Trading discounts may be computed three ways: 1) by cost breakdown discounting, where each expected cost is listed; 2) by percentage discounting, where a standard percentage discount is applied to the appraised value; and 3) by trading fee discounting, where a standard fee is charged for each house regardless of value (sometimes a 5% commission plus a fee is used).

Both percentage and fee discounting are convenient-but don't just adopt fees or discounts that seem common in the industry; make sure all costs are included.

Discounts are often lower than you think

Fifty percent of the traders interviewed in my surveys reported that they normally take trades in at a discount of 10% or less than the appraised value. Of all houses traded, 65% were discounted at or below the 10% figure.

There are notable exceptions:

One-eighth of the traders reported that their normal margin ran over 15% (in some cases discounts ran up to 30%). In at least 5% of all trade-in transactions, fees

Traders in general should be concerned about such examples, for they are likely to give trading a bad name.

You'll lose trades if discounts are too high

Discounts should, in every case, be defensible.

Explain them to the customer in detail so that he understands that you expect only a normal profit on the transaction and are not out to get rich at his expense (see p 228).

Firms using narrow discounts have a good competitive weapon. Some traders will even bargain on trading discounts, packing the prices of their new houses so they can afford to bargain. Bargaining at this point is permissible, but never compromise the integrity of your basic appraisals by adjusting them just to meet your competitors.

Know what constitutes a good trade and when you should not trade

The difference between a losing trade-in operation and a successful one is often the trading firm's skill in selecting and appraising old houses. If you accept an unsalable old house or appraise an old house too high, you can seldom sell it without loss; if you appraise it too low, you are likely to lose the transaction.

Location is the single most important factor

Nearly half the traders said they often reject houses because of poor location.

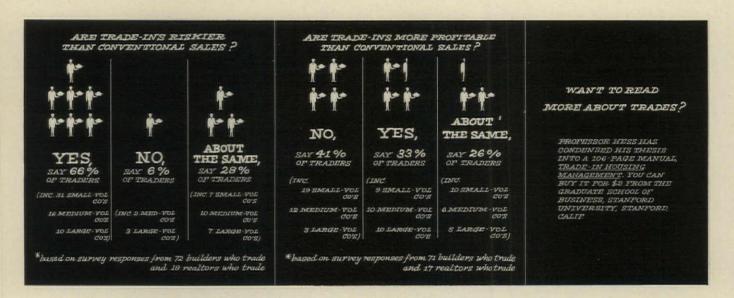
> Where the character of a neighborhood is changing, or where poor zoning laws give inadequate protection to residential properties, real estate price structures are

likely to be unstable and trades risky. Some firms reject houses because they are too far from the company's sales offices and it is just too inconvenient to service them.

Some traders flatly reject houses over 10 or 15 years old and most firms are reluctant to take homes which need any major repairs.

Other traders find older homes profitable. Nearly one-half the transactions analyzed involved houses over ten years old; and one-third of the traders said that houses over 12 years old accounted for more than two-thirds of their transactions.

The value of the old house is a limiting criteria for many traders. Some will take only "low priced" homes in trade and most recommend that the value of the traded house not exceed two-thirds of the selling price of the new house.



Traders do not restrict themselves too severely, though—of 103 trades on which price data was secured, only 30 sold for less than \$10,000, and 13 sold for more than \$15,000.

And what about houses that require fix-up?

Most traders dislike repairing houses taken in trade. Less than half the traders interviewed expressed willingness to do repairs, and most of these had a \$100 to \$200 limit. Traders who do remodel agree that risks and profits increase as the repair investment grows larger.

Twenty-nine traders reported their profit or loss on repairs: 12 had returns twice as large as the repair investment; 15 made from 100% to 150% on their expenses; and only two were unable to raise the selling price of their used houses by as much as they had invested in repairs.

Screening prospects is the first step in successful trading

Customer selection means screening prospects who are willing and able to trade from those who are not. Set up policies and procedures to regulate screening. They will save time, appraisal costs, and help you keep good public relations. Eliminate prospects who are not likely to trade, but be careful that you don't also eliminate good prospects who do not at first seem to qualify on all points.

Teach your salesmen what to look for

Primary responsibility for customer selection lies with your trade-in salesman. He must consider the prospect's desire for the new house, his financial ability, and the acceptability of the old house offered in trade. To help salesmen do the screening job adequately, provide them with a guide, screening forms, or policy statements.

Some companies consider their new-house deposit a screening device and about two-thirds of the surveyed firms require some sort of deposit as a declaration of sincere intention to buy.

Leland Lee in Dallas says that his best screening technique is telling people what the monthly payments will be on the new house. He has found that the large jump between old

and new-house payments is a main source of customer resistance and those who cannot or will not meet the increased payments should be eliminated at once.

The prospect wash-out rate in trade-in transactions is extremely high.

There are four reasons: 1) inadequate screening, 2) a poor explanation of trade-in plans, 3) poor handling of the price offered for the old house, and 4) a weak sales close.

Nearly one-half of the 101 traders thought that sales were completed with less than 5% of the prospects originally attracted by trade-in advertising. Another 25% of the traders said they had completed from 6% to 10% of their possible transactions.

Traders who screen carefully find their rate of customer loss low at the closing stage; while those who do not screen have a high percentage of losses in closing.

How many transactions are completed? Over one-half of the trading firms completed less than one-fifth of their total prospective transactions; about one-third completed from onefifth to one-half their trades. These figures do not include prospects who are discouraged before they reach formal screening. If it did, the wash-out rate would be even higher.

Make sure your trade-in ads tell the full story of how your trade-ins work

In general, today's trade-in ads seem to be poorly planned, poorly coordinated with other advertising, and often sadly lacking in information. Only 15% of traders who advertise indicate they get an "excellent" response. Nearly half the trading families said they suggested the trade to the seller.

In some firms the trade-in is held as a "secret weapon" to be used only when the prospect can't be turned into a purchaser any other way. In such firms trading can hardly be considered a device for mass-merchandising houses. To make your trade-in program effective, make sure it gets the

maximum public exposure. And don't forget free publicity in your local paper.

Devote some of your ads primarily to trade-ins, and run them to focus consumer attention on the trade-in plan. Specialized ads are quite likely to reach families who had not previously considered themselves in the market for a new house.

Too many trade-in ads don't tell enough

All too often trade-in ads are merely incidental to the main advertisement of a trading firm. Frequently the only mention of trade-ins is: "We take trades" or "See us about a trade-in." This is certainly not hard-selling copy, and is not

likely to bring many families into the market for a new house.

Your ads should arouse the homeowner's interest and lull his suspicions. So write your ad to tell the prospect why it is wise for him to trade, what the conveniences are, and what he will gain.

A brochure is perhaps the best and easiest way to give a prospect relatively complete information about your trade-in plan.

Ten of 21 large-volume traders said a brochure was their most important advertising medium. It can give complete information, the interested prospect will usually keep his copy, and it relieves salesmen of much of the chore of explaining trade-ins.

Remember, salesmen can make or break the best trade-in plan

All mass merchandising of houses depends on trained and experienced salesmen, and the complexity of house trading makes capable salesmen even more important.

Besides selling the customer on the new house, the salesman must also attempt to build customer confidence in your firm, the trade-in plan, and the fairness of the valuation on the old house.

In general, my research shows poor management of trade-in sales forces: the functions of the salesmen are poorly defined; salesmen are badly trained, if trained at all; salesmen are compensated incorrectly; salesmen are given inadequate sales aids; and, usually, salesmen have no source of written information to which they can turn. As a result, most salesmen can't trade successfully.

Should salesmen handle new and old houses?

Most firms have their salesmen sell only new houses or only used houses.

But a few firms argue that the new-house salesman who handled the trade is best qualified to sell the old property because he is best acquainted with it. You probably need more competent salesmen to handle both new- and old-house sales than you need if your salesmen specialize.

Salesmen's specific trading duties differ widely from company to company and from salesman to salesman.

At one extreme, traders restrict their sales staff to introducing the subject of trading. The prospect then is turned over to a "trading expert" or "trading specialist" (often the sales manager).

At the other extreme, salesmen may: 1) introduce the subject of trading; 2) explain the operation and advantages of the company's trade-in plan; 3) screen out ineligible prospects; 4) make a tentative offer for the old house, subject to appraisal, and persuade the prospect it is accurate and fair; and, finally 5) close the transaction for the trading firm.

Most traders strike a middle ground on the salesman's responsibility and authority because all but the most accomplished salesmen are likely to need help at the crucial stages of some transactions.

It's your fault if your men aren't good traders

Yet only one-third of the firms interviewed thought most of their salesmen were skillful in using trades to sell new houses.

More than a third said that only a very few of their salesmen possessed the requisite skill in trading and less than 60% of the trading families thought the salesman handling their transaction was well informed about trades.

So don't ignore your sales problems. Capable trade-in

selling is based on careful selection of salespeople, appropriate training or retraining, suitable compensation plans, trading aids, and employee interest and motivation.

Too often, fragments of a training program are substituted for a comprehensive program.

For example, of some 30 leading traders interviewed for this study, only four had provided their sales staffs with sales manuals—a basic for comprehensive sales training. An adequate program should include one or more formal training sessions, a sales manual for study, and supervised or practice selling. These should be supplemented by periodic sales meetings and information bulletins.

Salesmen should get trading aids to simplify their job. Examples: booklets and brochures to help them explain the trade-in plan; a step-by-step procedural guide to lead them through the transaction; and simple screening, contract, and cost-estimate forms to help them close the transaction.

How should you pay your salesmen?

Most companies pay straight commission—but this method is not the best method for trade-ins.

More useful alternatives may be: commission plus bonus, commission plus profit-sharing, and straight profit-sharing.

A compensation plan can be designed to accomplish one or more of the following objectives:

- Encourage the sales staff to trade (by allowing listing commissions on the old residences taken in trade).
- Stabilize the income and turnover of sales employees and encourage the old-house sale (by withholding listing commissions until the old house is sold).
- 3. Provide incentive to make a profit, or avoid a loss, on the old house sale (by offering a bonus for its successful resale).
- 4. Assure that trading is selective (by requiring salesmen to share losses).
- Increase trading activity (by exempting salesmen from trading losses).

Many interviewed companies indicated that lack of interest among salesmen was a major obstacle to the success of the trade-in program. Sales motivation is composed of many things. The salesman must be shown that trading is advantageous for him and that he is well rewarded for any extra effort trades may require of him. And he should be shown how trading brings him prospects and helps him close sales he would otherwise lose.

If a trade-in program is sound and the employees are trained and compensated correctly, salesmen are likely to be enthusiastic about trading after their first sale. /END

THIS FALL over 125,000 leading

professionals*—men like yourself—will read these 3 important oversized issues:

OCTOBER—How to Build Better Apartments for Less

This big issue will show:

Why America will need 3,000,000 more apartments in the next decade.

Why the industry needs a complete new deal on apartments from local, state and Federal governments.

How new methods borrowed from home building are cutting garden apartment building as much as 20%.

How to keep your apartments 100% rented when others are 40% vacant.

What the new design trends are and how they will affect rentals.

New tax devices to increase apartment profits.

What we can learn from the U.S.S.R. about apartment building.

New uses for materials and products that make apartments more livable.

—plus page on page of additional time-saving and money-saving information on how to design, build, finance and sell more apartments.

NOVEMBER—The Best Quality Houses for '60

This special issue will bring you detailed blueprints for the best salessparking speculative and trend-setting custom houses other leaders are counting on for 1960's market.

You'll get blueprints for a score of the country's finest houses that show significant—

ELEVATIONS WITH VARIATIONS FLOOR PLANS-TO-SCALE CONSTRUCTION DETAILS SALES FEATURES NEW METHODS SPECIFICATIONS COST DATA
DIMENSIONS
NEW PRODUCTS

You'll see a wide selection of ranch, hillside, 2-story and split-level houses of all popular design styles, for all climates and every price range.

Later next year you'll get another big issue featuring plans and specifications for The Best Houses for '61.

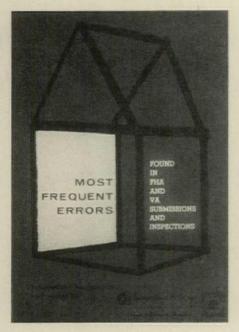
DECEMBER—A Double-feature Issue

This end-of-the-year issue will include 2 of House & Home's most important innovations—

- 1. House & Home's annual review of the progress of the manufactured house.
- 2. House & Home's annual consumer magazine review—to show you the best new ideas that consumer magazines have been pre-selling this year to millions of consumers.

To be sure of getting all 3 of these important issues, use the special insert card bound into this issue to enter your new subscription or to renew your current subscription.

*Architects, Appraisers, Builders, Contractors, Distributors, Dealers, Government Officials, Manufacturers, Mortgagees, Prefabricators, Realtors.





How to avoid mistakes in FHA submissions

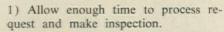
Are you among the 60% of builders who make mistakes in submitting your projects to the government agencies? If so, Youngstown Kitchens and the Seattle Master Builders Assn have done you a favor by putting together a checklist of the most frequent errors found in FHA and VA submissions and inspections. Here are some highlights from the FHA section:



Make sure your preliminaries are complete

- 1) Plot plans should show walks, drives, elevations, sewage disposal layout, retaining walls, etc.
- 2) Heating plan should show make and model of furnace, Btu output, size of oil storage, type of burner, size of registers, ducts, radiators or convectors, Btu loss per room.
- Adequate details and design data should be given for special framing
- such as beams into masonry, windows, reinforced concrete, etc.
- 4) Application should show whether mortgagor intends to rent, occupy, or sell the property.
- 5) Operative builders should supply current balance sheet and operating statement
- 6) Signatures of all parties should be on forms.

Make sure you are ready for inspections



2) Have all work completed that is to be inspected.

3) House should be weathered in, utilities roughed in, plaster grounds in.

4) Footings should be adequate and

- stepped, not sloped.
 5) Changes should be approved be-
- fore you go ahead with them.
- 6) Sewage fields should be open to inspection.
- 7) Framing lumber should be dried to 19% maximum moisture, siding and finish lumber to 12%.
- 8) Flashing should be in place on roof, at chimney, window sills and heads, and at base of brick veneer construction.
- 9) Heating and plumbing pipes and ducts should be supported at all joints.
- 10) Floors, walls, windows, porch slabs, brick work, plumbing fixtures, should all be clean.



Organize your drawings for submission

- 1) Submit two (and only two) sets of drawings and description of materials (Form 2005) with each single application, three sets for a basic.
- 2) Arrange drawings in the following order: plot plan; foundation plan; floor plan with kitchen cabinet detail; front, rear, and end elevations; wall section, roof trusses, and other details;

heating layout.

- 3) Don't use drawings bigger than 18"x30".
- 4) Arrange them so top and left edges are even.

The complete booklet including information on vA is available from Youngstown Kitchens. To get it, check No. 44 on the coupon on page 239.

Specify QUALITY – get quality results!



Specify Majestic FIREPLACE COMPONENTS

Any fireplace design becomes a better finished fireplace when quality components are used. And the name Majestic means quality! After more than 30 years of broad acceptance, Majestic circulators and dampers continue to meet the requirements of architects, builders and buyers.



Majestic CIRCULATOR

Really expedites the job of fireplace building. Circulates heat that other fireplaces waste! Heats rapidly, guards against smoking. Finish with any style mantel.

RADIANT BLADES



Increase radiant surface area, guide flow of air over hottest parts of firebox and assure rigid support of firebox wall. An exclusive Majestic feature.

Majestic DAMPERS

Cast iron or steel, with rotary face or poker type control. Tight-fitting construction for draft efficiency.



The Majestic Co., Inc. 413-AC Erie St., Huntington, Ind.

Maker of the much-discussed CHAR-GRILL barbecue grille for customized kitchens, family rooms, patios and outdoor living rooms.

Publications

Radiant heating slabs

Basic data on floor surfacing, heating slab, radiant heating coils, insulation base or fill, waterproof membranes, and support brackets accompany detailed installation drawings in this brochure aimed at the entire building industry — architects, engineers, builders, contractors, realtors, government officials, etc. Each sketch shows how wrought iron coils are placed in the slab and how the slab relates to other structural features.

A. M. Byers Co, Pittsburgh. For copy, check No. 45 on coupon, p 239

Architect's paint manual

Rockcote Paint Co's new manual provides quick reference to specifications for finishing all types of construction. Specs are given in short form so they can be typed directly from the manual. Booklet is a looseleaf binder so new sheets can be added easily. Each manual is registered so changes can be supplied automatically.

Rockcote Paint Co, Rockford, Ill. For copy, check No. 46 on coupon, p 239

How to use large size tile

A 16-page guide to the use of larger shapes and sizes of ceramic tile (8½"x4½", 6"x4½") is new from American Olean. Tile are shown used separately or in combination with standard 4½"x4½" glazed wall tile. Color photos show tile in several recent installations. Line drawings show range of sizes and shapes available.

American Olean, Lansdale, Pa. For copy, check No. 47 on coupon, p 239

How to apply redwood siding

This 4-page data sheet covers all phases of construction with redwood siding. It tells how lumber should be handled on the job, how it should be prepared, how to get weathertight construction, how to reduce condensation, how it should be applied, how it should be nailed.

California Redwood Assn, San Francisco. For copy, check No. 48 on coupon, p 239

Safe chimney construction

Full recommendations on how to use clay flue linings in standard chimney construction make up a 6-page folder from the trade association. Besides showing types of linings and pointing out their advantages, the booklet gives basic information on chimney structure, design, spacing, flashing, flue connections, etc. Drawings show elevations, sections, and details.

Clay Flue Lining Inst, Akron.
For copy, check No. 49 on coupon, p 239

Specification time saver

Armstrong Cork has a new way to simplify specification writing. Several copies of each resilient flooring specification are printed in the booklet. Each spec is on a perforated sheet so relevant specs can be torn from the booklet and added to the job specs. Covered are general requirements, cleaning and waxing, cove base, underlayment, linoleum, Linotile, vinyl sheet, vinyl tile, rubber tile, cork tile, vinyl cork tile, vinyl asbestos tile, asphalt tile, wall and counter surfacing.

Armstrong Cork Co, Lancaster, Pa. For copy, check No. 50 on coupon, p 239

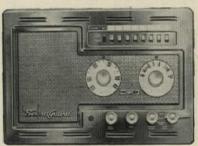
continued on p 237



A Product Designer named Frazier
Took a trip to Europe and Asia
His outlook enlarged,
His batteries charged
His new products* will simply
amaze 'ya.

*progress, of course

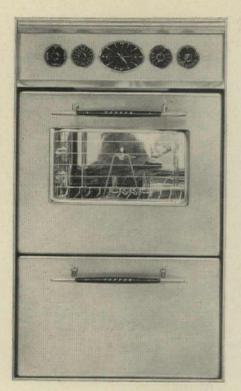
Sound Guard HOME RADIO INTER-COM



No wonder builders everywhere are specifying the new Sound Guard! It's the fastest, simplest installation ever, with AM-FM tuning for pre-selecting stations. Automatic. Two-way conversation with front door from all rooms. Full Fidelity tone control. One-year guarantee.

4	
	PROGRESS MANUFACTURING CO., INC. Dept. HH-9, Phila. 34, Pa. Please send me
	complete information on Sound Guard name of local distributor
	COMPANY
1	ADDRESS





GAS OR ELECTRIC-YOU CAN'T SEE THE VENTS ON TAPPAN OVENS

The vents are there all right. But you can't see them. There's nothing to interfere with the modern sweep of the new illuminated Constellation control panel.

You can offer the same beautiful Tappan styling whether your customer wants a gas or electric oven. And since they both fit exactly the same cabinet cutout you can interchange gas and electric units without extra carpentry.

TAPPAN
For more information on Tappan Built- Ins write
The Tappan Company Department HH-99, Mansfield, Ohio
Name
Address
CityState

Publications

start on p 234

How to build with panels

Complete instructions on how to build with Panelfab components is described in a new booklet. Included are data on how the panels are made, suggested uses, finishes, panel types, packing and shipping, site preparation, erection, typical plans and specifications. Illustrations include photos of products and installations, construction details, drawings and plans of seven typical structures.

Panelfab, Miami.

For copy, check No. 51 on coupon, p 239

Reinforced plastic skylights

New 8-page color brochure describes Consolite fiberglass-reinforced skylights. Types are shown and described; costs are discussed; and installation is illustrated. Detail drawings show how self-flashing, curb, and ceiling domes go in place. Dimensions and characteristics are tabulated.

Consolidated General Prods, Houston. For copy, check No. 52 on coupon, p 239

How to plan better lighting

The American Home Lighting Institute has two new publications to guide builders in planning home lighting. "Minimum Light for Living Standards" sets a basic standard, includes a checklist of required fixtures. "Guide to Advanced Light for Living" establishes higher levels for quality homes on a more flexible basis.

American Home Lighting Inst, Chicago. For copy, check No. 53 on coupon, p 239

Ideas for dream bathrooms

Award winners in Eljer's bathroom design contest are shown in a new four-color booklet just released. Designs show efficient use of small space, facilities for large families, compartmented and Privazoned baths, large and luxurious bath areas, powder rooms. Also included are notes on how to plan, how to use color.

Eljer, Pittsburgh.

For copy, check No. 54 on coupon, p 239

Catalogs

Full hardware line

Leigh Building Products' new consolidated catalog and price list covers door, cabinet, and closet hardware, ventilators, vent fans and range hoods, awnings and canopies, window shutters and flower boxes, mail boxes and door knockers.

Leigh Building, Coopersville, Mich. For copy, check No. 55 on coupon, p 239

Colored bathtubs

Four sizes and styles of enameled tubs and two lavatories are shown in a new brochure from Lawndale Enameling Co. Larger tub sizes feature slip-proof bottom. All are in color.

Lawndale Enameling Co, Aurora, III. For copy, check No. 56 on coupon, p 239

Architectural mirrors

Framed and unframed plate-glass mirrors in a wide range of sizes to 36"x72" are described in a new Faries-McMeekan catalog. Concealed and direct mountings are shown.

Faries-McMeekan, Inc, Elkhart, Ind. For copy, check No. 57 on coupon, p 239

continued on p 239

INCREDIBLE BUT TRUE!



BEST ADHESIVE FOR PRODUCTION WORK!

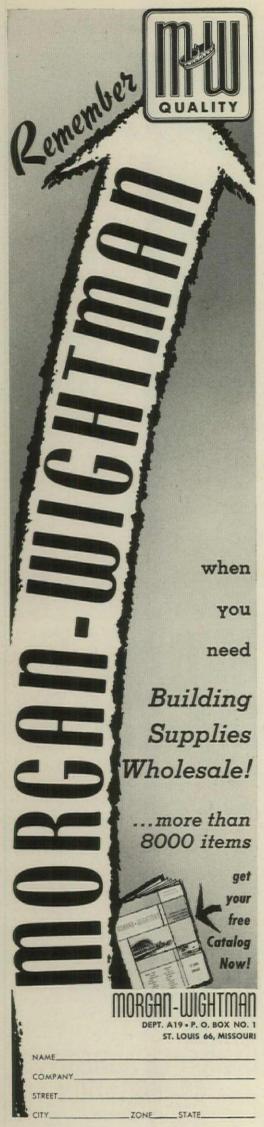
Right now in Levittown, as well as in developments all over the nation, one mechanic is installing tile in four bathrooms in just one day. Certainly it takes a special material to do the job. That's Miracle MA-266. Truly the mechanic's mastic. Made by Miracle Adhesives Corporation, who introduced the 'thin-set' adhesive method of setting clay tile more than 20 years ago, and has been the pacemaker to progress in setting tile ever since. And, Miracle has engineered MA-266 in accordance with the mechanic's own specifications. All over the country tile mechanics have told us what they wanted. In economy, in coverage, in long open time and in real waterproofness. All are combined in MA-266, finest and most economical tile adhesive in Miracle's entire 20 year history Really long lasting, too! Try it. You'll be delighted

with the way it speeds installations to achieve important savings.

Send for latest edition of valuable. authoritative handbook "Adhesive Products for 'Thin-Set' Genuine Clay Tile." No obligation.

MIRACLE ADHESIVES

250 Pettit Avenue, Bellmore, L. I., N.Y.



HOMES FOR BETTER LIVING AWARDS ENTRY SLIP

Entry slip and fee must be in the hands of the committee by January 15, 1960.

For additional entry slips or copies of the program, write The American Institute of Architects, or HOUSE & HOME, 9 Rockefeller Plaza, New York 20, N.Y.

Location Location Owner Architect Builder Submitted by	Address

To the Committee for the Homes for Better Living Awards American Institute of Architects 1735 New York Avenue NW, Washington 6, DC.

the amount of \$10

Enclosed



OUR POOLS
HAVE WON
ACCEPTANCE BY
HOME OWNERS
AND BUILDERS
ALIKE
BECAUSE POOLS
FILL A REAL
NEED...
THE HOME
WITHOUT A POOL
WILL SOON BE
AS OBSOLETE AS
ONE WITHOUT
A BATHROOM!





Mark this prediction...and if you do not have complete information on Romar Pools in your files, write or call us today. We welcome merchant builders as prospective dealers...and we welcome orders for even a single pool for one of your model homes. When contacting us, please state what information you want so that we can provide it promptly.

ROMAR FILTER CORPORATION

120 W. Melvina St. • Milwaukee 12, Wis. EDgewood 2-9070

Member, National Association of Home Builders • Charter Member, National Swimming Pool Institute

RSP-859

Metal wall plates

All Bell wall plates have been renumbered to fit a new designation system introduced in the company's newest catalog. Each device and each finish is given a number; these numbers are combined to specify any wall plate.

Bell Electric Co, Chicago.

For copy, check No. 58 on coupon below

Builders hardware

Weslock residential locksets, trim, and cabinet hardware is now displayed in a new color brochure. Incorporated are all models in 800 Series Sunray Deluxe, 700 Series Concave, and 600 Series Classic.

Western Lock, Huntington Park, Calif. For copy, check No. 59 on coupon below

Lighting fixtures

Lightolier's new style book has over 500 items—200 of which are being shown for the first time. The line covers full price range from budget to luxury installations with the biggest expansion in moderately priced fixtures. Sixteen pages of lamps are included with the built-in fixtures. Advice on how to combine fixtures is given.

Lightolier, Inc, Jersey City, N.J.

For copy, check No. 60 on coupon below

Tanier's new catalog lists 120 lamps and fixtures of contemporary Scandinavian design in a wide variety of materials including wood, glass, plastic, porcelain, wicker, raffia, linen, metal. Prices: \$18 to \$475.

George Tanier Lighting, New York City. For copy, check No. 61 on coupon below

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:

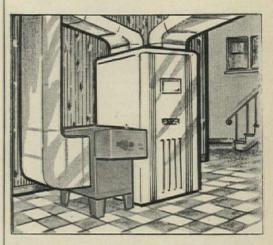
House & Home

Room 1021A, 9 Rockefeller Plaza, New York 20, N.Y.

NEW PRODUCTS • September	29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54.	T&R light-duty door closer Yale & Towne door closer Acorn DorWal 1100 Kidde fire warning kit Donley joist hanger Ralph Tripp eaves trough DeVilbiss airless paint spray Panel Clip sheathing clip Turn-A-Bore doormaking equipment Ryniker two-zone plenum Bryant air conditioner Westinghouse fluorescent light tubes Panelfab prefabbed carport Garland aluminum cupola Nat'l Shake cedar shake panels PUBLICATIONS Booklet on FHA & VA submissions Byers radiant heating slab data Rockocte paint manual American-Olean tile guide California Redwood siding data Clay Flue chimney lining information Armstrong specification time saver Panelfab component guide Consolidated skylight brochure American Home Lighting guide Eljer dream bathroom ideas Catalogs Leigh Building hardware line Lawndale bathroom equipment Faries-McKeekan mirror catalog Bell wall plate catalog Westlock residential hardware Lightolier's fixture line Tanier's contemporary lighting
NAME		
POSITION	FIRM_	
KIND OF BUSINESS		
STREET		
CITY	STAT	E
IMPORTANT:		
House & Home's servicing of this coupon	expire	es Dec, 1959. In addressing direct inquiries
		n which you saw the product or publication.
I wish to enter a subscription to House &		
□ New □ Renewal		
Litter Literati	1 A	Signature

ELECTRO-AIR ELECTRONIC CLEANERS

add quick sales appeal to your houses!



Home buyers are impressed with a house that has features that assure greater comfort, easier housekeeping and better health. Electro-air Electronic Cleaners do all these things . . without straining the budget. Your customers will enjoy "completely clean" air, because an Electro-air cleaner removes 90% of all smoke, pollen, dust and dirt regardless of size and concentration, as determined by the National Bureau of Standards Dust Spot Test. There are no messy filters to change . . collected dirt is simply washed down the drain!

Installation possibilities are unlimited. Compact Electro-air Cleaners operate with any forced air heating or cooling system; they can be installed for either vertical or horizontal air-flow and can be floor mounted or suspended.

THERE'S AN ELECTRO-AIR ELECTRONIC CLEANER FOR EVERY NEED!



compact line: Designed primarily for larger size homes, this unit comes in capacities ranging from 800 to 9,600 cfm. As with all Electro-air cleaners, all parts—including selenium rectifiers—are guaranteed for 5 years.

TEC LINE: An economical model for small and medium size homes, this unit is available in capacities of 800 to 1,500 cfm. Built-in wash system of this unit, and the Compact Line as well, make it easy and inexpensive to maintain.





UNIVERSAL LINE: This unit was designed for installation where water and/or drain cannot be made available or where the heating equipment is so positioned that the cleaner must be mounted directly above or below the furnace. Collecting cell can be cleaned simply by "flushing off" with a hose. Capacity, 800 to 1,500 cfm.

ROOM SIZE UNIT: This completely self-contained unit is for use in homes without central forced air ventilating systems. It just plugs into any lighting circuit . . . can be moved from room to room. Air cleaning capacity is 150 to 225 cfm.



Please ser	nd me literature	giving o	complete details on
	☐ Compact Line		TEC Line
	Universal Line	□ R	oom Size Units
ADDRESS_			n n V Si N
CITY	zo	NE	STATE



For your house sewer jobs ...

Save on your biggest expense - Time!

Transite's long lengths and simplified assembly save time to keep your total installed cost low

Time is your biggest expense in any house sewer pipe installation. That's why total installed cost is the only cost that counts. And that's why Transite® Pipe is making more friends among builders and plumbing contractors every day.

Last year, in fact, the number of new plumbing contractors who joined the ranks of confirmed Transite users brought the total to well over 10,000. What better proof that Transite Pipe saves money. Not only in material cost—but where it counts most, in *installation time!*

With all its money-saving speed, Transite protects your reputation for quality work. No material gives you better combination of root protection . . . corrosion resistance, strength and durability.

New 8-page Transite brochure, TR-82A, gives valuable installation tips, complete information on fittings and adaptors. Send for it today. Address Johns-Manville, Box 14, New York 16, New York. In Canada, Port Credit, Ontario.

Another money saver—Transite Plumbing

Vent. Here's the ideal low-cost companion product to Transite house sewer pipe — Transite Plumbing Vent. Costs you less to buy . . . and even less to install. You complete most any installation with a *single* length. There's no material waste . . . no cutting . . . no fitting. Write for information.



JOHNS-MANVILLE



6.14

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:	
144	Air Control Products, Inc. (Leigh Building Products
65	Div.) Airtemp Division (Chrysler Corp.)
18	American Brass Co.
200	American Gas Association
50	American Motor Corp. (Kelvinator Div.)
225 152	American Olean Tile Co. American Radiator & Standard Sanitary Corp.
132	(Plumbing & Heating)
147	American-Standard Corp. (Youngstown Kitchens
	Div.)
10	American Telephone & Telegraph Co.
68, 69 224	Andersen Corp. Answer America, Inc.
201	Appleton Coated Paper Co.
19-26	Armstrong Cork Co.
	2
155, 156	Barber-Coleman Co. Bell & Gossett Co.
205	Berry Door Corp.
27	Besser Co.
177 196	Bird & Son, Inc.
38	Bruce Co., E. L. Bulldog Electric Products Co.
	building Electric Frontein Co.
39	California Redwood Assn.
243	Caloric Appliance Corp.
242	Carrier Corp.
65 150	Chrysler Corp. (Airtemp Div.) Coleman Co., The
229	Consoweld Corp.
66, 67	Crane Co.
76	Curon Division (Curtiss-Wright Corp.)
160	Dalas Bushata Divisias (County Matous County)
169 221	Delco Products Division (General Motors Corp.) Delta Faucet Corp.
197	Duraflex Co.
8	Dwyer Products Corp.
58	Easy Heat, Inc. (Div. of Welcraft Products)
239	Electro-Air Cleaner Co.
213 11	Farley & Loetscher Manufacturing Co. Fasco Industries, Inc.
220	Float Away Door Co.
12, 194	Flintkote Co. The (Building Materials Div.)
167	Flintkote Co., The (Flooring and Adhesive Div.) Flintkote Co., The (Orangeburg Mfg. Co. Div.)
179 12, 194	Flintkote Co., The (Orangeburg Mfg. Co. Div.)
12, 194	Flintkote Building Materials (Div. of The Flintkote Co.)
167	Flintkote Flooring and Adhesives (Div. of The
210	Flintkote Co.)
218	Ford, Inc., Ivon R.
(157 202 202	6 15 6
6, 157, 202, 203 13-15	General Electric Co. General Electric Co. (Hotpoint Div.)
169	General Motors Corp. (Delco Products Div.)
36, 37	General Plywood Corp.
153	Georgia-Pacific Corp.
172 222	Goodrich Co., B. F. Gorman-Rupp Co.
	Ооппан-кирр Со.
79	Hall Mack Co.
214	Harris Manufacturing Co.
158, 159	Hines Lumber Co.
30	Hobart Manufacturing Co., The
28 204	Homasote Co. Home Comfort Mfg. Co.
13-15	Hotpoint Co. (Div. of General Electric Co.)
232	House & Home
200	In-Sink-Erator Mfg. Co.
164 165	Insular Lumber Sales Corp.
164, 165 42	Insulite Division (Minnesota & Ontario Paper Co.) International Harvester Co.
	And the react of
4, 183, 240	Johns-Manville Corp.
	The second state of the second
81, 82	Kaiser Aluminum & Chemical Corp.
50	Kelvinator Division (American Motor Corp.)
44	Kentile, Inc.
160, 161	Kewanee Manufacturing Co. Keystone Steel & Wire Co.

Knape & Vogt Manufacturing Co.

Kwikset Locks, Inc.

TYPICAL NORTHERN INSTALLATION goes below-grade to take advantage of residual ground-warmth during colder winters. This one serves 58 homes (20,100 gallons per day) at the Nike-Hercules Base, Lonejack, Missouri. Other installations range as far north as Michigan.



TURN "WORTHLESS" LAND INTO VALUABLE REAL ESTATE

with new, low-cost sewage plant

You probably know of land well-situated for development except for lack of sewage disposal facilities-which, in effect, renders it worthless. But now you can unlock this "potential" real estate . . . develop it into profitable subdivisions-without septic tanks or sewage lagoons.

The key to this situation is "Suburbia"-a sewage treatment plant you can afford now. It handles populations of 100 to more than 2,000 . . . can be installed anywhere in 90 days or less.

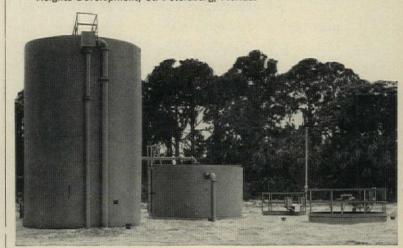
"Suburbia" is so simple that unskilled help can operate it. Yet, with minimum maintenance, it produces no objectionable odor-no bacteria-laden foam. Units are designed and installed under the direction of your consulting engineer to conform to your State Department of Health requirements.

"Suburbia" is designed for permanent or interim usecan be re-erected elsewhere - so your investment is actually self-liquidating. Moreover, it involves less initial and operating capital than any other type plant. "Suburbia" is furnished and installed on a turnkey basis only, by . . .

MUNICIPAL SERVICE COMPANY

4625 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 118 homes (41,600 gallons per day) in the Debra Heights Development, St. Petersburg, Florida.



Page: Leigh Building Products Division (Air Control 144 Products, Inc.) 72, 73 Lennox Industries Inc. Louisville Cement Co. Majestic Co., Inc., The Major Industries, Inc. Minneapolis-Honeywell Regulator Co. 215 171 Minnesota & Ontario Paper Co. (Insulite Division) 164, 165 Miracle Adhesives Corp.
Moe Light Division (Thomas Industries, Inc.)
Municipal Service Co. 238 National Concrete Masonry Assn. National Gypsum Co., The 151 National Homes Corp. National Lock Co. 244

New Castle Products, Inc. 2, 2A, 2B Nutone. Inc.

Orangeburg Manufacturing Co. (Div. of The Flint-

National Lumber Manufacturers Assn. National Oak Flooring Manufacturing Assn. Nevamar Carefree Kitchens

Pacific Lumber Co., The Pease Woodwork Co. Peterson Window Corp. 168 148 161A, 161B Pittsburgh Plate Glass Co. 199 219

207, 208

170 222

Plywall Products Co., Inc. Ponderosa Pine Woodwork Portland Cement Assn. Progress Mfg. Co., Inc. 235

Ready Hung Door Corp. Red Cedar Shingle Bureau 34, 181 74, 75 185

Republic Steel Corp.
Republic Steel Kitchens
Reuten, Inc., Fred
Reynolds Metals Co.
Richmond Plumbing Fixture Division (Rheem 61-64 86

Mfg. Co.)
Rilco Laminated Products, Inc. Roberts Manufacturing Co.
Roddis Plywood Corp.
Rolscreen Co., The
Romar Filter Corp.
Roper Corp., George D.
R. O. W. Sales, Inc. 80 77

238 198

Rowe Manufacturing Co. 211 Ruberoid Co., The

Samuel Stamping & Enameling Co. Santiam Lumber Co. Schlage Lock Co. 41

40 Scholz Homes, Inc. 223 Shakertown Corp. Simpson Logging Co. Simpson Redwood Co. 187-190

187-190 Stanley Works, The Structural Clay Products Institute Superior Fireplace Co. 184

195 221

Swimqueen Pool Co Symons Clamp & Mfg. Co.

236, 237

Tappan Co., The Thermo-Rite Manufacturing Co., The Thomas Industries, Inc. (Moe Light Division)

Ultra-Pane, Inc.

United States Gypsum Co. United States Plywood Corp. 226

209 Valley Metal Products Co. Virden Co., The John C. 149

Washington Steel Products, Inc. 29

85

Weiser Co. Welcraft Products (Easy Heat, Inc., Div.)

70, 71 Weyerhaeuser Sales Co.

32, 33 Whirlpool Corp. Yeomans Brothers Company 206

Youngstown Kitchens (Div. of American Standard

NEW CARRIER CLIMATE CENTER AND YEAR-ROUND WEATHERMAKER SYSTEMS



... make the biggest sales-making combination for your homes in air conditioning today!

Now even the most inexpensive Carrier Year-Round Weathermaker* System can have the "luxury look" of the revolutionary new Carrier Climate Center!

Here's year-around air conditioning that a prospective homeowner can see in all its glamour. And show his guests with pride. For the Carrier Climate Center has every control and indicator needed to insure all-season comfort, cleanliness and healthfulness.

With the Carrier Climate Center, the homeowner can create the ideal indoor climate with greater precision. He can see and predict the outside weather. Know how his system is operating—and make sure it is operating economically.

All this mastery of climate comes from an 8 x 14 inch satin aluminum wall panel—so compact that it can be installed easily between studs in any room. Yet to duplicate its functions would require an outside thermometer, barometer, rela-

tive humidity indicator, de luxe thermostat and a night setback control to lower indoor temperatures automatically during sleeping hours.

You can offer the dramatic Carrier Climate Center with Year-Round Weathermaker Systems in a wide range of capacities, using gas or oil. The indoor section is housed in a beautifully styled cabinet. The air-cooled refrigeration section is easily installed outdoors.

*Reg. U.S. Pat. Off.



Here is a Year-Round Weathermaker System employing gas for heating and upflow air discharge. Other systems are available in downflow, lo-boy and horizontal models to suit any home.

See your Carrier dealer for details, technical assistance, promotional support and merchandising programs. He's listed in the Yellow Pages.

MORE PROOF OF
BETTER AIR CONDITIONING FOR EVERYBODY





BUILT-IN REFRIGERATOR AND FREEZER BY REVCO, CABINETS BY WHITEHALL, BUILT-IN GAS RANGES BY CALORICA

Calloric GAS APPLIANCES

MEAN EASY LIVING... MAKE HOMES EASY TO SELL!



CALORIC GAS DISPOSER with Jet-Stream action burns everything but metal and glass. Lid locks automatically when dial is on. No smoke or odor escapes.

Designed for "home automation"... Caloric built-in gas ranges and disposers are now more automatic than ever. They make cooking and garbage disposal almost as easy as turning a dial! Install Caloric in homes you build or in the kitchens you remodel. Point out these important features to customers:

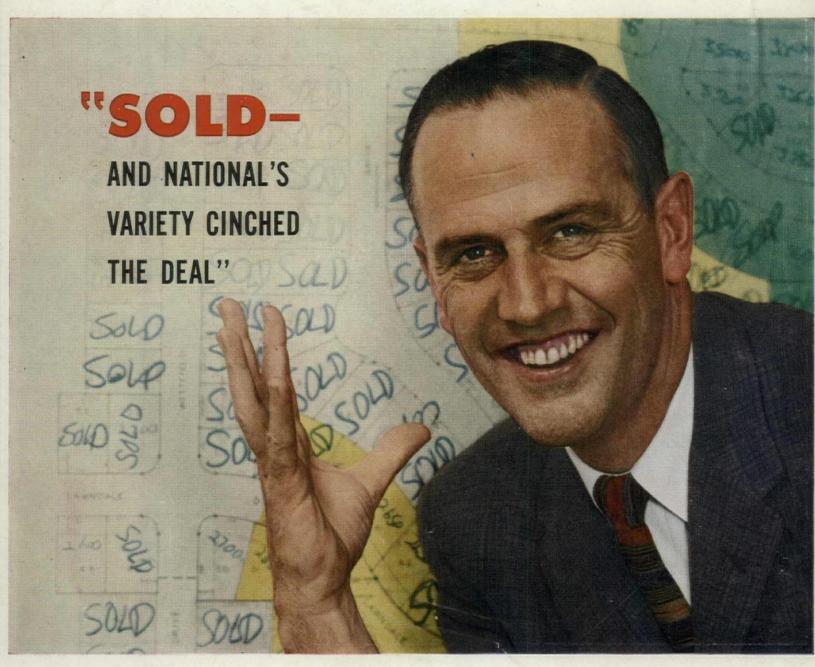
THERMO-SET TOP BURNERS keep food at the exact temperature set. Make every pan "automatic". MEAT THERMOMETER cooks meat till it's "just right"...then turns oven off, automatically. CLOCK-CONTROLLED OVEN turns on by itself, cooks complete meals, turns off by itself.

ROTO-ROASTER lets the family enjoy juicy, flavorful barbequed meats all year 'round.

When you install Caloric you give home buyers the automatic features they're looking for, plus built-in kitchen convenience. Choose from 7 handsome finishes. And remind your customers that Caloric is "America's easiest range to keep clean." For further information on Caloric built-in gas ranges and disposers, write:

CALORIC APPLIANCE CORPORATION DEPARTMENT HH, TOPTON, PENNA.

CALORIC • THE BUILT-IN SPECIFIED BY LEADING HOME BUILDERS FOR AMERICA'S BEST HOMES



Says National Homes Builder-Dealer

Scott Feeler

This 4000-home National Builder is "sold out" well through Spring of '60—thanks to wide choice of plan and styling offered by National Homes

"A home for every budget, every taste." That's what Scott Weller advertised at his new Holiday Park Subdivision in Champaign, Illinois. He backed it with over 200 combinations of styles and floor plans available through National Homes. The result: even though Holiday Park won't see completion until well into 1960, it's 100% sold out now!

There's no off-season in Scott Weller's efficient operation. A ten-year, 4000-home veteran builder of National Homes, he's able to maintain a full staff and full production around the calendar. National Homes' sales appeal makes it easy to sell far ahead of production. National Homes' firm price

guarantee makes it safe.

To the qualified builder who wants to grow, National Homes offers service and expert assistance no other manufacturer can match; a complete financing program including land procurement, site development, interim and permanent mortgage financing; expert sales promotion aids; cost control systems. Plus the widest variety of styles and plans, the finest in name-brand materials, the fastest selling homes in America today.

If you are interested in sure growth as a home builder, write us about a National Homes franchise now.



National Homes Corporation, Lafayette, Indiana

Plants at Lafayette, Indiana; Horseheads, New York; Tyler, Texas

One out of every 40 homes built in America today is a National Home