MAY 1959 SIX DOLLARS A YEAR - ONE DOLLAR A COPY

House Jome



How to sell the Economy of OUALITY

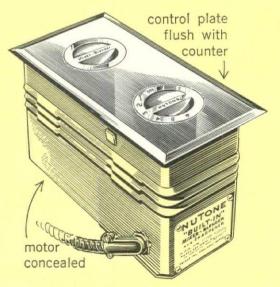
THE NUTONE BUILT One Built-In Power Unit for Six

EVEN MRS. OCTOPUS HATES "PLUG-IN CLUTTER"



WOMEN ARE FED UP WITH "PLUG-IN" FOOD APPLIANCE PROBLEMS LIKE.

Tangled Cords • Heavy Lifting • Wasted Space



AT LAST.. ALL THESE PROBLEMS SOLVED...
WITH THE NUTONE BUILT-IN FOOD CENTER!

So easy to install in your kitchen counters. NuTone's Food Center is completely recessed and out of sight. No tangled "plug-in" cords.. No wasted work space.. No need to drag heavy portable "plug-in" appliances with bulky motors attached.. No crowded storage problems.

The NuTone Built-in Food Center stores itself. All the attachments are light weight and easy to handle. Keeps kitchens uncluttered and neat.. because the stainless-steel control plate is flush with the counter top. The powerful, concealed motor operates six food appliances.

IN FOOD CENTER!

Food Appliances









2. MIXER



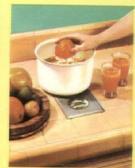
BLENDER



GRINDER



5. SHARPENER



6. JUICER



NEW SHREDDER SLICER.. one of six food appliances operating from the powerful built-in Food Center.

NOW ... THE NUTONE FOOD CENTER POWER UNIT ONLY \$42.50 LIST

It's no wonder this NUTONE BUILT-IN FOOD CENTER is so popular with homemakers. There's no limit to it's daily use in the kitchen for all food preparation. It shreds, slices, mixes, grinds, juices and even sharpens knives!

What a wonderful built-in feature to "perk-up" sales for your new homes .. and the moderate cost is so easy on your budget. The NuTone Built-In "all-purpose" power unit lists for only \$42.50, with a choice of six interchangeable food appliances at a low cost. Here's a "sales-closer" which has proved itself in homes of America's Leading Builders.



NEW COLOR CATALOGS Write NUTONE, INC. Dept. HH-5, Cincinnati 27, Ohio · Homemaking is Easier with NuTone!

NuTone's Intercom-Radio is a step-saver. Fills the home with radio music.

NuTone Door Chimes make any home more inviting with a "friendly greeting".

U. S. and Foreign Patents



INTERCOM-RADIO



DOOR CHIMES



CEILING

USE ONE Electrical Built-Ins

EXHAUST FANS HOOD-FANS



NuTone's Ceiling Heaters provide instant heat for toasty-warm Bathrooms.

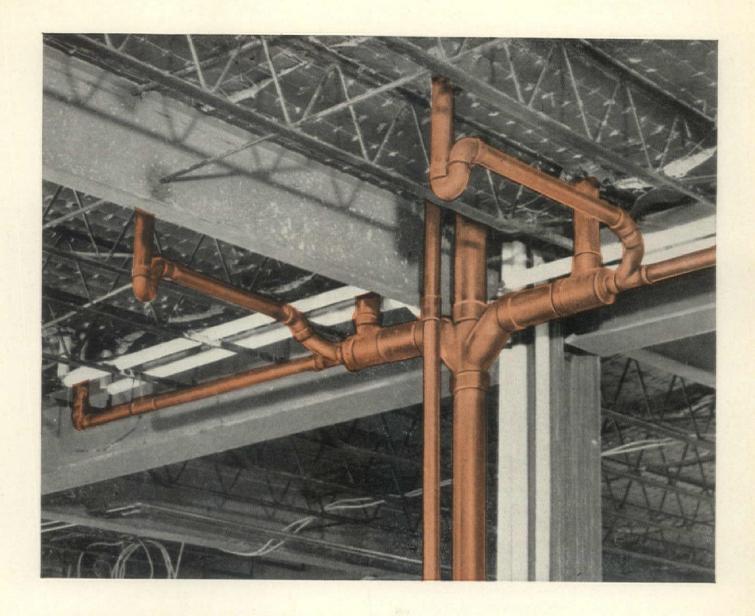
NuTone's Exhaust Fans get rid of cooking odors grease, steam, excess heat.

NuTone's Range Hood-Fan ..acts like a huge vacuum to keep kitchen air fresh.

SEE OTHER SIDE

· Home Selling is Faster with NuTone!

FREE CATALOGS & INSTALLATION DATA.. Write NUTONE, INC. Dept. HH-5 Cincinnati 27, Ohio



SAVE SPACE WITH COPPER TUBE. Anaconda copper tube and fittings assemblies are compact, result in greater ceiling height and more usable floor area. No need to build wide plumbing walls—a 3" copper tube stack with fittings will fit inside a 4" partition. Overhead work is easier because copper plumbing is about *one fourth* the weight of ferrous materials. In close quarters, copper makes light work out of tight work. Use these space-saving modern plumbing materials—Anaconda copper tube and solder-joint fittings—for your next water supply AND sanitary drainage installation. For more information on copper tube, write: The American Brass Company, Waterbury 20, Conn. In Canada: Anaconda American Brass Ltd., New Toronto, Ont.

ANACONDA

COPPER TUBE AND FITTINGS for soil, waste and vent lines

Available through plumbing wholesalers. Products of the American Brass Company



Longer Lengths—Fewer Joints



Preassembly—Saves Time



Lightweight Copper-Easier Installation



Easier Remodeling

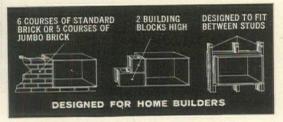




INSIDE, the new *Thinline* air conditioner panel can be painted or papered to *blend* in with room décor. Easy-to-reach controls are hidden from view.



outside, the Built-in *Thinline* has a "no-see-through" aluminum grille. It can be painted to match exterior. From street, it has a neat, built-in look.



New General Electric Built-in Thinline

Solves more builder problems than any other air conditioning system

Designed specifically for home builders. The new Built-in *Thinline's* aluminum case is exactly as high as two building blocks with mortar, six courses of standard brick, or five courses of jumbo brick. Case fits between a standard two-stud width. Unit actually becomes part of the wall.

Problem SOLVED! Cuts on-site costs—Your workmen build case into the wall during construction—slide the unit into place when the building is finished. No ductwork or plumbing needed.

Problem SOLVED! Preserves beauty of home—Inside panel can be painted or papered to match interior. It *blends* with room décor! Outside grille can be painted to match exterior.

Problem SOLVED! Flexible—You can now air condition as little or as much as you need to assure a quick, profitable sale.

Problem SOLVED! Economical—Saves you labor cost in installation, the material cost of ductwork and plumbing. This means the new General Electric Built-in *Thinline* system costs less than most central systems.

Problem SOLVED! Powerful, but quiet!—One model, packing up to 10,000 BTU's *, is enough to cool the large rooms in an average-sized house. A second complementary model, with extremely

low noise level, is ideal for bedroom use.

Problem SOLVED! Buyer acceptance—It's assured! Because your customers know the General Electric name. They *know* they're getting dependability and advanced design.

SPECIFICATIONS

| | MODEL R4355 | NUMBER R4755 |
|-----------------------------------|----------------|-----------------|
| BTU/hr.— ASRE Cooling Capacity | | 9500 |
| Voltage | 230 | 230 |
| Amperage (nameplate) | 5.0 | 6.9 |
| Watts (ASRE) | 1000 | 1575 |
| Height of cabinet | 155/8" | 1.55/8′′ |
| Depth | 12" | 167/16" |
| Width | 26" | 26" |
| Depth of Louvers | 17/8′′ | 17/8′′ |

*Cooling capacities are tested and rated in compliance with NEMA Publication No. CN1-1959, and are stated in British Thermal Units.



See your G-E representative, or

SEND FOR FREE BOOKLET

Get the whole story. How you can save air conditioning dollars—and still give home buyers the latest and best in home cooling. Write to Miss Gail Evans, Dept. HH-5, General Electric Company, Appliance Park, Louisville 1, Kentucky.

Progress Is Our Most Important Product





Kwikset "400" line locksets since 1951. Quality is a lot of little things which together have resulted in a residential lockset that outsells all others.

When you order Kwikset, you'll appreciate these little things that give you a little more for your lockset dollar.

America's largest selling residential lockset



KWIKSET SALES AND SERVICE COMPANY

A subsidiary of The American Hardware Corporation • Anaheim, California

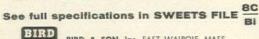
"AW, GO AHEAD AND BRAG"



Heavyweight (300 lb.) Bird Architect Shingles are worth shouting about. No need to be modest about a roof that'll last 50% longer. We're telling your future customers about Bird Architects in The Saturday Evening Post. You can use Bird Architect Shingles to show your customers you've "cut no corners" in the homes you build.

Use these quality features of Bird Architect Shingles to sell homes.

- 15" x 36" 300 lbs. per square.
- Three full layers of protection with 5" exposure.
- Exclusive jumbo granules, 3 times standard size, for richer texture and color, greater holding power.
- For slopes as low as 2" in 12".
- Two 18" wide tabs vs. standard 3 for cleaner lines and stronger nailing.
- Massive thickness of standard slate.
- 50% longer life than standard shingle.-





BIRD & SON, Inc. EAST WALPOLE, MASS.
CHICAGO, ILL. - SHREVEPORT, LA. - CHARLESTON, S.C.

BEST FOR YOUR ROOF ARCHITECT SHINGLES

Insure extra built-in potential 2 ways with

FRIGIDAIRE WALL OVENS

featuring Drop-Leaf Doors — another Frigidaire First!

Built-In Customer Satisfaction with Frigidaire. Cooking satisfaction is the real test of a kitchen in any price home. Naturally you can't invite every homemaker prospect to try out your kitchen for livability-but-you can be certain she'll feel like a Queen with a Frigidaire Built-In Cooking Center. And here's why: All Frigidaire Built-Ins are designed with today's woman in mind. Even the economy model De Luxe Wall Oven (RBZ-93) features the famous Drop-Leaf Door for easiest cleaning without stretching. Holiday-meal capacity and Sheer Look beauty, too! And the brandnew budget model Cooking Top (RBA-102) has four Radiantube Units, famed for quick, even cooking. Easy-to-reach, easy-to-read control knobs are built-in on the top . . . offer five exact heat settings for each unit. Cooking satisfaction? It's built-in!



Built-In Savings with "Minute-Man" Installation.

oven onto level shelf. 3. Mount oven with screws con-

cealed behind door. (If required, leveling may be done in

Frigidaire Built-Ins are designed with you, the builder, in mind, too! For example, Wall Ovens were installed in as little time as 7 minutes and 52 seconds in factory tests! Here's how easy: 1. With carpentry and rough wiring completed, connect junction box and factory attached 54" armored cable. 2. Slide

minutes with feet provided.) Time saving? You bet!

Every home you build can feature the "feel like a Queen" appeal of a Frigidaire Cooking Center. Let your home-buyers choose from four Wall Oven models, three matching Built-In Cooking Tops and five exclusive Fold-Back Surface Units. Ask your Frigidaire Distributing Headquarters for your copy of the 1959 Builders' Planning Guide, or write Frigidaire Division, General Motors Corporation, Dayton 1, Ohio.







See our catalogs in Sweet's Architectural and Light Construction Files.

It's a woman's world make her feel like a queen



Build with Frigidaire in '59!



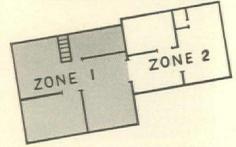
HONEYWELL IS PUSHING THE HOTTEST HOME-SELLING IDEA IN YEARS!

You get the jump on competition, create greater sales appeal for your homes by putting 2-furnace or 2-zone heating in your plans!

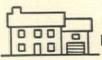
You sold more homes by promoting 2 baths, 2-car garages and 2 sinks! Now Honeywell is promoting 2-furnace and 2-zone heating for all it's worth. The comfort-conscious public is becoming aware of its many advantages every day. So tie-in—you'll find that this exciting feature adds "sell" far beyond its low cost.

The present standard system simply won't handle the problem areas outlined here. Be the first builder in your area to offer comfort-zone heating! Give your house-hunters an extra reason to favor your homes!

HERE'S HOW IT WORKS!



Each of the zones shown above has its own thermostat and distribution system which provides even heating throughout the home. If you are now building homes with these 6 problem heating areas, you can take full advantage of the 2-zone heating idea!



Rooms over unheated areas



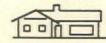
Spread out floor plan



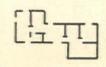
Split level homes



Finished basements

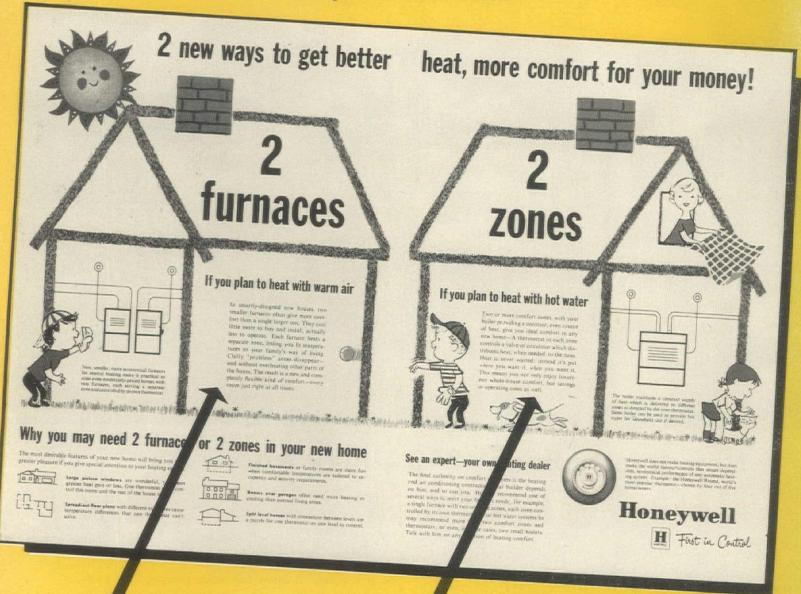


Large picture window



Separate living and sleeping areas

This exciting ad in May issues of BETTER HOMES & GARDENS and HOUSE BEAUTIFUL kicks off Honeywell's Promotion!



A SALES PLUS FOR WARM AIR SYSTEMS!

2 smaller furnaces assure greater comfort than one larger one.

Mr. Builder, here's what Honeywell is doing to help you sell!

Tie-in and you get a complete merchandising kit. Everything you need to make *your* homes outstanding for 2-zone heating—no obligation!

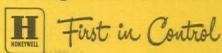
 Window streamers • Ad mats • Hang tags • Kleen-stik pointers • Signs • Pass-out literature • Ideas for promotion parties • Radio & TV scripts

See your heating contractor or call your local Minneapolis-Honeywell office.

IN HOT WATER SYSTEMS!

2 or more comfort zones provide a constant, even flow of heat in every room!

Honeywell





Loader: International Pippin . . . Rear blade: Danuser

New International 340 Utility tractor... BIG-TRACTOR BRAWN



Fork lift: Harlo

Cut job site materials handling costs with the brawny International 340 Utility, equipped with 4,000-lb capacity fork lift. Big-diameter tires give sure-footed traction over rough or soft ground, in mud or snow. Unload trucks, stock pile or spot materials at point of use, lift them to roof or scaffolding as high as 20½ feet.

...low budget economy!

You get a lot of work for your money in a new International 340 Utility tractor. While rated in the economical 45 hp class, the 340 has built-in weight usually available only with larger, more powerful tractors. Premium weight and high-torque power provide work-boosting traction, stamina, operating economy.

Work-speeding options include new Fast-Reverser unit providing six reverse speeds to save time on all shuttle-type work, or Torque Amplifier drive for 10 speeds forward, two reverse; new built-in hydraulic system with capacity to operate backhoe, loader, 3-point hitch equipment, and accessories such as power steering!

Ask your IH dealer to demonstrate the new 340 Utility . . . or others in the complete International line of 6 power sizes, 12.8 to 90 hp*. For catalog and your IH dealer's name, write International Harvester Company, Dept.HH-5, P. O. Box 7333, Chicago 80, Illinois. * Bare engine hp at standard sea level conditions.



INTERNATIONAL HARVESTER DEALER

International Harvester products pay for themselves in use—Farm Tractors and Equipment... Twine... Commercial Wheel
Tractors... Motor Trucks... Construction Equipment—General Office, Chicago 1, Illinois



It's a fact! Contemporary and traditional houses sided with Alsco attract more buyers—faster.

A brand name, it's nationally advertised in Better Homes & Gardens, American Home and other leading home magazines. Alsco Siding meets F.H.A. specifications for new construction. More and more lending institutions are evaluating Alsco-sided houses in the same high loan classification as brick veneer.

You have a tremendous story to tell prospective home-buyers about the lifetime lasting qualities of Alsco as well as the baked enamel finish which ends paint problem for years.

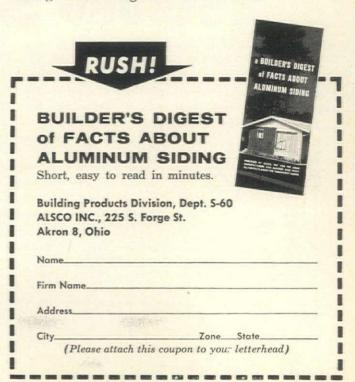
Alsco Siding is easy to work with—fits snugly. Installation is no problem! (Alsco will furnish installers—or help you train your crew.) There's no waiting for dry weather for the second coat of paint—it arrives at your job site with two finished coats, ready to install.



Alsco also manufactures aluminum double-hung and slider windows, shutters, vents, soffit and fascia material.

Builders get merchandising aids from Alsco in the form of point of sale signs, displays, literature, brochures, newspaper ad mats and other sales aids.

If you are looking for a practical way to increase sales appeal in your homes—investigate Alsco Siding. In the long run—it costs less.



Now! the first and only plastic pipe... (includes pipe and labor)

ORANGEBURG® SP® Plastic Pipe

No longer need you guess about the quality of plastic pipe!

Here at last is a slit-proof plastic pipe so strong and so tough, it is Guaranteed and Bonded for 20 years for cold water service. Under the terms of the Bond, repairs or replacements, INCLUDING LABOR COSTS, due to the failure of the pipe will be made at the expense of Orangeburg!

Application for the Bond is simple and involves no work for you. When your plumber or well driller completes his

Orangeburg *SP* installation in accordance with manufacturer's instructions, he simply forwards the "*Request for Guaranty Bond*" form to Orangeburg. After approval, Bond is issued direct to the home owner—made out in his name.

Be first to feature Orangeburg SP Plastic Pipe in your homes' water system installations. Orangeburg SP—the only plastic pipe backed by a 20-year Guaranty Bond—gives you a first-rate selling point that says your homes are quality built.



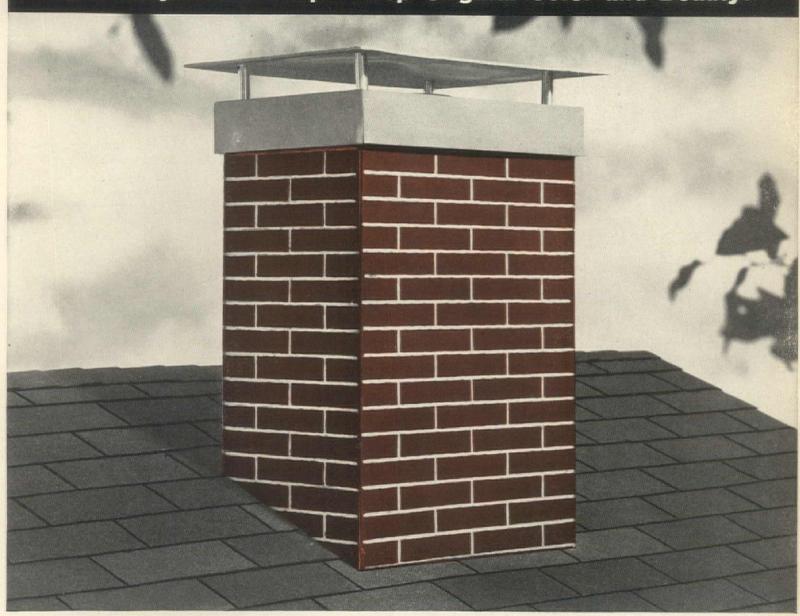
ORANGEBURG MANUFACTURING CO. • Orangeburg, New York • Newark, California A Division of The Flintkote Company, Manufacturers of America's Broadest Line of Building Products

GET ALL THE DETAILS ON THIS AMAZING

YEAR
GUARANTY
BOND

Have your plumber or well driller see an Authorized Orangeburg
Wholesaler or write Dept.
HH-59.

NEW Butyl-Finish Helps Keep Original Color and Beauty!



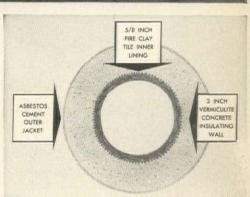
Van-Packer Chimney with permanent masonry flue goes up in 3 man hours

Embossed-brick design housing of the Van-Packer Chimney looks attractive and stays looking that way. New Butyl-finish protects against discoloration . . . helps retain original color and beauty. The Van-Packer Chimney is long-lasting, too. Permanent masonry flue sections won't corrode, are UL listed for all fuels, safe even for incinerators.

Installing a Van-Packer is fast. One man can install it in 3 hours or less without special skills or tools. It comes completely packaged and labeled, with everything provided, including flashing. The two-foot masonry sections are joined with special acidproof cement and secured with snap-lock drawbands.

Van-Packer Chimneys are available everywhere, and can be delivered to your job site exactly when needed. See "Chimneys — Prefabricated" in the yellow pages, or write for Bulletin RS-1-19.





Van-Packer flue sections feature masonry construction for permanence.



One man can install a Van-Packer in three hours or less, saving up to 40%.

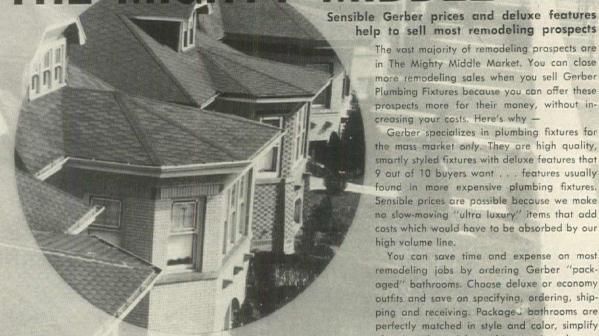
Gerber helps you sell

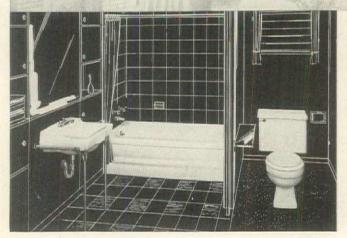
help to sell most remodeling prospects The vast majority of remodeling prospects are in The Mighty Middle Market. You can close more remodeling sales when you sell Gerber Plumbing Fixtures because you can offer these

prospects more for their money, without increasing your costs. Here's why -

Gerber specializes in plumbing fixtures for the mass market only. They are high quality, smartly styled fixtures with deluxe features that 9 aut of 10 buyers want . . . features usually found in more expensive plumbing fixtures. Sensible prices are possible because we make no slow-moving "ultra luxury" items that add costs which would have to be absorbed by our high volume line.

You can save time and expense on most remodeling jobs by ordering Gerber "packaged" bathrooms. Choose deluxe or economy outfits and save on specifying, ordering, shipping and receiving. Packaged bothrooms are perfectly matched in style and color, simplify planning. In stainless white or six colors petal pink, wedgewood blue, forest green, driftwood tan, daffodil yellow, or cloud gray. (Bathrooms with shower stalls, instead of bathtubs, in white only).





*Source: 1959 Statistical Abstract of the United States

Remodeling . . . The Mighty Middle is the mass market.

80% of all homes in the U.S. are over 15 years old, 20% have

no bathrooms.* This is your biggest, most profitable market.

Gerber Nassau Bathroom - luxury set for The Mighty Middle. Porcelain enameled steel recessed tub with automatic bath and show diverter (4582) and pop-up drain (180G). Shelf-back lavatory (390) has pop-up and aerator (143A). Deluxe unit-type closet (1200) has reverse trap, 12" rough-in. Stainless white, petal pink, wedgewood blue, forest green, driftwood tan, daffodil yellow, cloud gray.



Gerber Key West Bathroom - space-saver set featuring Gerber's rust-proof shower cabinet complete with chrome plated shower head and soap dish, Rostone ceramic base, and plastic curtain with pins (RB50 or RB40). Lavatory (300) has raised splash back and features centerset mixing faucet (141). Closet is close-coupled washdown, space-saver design, with 12" rough-in (800/912).

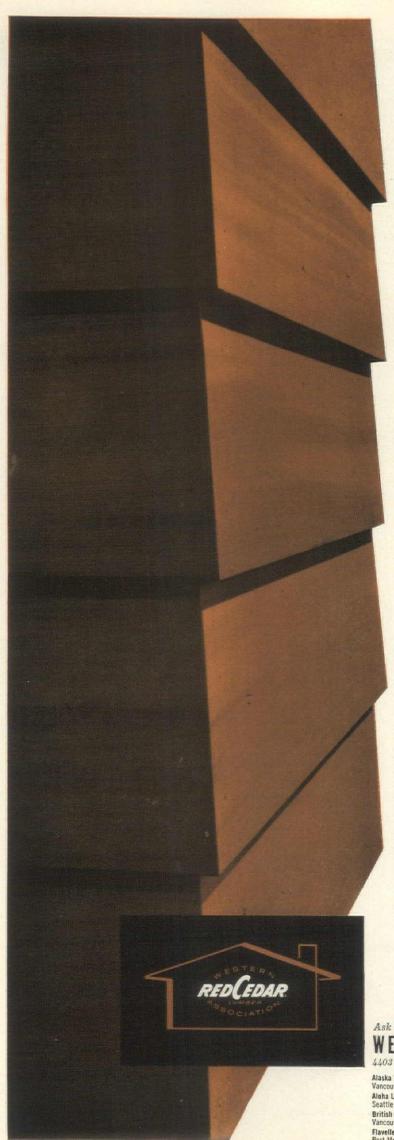
Write for Gerber folder 419



Gerber Plumbing Fixtures Corp., 232 N. Clark St., Chicago 1, Illinois

Dependable service from leading jobbers, or prompt delivery direct to your job from 5 modern factories: Kokomo, Ind., Woodbridge, N. J., Delphi, Ind., Gadsden, Ala., West Delphi, Ind. Export Division: Gerber International Corp., 500 Green St. Woodbridge, N. J.







WESTERN CEDAR

...the Sterling of Sidings

You can step ahead of the competition in home sales with Western Cedar Siding...Bevel or Tee-Gee. This comfortable advantage is yours with the miracle of Western Cedar because it is unduplicated by science or nature. The "grown in" qualities of this wood siding work for you from original application to final closing of the home sale.

Western Cedar Siding has the character to design into any architectural style. And, it has the sincerity to create definite home personality. This all natural-wood siding takes all finishes beautifully and has the durability to last generation after generation.

Ask your lumber dealer . . . he knows Western Cedar is the Sterling of Sidings.

Ask Your Western Cedar Sales Representative

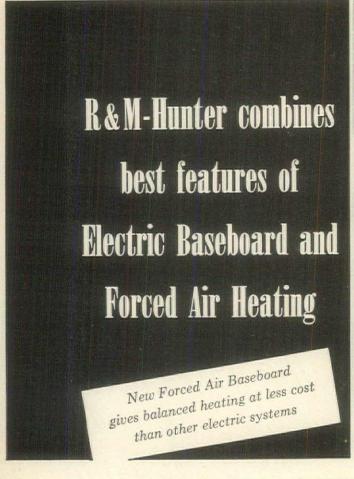
WESTERN RED CEDAR LUMBER ASSOCIATION

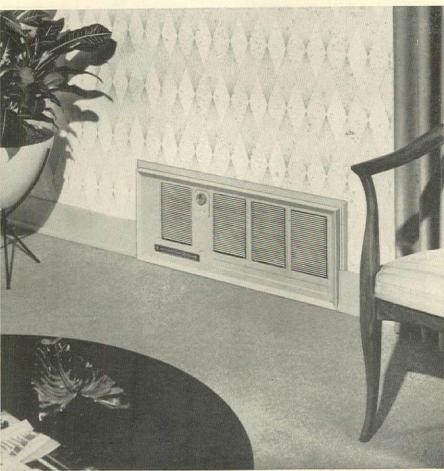
4403 White-Henry-Stuart Building · Seattle 1, Washington

Alaska Pine & Cellulose Sales Limited Vancouver, B. C.
Aloha Lumber Corporation
Seattle 11, Washington
British Columbia Forest Products, Ltd.
Vancouver, B. C.
Flavelle Cedar
Port Moody, B. C.

Lamford Cedar Ltd.
New Westminster, B. C.
MacMillan & Bloedel Limited
Vancouver, B. C.
E. C. Miller Cedar Lumber Company
Aberdeen, Washington
Nalos Lumber Ltd.
Vancouver 3, B. C.

Norwood Lumber Co., Ltd.
Vancouver, B. C.
Powell River Forest Products Limited
New Westminster, B. C.
Seattle Cedar Lumber Manufacturing Co.
Seattle 7, Washington
Weyerhaeuser Timber Company
Tacoma I, Washington

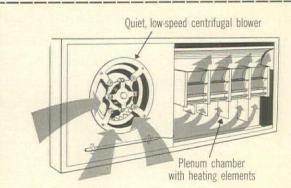




The new R&M-Hunter FORCED AIR BASEBOARD has definite, salable advantages over other heating systems. It costs much less than convection baseboard and is

easier to install. No expensive accessories, no parts to assemble. Produces warm comfort throughout living zone—no cold air at floor level or "heat pack" at ceiling.

ENTIRELY NEW PRINCIPLE GIVES PERFECT CIRCULATION



Centrifugal low-speed blower pulls in cool floorlevel air and delivers to subdivided plenum chamber over coil heating elements. Here air is heated and distributed evenly into room with uniform velocity across discharge grille. **Complete safety**—Discharge grille is safe to touch. Electric current shuts off automatically when grille is removed for cleaning of interior.

Independent zone control—Individual thermostats, provide amount of heat desired for each room. Located in unit at floor level for fast response.

Quiet operation—Special design centrifugal blower with low-speed R&M motor operates very quietly.

Engineered for compactness—Dimensions: 33" long, 13" high, and only 37/8" deep. On recessed installations, unit extends only 13/4" from finished wall.

Simplified line reduces inventory needs—There are 3 capacities (1000, 1500 and 2000 watt), with or without thermostats—a total of 6 models. One thermostat will operate two or more units in room.

Write for full details: HUNTER DIVISION-ROBBINS & MYERS, INC., 26.76 FRISCO, MEMPHIS 14, TENN.



FORCED AIR BASEBOARD

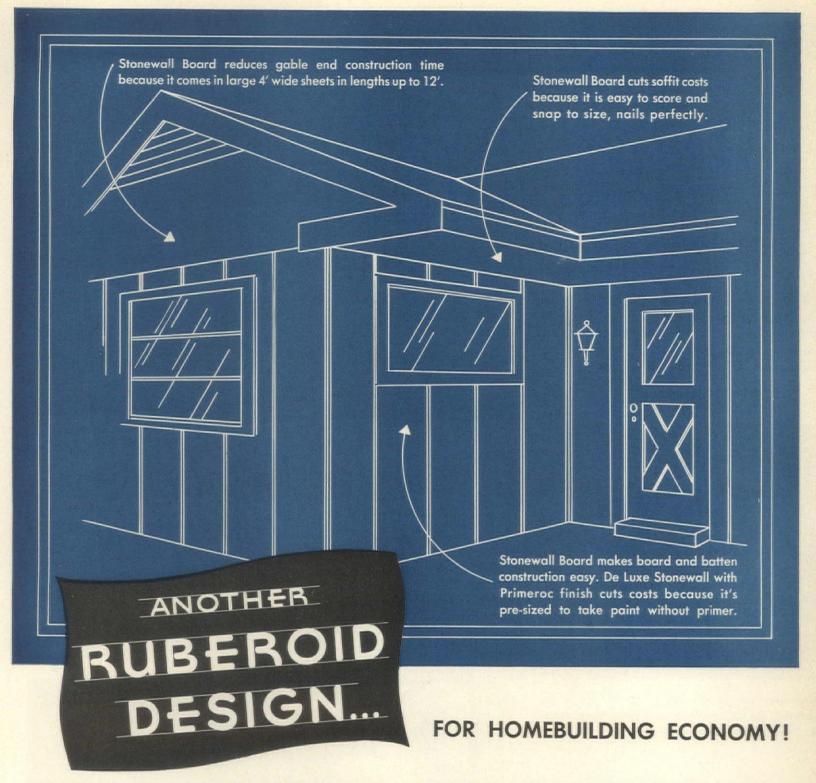
Other Electric Heaters by R&M-Hunter







Live better . . . electrically



STONEWALL BOARD

There are many uses for Stonewall Board in new home construction—many ways to cut building costs with the most useful and versatile asbestos building board on the market. In addition to those illustrated above, check its economy as a closet liner, for garage interiors, over furnace installations.

Stonewall Board is another Ruberoid building

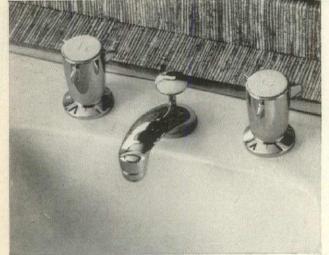
product designed to help you build better new homes and cut your costs. It's part of a line that has been serving builders better since 1886. On your next house or project, check with your Ruberoid dealer. Learn how you can build better and cut costs with Ruberoid quality products. For more information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

RUBEROID

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



Easy Care! Housewives can clean beneath the Briggs "King" with the merest flick of mop or broom. This wall-hung model eliminates dust-catchers and hard-toreach space between wall and fixtures.



Exclusive Color Inserts key Briggs fittings to the glowing, decorator colors of Briggs Beautyware fixtures. Distinctive styling by Harley Earl, Inc.



Exclusive Briggs Porcelain Finish is glass-smooth, fused right into Briggs Vitreous Enameling Iron. The result: true, nonfading colors that resist acid and chipping.

THIS BRAND DOES MAKE A DIFFERENCE!

Let these modern features of Briggs Beautyware build sales for you



Low Ledge Back combines with subtly modeled basin to create the clean, modern look of the Briggs "Whitman" vitreous china lavatory. Here's eye appeal typical of Briggs Beautyware!

The complete Briggs Builder Promotion can help you sell homes with Briggs Beautyware. Get full information from your Briggs representative.

BRIGGS

BEAUTYWARE



SEND FOR THESE TWO BOOKLETS NOW

Did you know that Chase® copper tube plumbing costs less installed than ordinary rustable pipe? Get the facts about using the finest plumbing material—COPPER in your houses. Send for your free copy of the new Chase book, Save on the Homes You Build. It's illustrated—quick-reading—handy. And it gives you Facts about savings that can be made with Chase copper tube plumbing.

Also, be sure to ask for a copy of the new Chase booklet, Now's the Time to Buy a House. It was

specially written to help builders sell more houses. It tells your prospective customers the reasons why Now is the time to buy a new home...helps you with convincing facts on the "economics" of buying a home now. Available at low cost for your own imprint. You can have a sample for the asking.

Get these two helpful booklets right now...from the nearest Chase office, representative or warehouse. Or fill out and mail the coupon to Chase at Waterbury 20, Connecticut.



BRASS & COPPER CO.,

WATERBURY 20, CONN.

Subsidiary of Kennecott Copper Corporation

CHASE BRASS & COPPER CO., Dept. HH-659, Waterbury 20, Conn.

Please send me my FREE copies of "Save on the Homes You Build" and "Now's the Time to Buy a House." I want to see how low-cost, Chase® copper tube plumbing can help me save money and sell more houses.

| NAME | |
|------|--|
| | |

| ADDRESS | | |
|----------|--|--|
| ADDITESS | | |
| | | |

CITY_____Zone__State___

THE NATION'S HEADQUARTERS FOR ALUMINUM . BRASS . BRONZE . COPPER . STAINLESS STEEL

Atlanta Baltimore Boston Charlotte Chicago Cincinnati Cleveland Dallas Denver Detroit Grand Rapids Houston Indianapolis Kansas City, Mo. Los Angeles Milwaukee Minneapolis Newark New Orleans New York (Maspeth, L.I.) Philadelphia Pittsburgh Providence Rochester St. Louis San Francisco Seattle Waterbury

SELL THE **CUSTOM LOOK WITH GEORGIA-PACIFIC** FAMILY-PROOF PANELING!





Every family wants a home to reflect its own taste—and nothing adds warmth, character, individuality to a home like Georgia-Pacific Family-Proof Paneling! What's more, this wide line of handsome hardwoods makes it easy for your customer to choose just the color and grain she likes best.

The "family-proof" finish protects the paneling, keeps it beautiful. Hair tonic, household chemicals, grease, ink, paint, mercurochrome, cleaning fluid, turpentine, boiling water can't harm the durable finish. This luxury look lasts longer, costs less over the years than any other wall covering!

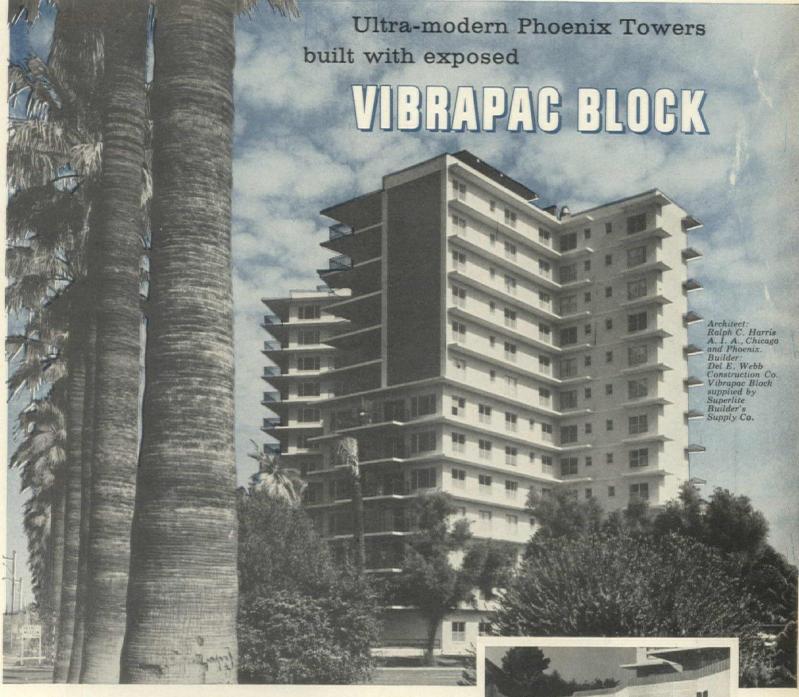
This kit helps you sell! Georgia-Pacific's new selling kit for builders tells the story, helps you sell! You get a viewer with color slides, a new color booklet full of room ideas, actual paneling samples to show your customer. Write today for your Georgia-Pacific selling kit.

| Georgia-Pacific, | Dept. HH559 |
|------------------|--------------|
| Equitable Bldg | Portland Ora |

Please send me complete information and selling kit for GEORGIA-PACIFIC Family-Proof Paneling.

GEORGIA — PACIFIC Lumber & Hardboard - Plywood & Redwood - Pulp & Paper

a Skyscraper of Ranch Homes



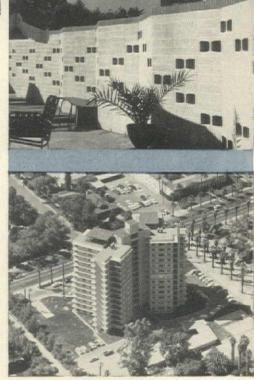
Now — you can live in luxury 5 minutes from the heart of Phoenix. The new, magnificently conceived Phoenix Towers is literally a skyscraper of air-conditioned ranch homes, each affording a gorgeous view of sunny Arizona's mountain and desert grandeur.

Phoenix Towers is all Vibrapac Block constructed. Exposed, lightweight units, for both exterior and interior walls, provide a high degree of insulating and soundproofing qualities, as well as fire-safety and storm-safety. Residents have the advantage of living in a beautiful suburban home located in a busy metropolitan area.

Yes—you can build better with Vibrapac Block, the modern building material. Numerous styles and sizes, interesting textures, and distinctive color tones challenge both architects and builders in achieving beauty and permanence. Write for chart showing 50 block wall patterns available. No obligation.

BESSER Company

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



A9-19



These sparkling Hall-Mack accessories are styled for modern, convenient living. Original in idea, and crafted from quality materials, they provide a clean, uncluttered arrangement of space — add convenience, warmth and charm to any bathroom. Their functional good looks and simple styling have set the trend in bathroom utility. So beautifully practical, they truly provide the touch that means so much. Qualitywise, budgetwise — the choice is always HALL-MACK!

| HALL-MACK COL | MPANY Division of TEXTR | ON INC. |
|-----------------------|--------------------------------|----------|
| 1380 W. Washington Bl | vd., Los Angeles 7, California | HH-59 |
| Please send your FRI | EE color booklet of new bathro | om ideas |
| Name(PLEASE PRINT) | | |
| Address | | |
| City | Zone State | |

Quality Ulindows

ARE THE "BEST BUY"

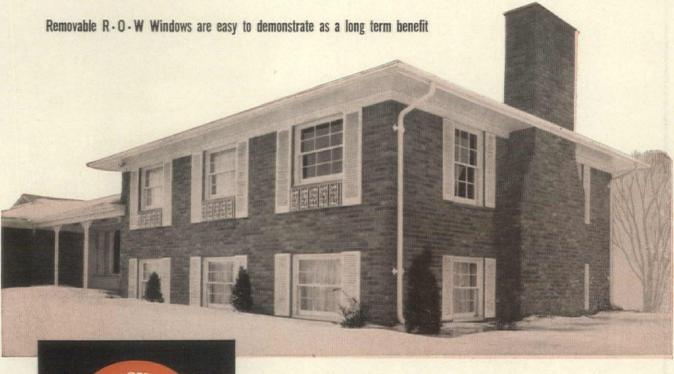
Quality wood windows look better—work better and cost less to own because they are much easier to maintain.

Cheap windows cost you more to install and more to service.

Use R·O·W windows with built-in buyer satisfaction.







R.O.W is the trade-mark of R.O.W Sales Company, 1365 Academy Avenue, Ferndale

Wood Windows provide residential character not available in metal units. Wood is a natural *insulator*—metal is a natural *conductor*.

Removable Wood Windows insure better weather protection with natural insulation—plus take-out convenience, the feature that sets modern windows apart from windows manufactured fifty years ago.

Top Quality and Top Value are the basic guides which have made R·O·W Removable Wood Windows the fastest selling double-hung unit in the country. Original cost is a little more than the lowest priced units, but you're buying lasting beauty and lasting performance. Eliminate call-backs and customer dissatisfaction by going R·O·W.

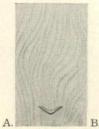
R.O.W SALES CO. 1300-5 ACADEMY . FERNDALE 20, MICH.

Now-YOUNGSTOWN NEW WOOD



Fruitwood, Honeywood, Autumn Birch, Sandalwood on today's finest cabinets

Autumn Birch (shown above) is just one of 4 beautiful new kitchen fashions presented by Youngstown Kitchens, masters of kitchen cabinetry. Here are handsome wood fronts on basic steel cabinets, including fortified wood styles that heat, water, steam or stains can't harm...won't warp, swell or sag! See this new group of kitchens now!







Youngstown Kitchens brings you three other wood styles in addition to Autumn Birch. Choose: (a) Honeywood; (b) Sandalwood; (c) Fruitwood.

KITCHENS presents FASHIONS

Now you can show glamorous Youngstown Kitchens Fruitwood in your model home and offer 3 alternate wood styles and 1 steel style at no additional cost! New SNAP-ON DOORS... 1 BASIC STEEL FRAME ...take the risk out of home sales by offering home buyers a wide choice of kitchen styles.



QUALITY HOMES ARE BUILT WITH YOUNGSTOWN KITCHENS

 Don't risk home sales with less than quality kitchens... and don't risk sales on just 1 kitchen style. Youngstown Kitchens new Woodcharm line gives home buyers a wide choice of fine quality wood or steel kitchens and makes your kitchen installation easy!

• Finish your home starts with basic steel cabinets in

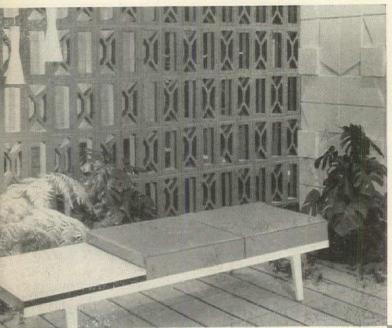
the kitchens...snap on doors and fronts of owner's choice as home is sold. So easy and quick. Any of 5 styles at no extra charge to home buyer!

• Immediate delivery from 80 distribution points. Contact your Youngstown Kitchens Sales Representative.

| American Standard, Youn Dept. HH59, Warren, Oh | gstown Kitchens Div. |
|---|------------------------------|
| Please rush me complete style kitchens. | information on your new wood |
| Name | |
| Firm | |
| Address | |
| City | State |



ABOVE: Quiet beauty in the modern manner. Here a handsome wall done in 8-inch square diamond-pattern block adds its special charm to this handsomely proportioned room. Block blends well with contemporary decor, other building materials.



ABOVE: A practical sun screen for patios or an attractive divider inside the house. Anywhere you find it, this wall of grille block is a scene stealer. Wall is made up of alternating grille and hollow units.

NEAR RIGHT: Lace in living concrete block. That's the picture created by this lovely screen. Practical too for the patio. Gives privacy, yet passes the cool breeze.

FAR RIGHT: Another sculptured wall in modern masonry. Here, a long wall is given life and attention with the introduction of vertically placed hollow units.

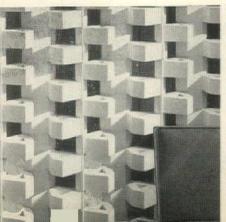
of Rock

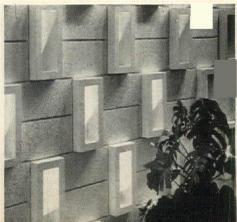


The bright, new world of concrete masonry is one of imagination, warmth and beauty—full of intriguing ideas to give your new homes color and distinction, inside and out. There was never a build-

ing material like block, combining beauty, proof against fire and vermin, sound absorption, and the economy of the lowest "in place" cost in building. Ask your local NCMA member to show you modern masonry. Step into the wonderful new world of block yourself.

National Concrete Masonry Association • 38 South Dearborn • Chicago 3







Quality building is evident before you even enter a home that has been locked with beautiful Schlage Locks. A Schlage Lock on the entranceway—the first thing you touch—says, "This is the work of a quality builder."

Schlage, pioneer of the much-imitated cylindrical lock, is the standard of the industry. To a customer, to a builder, to an appraiser there is no finer name on a latch plate than Schlage.

Schlage Lock Company... San Francisco...

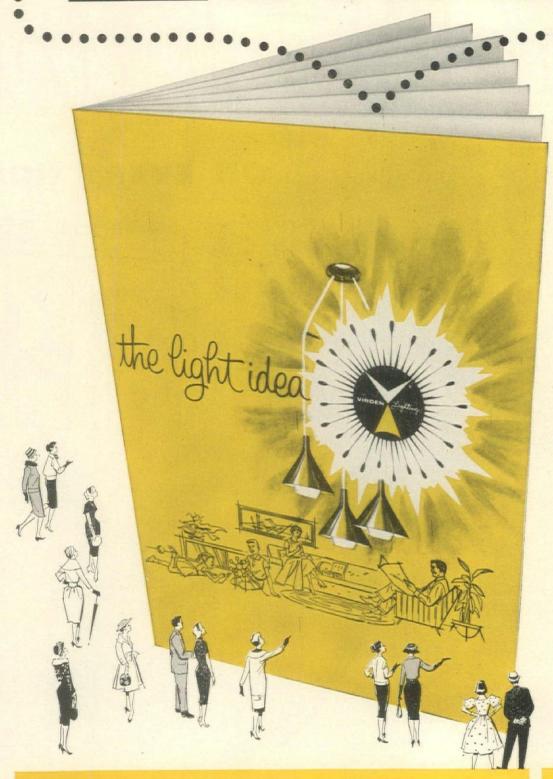
New York... Vancouver, B. C.

SCHLAGE

AMERICA'S MOST DISTINGUISHED

LOCK BRAND

from virden.





write for your copy

52 pages in full color showing the newest designs in light idea lighting. Beautiful new pulldowns, chandeliers, ceiling and wall units, bullets! New designs in Colonial, Traditional, Contemporary and Modern styling. Outdoor and garden lighting. Truly the most complete, the most brilliant collection in Virden's history!

mail the coupon today

comes a new concept in home lighting!

the light idea



to help you sell your new homes easier...at better prices

Now, give your homes exciting new sales appeal! Lift them above competition! Take the emphasis off the price! All at no added cost to you!

"the light idea" by Virden makes it possible!

It's a new concept in home lighting! The use of Virden lighting not only to illuminate, but to match today's modern living patterns...to create the right lighting mood for every occasion, from a gay party to a quiet evening at home ... to emphasize beauty, to bring out colors, dramatize points of interest, accent prized possessions... to provide safety and protection inside and outside of the home.

It's easy to use...inexpensive too!

Virden's new line of lighting fixtures is light idea

designed! Each is styled to provide the beauty, comfort and safety that makes "the light idea" a practical, wanted new home feature . . . a feature that is worth far more than its slight additional cost.

Get the details now!

See your Virden distributor. Tell him you want to use "the light idea" by Virden in your new homes. You'll find his name under "Lighting" in the Yellow Pages of your phone book.

Or mail the coupon below for your free copy of new "light idea" catalog. 52 full color pages showing the new 1959 selection 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 Member American Home Lighting Institute Virden Lighting, Dept. HH 5209 Euclid Avenue, Cleveland 3, Ohio

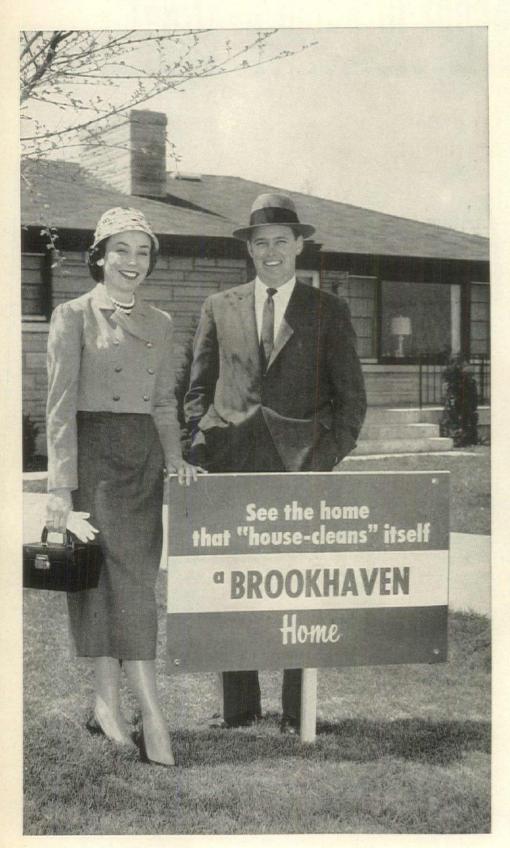
I like "the light idea." Mail me your new light idea catalog and the name of my local Virden distributor.



| Name | | | |
|---------|-----------------|--|--|
| | MINISTER OF THE | | |
| Address | | | |

| Address | | | |
|---------|-------|-------|--|
| City | Zone_ | State | |

Here's the sign that stopped us!



ELECTRONIC HOME AIR FILTER

"I imagine every woman has dreamed about a home that would keep itself clean . . . tables that would dust themselves . . . walls that would keep their new look . . . rooms that would automatically 'clean themselves'. I've dreamed of such a home, too, but I never expected to find it!

"That's why this sign stopped us. We could hardly believe that now automatic house-cleaning

is here, at a price we could afford!

"The salesman showed us how a simple electronic device, attached to the furnace or central cooling unit, drew up to 20 times more dirt particles out of the air than throw-away filters. It was easy to understand how Electro-Klean could prevent thick layers of dust from collecting on furniture, walls and windows by trapping it from the air. Naturally the Electro-Klean gets bacteria laden dirt and pollen, too. I understand that doctors use Electro-Klean for relief of allergy troubles.

"When we found that automatic house-cleaning added less than two hundred dollars to the cost of a home, we were sold!"



"Imagine . . . this addition to our furnace will house-clean every room in the house, every day!"

Electro-Klean is a compact, "package" unit that may be quickly installed on the return air side of any forced air furnace or air conditioning system, using existing ducts. There are no water or sewer connections. Electro-Klean traps airborne dust and pollen like a magnet attracts and holds bits of iron.

Electro-Klean provides a tremendously effective selling point for your homes at low cost. It is backed by a national promotion program that will pre-sell your best prospects. Localized promotional material and plans will help you reap the benefits of this outstanding new and exclusive selling feature.

Electro-Klean is a product of American Air Filter Co., oldest and largest manufacturers of electronic air filters. It is backed by more than 30 years' air filtration experience.

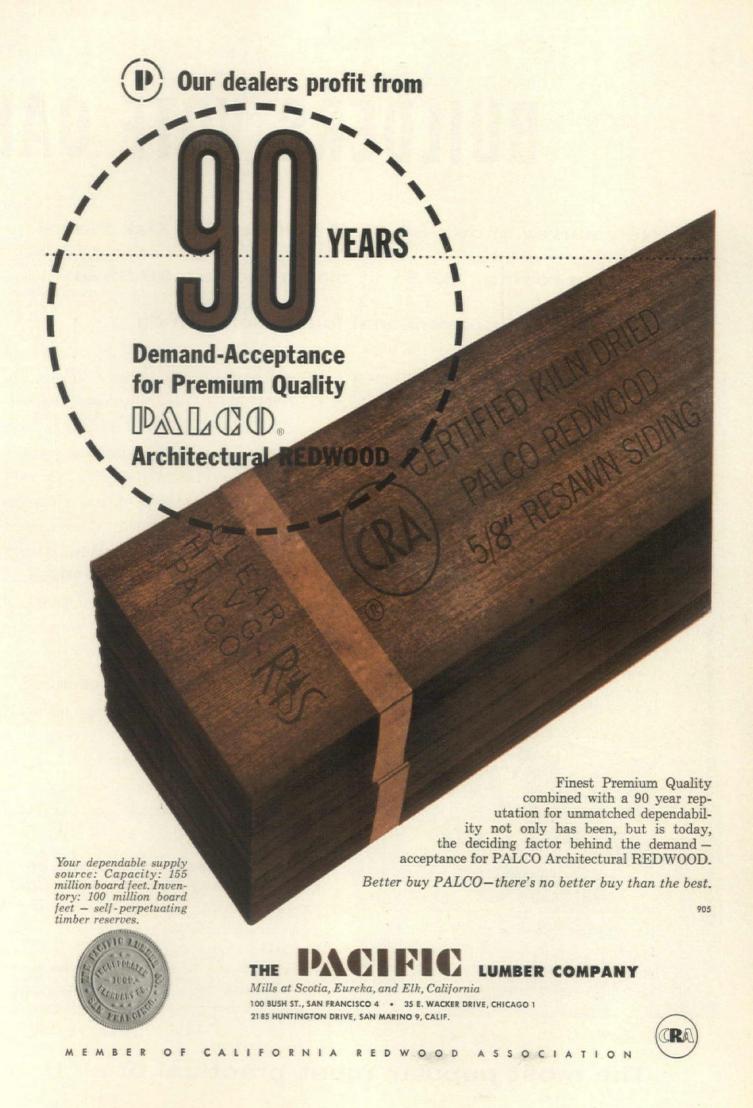
Investigate Electro-Klean today. Be first to offer this amazing new selling point — "homes that house-clean themselves". Write for details of promotion plan and Electro-Klean prices.

American Air Filter Company, Inc.

215 Central Avenue,

Louisville 8, Ky.

Built and Backed by American Air Filter . . . World's Largest Manufacturer of Electronic Air Filters



BUILDERS VOTE OAK

New survey shows 86.4% of builders use Oak Floors in living rooms...83.8% in dining rooms...89.8% in bedrooms of conventional foundation homes

WOOD OR CONCRETE



Simplest of all floors to install, Oak is nailed to subfloor in wood joist construction. Modern Strip Oak Floors are precision manufactured in a variety of sizes and grades to suit any building requirement.



Screeds laid in mastic provide nailing surface for installing Strip Oak Floors in homes built on concrete slabs. Write National Oak Flooring Manufacturers' Association for free installation manual.

What flooring material do home builders like best? The above figures, developed in a new survey of builders throughout the country, leave little doubt. They gave a tremendous majority (a high of 89.8%) to Oak as the floor used most often in living, dining and bedrooms of conventional foundation homes. This survey covered every type of home building operation . . . large and small, market and contract. Its findings are authenticated by figures on actual shipments of Oak Flooring which, for many years, have shown Oak Floors first by far.

POPULARITY IS WELL DESERVED

Oak Flooring has many advantages of beauty and practicality, plus economy. It costs much less than almost any other floor, yet is a symbol of luxury to home buyers. Always in style, appropriate with any architecture, Oak Floors are a builder's best choice for any home.

Compare these advantages of OAK with any floor at any price

Lifetime durability
Distinctive grain and color
Easy to keep clean
Low cost
Natural wood beauty
Resistance to damage

Warm and healthful
Easy to install
Comfortable resilience
Non-denting surface
High insulating quality
Home buyer preference

The most popular, most practical of all floors

FLOORS FIRST BY FAR



Home buyers prefer Oak Floors over all other types

No other flooring material has ever approached the popularity of Oak with home buyers. Only Oak offers all these features and at low cost: natural beauty, warmth and resilience, lifetime durability, ease of maintenance.



Oak Floors increase loan and resale values

The universal acceptance of Oak Floors helps builders obtain highest loan valuations. In the resale market an Oak Floor is always an asset because it resists so well the signs of age and wear.



Oak Floors enrich all home styles

Oak Floors adapt naturally to all architectural and decorative styles. Their warm wood beauty provides the perfect accent to either contemporary or traditional settings, harmonizes with all colors.



88.8% of realtors vote Oak Floors "most acceptable"

Realtors know, perhaps better than anyone else, the value of Oak Floors in selling homes. A new survey shows 88.8% of all realtors endorse Oak as the "most acceptable" floor to home buyers.



NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION 814 Sterick Building, Memphis 3, Tenn.

OAK FLOORS

a message to every architect, builder, contractor, dealer, distributor, engineer, government official, lender and realtor who is on his toes ...

1959 this is the year!

these are the pools!



Last October, Romar advertised this to the industry: "There is a big extra profit you're missing in home sales today." Meaning the extra profit to be earned by specifying, selling, installing and lending money on swimming pools.

That prophecy has been borne out. Today the swimming pool market has burst its bonds of the past. Today there is a healthy, booming consumer demand for high-quality, low-cost packaged swimming pools. Truly, we are seeing a market in search of an industry not the reverse.

Consumer acceptance of Romar Pools has a sound market condition behind it: the increasing days of leisure time becoming available to families in all income brackets. Inherently they prefer to spend this spare time at home. And a Romar Pool, which they can own for anywhere from \$2,000 to \$6,000 installed, gives them a packaged estate and a whole new outlook on life!

Right now is the time to learn this fascinating new field. Our management team, engineers and marketing people are at your service. Write, wire or telephone for Catalog 591, current pool kit and equipment prices, installation drawings, etc. Better yet, visit our manufacturing plant here in Milwaukee . . . see a Braves game as our guest, and learn why this is the year and these are the pools.



Don't forget:

your many swimming pool markets: besides new and older homes, you can sell Romar Pools to motels, country clubs, smaller hotels, shopping centers, outdoor theatres, restaurants, churches, institutions. resorts, and many more. Romar's line includes **EVERYTHING** for pools 15x30, 18x36, 20x42, 25x50 and larger.

RSP-759

Call Milwaukee . . . EDgewood 2-9070 ... for full details.



Member, National Association of Home Builders Charter Member, National Swimming Pool Institute



Scored Tile, in new Crystalline Glazes, used in an entrance hall designed by Emily Malino Associates. Walls: 315 Cr. Tan in Scored Design SD-1. Floor: 345 Cr. Cobalt in Scored Design SD-4. Color Plate 82.

This Entrance Hall is a Real Sales Feature!

It's cheery and charming with walls and floors of American-Olean's new Crystalline Glazed Tiles. They have a rich textured surface as decorative as it is rugged. On floors, they'll last a housetime without waxing, scrubbing or replacement.

Architects and builders are using Crystalline Glazes

and Scored Tiles* to create new and different decorative effects not possible with other materials.

Crystalline Glazed Tile is made in thirteen new colors, as well as in four Scored Tile designs—permitting hundreds of different patterns and color combinations. Send for full color booklets which give complete information.

*PAT. APPLIED FOR

| 1409 Canno | on Ave., Lansdale, Pa. |
|-------------|---|
| Please send | me booklets 1020, "Crystalline Glazes an |
| | and 450, "Color Planning with Ceramic Tile" |
| | |
| | |
| NAME | |
| NAME | (PLEASE PRINT) |
| NAME | |
| | (PLEASE PRINT) |





You will sell more houses

There's more to show, more to sell with these complete kitchens!

Here are the kitchens with all the advantages and conveniences "most wanted by most women"! They are beautiful kitchens, with every appliance color-matched and design-coordinated. They are convenient kitchens! Imagine the "desire-to-buy" your houses will arouse when you offer prospects such exclusive better-living features as a built-in oven barbecuer; a refrigerator-freezer with automatic ice maker; a 2-cycle dishwasher with Filter-Stream* washing; a washer and dryer that set themselves; Select-A-Door cabinets that change color in minutes; * Tmk

RCA WHIRLPOOL . . . America's first family of home appliances

and many more advantages.

And, they are kitchens that give you big profit opportunities. You obtain everything you need . . . appliances and cabinets . . . from one quality source of supply. Ordering is simpler and less costly . . . service is fast . . . and you get a package deal at a package price. Here's an important extra . . . you can have an RCA WHIRLPOOL kitchen designed for your houses by the staff of a leading magazine "LIVING FOR YOUNG HOMEMAKERS". Write for full details.

Use of trademarks on RCA authorized by trademark owner Radia Corporation of America

Products of WHIRLPOOL CORPORATION St. Joseph, Michigan



with RG Whirlpool kitchens



(1) "Select-A-Door" wall and base cabinets (2) Built-in gas and electric ovens (3) Built-in gas and electric cooking tops (4) Dishwashers (5) Disposers (6) Gas and electric refrigerator-freezers . . . plus automatic washers, gas and electric dryers, gas and electric washerdryers, air conditioners, combination range-sink tops.

| Whirlpool Corpore | ation, St. Joseph, Michigan |
|-------------------|---|
| | omplete information on the new kitchens and appliances. |
| NAME | TITLE |
| FIRM NAME | |
| | |
| FIRM ADDRESS | |

Everything for the modern kitchen with one brand name...RCA WHIRLPOOL Mail coupon for complete details!

STYLE SELLS HOMES ... AND THAT'S WHY YOU SEE

KENTILE FLOORS IN TODAY'S FASTEST-SELLING HOMES!



golden elegance in thrifty Vinyl Asbestos Tile!

There's exciting eye-appeal in this stylish newyet low-cost—Kentile Floor. Practical ease of care, Style is heavily presold through continuous national too, because it's made with Vinyl. Nine striking advertising-in LIFE, LOOK, THE SATURDAY colors, each smartly accented with gold. Use EVENING POST, AMERICAN HOME, BETTER it anywhere indoors. Fits any décor . . . modern

or traditional. Like all Kentile Floors, Metallic HOMES & GARDENS, LIVING.





OVER 200 DECORATOR COLORS IN SOLID VINYL, VINYL ASBESTOS, CRYSTALITE™M VINYL, RUBBER, CORK, AND ASPHALT TILE.

FREE!

MODEL HOME SALES KIT

You get (1) Lawn Sign with your development name, (2) Personalized interior signs for wall base, (3) Helpful selling tips and color leaflets for use by salesmen. Write to: Kentile, Inc., 58 Second Avenue, Brooklyn 15, N. Y., for details.

Roundup:

NEWS INDEX

| Materials & Prices | 46 |
|------------------------------|-----|
| Materials briefs | 46 |
| Closeup: Clarence Thompson | 47 |
| Foreign competition | 51 |
| Producers earnings | 55 |
| Housing policy | 58 |
| Mortgage market | 63 |
| Mortgage briefs | 63 |
| Pension funds and mortgages | 66 |
| Housing abroad | 70 |
| Housing market | 71 |
| Market briefs | 75 |
| Local markets | 75 |
| Housing in Hawaii | 86 |
| Segregation | 90 |
| Violence in Wilmington | 90 |
| Atlanta civil rights hearing | 91 |
| Urban renewal | 94 |
| Maryland hits blockbusting | 94 |
| Frank Lloyd Wright | 95 |
| People | 103 |
| Baltimore woos URA's Steiner | 103 |
| Statistics & Indexes | |
| Boeckh housing costs | 46 |
| BLS materials prices | 47 |
| Mortgage quotes | 67 |
| Housing starts | 71 |
| FHA VA applications | 71 |

The bright side: starts surge forward

Private starts now seem firmly headed for a 1.3 million year. Experts are beginning to drop the familiar "if"—enactment of a housing law. Starts in March rose to a seasonally adjusted rate of 1.39 million. This ranks behind only last November and December among the biggest months since 1955 and it is the biggest March on record. First quarter private starts of 288,200 are likewise an all-time record.

Economist Miles Colean, pointing to a big pick-up in conventional and cash home purchases as well as in FHA, predicts: "The outcome of the year appears to be less dependent on the actions taken in respect to federal legislation [a VA interest rate boost] than is ordinarily thought." He foresees 1.3 million private starts—up 110,000 from his most recent forecast (*March*, *News*). With 60,000 public starts his new total forecast is 1,360,000—for the biggest year since 1950.

It is also clear that dollar volume will surge ahead even more. The size and the price of houses is going up. One reason: the government is no longer bribing builders via subsidized FNMA special assistance loans to build cheaper houses (\$13,500 or less). So builders are putting up what the sales and money market—blended—will absorb.

The question mark: will the economy's boom squeeze building

Some doubters contend housing is about to taper off. For every builder like Bill Levitt who says he had his best winter in five years, there are others who report sales, only fair. Says NAHB Past President Tom Coogan: "In spite of several bright spots, home sales are generally slow in many areas."

And while Labor Secretary James Mitchell hails the starts figures as meaning "more jobs for more people," a top Administration economist notes employment in the building industry, at least, has not risen. "We've got starts, but we don't have the people on the job. I think this is a reflection of bum figures," he says.

(BLS figures became suspect a year ago when the Census Bureau's housing inventory indicated BLS starts had been 20% too low for six years. BLS gives up the starts counting job to Census next month.)

Many a builder thinks a 1959 Housing Act would ease his mortgage money problems. But the general level of interest rates is rising so fast a 5¼% VA rate may bring out little more money (see p 66). Sales of durable goods are going up and their financing competes for money. Corporations are stepping up expansion plans and this means lots of money. But even if mortgage money tightens again, advance commitments should maintain a near-record rate of starts well into the last quarter of 1959. Housing is having a wonderful splurge, whatever problems may lie just ahead.

More items may win approval for FHA repair loans

Because House & Home's Washington editor, Dick Saunders, asked a pertinent question, FHA has begun studying whether it can broaden its list of items eligible for Title I repair loans. The upshot may be to qualify such home improvements as greenhouses, built-in vacuum cleaners and intercom systems for FHA repair loans.

The subject came up when FHA sent out a reminder to repair loan lenders that bomb fallout and tornado shelters are eligible for FHA loans. The agency noted, however, that such loans must be on a direct lender-to-borrower basis, with no dealer or fixup contractor in between. "Why?" asked Saunders. To keep out promoters who might start scare campaigns, explained FHAides. "If you have this degree of control over items which could be abused, why do you use it on only one thing," asked Saunders. Next day, Asst FHA Commissioner Roy Cooke called his staff into a huddle. "Why indeed?" he wanted to know.

Some fixup and improvement items are banned for FHA repair loans by Congress. But others are blacklisted administratively. FHA is pondering whether to pare down its own blacklist—under strict controls to prevent abuses.

Is military housing riddled with 'gross waste and negligence'?

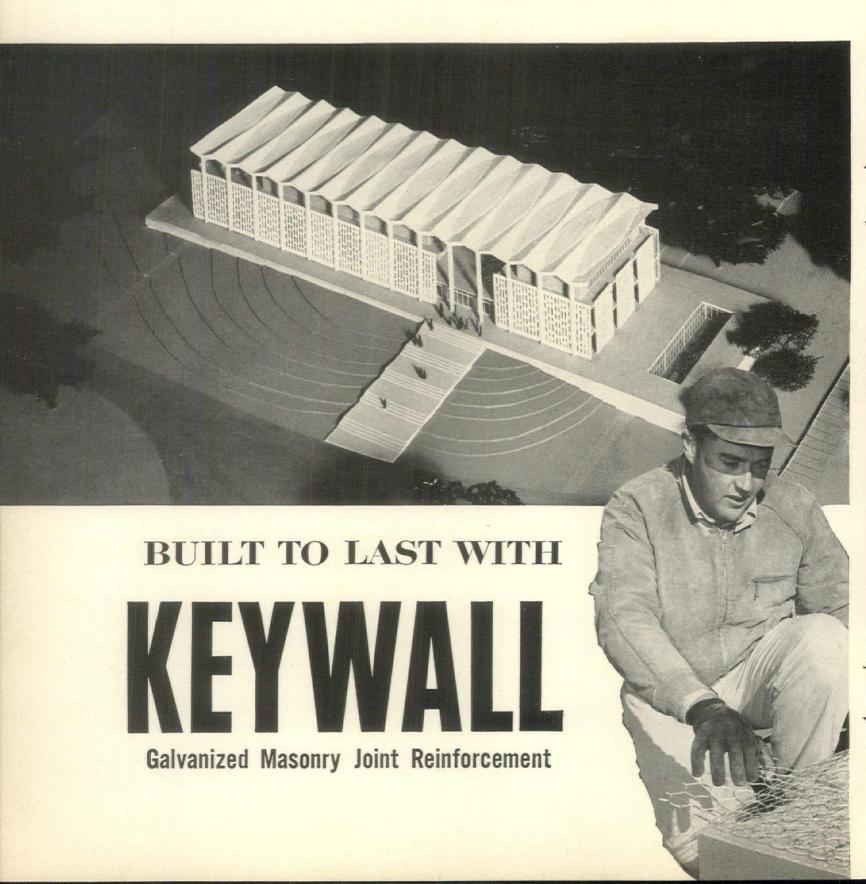
Sen Harry F. Byrd (D, Va.) the archenemy of federal spending who first pointed an accusing finger at FHA Sec 608 windfalls, insists it is. He bases his charge on a probe the General Accounting Office has just made of Capehart military housing at Ft Belvoir, Va. GAO reported irregularities there "apply to the Capehart program as a whole." Among other things, GAO found: 1) a \$15,000 outlay for "title search and insurance" although the government has owned the land for a century, 2) "additives"—such as patios for officers' houses—which were tacked onto the low bid to bring the unit cost to \$16,345 (close to the legal ceiling of \$16,500), 3) costly redesigning to include only 2-family houses instead of 4- to 8-unit structures as originally planned when the cost ceiling was only \$13,500.

NEWS continued on p 46

PAVILION OF BEAUTY...

The first unit of the new Memphis Academy of Arts rises majestically in the city's Overton Park. This impressive structure will be the pride of Memphis residents for generations.

KEYWALL masonry reinforcement is protecting the beauty of this Fine Arts Center. It's adding greater crack resistance and increased strength to outside and partition



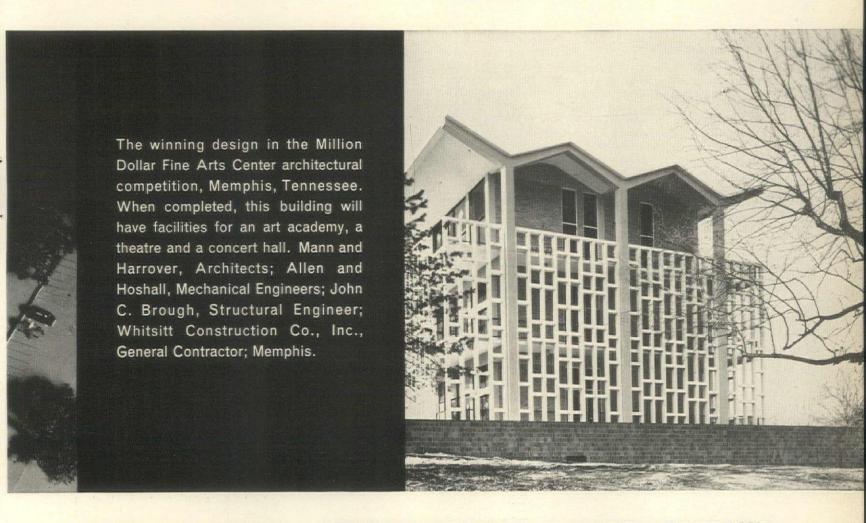
walls, as well as the retaining wall at the base.

Architects have specified KEYWALL because they know it does an exceptional job in reducing shrinkage cracks and increasing lateral strength. And, as on all KEYWALL jobs, they can be sure this masonry reinforcement is used as specified.

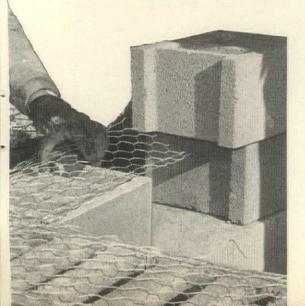
Masons find KEYWALL easy to handle

and store. It unrolls in place on the wall, it cuts easily, and it's easy to lap without adding thickness to mortar joints. Full embedment and a strong bond are always assured.

Why not use KEYWALL masonry joint reinforcement on your next job? You'll find it gives the low-cost, effective reinforcement you've been looking for.



KEYWALL masonry joint reinforcement is made for the following wall thicknesses: 4", 6", 8", 10" and 12".



KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

Keywall - Keycorner - Keystrip - Keymesh® - Welded Wire Fabric - Nails

| | & Wire Company | | Dept. HH-59 |
|-----------------------|----------------------------|------|-------------|
| Peoria 7, Illinois | | | |
| Please send me com | plete information on Keywo | all. | |
| Name | | | |
| Ivame | | | |
| | | | |
| Title | | | |
| Title Company Address | | | |

Lumbermen sign up to promote aluminum

Is LuReCo pact with Reynolds Metals the start of sweeping changes in materials marketing?

A sales & development contract that may have far-reaching effects on housing technology and the economics of the retail lumber trade has been signed by Reynolds Metals Co and a subsidiary of the Lumber Dealers Research Council.

Under the agreement, LuReCo Service Assn, the LDRC subsidiary, is supplying a complete line of Reynolds aluminum building products direct to the 1,475 US lumber dealers franchised to build house parts under the LuReCo modular system—at 5 to 15% less than they could buy them elsewhere.

In effect, the agreement lets LuReCo dealers nearly match the mass direct aluminum buying power of the prefabbers who are their chief competitors. But the tie-up between fast-growing LuReCo* and the fast-growing aluminum residential products field (Feb, News) has more than mere price implications:

1. Aluminum gets a bigger foot in the door in new-house construction. "It gives us more than 1,400 potential retail outlets we didn't have before," says a Reynolds spokesman. "Up to now most of the aluminum in housing has been sold to the remodeling and fixup markets." Moreover, Reynolds had no well-developed system of wholesale or jobber outlets.

Reynolds reports that some builders participating in its "House of Ease" promotion, featuring heavy use of aluminum, last year had to go to fixup applicators for their materials—siding, for example—because regular suppliers were not stocking them.

What does Reynolds think the pact will do for the company? "We'll be disappointed if this doesn't increase our residential sales by 25 million pounds the first year." How does that compare with present sales? "We don't release our figures, but the entire industry sold 400 million pounds last year—300 million to fixup alone."

- 2. Lumber dealers get an incentive to relax resistance to materials many now scorn as "substitutes"—metals among them. Besides getting aluminum products cheaper for their own use, LuReCo dealers can sell them out of stock to builders and fixup contractors. They can also benefit from aluminum's national promotions like Reynolds' "House of Ease" program.
- 3. Aluminum becomes easier to carry in stock because there will be a central source of supply. "Up to now," says Raymon Harrell, LuReCo research director, "many of these products were available only from scattered individual fabricators. Now they all will be available from one source."
- 4. Coordination of aluminum components like windows with LuReCo's modular system can lead to more standardization and lower prices. Reynolds has designed and will produce five different window styles for the LuReCo market, all of which fit the same hole in the standard four-foot LuReCo panel. If acceptance is as great as expected among dealers (who produced an estimated 25,000 houses last year), mass production economies could make these cheaper for everyone, a development long urged by many industry leaders (H&H, June '55).
- 5. Similar arrangements with other materials producers may follow. "We're not joining any camp to the exclusion of others," says Lumber Dealer Clarence Thompson, president of

LDRC and LuReCo Service Assn. "We're willing to work with any material that is willing to work with us and move with us. We hope to do so."

- 6. New product development gets a big lift. By providing a ready-made setup for field trials and test marketing, LuReCo removes one of the worst stumbling blocks to harnessing modern technology to housing needs. It teams Reynolds' design and production resources with the experience and ideas of LDRC's research-oriented executive committee, can do the same for any similarly willing producer. Eventually, says Harrell, "we could be the catalyst to bring together two, three or four producers to develop new combination products. If we can take two or more materials and make them do more than one thing in a single operation—like roof sections or sandwich panels-we can cut labor costs." A first objective, though, will be "applied research"-finding new uses, new methods with existing materials. "Pure research-development of new products-will come in the future as we visualize additional needs.'
- 7. Research by lumber dealers gets a two-way boost. Profit from the modest 5% mark-up LuReCo will take goes to LDRC for research. And the economic advantage is expected to boost the number of lumber dealers who will pay \$300 to become franchised under the LuReCo system.

Where it leads

The tieup is a good example of how Reynolds builds its markets—one that other materials producers might well study. Executive Vice President David P. Reynolds told House & Home he believes aluminum's entrance into the new house field will parallel its entrance into the auto industry (from 6 lb/car average in '49 to 60 lb/car now, estimated 400 lb/car in five years). "We build this market up gradually, using aluminum in parts where we couldn't miss in acceptance or performance. Mass production helped cut costs. We perfected new finishes, new strengths in alloys, so each year we could take more of the auto market.

"The public and our technology are not ready for the all-aluminum house, but we're getting them ready for more and more aluminum parts. One day there may be aluminum houses, but we'll only get them through the gradual growth of technology and acceptance that our material allows."

The agreement is the outcome of talk about product development which started casually between LuReCo's Thompson and Harrell, and Reynolds representatives, at the NRLDA convention in Chicago last November. "It is a mutual thing that we worked out together," says Harrell. "Both sides can gain."

continued on p 55

MATERIALS BRIEFS

Court kills transit cars

Slowpoke rail shipment of Western lumber—so-called "transit" or "roller" shipment—by the Union Pacific Railroad has been enjoined by a US district court. The injunction probably means the end of a marketing device that has been important to some small mills and lumber dealers, but is generally disapproved by the industry. The ban was asked by the Interstate Commerce Commission (Feb '58, News).

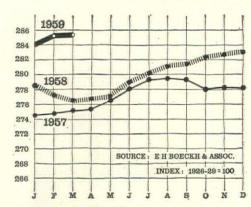
Transit shipment consists of deliberate delay of unsold lumber enroute from mill to market by the railroad at the shipper's request. It gives wholesalers more time to find buyers. In his finding, Judge Edwin R. Hicklin at Des Moines said that the railroad was in effect providing warehouse facilities for shippers, passing on increased cost of such delays to the general shipping public, and that other shippers were denied the use of the cars involved. The special service, obtained by merely marking the shipping order "via Colby", amounted to granting a superior competitive position to shippers using it, the court ruled.

Transit shipment flowered in the post-World War 2 boom when wholesalers could get premiums from buyers as the cars reached their destination. As the market weakened, shippers began to ask for more time. The method lost popularity when many shippers had to sell at distress prices as the cars reached the market unsold. Most large mills now sell, and most large dealers buy, on firm order. Most affected will be small dealers who make a practice of shopping for distress cars.

The looming freight car famine

Chances are getting better for a summer shortage of freight cars. Some lumber producers estimate the supply will fall as much as 40% behind demand by year's end. Early twinges (April, News) have become sharper. Two-or three-day waits are commonplace for West Coast lumbermen.

Alarm is spreading to other industries. Na-



point to 285.3 on Boeckh's index in March. "But wait till June. Then we'll show you something," says Col E. H. Boeckh. A hint of why is given by Long Island home builders who report these price boosts: framing lumber from \$64 mbf in mid Jan to \$70; 5%" fir sheathing plywood from \$96 to \$106/m sq ft; asphalt roofing up 8% to wipe out last year's drop. Result: a 1% rise in construction costs.

CLOSE-UP:

tional Gypsum has warned its customers against letting inventories fall. Steel, sand & gravel and other car users feel the pinch. A Senate commerce subcommittee started hearings on the problem, heard cries of grain shippers last month in Kansas City, where rail men predicted a peak 50,000-car shortage.

The reason: usable cars are 5% down from last year while carloadings are up nearly 10%. In '58, carriers ordered only 17,546 new cars, scrapped 41,000. Complicating the picture: Eastern railroads which cry they can't afford new cars are hanging on to those of more prosperous Western roads, spending \$2.75 a day rental instead of \$8-\$20,000 each to buy their own. Outlook: railroads are placing big orders for new cars, but delivery probably won't be until late '59, into '60 if a midyear steel strike develops. The whole picture means lagging deliveries and probably higher prices for building product users this year.

Components plan started

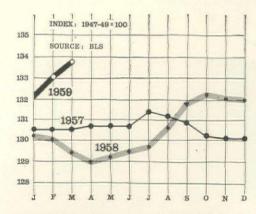
Douglas Fir Plywood Assn is setting out to create a plywood component industry.

A newly-formed (in March) subsidiary, Plywood Fabricators Service, begins a pilot program this month to recruit fabricators. DFPA sees a potential \$100 million extra business in components (against a \$500 million industry gross last year).

Headed by W. D. Page, formerly DFPA's Chicago regional promotion manager, PFS is supplying engineering, testing and certification, and national promotion (including services of DFPA's 60 field salesmen) to three fabricators each in Chicago, New York, Boston, and two in St. Louis. First emphasis is on developing and selling box beam and panel roof systems, box beam and heavy panel floors, especially for homes.

"If we can get 50% of the truss business going into residential construction," says Page, "it will mean \$320 million volume a year." As soon as the pilot program is working smoothly, PFS facilities will be offered to potential plywood component fabricators on a national basis. Fee is 1½% of gross sales, or \$650/mo, whichever is less. One reason for the steam: fir ply sales are building fast, will end the year 1 billion sq ft ahead of sales.

Research in '59 will focus on new structural systems, especially an "erector set" system for plywood components.



MATERIALS PRICES rose to 133.8 in March, up a half point from BLS' revised figure of 133.3 for February. Main reason: plumbing rose 2.5%, heating equipment 3.3%, lumber and wood products 1.3%, asphalt roofing 1.1%. These increases were partly offset by a 2.4% drop in metal doors, sash & trim. The cut was concentrated in aluminum products and was probably due to competitive price slashing.

Clarence Thompson: leading a quiet revolution in the lumber yards

To some of his more conservative colleagues in the notably conservative retail lumber industry, Clarence A. (for Albert) Thompson, 48, is a deeply disturbing fellow.

He talks of "the threat of the prefabber" and urges them to forsake the solid old methods they know so well to get into something called making houses in parts—or sometimes just LuReCo—in order to meet the competition. He suggests there may be new and better ways to do business, new and better products to replace—or at least compete with—tried & true standbys.

It is reasonable to assume that Thompson's latest gambit, which brings aluminum smack into the lumber trade, and at a price break for LuReCo dealers, will be even more disturbing.

To those who have not yet felt the sting of prefab competition, Thompson's concern over it has some aspects of a knight-errant jousting at factory-built windmills. But a growing number who have, or who are alarmed at shrinking profits from other causes (Jan, News), believe this slender (5'10", 150 lb), sad-faced, soft-spoken lumberman from the downstate college town of Champaign, Ill, has found some important answers to the challenge confronting the traditional "bricksand-sticks" technology of housing. They listen carefully to him.

To Thompson, who gives the impression he would be unruffled on a sleigh ride down



LUMBERMAN THOMPSON
One aim: "to be competitive."

the Matterhorn, it is surprising that what he is doing should be disturbing at all. It has only one purpose: to keep the retail lumber trade competitive with other segments of the housing industry.

"I don't want to be accused of doing this [the deal with Reynolds] for the sole purpose of getting it cheaper or eliminating the jobber," he says. "The only reason is because I want to be competitive." His competitor? The prefabber, who can buy direct in huge economy lots, save all down the line by eliminating every possible on-site operation in favor of factory operation, and in wooing away the builders and buyers whose trade is the lumber dealers' bread & butter.

As owner of four lumber yards in downstate Illinois, Thompson has good reason to be concerned for the future of the industry. And as the son of a lumberman, he has a long background in it. His father, McPherson Thompson, entered the lumber business in Champaign in 1925 after operating a string of small yards around Springfield. In 1932 the elder Thompson bought out his partner, and in 1933, when young Clarence graduated from the University of Illinois (BS in business administration), he went into the business with his father.

Thompson traces his interest in progressive methods to a housing goods school conducted in the mid-30's by Art Hood, longtime editor of American Lumberman, for Johns-Manville. He traces his interest in prefabs to 1937, when he saw one of the first Gunnison steel prefabs. His interest turned to action after World War II, when he returned from two years' service as a Navy supply lieutenant, became involved in the work of the University of Illinois Small Homes Council. "I thought it would be a good idea for the lumber dealer to go into home building." Thompson buttonholed Ray Schaub, another forward-thinking lumber dealer from Whiting, Ind. They talked for a year. Then Thompson, Schaub and a few others formed LDRC, putting the \$50-\$100 per member dues into research grants. One study by the Small Homes Council led to the conclusion that a modular prefab system was feasible. Another, in 1953, led to the LuReCo system as it now stands.

An adaptable plan

"All I wanted was a study to let lumbermen compete with prefabricators," Thompson says. What he got, he admits, is essentially a prefabrication system, only oriented to local lumberyard operation instead of factory assembly. The chief difference is that the lumber dealer can adapt his modular house parts to many different house plans instead of a limited number of stock models. Says Thompson: "We don't use the word prefab but our units are prefab units. We can put up a house in one day."

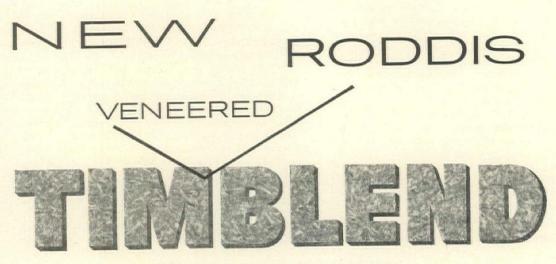
In Champaign, Thompson (Tommy to his friends) is a civic and business leader. Besides his lumber business, he is involved in land development and component manufacture. He has held offices in the chamber of commerce, county credit bureau, Rotary Club, YMCA and Champaign Country Club. He belongs to the Masons, Elks and Moose. Once married and father of three but now divorced, he lives quietly near the Champaign Country Club golf course in a white two-story LuRe-Co-built dwelling he designed himself. He calls it "contemporary Illinois farmhouse." His reading tastes range from lumber trade journals to Dr. Zhivago; social pastimes include bridge, dancing, golf (mid-90s).

An independent traveller

Politically, he calls himself "independent"
—I used to be a Democrat but around here
[in a heavily Republican area] it's useless to
be a Democrat." He enjoys driving—fast but
skilfully—and likes to travel, which he does
often in the interests of LDRC and LuReCo,
both of which he heads. On the platform, he
is known as an effective, low-pressure speaker.

He has a pleasant but needling manner when he lectures lumbermen on the—to him—self-evident need for lumber research.

"We have \$40,000 in our treasury for research," he says. "We should have half a milcontinued on p 51



EXCLUSIVE WOOD BLEND PANELS

MANY WAYS SUPERIOR TO HARDWOOD PLYWOOD ... YET COSTS LESS!

Timblend, Roddis' amazing man-made board, is now available veneered, in the most popular genuine hardwoods . . . from warm Birch to rich Walnut. New beauty plus highest warp-resistance combine in veneered Timblend to assure finer product quality, at lower cost, in many hardwood plywood applications.

Builders have responded enthusiastically to the introduction of Roddis' new veneered Timblend. Sales have actually tripled in just one year! Here's how you can profit from this "success story."

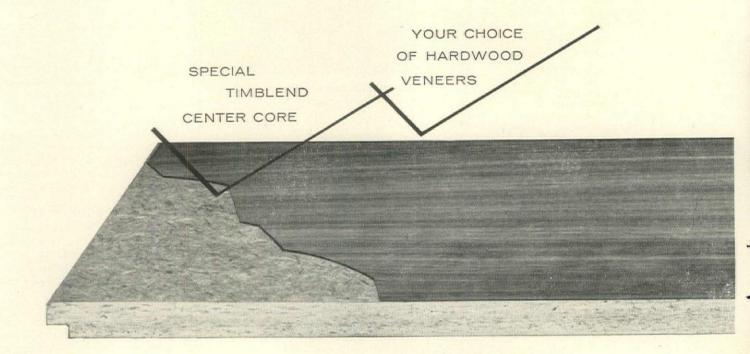
With veneered Timblend you'll get all the richness and beauty of your favorite hardwoods, plus all the proven advantages of its exclusive Roddis man-made core. It's this Timblend core that makes the big difference!

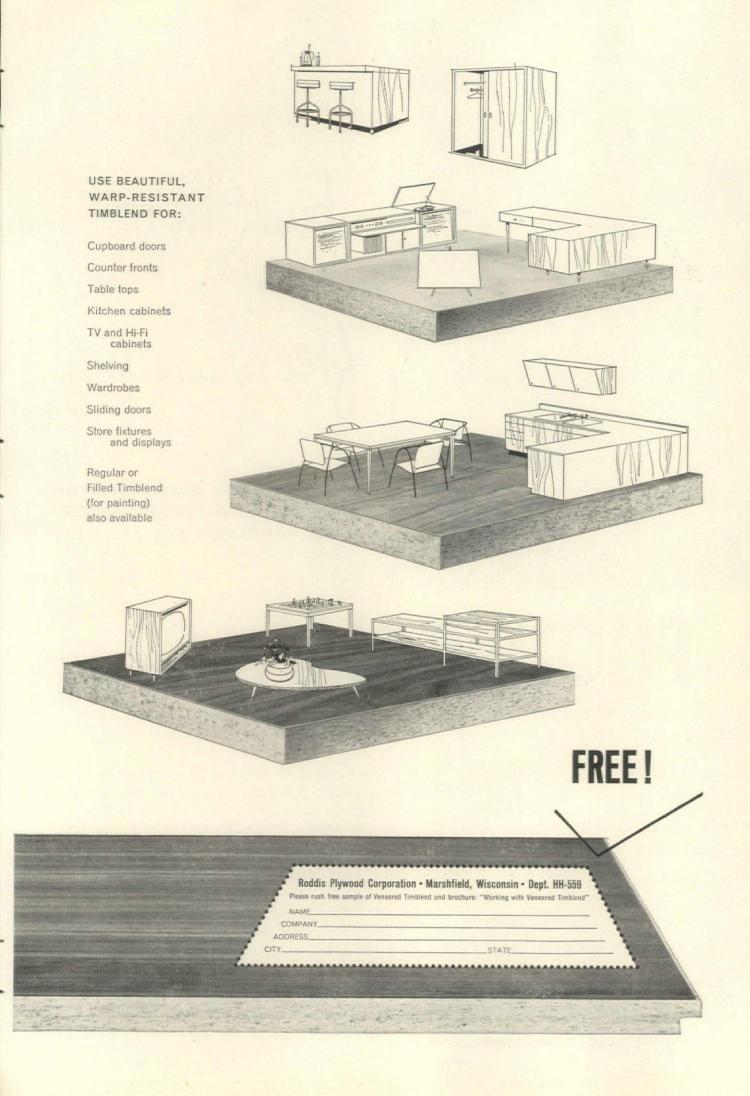
Because of the unique, controlled density, non-grain construction of this core, veneered Timblend machines

beautifully with ordinary woodworking tools or power tools. Saw it. Drill it. Rout and rabbet veneered Timblend. You get 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.

Choose veneered Timblend in any of these best-selling woods: Elm, Birch, Maple, Cherry, Mahogany, Oak, Walnut and many others. Available in ¾" in common plywood sizes. Other thicknesses and sizes available, prefinished if desired, on special order.

Use veneered Timblend for your cupboard doors, cabinets, built-ins, wardrobes, sliding doors and other hardwood plywood applications. You'll achieve excellent end results at lower cost. Why not send the coupon today for a free sample of veneered Timblend plus the illustrated brochure: "Working with Veneered Timblend"?







built-in or



free-Standing

NO ORDINARY REFRIGERATOR CAN HELP YOU SELL HOMES LIKE FABULOUS FOODARAMA

fabulous FOODARAMA by Kelvinator

A 12 CU. FT. DELUXE REFRIGERATOR AND A 6 CU. FT. UPRIGHT FREEZER ALL IN ONE CABINET ONLY 41" WIDE, 63" HIGH AND 25" DEEP

With a family-size home freezer in just 10 inches more space than needed by an ordinary refrigerator, Fabulous Foodarama by Kelvinator actively contributes to your selling story. It gives your homes advantages your competition can't touch! And with handsome square-corner styling and fan-cooled mechanism, Foodarama can be built-in *completely!* It costs much less than the valuation you can place on it. Be the first in your area to profit by the sales and publicity advantages only Foodarama can give you. Send for the complete story today.

SELL HOMES FASTER WITH AMERICA'S MOST ADMIRED, MOST DESIRED APPLIANCE.

BUILT BETTER TO SERVE BETTER

Kelvinator

Division of American Motors Corp., Detroit 32, Michigan



Live Better Electrically



MAIL THIS COUPON TODAY!

KELVINATOR DIVISION, Dept. HH-5

14250 Plymouth Road, Detroit 32, Michigan

Please send complete details of the Special Foodarama Builder Plan.

1 ...

Company

Stree

City_

lion." But even on such short rations, he thinks the lumbermen can keep pace with advances in prefabs.

"I still think that the lumberman with component parts can compete with any kind of prefabricated house," he says. "And even when they start stamping out homes en masse, the lumberman will still function." A major obstacle to full realization of the LuReCo potential, he believes, has been the lumberman's lack of merchandising know-how, and LuReCo's own lack of resources to provide the full array of merchandising aids supplied by prefabbers—notably National Homes.

"We emulate National Homes," he says. "I have a lot of admiration for them." And he hopes that arrangements like the new contract with Reynolds will let lumbermen tie in with national merchandising programs by manufacturers to help even the odds.

"I'm interested in keeping active and strong

the small-to-medium factors in the building industry," he says. "Yet at the same time I want to use the large factors." He hopes that more and more of these large factors may be harnessed through LuReCo. "We want firms to develop new products, but the trouble is that most are interested only in their own phase of the work. We feel that we can be honest and open enough to work with several different manufacturers to develop new techniques."

Since LDRC started franchising LuReCo dealers five years ago, some 1,475 have paid the \$300 fee (plus two in Alaska, one in Australia). Not all produce components, but a recent survey of 478 revealed these dealers felt they could produce 42,000 houses a year if they had the market. Thompson's goal: "I would like to see 5,000 LuReCo dealers working with local builders." For himself? "I don't want to be a big man in the industry. I'm



THOMPSON'S LURECO HOUSE

satisfied with our firm as it is. I do feel I should have a successful business—otherwise I'm just wasting time. But I'm not the kind of guy who has to be on top of the heap to be a success." Top of the heap or not, Clarence Thompson has become a leader in retail lumbering—and unlike some other prophets of housing progress, he is quietly but successfully carrying the field with him instead of leaving it behind.

How imports pinch US materials producers

By Robert Seaver

Imported building materials, under the stimulus of low tariffs and exported American know-how, are beginning to give some domestic producers competition.

Imports range from a whopping 52% chunk of the hardwood plywood market to an "insignificant" percentage of asbestos roofing sales. Overall, they still amount to a trickle rather than a flood in the US marketplace. But producers are eyeing more and more uneasily such items as a wrecked price structure in common hinges, drooping employment in window glass, growing volume and improved quality in foreign-made nails and locksets.

Most agree that imports are a small worry in times of expanding markets and high production levels. But they are concerned about what might happen if building slumped. Some are hurting badly now. Others are feeling sharp effects in specific market areas. For instance:

• Last month a Portland lumber retailer, in the heart of the fir plywood belt, ordered 50,000 sq ft of Philippine mahogany plywood because it was \$76/m sq ft delivered for ½" sanded against a special offer of \$80 for domestic softwood plywood of the same quality (the latter was actually a \$5 cut from the mill price because the wholesaler was overstocked). Said the retailer: "I hate to do it because some of my customers work in plywood plants, but competition forces me to." Three days later the US Tariff Commis-

House Home exclusive sion heard charges by Rep Russell V. Mac (R, Wash.), Rep Prince H. Preston (D, Ga.) and Sen Strom Thurmond (D, S.C.) that imports have resulted in a 35% drop in net sales for 40 plywood mills in 17 states. The Douglas Fir

Plywood Assn reported that imports represented about seven weeks of industry production last year.

- Japanese ceramic tile is selling in New York City at 29¢/sq ft, little more than it costs an American manufacturer to prepare his product for the firing kiln. The US industry is operating at about 60% of capacity. Imports have grabbed 11% of the market. Says Alfred McMillan, secretary-treasurer of the Ceramic Tile Council: "The only way we are holding our own is to increase the use of ceramic tile 7 to 10 million sq ft a year. You begin to feel you're on a treadmill, fighting like hell just to keep what you've got."
- · Belgian and French window glass is for

sale on the dock, duty-paid in Miami and New York, for less than Libbey-Owens-Ford can set its product on flatcars at its West Virginia plant. Though freight rates rapidly diminish the price advantage inland, the company reports average employment has dropped nearly 1,000 in each of the past three years.

The list of other products with enough foreign competition to excite comment if not alarm includes steel furring channels, reinforcing bars, and pipe; hardboard and insulation board; copper pipe and tube; asbestos cement items; linoleum and rolled floorings; softwood lumber; metal lathe.

The foreign edge

Imports have grown as tariffs shrink under US free trade polices. But many manufacturers say this is not the vital factor in foreign competition. What is:

1. Foreign manufacturers have much lower labor costs. In steel, where competition is confined to a comparatively small portion of the total industry (but where imports are acutely affecting that small portion), a breakdown of foreign wages for six countries shows a range from Japan's low of 40¢/hr to Australia's 98¢, compared with US industry's \$2.91-from 66% to 86% less. "You can see," says a spokesman, "why the Japanese can buy scrap steel here, ship it home, run off reinforcing bars, ship them back and still undersell the home industry." One steel executive has estimated that wages to American labor in five products-barbed wire, reinforcing bars, pipe, plain wire, and nails & staples-in 1958 would have been \$6 million more if imports had been manufac2. Many foreign producers have, through exported American know-how and equipment, achieved productivity and quality equal to their American competitors. Foreign hardboard, for instance, has grown to a capacity roughly equal to American producers'. "Many new mills have been built with US aid and technical advice," says Donald Linville of the American Hardboard Assn. "So they have equal productivity and we don't have that as an advantage." Scandinavian, European and Oriental producers now have 10% of the US market, says Linville, are offering their product at 10-15% below domestic prices, with marked effect on the US price structure.

A third plus often adds to the coastal impact of some goods that can't be shipped inland economically:

Foreign shippers can often put their product aboard ship and send it to US ports cheaper than inland producers can send their products to the same ports. Says Linville: "It costs us \$12.50/mbf to ship 1/8" hardboard by rail from the West Coast—where much of our industry expansion has taken place—to any Atlantic port. From any Scandinavian country—where the bulk of the competition lies—it costs only \$5." Opening of the St Lawrence seaway is expected to extend this uncomfortable advantage.

Is tariff protection the answer for pinched domestic producers? Some are crying for it. But few believe that this offers any permanent shield. Many say that major factors in industry and government are so far committed to free trade that even temporary relief from this quarter is unlikely.

"They could put tariffs on ceramic tile back up to 100% of pre-war levels, and we would still be undersold," says McMillan. Says Linville: "We can't expect to sell \$19 billion a year of US products abroad and expect our foreign friends to sell nothing here."

Sharing the plight of many another American industry, they are considering ways & means already advocated or tried by companies in other fields. Among them:

• A tariff tie-in with foreign wages to give the advantage to overseas producers who pay higher wages. "For years we have been trying to take wages out of competition here at home," says one materials spokesman. "Some continued on p 55

"Our home owners continually tell us with TWINDOW insulating



how happy they are windows,"

says Edward J. Dougherty, Builder Allentown, Pennsylvania





THIS FORWARD-LOOKING CONTRACTOR builds about 15 homes a year in the Allentown, Pennsylvania, area. Prices of his homes range from \$20,000 to \$45,000. In Mr. Dougherty's opinion, not only does Twindow add sales appeal to a home; it is practically a necessity in view of the requirements of present-day buyers. He says: "With home buyers constantly insisting on larger window areas in homes today in order to fully enjoy the best outside views, it is necessary to install Twindow in these windows to permit a clear, undistorted, frost-free view for all seasons. Twindow creates a feeling of spaciousness and permits a fuller view of the outdoors."

Does Twindow make home buyers happy owners? Most assuredly, according to Mr. Dougherty: "Our home owners living in homes containing Twindow are continually remarking to us how happy they are with Twindow insulating windows. This has convinced us that the advantages of Twindow are worth making available to all our prospects." Adding a note of endorsement derived from personal experience, Mr. Dougherty says: "Our past, hard winter season certainly pointed up the added comfort and convenience to home owners with Twindow in their homes."

Help sell your homes and generate customer satisfaction by including Twindow... Pittsburgh's windowpane with insulation built in. It cuts heating and air-conditioning costs, reduces drafts at windows, muffles outside noises, eliminates the need for storm windows. Further information is contained in our free Twindow booklet. Why not write for a copy today? Address Pittsburgh Plate Glass Company, Room 9168, 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 ¼" clear-vision Plate Glass, with a ½" sealed air space between. Its stainless steel frame, a TWINDOW 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 ⅓* PENNVERNON®—the quality window glass—with a ¾₁6* 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

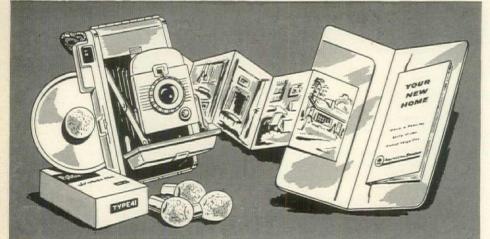
IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

New SELL-A-HOME program sells every feature in your model home



KEEPS CUSTOMERS SEATED TILL THEY SIGN ON THE DOTTED LINE!

After the customers have seen the model, the salesman can show them pictures of any feature of the home they'd like to see, then complete his sales talk (with help from the selling booklet) and ask for the order.



LOOK WHAT YOU GET IN THE SELL-A-HOME PROGRAM! First, a Polaroid camera, to take pictures of the home, of prospects and of features they'd like to remember. Second, a supply of film and flash bulbs. Third, a wallet presentation for your salesmen, with a pull-out picture folder and the new custom-tailored selling booklet "Your New Home."

Picture-story presentation is custom-tailored to the homes you are selling

The Sell-A-Home program helps any salesman—beginner or old pro—sell better than ever!

Here's what's in the Sell-A-Home program. You get a wallet presentation for each of your salemen. The wallet contains the new room-by-room selling booklet, "Your New Home," and a fold-out sleeve for photos. You get a Polaroid camera and a supply of film and flash bulbs.

Using the Polaroid, you take pictures of all the important features that make your home a real buy. You put copies of the pictures into each salesman's wallet. Now he can show a customer any feature he wants to see, any time during the sales talk.

Next, you write in each salesman's selling booklet information on the standout features of your model home. (The book reminds you, room by room, of all the features you should mention, and suggests selling arguments your salesman can use on customers.)

Sell-A-Home was the talk of the Chicago Builders' Show! Hundreds of builders signed up for additional information at the show. To find out how you can get in on the Sell-A-Home program, get in touch with your American-Standard Air Conditioning Division distributor, or send in the coupon below—today!

| American-Standar 40 W. 40th Street | | |
|---------------------------------------|-------------------|--|
| | ore details and t | sounds interesting ell me how I can get |
| * | | |
| Name | | |
| * | | |
| Name | | |

MERICAN - Standard and Standard * are trademarks of American Radiator & Standard Sanitary Corporation



say we should try the same thing with imports." An illustration of how this might work: Canadian softwood lumber comes into US at about 2 billion bd ft a year, but at same price. So it is no discomfort to US industry (26-30 billion bd ft/yr).

- A counterinvasion of overseas markets. Domestic producers would establish overseas facilities in low-cost labor areas to produce for the home trade. "Those with money to go abroad are going to go, and the small ones will be dead," glumly predicts Ceramic Tile's McMillan. Many American producers have overseas ties already. Among them: Armstrong Cork, Yale & Towne, Johns-Manville, American-St. Gobain Glass. Others, like American Hardware Corp, are eyeing the possibility.
- More efficiency and productivity through more automation, closer control of costs and marketing. "It's already apparent that new plants have more machinery, fewer people," says one industry spokesman. "It may be that this competition, as a stimulant, will be a good thing."

LuReCo-Reynolds agreement means savings for dealers

continued from p. 46

Under the five-year agreement, LuReCo will handle sales, marketing, advertising and promotion of a list of at least 13 and perhaps more aluminum products. Included now are shingles, siding, windows, foil insulation, gutters & down spouts, ductwork, soffit & fascia material, corrugated farm roofing, nails, hardware, louvres & ventilators, lighting fixtures. Those manufactured by Reynolds will be purchased direct by LuReCo. Others will be bought from fabricator-customers of Reynolds. Both parties insist Reynolds is making no price concessions. "We are treating them like any other customer," says Reynolds, which will continue to sell elsewhere, as at present. Secret of the price break: "We are taking less than the customary markup, in the interests of providing a service to our dealers," says LuReCo's Harrell.

Benefits of the arrangement are limited to LuReCo franchised dealers—lumber retailers licensed to produce house parts under the modular system worked out by LDRC and the University of Illinois Small Homes Council. Under the LuReCo system, lumber dealers construct in their own yards, either for sale to builders or use in building themselves, lumber & plywood wall, door and window panels, and roof trusses, on a 4' module for assembly on-site. Jigs and precision pre-cutting let unskilled or semi-skilled labor do the preassembly, with a theoretical and often real-saving in costs. Some LuReCo dealers use prefab plumbing trees but none do shop wiring.

Harrell says a spot survey indicates dealers can save \$65 per house on siding by buying at \$5-\$6/m sq ft less than they would pay

LuReCo is not now warehousing materials for its dealers-price lists have only recently been issued-but if volume grows to expected levels, it is "definitely part of the plan."

LuReCo's Thompson & Harrell shy away from speculating on the eventual scope of the project. But it is evident that if the present deal works out, LuReCo dealers may one day be able to buy the bulk of their materials from such warehouses.

Producers brighten as sales rise. profits rebound in first quarter

Building materials' sales and profits are bouncing back with increased vigor from the recession slump. Delighted producers are becoming more and more optimistic. Firstquarter reports for '59 show 15-20% hikes in sales for many. Some are predicting a record year. Among them: Flintkote Chairman I. J. Harvey Jr, who expects a \$200 million sales volume. Georgia-Pacific announces firstquarter profits "considerably ahead" of last year, expected to be 20% over any previous first quarter. Others with cheering news:

- National Gypsum orders are running 20% ahead of '58, with first quarter sales up to \$38.3 million from \$32 million the year before. Johns-Manville Chairman A. R. Fisher says his firm's sales and profits are up 15-20% in the first quarter.
- Yale & Towne's first-quarter orders are 30% ahead of first-quarter '58, even though a strike will cut earnings.

Year-end figures for 38 producers show a substantial number were able to recoup firstquarter drops, improve both sales and earnings in '58 over '57. Others upped either sales or earnings, to continue a trend seen at midyear (Sept, News) and bear out hopes for a good second half sparked by the housing upsurge. The score: at year's end, 46% improved both sales and profits; 62% improved sales; 54% improved profits. In mid-'58 only 29% showed improved sales and profits; 44% upped sales; 39.5% improved profits.

National Gypsum Chairman Melvin Baker

has revised his year-end prediction that housing starts will hit 1.2 million, now says it "is definitely a minimum estimate. We might start as many as 1.3 million." Echoes President C. J. Backstrand of Armstrong Cork (whose sales hit an all-time high, profits rose to near-record in '58): "New and expanded opportunities should be present in many markets."

Although the second-half housing comeback gets a good share of credit for better profits, belt-tightening and hard work helped.

Price lag was a big factor for producers unable to offset early losses with later business. In spite of "a vigorous program" in which "losses incurred in the first quarter were quickly offset and increases established over the previous year," Flintkote found "the time lag between the end of the recession and the establishment of more adequate prices" kept net profits below those for '57. Similarly, Certain-Teed found prices "had broken so badly that . . . we were unable, for several months, to conduct our business at a profit." Volume increased over '57, but "we could not recoup our losses of the earlier months." Rising labor and materials costs contributed, says Certain-Teed President Malcolm Meyer.

But even here the optimism for '59 is shared. "We're quite bullish," says President Henry Collins of Celotex, which suffered a drop in fiscal '58 (which ended Oct 31; By year's end, the firm showed an improvement over calendar '57).

NEWS continued on p 58

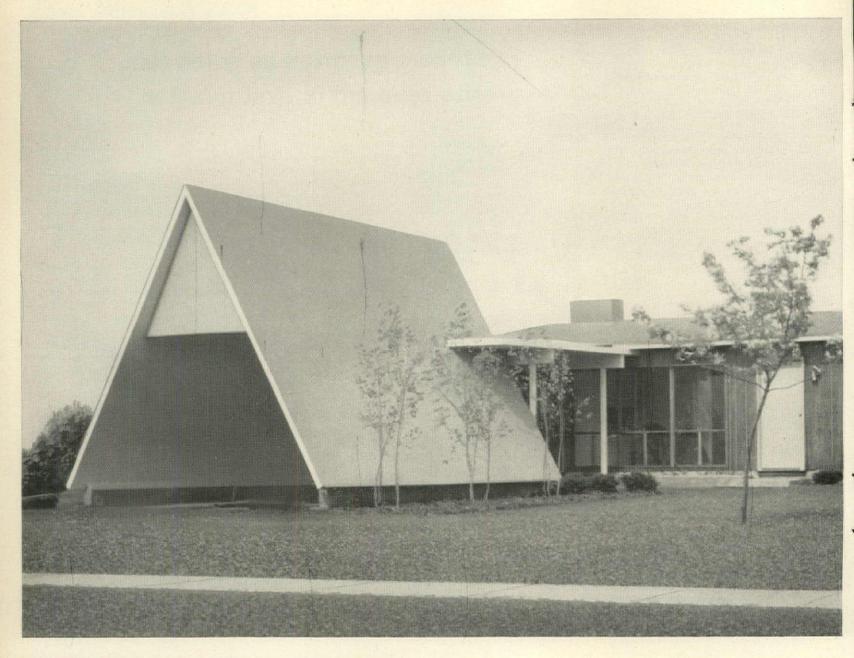
HOW THEY FARED

Sales and earnings for some of the biggest producers in 1958, compared with the same

| | '58 | % | % | Cement | | | |
|--|------------|-------------|---------------|-----------------------|---------|-------|-------|
| | SALES | CHANGE | CHANGE | Lehigh Portland | 75.8 | +8.4 | +24t |
| COMPANY | (MILLIONS) | SALES | NET | Ideal | 92.3 | +16.8 | +19 |
| | | | | Penn-Dixie | 47.0 | +15.5 | +43.4 |
| r . | | | | Lone Star | 99.7 | +4.7 | +.1 |
| Lumber | 0 F T 1 O | 1.44 | Licol | Alpha Portland | 33.2 | +7 | -3.8 |
| US Plywooda | | +11 | +1021 | General Portland | 46.9 | +24 | +26.5 |
| Weyerhaeuser | | -2.6 | -5.7 | Marquette | 53.0 | +11.1 | +19.6 |
| Georgia-Pacific | . 152.4 | +3.1 | +7 | Permanente | 67.3 | +33 | +44 |
| Wallboard, roofing, til | e | | | | | | |
| Celotex ^b | . 70.0 | +3.2 | +20.3 | Hardware | | | |
| Masonite ^c | | +.3 | -14.6 | American Hdware | 41.3 | +15.7 | +23 |
| Ruberoid | | +2.2 | -22 | Yale & Towne | 115.7 | -10 | -23.4 |
| US Gypsum | | +6.5 | +5.6 | | | | |
| Johns-Manville | . 304.1 | -1.4 | +23 | Appliances | | | |
| National Gypsum | . 163.2 | +15.3 | +22 | Carriers | 252.5 | -4.1 | +2.7 |
| Flintkote | . 156.2 | +.7 | -11 | Westinghouse | 1,895.7 | -6 | +2.9 |
| Armstrong Cork | . 249.9 | +1.4 | +24 | Minneapolis Honeywell | 328.5 | +1.1 | +5.6 |
| Congoleum-Nairnd | . 33.2 | -15.8 | 0 | Whirlpool | 404.6 | +.6 | -3.8 |
| Certain-Teed | . 88.4 | +5.7 | -13.8 | Worthington | 184.2 | -3.8 | -19.7 |
| Philip Carey | . 66.4 | -5 | -11.8 | GE | 4,120.8 | -5 | -2 |
| Bestwall | . 34.0 | +15.7 | +39 | Maytag | 105.8 | +7.3 | +49.2 |
| II and a second to a | | | | | | | |
| Heating & plumbing American-Standard . | . 351.4 | -4.7 | —19 | Glass | F10.0 | 1701 | 117 |
| Crane Co | | -4.7 -11 | —19 —36.8 | Pittsburgh Plates | 513.6 | -17% | -44.7 |
| | | | -30.8 -3.6 | Libby-Owens-Ford | 216.9 | -8.6 | -23.6 |
| Trane | 81.6 | +1 | -5,6 | American-St. Gobain. | 24.8 | -3 | n |
| | | | | | | | |

- a First 9 mos. of fiscal year ending Apr. 30. '59.
- ^b Based on quarterly figures for calendar '57-'58.
- c Fiscal year ends August 31. d First 9 months only.
- Deficit of \$1,97 million.

- 1 Excludes 43¢/share tax reserve in dispute; if added, would show earnings -1% for '58.
- g Fiscal year ends Oct. 31.
- h Deficit of \$276,468.
- 1 Includes \$2.5 million non-recurring income excluding this, earnings = +53.9%.



NAHB Research House features

Climate by Chrysler

New high-quality air conditioning, heating and air purification for a low-budget home

Perfect year-around climate for a limited-budget home . . . that's the contribution of Chrysler engineering to the NAHB Research Home in South Bend, Ind.

Climate by Chrysler is the next step beyond mere air conditioning. In addition to automatic heating, cooling, humidifying, and dehumidifying, this Chrysler system actually purifies the inside air. It traps even the tiniest particles of dust, dirt and pollen electrostatically. Kills air-borne germs electronically. And absorbs smoke, fumes and odors almost magically.

Climate by Chrysler is the kind of luxury-home feature every buyer wants. Yet it's so low in cost it can be included in a quality home like the NAHB Research House that's built to sell for less than \$15,000.

High customer appeal is just one of the many advantages Chrysler Air

Conditioning offers the builder. The entire installation and service job is handled locally by a Chrysler Airtemp Dealer. No extra subcontractors are needed, and troublesome service calls are eliminated. To get all the facts and figures on Climate by Chrysler, call your nearby Chrysler Airtemp Dealer . . . today.



Airtemp Division, Chrysler Corporation, Dept. L-59, Dayton 1, Ohio

56



1959 NAHB RESEARCH HOUSE, South Bend, Ind. One-story, slab-on-grade, contemporary-styled house with a new type of combined outdoor storage area and car shelter. Three bedrooms, one bath, fully air conditioned. Built to sell below \$15,000.

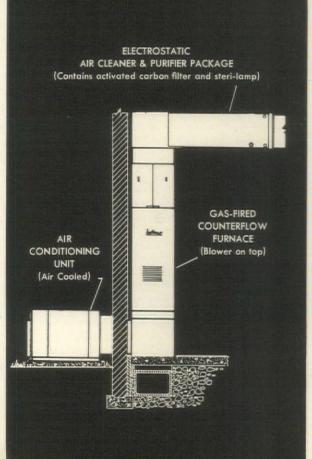
Sponsor: NAHB Research Institute. Builder: Andrew S. Place. Architectural Design: NAHB Research Institute. Consulting Architect: Herman York.

EXCLUSIVE CHRYSLER ELECTROSTATIC FILTER PACKAGE. Only Chrysler offers 3-way air purification. This new development keeps the air dust-free, odor-free, germ-free. Customers really appreciate the freshness it puts in their home.









CHRYSLER CLIMATE-MINDER CONTROL. Another quality sales feature every prospect will love. One touch of the finger creates any desired climate. Choice of automatic or manual operation to heat, cool, or circulate fresh, purified air. Even overloads can be reset at this control center—eliminating trips outside or to the basement.



LOW-COST CHRYSLER HEATING-COOLING SYSTEM. Requires a minimum of floor space. Handsomely designed cabinet blends in attractively with basement or utility room decor. Or is small enough to be hidden away completely in a closet.

House rules committee stalls housing bill but FHA continues to hold out

The housing bill, which the Democratic-controlled Congress was going to make the first order of 1959 business, remained stalled for a fourth month in April.

The bickering centered in the House rules committee, which screens legislation before it is brought onto the floor for a vote. A conservative coalition of Republicans and Southern Democrats on the rules committee stymied the first effort to report it out-via a 6-6 tie vote. The deadlock was a symptom of how the Southern Democrat-conservative Republican coalition is reasserting itself in the House. Chairman Howard Smith (D, Va.) is the man who, by absenting himself from Washington, blocked efforts to give the 1958 housing bill a rule during the dying days of the last session of Congress (whereupon the bill failed by six votes to muster the necessary two-thirds majority to pass under suspension of the rules). Now, Smith and other fiscal conservatives are arguing that items requiring use of Treasury funds should be cleared through congressional appropriations committees. Such programs as public housing, urban renewal and college housing loans operate under a public debt law and do not require such clearance. If Smith succeeds in tacking his idea onto the housing bill, more delay seems sure.

Politically, the rules committee deadlock embarrassed House Speaker Sam Rayburn (D, Tex.), who quelled a House revolt early in the session with a personal promise that no legislation would be bottled up by the rulesmen. The situation moved Cartoonist Herb Block to satirize Rayburn as a distrusting keeper of the keys (see cut).

While Congress fiddled, FHA was burning



"Aren't You Big Enough To Have a Key of Your Own?"

up its dwindling authority to insure mortgages at a surprisingly slow rate—thanks to its stopgap "agreement to insure" setup which postpones actual commitments to insure until the last minute. In March, House & Home learned, loan amortization plus terminations and recapturing of commitments actually exceeded new FHA commitments. On April 1, FHA still had \$1 billion of insuring authority left. It did not plan to impose tighter controls until this falls to about \$750 million. Apparently, FHA can keep going for a while longer without a housing law.

"hopelessly inadequate," would limit bond interest to 2%%, reserve 25% of the billion for use of small (under 35,000 pop) cities.

• FHA insurance for land purchase & development. Endorsed last year by an FHA advisory committee, but too late to catch up with the housing bill, the idea has been suggested as a floor amendment. But Rep Albert Rains (D, Ala) chairman of the House housing subcommittee, blocked this idea, will instead hold hearings on the matter separately later this year.

Civil Service Commission probes HHFA job setup

An indiscreet order by Deputy HHFAdministrator Walter Rosenberry has prompted a Civil Service Commission investigation of HHFA personnel practices.

Rosenberry, who came to HHFA with Administrator Norman P. Mason in February, fired off a letter to HHFA's seven regional administrators which said: "Senators and Congressmen are very much interested in all appointments and promotions of their constituents. In order that this information may be supplied to them, will you please see that I am supplied with names and proper background including residence of all personnel you are considering appointing or promoting in your region."

When news of this leaked back to Washington Post Columnist Jerry Kluttz (whose Topic A is civil service jobs), Kluttz roared into action. "CSC's inspectors should take a good long and hard look at HHFA," he wrote, citing the Rosenberry letter as evidence that the housing agency was ignoring Civil Service rules requiring merit promotions. Two days later, the Civil Service Commission ordered its inspectors to begin "a complete review of all appointments and promotions" at HHFA since the Rosenberry order. Meanwhile, CSC suspended HHFA's power to make appointments or promotions except after review by its own inspectors. Civil Service Chairman Roger W. Jones wrote Mason: "Any political clearance of candidates for positions under the competitive Civil Service system would clearly violate the Civil Service Act and Executive Order 10577. Moreover, furnishing background information on applicants and employees proposed for promotion to persons who do not have authority to make such decisions is in direct conflict with the law."

Columnist Kluttz, speculating that the HHFA job order "reflected on and embarrassed the Eisenhower Administration," reported "this could easily mean that Administrator Mason and his deputy . . . Rosenberry are in a big doghouse."

If so, Administrator Mason promptly wagged his way out. He: 1) conceded Rosenberry's action was "unfortunate . . . unthinking," 2) called his top aides together and told them the Civil Service probe "is welcomed by me and has my unqualified support," 3) recalled that "in my first meeting with the top staff here, I made clear my admiration for . . Civil Service."

Mason also shrugged off rumblings that HHFA and its constituent agencies (FHA, PHA, URA, CFA) "have more political jobs than any agency of its size (11,000 employees) and more than most departments." HHFA has only 40 politically exempt jobs (Schedule C) out of 1,200 for the whole government, Mason noted.

NEWS continued on p 63

And elsewhere in the legislative mill-

While the omnibus bill still holds the spotlight in housing's 1959 legislative melodrama (April News), a crowd of bit players and character actors jostle each other in the wings, waiting to make their entrance. Some are well-supported by special-interest claques. Others wait for scripts to be written by the Joint Economic Committee of House & Senate which is mounting a "broad inquiry into overall economic policies" under Chairman Paul Douglas (D, Ill.).

Organized by the Democratic majority to counter spendthrift criticism from Republicans and their own conservatives, the committee is expected to develop evidence supporting the need for some spending measures, including housing programs, dear to the Democrats' hearts. The cast, not necessarily in order of appearance:

• Second supplemental appropriations bill. FHA's operating requests for the balance of fiscal '58, slashed 10% by the House, have been restored to their original \$3.6 million by the Senate appropriations committee, are expected to survive the Senate floor. Next question: will they survive conference? Or will Democrats' desire to avoid the spendthrift label, plus Congress' selfsupporting FHA how much of its own money it can spend, make it a victim of horse-trading? Dour predictions that already sticky backlog situation (April News) will worsen if the

money isn't forthcoming, plus fact that it doesn't cost Treasury anything, make survival seem likely—but not certain.

• Real estate investment trust bill. Pending before the House ways & means committee, with hearings set for mid-month, it extends immunity to corporate income tax enjoyed by security investment trusts to similar "passive" real estate trusts. They must have at least 100 shareholders, distribute at least 90% of their revenue directly to beneficiaries. A revamped version of a measure vetoed last year by Pres Eisenhower, the bill was boosted by NAREB President James Udall in a visit to Ike. Following the visit NAREB announced Udall had pledged realtor support to the President's drive against budget-busting housing legislation, urged endorsement of the tax-reducing bill as "an aid to Administration policy." Ike's reply, in a letter: if the bill passes, he will "be very happy to reconsider the whole matter together with your arguments." Chances: fair.

• Community facilities bill. A \$1 billion direct-loan program to help cities finance water, sewerage facilities, and build public or nonprofit hospitals and nursing homes is up in the House banking committee. Chairman Brent Spence, whose similar \$2 billion measure was refused for action by the House last year, calls HHFA's present loan program

First signs of rising interest rates, bigger discounts appear on horizon

A general rise in interest rates, which had been expected later this year, may be arriving now.

As a result, some experts predict FHA and VA discounts will climb perhaps ½ point within a month or six weeks. Others agree the trend is toward tighter money, but forecast it will not hit mortgages for some months.

Any heavy demands on the available supply of money, either by housing or other users of long-term credit, could push discounts up quickly. The surge of housing starts in March may indeed be the first tip-off that money will cost more by June 1.

Business spending up

Corporate borrowing for expansion is already on the rise. It is one of housing's chief



competitors for money. And it was off 17% to \$30.5 billion last year—a key item in the recession's easy money spell. This year capital outlays for plant and equipment are expected to climb 4% to \$31.8 billion. But the Com-

merce Dept's past experience indicates that when business is on the upswing—as it is now—these estimates are usually too low and too slow.

A key unknown in the long-term money outlook is the government's own financing plans. After the disappointing reception given long term government issues this year, the Treasury has glumly stuck to short term issues—paying a top price, 3.075% on 90-day bills.

The Treasury would like to take another shot at the long term money market later this summer. It wants to cut its dependency on banks because this is inflationary. And it wants to make room for corporate borrowers to make bank loans, thus boost the new boom.

Yet the climate for a long term issue may be worse, not better, later this year. President S. Clark Beise of the Bank of America predicts the Fed will apply more anti-inflationary screws by boosting the rediscount rate again. It was raised from 2½ to 3% in March. Such action helps head off inflation but it compounds the Treasury's financing headaches.

The picture on savings is not encouraging for homebuilding. The rate of gain has slowed in both S&Ls and mutual savings banks. Net gain in S&Ls for the first quarter is only equal to first quarter, 1958. For savings banks in the first two months net savings were actually down because of heavy withdrawals.

In large measure housing owes the stable mortgage market of the past six months to the high level of personal savings last year. The net 1958 savings gain of \$17.3 billion in savings institutions was up 50% from 1957.

With all this money in hand, S&Ls alone loaned \$3.2 billion in the first quarter (on both new and used homes) compared with \$2.2 billion in the first quarter of 1958. Lending on new construction only—reached nearly \$1 billion—up 30% from the first three months of 1958.

Off the roller coaster

The six months of mortgage stability which extended through April has been the longest in five years. Yet even in a period of calm, FHA and VA rates have been pegged low enough to force discounts of from 1 to 4 (FHA) and 4 to 8 (VA) points for all of the six stable months. Mortgage men agree this steers some lenders away from mortgages.

With money in a delicate balance of supply and demand one of the key props under FHA and VA prices has been Fanny May. Its secondary market prices either have stayed 1) ahead of the open market or 2) equal to the top price of an open-market spread.

As tighter money gets closer, offerings to Fanny May secondary market are growing. With only a couple of slips, volume has moved up from an average of \$8 million a week in January to \$10-\$12 million in April.

Fanny May had to pay 43% on its latest \$90 million issue of ten-year debentures. So the agency seems almost sure to cut purchase prices if offerings continue to increase. Mutual savings banks are a cinch to follow.

now understands discounting so that they know what we're doing and why."

Bank of America keeps individual loans in its own permanent portfolio. Tract loans the bank sets aside for a year, often selling some in the secondary market.

MORTGAGE BRIEFS

S&L give-aways curtailed

A loophole in its rules governing S&L giveaways to woo shareholders has been shut by the Home Loan Bank Board.

Since 1957, HLBB has limited premiums offered for new savings accounts to \$2.50. Now, it has told federal S&Ls they cannot give certificates which, when sent with a nominal amount of cash to a merchandiser, is exchanged for a service of silverware.

But HLBB also told S&Ls they can give as many \$2.50 premiums during a life of an account as they wish. There had been a limit of one.

Problems for open-end

The open-end FHA and VA mortgage has been closed by one of its biggest exponents.

Dime Savings Bank of Brooklyn, which limits its home lending to the New York City area, is no longer re-lending on open-end FHAs and VAs.

Explains Vice President Fred Jackson: "We would have to be lending below the current price of mortgage money."

Dime has been writing open-end loans for 10 years. Much of the time FHA and VA rates were as low as 4%. FHA requires that any re-borrowing on an open-end loan carry the same rate as the original loan—no matter what has happened to interest rates.

VA lets reborrowings carry the current rate—which means the borrower is paying a split-rate. But at VA's current below-themarket 43/4 %, the Dime is still not interested.

FHA also has piled a mound of red-tape on open-end procedures, Jackson contends. "We have to certify that the cost of any proposed change in the real estate is reasonable. This means we practically have to do a material check-off to develop figures for certification. It's laborious."

Ironically, new FHA Commissioner Julian Zimmerman has given top priority to promotion of open-end lending to fight blight.

Open-end mortgages have yet to score a major nationwide breakthrough. Few FHAs or VAs originated in the West, Southwest and South for sale in the East are open-end.

The Dime still does a substantial volume of open-end re-lending on conventional loans. But it requires that when a loan is opened, the entire mortgage must take the current conventional lending rate.

Servicing fees (cont'd)

Bowery Savings Bank, the nation's largest, is still studying whether to press mortgage originators to accept lower servicing fees, says Senior Vice President Harry Held.

Several mortgage bankers had pointed to the Bowery as one bank which had given up the idea of the lower fees (April, News). Not so, says Held: "We have told no one that we are not going to ask for a lower rate. We sounded out some of our principals on the subject and right now the whole situation is in a state of flux."

NEWS continued on p 66

Public pays FHA spot loan discounts

California mortgage bankers expect to get back a big hunk of the FHA spot loan business they have lost to commercial banks.

Major California banks have quit making par FHAs on individual house sales and refinancings. They now demand two points discount from the house seller plus one point origination fee from the buyer. (The owner pays all three points, of course, in a refinancing.)

These terms apply to 25-year, 10% down loans. Banks make few, if any, minimum down, 30-year deals on individual homes. (But they do on new tract homes.) The only FHA loans the banks will make at par now are to depositors who put 20% down on a 20-year mortgage.

The giant Bank of America led the way in the new lending policy. Explains Vice President D. Clair Sutherland: "There is no justification for making these loans at par any more. Even at 97 we are still over the market. And doing this helps us control our loan volume. We had been making individual loans at a rate of \$25 to \$30 million a month. We believe the new two point discount will cut this volume 25 to 40%."

Many borrowers will go back to mortgage bankers, Sutherland predicts. He adds: "We were never trying to take the mortgage bankers' volume away from them."

This is the first time the bank has charged discounts on individual FHA loans. Says Sutherland: "We believe the general public



Stanley Edge, marketing consultant to NAHB, produced this film. Owens-Corning Fiberglas offers it as part of the Comfort-Conditioned Home Program. Here are a few highlights from the film:



HOW TO PLAN SALES ROUTE

A good salesman guides his prospects. And he will guide them with CONFIDENCE if the route is PLANNED.

A good salesman has charted this route in advance to sell on purpose, not by accident. He doesn't follow the customers, he LEADS them.

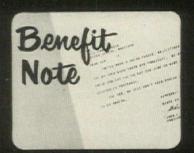
He establishes the living room as the first step along his route and he has also planned what he will say.

NEW HELP FOR YOUR SALESMEN: STANLEY









HOW TO GET PERSONAL DATA FROM THE PROSPECT

When he takes customers through the model, he uses a small pad to take notes on what they like and possible changes to suit them.

He asks their opinions along the route. He asks casual questions on where they live, how many in family and what they will need in a house.

He follows up every time with letters and phone or personal calls. But he keeps selling, never writes a thankyou note but a BENEFIT note. With each follow-up contact he reminds them of benefits, finds out the cost of changes that would suit them . . . always keeps SELLING.

BACKED BY PROMOTIONAL POWER OF FIBERGLAS*





COMFORT-CONDITIONED HOME PROGRAM includes Sales Builder Kit with a complete promotion planning guide; also home buyers brochure, site signs, billboard material, model home displays, pennants and other promotional tools.









STRESS CUSTOMER BENEFITS

He looks for selling features or BENEFITS the buyer will receive and writes them down so he can fit them in his selling plan. For example, he notes a picture window looking out on a side of the landscaped lot as located . . . "with a view to privacy."

POINT UP FEATURES IN PROSPECTS' TERMS

He relates each feature with a real benefit. Fireplace construction is interpreted in terms of safety, good updraft or easy ash disposal.

He translates size, such as the dining area, into a specific benefit. "This room will take a five-foot table to seat eight to ten people."

EDGE'S "SELLING ON PURPOSE" SLIDE FILM



When customers make the down payment and he reserves the house for them, he knows that his job is by no means finished.





LEADING PROSPECTS TO A CLOSE

When he follows up, he has good reasons for calling—new information, a new idea or financing arrangement, a new model home.

The salesman takes other action, too. He pushes his closing. He follows up financing arrangements and keeps an eye on them.



He is ready to help expedite matters and to help remove financing snags. He never takes his closing for granted until the ink is dry.

COMFORT-CONDITIONED HOME PROGRAM

Here's how to train salesmen for most effective house selling—new film is latest addition to the promotion ideas and help offered by America's No. 1 home-selling success. Now Comfort-Conditioned Home builders get expert assistance in training their salesmen with "Selling on Purpose"—30 minutes of step-by-step instruction on planning, following and closing the sale. For complete information on this film, the program and its merchandising support—write: Owens-Corning Fiberglas Corporation, Department 67-E, National Bank Building, Toledo 1, Ohio.

Nothing succeeds like America's no. 1 selling success!



*TM (Reg. U.S. Pat. Off.) O-C. F. Corp.

Pension fund trustees fear inflation, quit mortgage market in favor of stocks

Pension funds, which were scarcely in the mortgage market more than half-heartedly, are out of it again.

Trustees of the \$35 billion pool of funds are now following a path already well-trodden by other investors hedging against inflation: they are putting the bulk of their new money into common stocks, not fixed-income securities. An estimated \$4.4 billion flows into pension funds each year. Currently, the bond market is suffering nearly as much as the mortgage market from this investment shift, though most pension fund trustees are basically bond men.

Ironically, pension funds withdrawal coincides with disclosure of two new efforts to bring more pension money into FHA and VA loans (see stories this page).

Mortgage men hope the switch to stocks is only temporary. A fatter yield on mortgages would help, they contend. This would require higher FHA and VA rates.

Two New York firms, both started two years ago and both pioneers in selling FHAs and VAs to pension funds, gave this report of their efforts to HOUSE & HOME:

1. Investors Central Management Corp, owned by 24 of the nation's top mortgage banking firms, made its first major sales to pension funds a year ago—just one year after its start.

Since then it has sold about \$35 million in mortgages to 60 trusts administered by four big trustee-banks. ICMC performs a home office function for the funds, overseeing the servicers and checking the quality of all loans.

The picture today: "For the first time in a year we can't see any funds readily available," says Vice President Arthur Viner.

Disappointed but not discouraged, Viner reports: "The basic preference of the pension fund trustees today is common stock. It wouldn't be but for the fear of inflation."

When yield on FHAs and VAs is higher than the best corporates, Viner predicts, "we will do a lot of business." So he argues that the best answer is a flexible FHA and VA rate.

"The real significance of our experience of the past year is that pension funds will buy mortgages if the yield is there. All this talk of pension fund trustees being bond men really doesn't mean much."

2. Instlcorp, the subsidiary of Institutional Securities Corp, hasn't made a deal with a pension fund since last summer. It sold its first \$500,000 in trust notes, pledging mortgages as collateral, in 1957. Since then it has sold about \$8 million—most of it in the easymoney period of February-August last year.

Instlcorp is not trying to make any deals now. Explains President Clifford Boyd, who runs ISC and Instlcorp for the New York savings banks who own it: "We set up Instlcorp because of a couple of the (pension fund) trustees asked us to do something. We were happy. So were they. Then their enthusiasm waned when yields didn't look so hot. They stepped out just as fast as they stepped in.

"If they want to use Instlcorp again we will be glad to help them but I don't think I could have sold them any more [collateral trust notes] if I'd slept on their doorstep for the last six months."

Commercial banks study FHA, VA plan to freeze out mortgage bankers

Commercial bankers are studying a detailed plan on how they can grab a big chunk of the nation's FHA-VA mortgage business.

One of the plan's key points is outright exclusion of the mortgage banker, who is described as an expendable "middleman."

Mortgages would be originated and serviced by commercial banks in the West and South and sold to commercial banks in the East.* The latter would invest pension funds for which they are trustees as well as their own time deposits.

The plan was devised by the New York law firm of Cadwalader, Wickersham & Taft at the joint request of a group of New York commercial banks and the committee on real estate mortgages of the American Bankers Assn.

Comparing their plan with two others in use by pension fund trustees, the lawyers believe the bank-to-bank system will produce a yield of from .35% to .18% more. Based on an investment of \$1 billion a year, this would mean a net yield of at least \$1.8 million more than the best competitive plan.

Some of the plan's key features:

- Originating banks would keep custody of the mortgages, sending investing banks only a single piece of paper as evidence of its investment. This certificate would be transfer-
- Servicing banks would furnish reports to investors on a single debit block basis for

each trust. "Thus, no intervening middleman is needed to assemble and reprocess reports," the lawvers add.

- Since the deal is between two commercial banks, investing banks as a practical matter would not have to supervise servicing banks since they would be subject to independent government supervision and audit (unlike mortgage bankers).
- Originating banks acting on behalf of investing banks would approve sites and buildings and borrower credit according to agreed-upon standards. This would give them far more leeway as originators than most mortgage bankers now have.
- Theoretically, investing banks would have little trouble getting immediate delivery on loans from inventory. The lawyers comment: "Originating commercial banks, to a far greater extent than mortgage companies, can and do accumulate mortgage inventory substantially in excess of their own investment needs."

The attorneys insist there is no danger of getting involved in doing business out of state—a chronic worry with investors because it subjects them to extra taxes. This bank-to-bank plan is the most significant benchmark in the efforts of a group of commercial bankers, working through ABA, to get more of their number into the FHA-VA market (April, News).

Bankers hope that more mortgage activity will help them 1) compete with S&Ls for savings, 2) build up other services in their banks and 3) build a portfolio of investments in an area most have ignored because of unfamiliarity and conservative lending policy.

*This was one of the main ideas held by founders of FHA. But most commercial banks spurned it. As a result, say some experts, the whole mortgage banking industry has grown up to fill the gap.

Three firms ask SEC to approve sale of shares in FHA mortgages

A major new effort to sell participating shares in FHA mortgages should be started within weeks.

Three mortgage banking firms have asked the Securities & Exchange Commission to approve a plan to sell such shares—mainly to pension funds. FHA has already approved the plan and the 57-page trust indenture. SEC is still considering the idea.

Carry Winston of Washington, Weaver Bros Inc of Washington and Baltimore and J. Maxwell Pringle of New York City have formed Mortgage Corp of America to undertake the effort.

Their plan is much like one started in 1957 by Instlcorp, a subsidiary of Institutional Securities Corp, mortgage investment company owned by New York State savings banks. But Instlcorp insists its operation does not involve sale of participating shares.

What MCA plans and what Instlcorp has done, is to sell collateral trust notes to pension funds—pledging a pool of FHA and VA mortgages as collateral. The mortgages would be held in trust. MCA would make the collections from the originator-servicer who retains the usual ½% servicing fee. MCA would pay the interest to the note holders.

The note holder would have nothing but a

piece of paper like a bond, would not have to bother with the bookkeeping or supervising servicers. Neither would the note holder become involved in litigation if MCA had to foreclose, because MCA would be the mortgagee.

Losses by investors under MCA's plan would be minimized by the pooling setup. For example if a pension fund held \$100,000 in notes on a \$1 million pool of mortgages and a loss occured, the fund would have to take 10% of the total loss, its proportionate share. This would be much less than if the \$100,000 in notes were backed by a specific \$100,000 block of mortgages.

Tentative rate on the trust notes has been fixed at 45%, about as high as feasible at FHA's current interest of 51/4%.

MCA's mortgages would be held in trust by the Maryland Trust Co. The trust would be open-end with the repaid principal continuously reinvested in more mortgages. The interest would be paid to the note holders semi-annually. Principal would be paid on maturity.

Notes would be callable because the trust would be open-ended. This is a hedge against a possible cut in the FHA interest rate. If MCA were pledged to pay a fixed interest rate on uncallable notes issued when FHA's rate was 51/4%, for example, it would be severely pinched if FHA cut the rate and the only mortgages available to meet interest payments on the notes were pegged at 5%.

MCA's founders doubt whether many individuals will buy MCA notes. MCA plans no effort to sell the notes to individuals because of the high cost of dealing with a multitude of small investors.

FHA first opened the door to sale of mortgage participation in July, 1957. (The action was taken at the time Instlcorp was started, though Instlcorp claims the change in regulations was not necessary for its operation.)

Up to that time, dating back to FHA's founding in 1934, such sales had been banned. The agency's founders drafted the ban with one eye on the 1929 crash, when thousands of investors lost millions in bonds supposedly secured by mortgages. Mortgage holders had sold more notes than they had mortgages and kept bonds in circulation long after the mortgages had been paid off.

When FHA dropped its ban in 1957, the agency warned mortgage men that it would carefully police any plan they started. That fall 15 mortgage banking firms began the legal spade work on a plan to meet FHA's demands. FHA agreed only to study any proposal submitted, not to aid writing it. Reason: it wants to retain regulatory latitude, frankly wants to avoid being a party to an error, if one shows up.

All 15 firms are still interested in the plan but only the three MCA founders are anxious to push ahead quickly. They will provide the first block of mortgages for the corporation.

Foreclosures up 24 %

Nonfarm real estate foreclosures hit 42,367 last year-up 24% from 1957 and the highest since 1941.

But the Home Loan Bank Board calls this level extremely low considering the huge volume of homebuilding in the past 10 years.

Discounts down, FHA says

Discounts are shrinking, says FHA.

Prices on FHA 25-year, 10% down loans inched up from 97.4 to 97.5 in March, according to a survey of field offices. (Quota-

tions represent field director's opinions, not actual sales of mortgages.)

The change reflects better prices in three of six regions. Prices were unchanged in the other three. Details:

| ZONE | AVERAGE | RANGE | AVERAG | E |
|---------------|---------|---------|--------|---|
| | Apr | il 1 | March | 1 |
| Northeast | 99.4 | 98-par | 99.4 | |
| Mid Atlantic | 98.7 | 97-par | 98.6 | |
| Southeast | 97.1 | 96-97.5 | 96.9 | |
| North Central | 97.1 | 96.5-99 | 96.9 | |
| Southwest | 97.3 | 96-98 | 97.3 | |
| West | | 96-97.5 | 97 | |
| United States | 97.5 | 96-par | 97.4 | |

Oddly, the field office survey shows conventional interest rates up in March-while FHA discounts were supposed to be moving the other way. These are the findings-with rates applying only to first mortgages:

| Zone | INTEREST RATE | | | | | |
|-----------------|---------------|---------|-------|--|--|--|
| | April 1 | Jan 1 | Oct I | | | |
| Northeast | 5.45 | 5.45 | 5.50 | | | |
| Middle Atlantic | | | 5.55 | | | |
| Southeast | 5.60 | 5.70 | 5.75 | | | |
| North Central | 5.60 | 5.70 | 5.75 | | | |
| Southwest | 5.75 | 5.90 | 5.90 | | | |
| West | | 6.10 | 6.10 | | | |
| United States | 5.65 | 5.75 | 5.80 | | | |
| | S conti | nued on | p 70 | | | |

MORTGAGE MARKET QUOTATIONS—new construction only

(Sale by originating mortgagee, who retains servicing.) As reported to House & Home the week ending April 10, '59

FHA 51/4s (Sec 203) (b)

VA 43/45

| Spec Asst VA** | Scdry Mkt FHA** | 30 year | m Down* | Minimum 20-25 yea Immed | r | 10% or r 20-25 year Immed | | City | 30 year no to 2% Immed | down Fut | 25 year 5% down | | 20-25 yea 10% dow Immed | vn or more | Conven- tional Interest Rates |
|----------------------|-----------------------|----------|-------------|-------------------------------|-----------------|---------------------------------|-------------|--------------|------------------------------|-------------|--------------------|-----------|-------------------------------|------------|--|
| 96 | 97 | 961/2-97 | 961/2-97 | 961/2-97 | 961/2-97 | 971/2-98ь | 971/2 | Atlanta | 80 | 8.0 | ae . | ae | 69 | ao | 51/4-53/4 |
| 96 | 98 | par-101 | par-101 | par-101 | par-101 | par-101 | par-101 | Boston local | 99 | 99 | 99 | 99 | 99 | 99 | 5 |
| - | - | 96-961/2 | 951/2 | 96-961/2 | 951/2 | al | a- | out-of-st | 92-921/28 | 92-921/2 | 92-921/2 | 92-921/2 | n | a | _ |
| 96 | 97 | 96-98 | 96-98 | 96-98 | 96-98 | 96-98 | 96-98 | Chicago | .0 | a | | 0 | B | a | 51/2-53/4 |
| 96 | 97 | 97-98 | 961/2-971/2 | 97-98 | 961/2-971/2 | 97-98 | 961/2-971/2 | Cleveland | 92-93 b | 92-93 ь | 8 | a | 94ъ | 94 b | 51/2-53/4 |
| 96 | 961/2 | 96-971/2 | 96-971/2 | 97-98 | 97-98 | 971/2-990 | 971/2-990 | Denver | 91-93 | 91-93 | 921/2-931/2 | ь92-93½ b | 94 0 | 8 | 51/2-6 |
| 96 | 961/2 | 96-97 | 961/2-97 | 961/2-971/2 | 97-971/2 | 971/2-98 | 971/2 | Detroit | 92-921/2 | 92 | a | n | 921/2-93 | 921/2 | 51/2-6 |
| 96 | 97 | 96-961/2 | 96-96 1/2 в | 96-961/2 | 96-961/2 в | 961/2-97 | 961/2-97 | Houston | 92-921/2 | 92-921/2 | 92-921/2 | 92-921/2 | 921/2-93 | 921/2-93 | 5 1/4b-5 3/ |
| 96 | 97 | 96-961/2 | 96-96½ b | 961/2-97 | 961/2-97ь | 97 | 97 | Jacksonville | 92-921/2 | 92-92½ b | | 4 | В | n | 51/2-6 |
| 96 | 961/2 | 96 | 96 k | а | 0 | 97-98 | 97 | Los Angeles | 92k | 92k | 8 | n | a | а | 53/4-6.6 |
| 96 | 971/2 | 99 | 981/2 | 99 | 98 1/2 | par | 99 1/2 | Newark | 96 | 95 | 961/2 | 951/2 | 98 | 97 | 51/2-53/4 |
| 96 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | New York | 971 | 971 | 97 f | 971 | 971 | 971 | 51/2-53/4 |
| 96 | 96 1/2 | 97 | 961 | 97 | 96 ¹ | 971/2 | 971/2 | Okla City | 92-92½h | a | 92-921/2 | n | 92-921/2 | | 53/4 |
| 96 | 971/2 | 99-par | 99-par | 99-par | 99-par | 99-par | 99-par | Philadelphia | 6 | n . | 8 | n | a | | 51/4-51/2 |
| 96 | 961/2 | 96 | 96 | 96 | 96 | 8 | a | San Fran | 92ъ | 92b | 8 | n | 0 | Δ. | 53/4-6 |
| 96 | 97 | 941/2-97 | 94-97 | 95-971/2 | 94-971/2 | 96-99 | 951/2-99 | St Louis | d | d | 6 | n | 8 | a | 51/4-6 |
| 96 | 971/2 | 981/2 | 97b | 981/2 | 97ь | 99 | 971/2b | Wash, DC | 931/2 | 92b | 96 | 93½b | 96 | 931/2Ь | 51/2-53/4 |

*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, Maurice Pollak, exec vice pres, Draper & Kramer Inc; Cleveland, William T. Doyle, vice pres, Jay F. Zook Inc; Denver, C. A. Bacon, vice pres, Mortgage Investments Co; Detroit, Harold Finney, exec vice pres, Citizens Mortgage Corp; Houston, Donald McGregor, exec vice pres, T. J. Bettes Co; Jacksonville, George Dickerson, Stockton, Whatley, Davin & Co; Los Angeles, Robert E. Morgan, exec 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, Robert S. Irving, exec vice pres, W. A. Clarke Mortgage Co; St. Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Maurice V. O'Hearn, vice pres, Bankers Mortgage Co of Calif; Washington, DC, Hector Hollister, exec vice pres, Frederick W. Berens Inc.

- Immediate covers loans for delivery up to 3 months; future covers loans for delivery in 3 to 12 months.
- Quotations ref.r 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.

design, location and construction.

Footnotes: a—no activity. b—very limited market. c—very limited demand.
d—some offering at 91-92. e—lenders offering 90 with no takers. f—includes construction loans. g—a few at 93. h—no merchandise, i—almost all goes to insurance companies. j—just over 3 mos and limited amounts. k—developing resistance at this price. w—FNMA pays 98 for FHA 5½% mortgages of \$13,500 or less after % point purchasing and marketing fee and % 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 % point purchasing and marketing fee, plus % point commitment fee: applies only to VA mortgages of \$13,500 or less.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 51/45

Immediates: 95-97

Futures: 95-961/2

Immediates: 91-92 Futures: 901/2-92

FHA 51/4 spot loans

(On homes of varying age and condition) Immediates only: 931/2-96

Prices for out-of-state loans, as reported the week ending April 17 by Thomas P. Coogan, president, Housing Securities Inc.

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

FNMA STOCK

| | | | M | onth's | Month' | |
|-------|-------|----|----------|--------|--------|--|
| | March | 17 | April 14 | low | high | |
| Bid | 66 | | 631/2 | 631/4 | 661/4 | |
| Asked | 68 | | 651/2 | 651/4 | 681/4 | |

Quotations supplied by C. F. Childs & Co.

Announcing...

TRUSCON'S MENIELLE EGGNA LINE.

featuring

TRUSCON CUALTY

purchase price for traditional TRUSCON quality in all these products



Truscon builder-inspired designers have engineered excess cost right out of metal windows and doors. We're now on the market with additions to our complete product line that are designed specifically for the economic needs of home building and light construction—not simply adapted to them.

This new philosophy—and it is new in this industry—reflects itself in mass-production economies. Cash savings that we can put into traditional Truscon quality, one area in which we will not compromise. As a result, competitively priced Truscon products are worth dollars more on the job and in the structure.

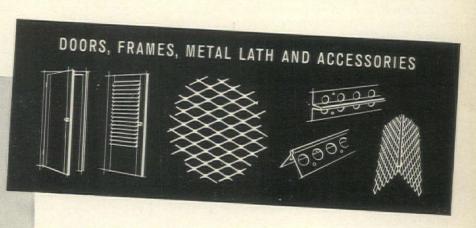
Coincidentally, we have been busy streamlining distribution and distribution costs. This pruning is paying off in improved service at low have the advantage of an expanded dealer organization, backed by our nation-wide net of service-houses, for fast delivery of what you want, when you want it.

Truscon is geared up now to sell like "60" in '59... and on into the future. With quality you can point to, prices you can live with.

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

Note: Be sure to see Truscon's new economy line products; Series 500 Aluminum Awning Window, Series 160 Aluminum Single-Hung Window, Aluminum Slider, Metal Door Frame.

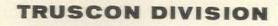
STEEL WINDOWS



REPUBLIC STEEL CORPORATION

TRUSCON DIVISION . DEPT. HO-7582

REPUBLIC STEEL



Youngstown 1, Ohio

... NAMES YOU CAN BUILD ON

PUBLIC

1312 ALBERT STREET • YOUNGSTOWN 1, OHIO

I'm interested in Truscon quality products. Send factor.

Name _____Title _____

Address ____

City_____Zone___State___

MAY 1959

Cuts in rent, interest rates choke Cuban realty activity

Fidel Castro may be delighting the Cuban masses but in doing so he has just about brought construction in that revolt-torn country to a standstill.

He has scared off investment capital, has prompted many property owners to list their holdings for sale at bargain prices. This was not an entirely unpredictable result when the revolutionary leader:

- Cut rents on all buildings erected since 1939; 50% on rents up to \$100 a month; 40% on rents up to \$200; 30% beyond \$200.
- · Compensated owners theoretically by cutting the interest rate on FHA mortgages from 6 to 4% on buildings affected by the rent cuts. He also doubled the term up to a top extension of 10 years. (The order does not affect conventional loans though the rent cuts do.)
- Cut interest rates on all houses not affected by the rent control law and on any new sales to 6% maximum. Rates have been as high as 12%.
- · Suspended for six months any legal action to collect the principal of a mortgage if more than 20% of the original amount is still outstanding, provided the mortgagor continues to pay the interest.

Ordered owners of undeveloped urban

land to build on in it within five years after so directed by the government. If they fail to comply they must sell the land to the government at a price set by the government.

Castro insists landowners should not make a profit on unearned increment as their unimproved land benefits from development of nearby parcels. He considers a fair price for the land the sum paid plus reasonable rate of interest for the time held.

He believes no land is worth more than \$4 a sq meter though some in downtown Havana brought up to \$165 before the revolution.

The government's frontal assault on property rights has had a devastating effect on the real estate business. Says one US realtor who visited Cuba in April: "Half the people figure Castro won't be around in six months so they aren't doing anything. The other half want to sell and get out, but there aren't any buyers.'

Up to now, Cuba has sought foreign funds for real estate investment with some success. Arthur Vining Davis of Miami, former Alcoa board chairman, owns 200,000 acres on the Isle of Pines-a Cuban island. One investment counselor says now he cannot recommend land investment there any longer. Cuba's FHA was started in 1953 and was modeled after that of the US. Main variation: it insures loans on commercial and industrial buildings as well as residential. Income from the loans is tax-exempt (like public housing bonds in the US), even for foreigners who buy mortgages.

FHA is administered by a committee consisting of two bankers, a government representative and the FHA executive director.

There was no limit on interest rates on FHA loans. Despite this, discounts of up to 20% on mortgages were normal. Apparent reason: padded appraisals.

Though some reform may well have been called for, there is still feeling in the Cuban real estate and building industry that Castro has gone too far too fast, showing some naivety about the business of building. Unfortunately in almost shutting down the building business he has added 120,000 more workers to the rolls of the unemployed.

And he is already talking of new reforms. Next step: agrarian land reform. He plans to expropriate uncultivated or badly cultivated land, though the owners would be paid.

His minister of finance, Rufo Lopez Fresquet, adds however that Cuba will not break up efficiently running estates. "We are not going to make the mistake the Mexicans made," he explains.

CANADA:

Record high starts in '58 produce glut of new houses in '59 market

More homes were started in Canada last year than ever before. The 164,632 starts were a 19% increase over 1955, the previous best year. Many of them have been completed and gone on the market during the past month. The result, in many areas: lenders have limited new loans to "owner applicants" (meaning builders must have buyers lined up before getting a mortgage).

In many cities builders have adapted to the situation, launched aggressive promotions to sell ahead of starts.

They are using more and dressier model homes, offering more built-ins, service warranties and other enticements.

Sales in typical cities:

Vancouver: builders made more starts in the first two months than in Montreal-Canada's No. 1 homebuilding city but slipped back to their usual third place in March. Vancouver is a small builder city, so builders have long been used to dealing with single owners rather than volume production. Only soft spots in Vancouver market: Surrey and Lulu Island, where the biggest builders (100-a-year is top) sell the lowest priced homes (average:

Edmonton: new homes are being started at

twice last year's rate and almost twice as many homes are under construction (1,400 at the end of March, with most due for completion last month). "Too much optimism," warns President Lorne Baxter of the builders association.

Calgary: builders are optimistic, figure sales are holding up well. But they complain lenders won't make blanket commitments, favor projects sold well ahead. Canada's biggest builder, E. V. Keith (1,200 starts in 1958) looks for a 25% increase this year. He notes a big trend to Cinderella styles.

Winnipeg: has been one of Canada's depressed housing markets for two years, after a splurge of overbuilding in 1955-'56. The builders assn, only one in Canada to do its own statistical reports, says there are less unsold homes than at this time last year. First quarter permits dropped almost 40% (322 single family homes vs 501 in the first quarter of 1958).

Montreal: heavy winter slowed building, so big selling season is still to come. Builders are worried about the glut of new apartments in all price classes. "As apartment house owners cut rents and offer bonuses to fill their buildings, they cut into the new home mar-

ket," says Builder Irving Magil. Montreal is a traditional renting city. The main way build-ers can lure buyers is by getting monthly payments well below rentals.

Toronto: the market got a severe blow when Ottawa cut back its military aviation program, idling many workers at huge Avro plant. Builders fear a mass exodus in search of employment elsewhere could put many recently built homes on market, reduce need for new ones.

Toronto metro builders assn tried to whip up buyer interest with electronic data processing at last month's home show. New home prospects were invited to submit their requirements to an IBM machine. Over 5,500 got back a list of suitable homes built by assn members. "We've seen them carrying these lists around the projects," says Secretary-Manager Bill Clements. "Sales are going

Government predicts drop in starts from last year

Housing starts will slip a little from last year's record high, government forecasters

Outlook is for 150,000 to 155,000 starts vs the 164,632 of 1958. Dollar volume would slip from last year's \$1.78 billion to \$1.73 billion.

Ottawa's predictions have usually been too low. Last year it predicted 140,000 starts. Now the government is already hedging its new forecast, commented last month: "Present intentions were framed at a time when business conditions were in the initial stages of recovery."

The forecasts are made by the Dept of Trade & Commerce which also predicts total construction outlays will drop from last year's \$7.23 billion to \$7.2 billion.

| CITY | POPULATION | TOTAL '58 STARTS | FIRST QUA | ARTER STARTS | | INVENTORY |
|-----------------|--------------|------------------|-----------|--------------|-------------|-------------|
| | ('56 census) | | *59 | *58 | Mar. 31 '59 | Mar. 31 '58 |
| Vancouver | . 660,000 | 12,299 | 2,667 | 2,230 | 465 | 348 |
| Calgary | | 5,655 | 618 | 653 | 42 | 36 |
| Edmonton | | 5,805 | 316 | 424 | 192 | 57 |
| Winnipeg | | 4.422 | 509 | 263 | 107 | 307 |
| Toronto | | 24,301 | 3,008 | 4,209 | * | ¢ |
| Montreal | | 26,198 | 3,232 | 2,996 | * | * |
| * Not available | | | | | | |

HOUSING MARKET:

Realty boards with multiple listing services lose tax-exempt status

The government has exploded a small bomb under operation of many of the nation's 1,315 local real estate boards.

Internal Revenue Service has announced it is revoking the tax exempt status of real estate boards "in cases where a principal board activity consists of operating a multiple listing service." Tax men argue that multiple listing services "render particular services to member firms as a convenience and economy in the operation of their businesses and, in addition that it [multiple listing] represents a type of activity ordinarily carried on for profit."

Multiple listing services are clearing house arrangements, often organized on a countywide scale, which let member realty firms offer many more properties for sale than those they can hope to offer individually. The usual practice, when the owner of a house sells it through multiple listing, is for him to deal directly with any realtor who belongs to the MLS. The realtor lists the property with MLS. MLS's central office photographs it, sends out a photo plus pertinent details to all MLS members. MLS participants split the sales commission, often 70% to the selling firm and 30% to the firm which listed the property originally. NAREB brass profess ignorance of how many realty boards operate multiple listing services. But a cross-country check indicates a sizeable fraction-perhaps a majority-do.

California test case

Do they make a profit? Both NAREB and Internal Revenue plead ignorance of the total picture. But IRS for the last 3½ years has been pressing a test case to impose taxes on the West Contra Costa (Calif.) Real Estate Board, one of many around the San Francisco Bay area whose multiple listing gross has helped pay for handsome new office buildings. NAREB, accepting the Contra Costa case as a national test, had the case moved from

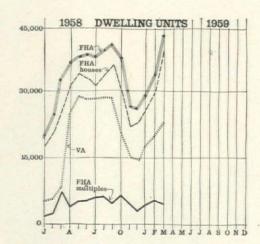
HOUSING STARTS turned up again on a seasonally adjusted basis in March, ending a slide that followed the December peak. Starts totalled 120,000 (117,000 private and 3,000 public). The private total is the highest on record for the month and sets a seasonally adjusted annual rate of 1.39 million. This ranks only behind last November and December among the biggest housing months since 1955. It is up 51% over March of last year.

First quarter starts total 295,000—288,200 of them private, also a record for the period. This is a 43.2% gain over the first quarter of 1958. The 7,800 public starts are off 45% from the 14,200 in the first quarter of last year.

San Francisco to Chicago. For two years it has been before the US Tax Court but it is not yet on the calendar for trial.

What took NAREB by surprise was that IRS decided to revoke tax exemption for multiple listing boards while the issue was still being tried in federal court. But IRS spokesmen explain that acting now establishes a "cut-off date—January 1, 1958" after which the government will attempt to collect income taxes.

NAREB plans to fight Internal Revenue in court, presumably appealing case after case, if necessary, to US Circuit Courts of Appeals. "It is our contention that the interpretation is in error in its application to real estate boards generally," says Eugene P. Conser, executive vice-president of NAREB, "A multiple listing service is only one of the many services rendered for the benefit of the public, and only in rare instances of over-emphasis should its status be subject to question." George P. Ellis, NAREB tax counsel who in 1927 persuaded Congress to include real estate boards in tax exemption legislation, points out that the 1954 Internal Revenue Act specifically exempts real estate boards from paying taxes. "A pronouncement of a bureau of one of the departments hardly rates as an amendment to the law," Ellis has advised local real estate boards. "It would, therefore, be necessary for them [IRS] in the case of each individual



FHA APPLICATIONS on new units rose to 43,567 in March, highest since October 1950, up 26% from February and up 33% from March 1958. Applications on new homes—38,930—were up 32% from February and 55.9% from March 1958. Project applications of 4,637 were down 9% from February and off 39% from March 1958. Total new applications for the first quarter were 106,912, up 42% from the 75,178 for first quarter 1958. New homes were up 49.4%, projects up 5.4%.

VA appraisal requests in March totalled 23,165, up 10.5% from February and 175.6% from March 1958. First quarter appraisal requests of 62,063 are up 227.4% from 1958.

board specifically to hold that the income from multiple listing service is an unrelated income and to make the showing that it was so relatively large that it would cancel out the entire exemption." He is advising boards to continue to fight any federal effort to cancel their exemptions.

How it started

The West Contra Costa case began four years ago when the board's accountant, according to Executive Secretary William T. Leonard, suggested that it check into the possibility that IRS would clamp down on non-profit groups. The board contacted NAREB in Chicago, which studied its financial statements and advised it not to worry. Six months later, Internal Revenue audited the board's books and declared a tax deficiency of \$1,214 based on an alleged net income of \$5,057.79 in 1953.

The West Contra County Board operates today on a \$43,000-a-year budget, says Leonard. Of this, multiple listing brings in \$22,000.

Some real estate boards make membership in multiple listing automatic with membership in the board; some do not. West Contra Costa does. So it has 110 brokers, 70 officers, 170 salesmen who can use MLS. Costs of running MLS are met by a levy on real estate sales commissions—2% if the listing and sale is by a single office, 5% if it is a joint listing and sale. Last year, brokers using its MLS sold properties worth \$15 million. For the \$22,000 commission, the real estate board supplies photos, stenographic help, policy guidance and IBM machines.

Fighting this tax assessment in US Tax Court, NAREB lawyers protested that:

- The board "did not realize net income," from running MLS in 1953.
- Internal Revenue is wrong in treating the board's \$5,446 of dues income as income from MLS.
- The board received "no unrelated business net income" in 1953 because, among other things, running a multiple listing service is "directly and substantially related to the exercise and performance" by the board of its "purpose and functions" that give it tax exemption.

Ahead: long litigation

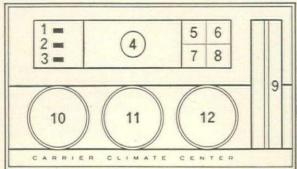
Whatever the outcome of the tax fight, a clearcut decision seems years away. But already some multiple listing services, notably in San Francisco, are taking steps to organize as a separate corporation with no effort to seek tax exemption. Federal lawyers, however, wonder if this might lay multiple listing services open to restraint of trade charges. They theorize this way: suppose multiple listing service set up to stand on its own feet balked at letting outsiders participate. Suppose it said a real estate dealer who did not belong to the board could not get its listings. This, lawyers contend, would violate anti-trust laws in most states. It would run afoul of federal anti-trust laws in cases where realty firms involved do business across state lines.

But Executive Secretary Leonard of the embattled West Contra Costa board concedes the MLS ruling confronts his board with two alternatives: 1) lower MLS fees so there is no profit at all, 2) separate the organizations and let MLS go into business in earnest, even to the extent of buying automobiles for its salesmen as some boards have.

NEWS continued on p 75

NOW SOMETHING BIG HAS





THE CARRIER CLIMATE CENTER REPORTS:

1 heating or cooling cycle; 2 fan operation; 3 night setback; 4 indoor temperature setting; 5 filter cleanliness; 6 pilot light operation; 7 condensate operation; 8 compressor performance; 9 outdoor temperature; 10 time and night setback indicator; 11 barometric pressure, and 12 indoor temperature and humidity.

†Optional

HAPPENED TO AIR CONDITIONING!

The Revolutionary New Carrier Climate Center

gives home buyers new mastery of indoor climate ...puts powerful new sell into your houses!

Ever sat behind the controls of a plane? Or stood on the bridge of a ship? Then you have a fair idea of how you'll feel when you stand in front of the Carrier Climate Center.

This handsome 8-by-14-inch wall panel which installs between study is more than a weather bureau ... which it is. More than a control board ... which it is. More than an automatic monitor that reports on the operation of a Carrier air conditioning system ... and it's that, too.

The Climate Center is the heart of a Carrier air conditioned Weathermaker* Home. Here your customer is master of the well-being of his family. He can see the performance of his system—and be able to precisely control it. See what the weather is outside—and what it will be like tomorrow. And see new ways to obtain the most economical operation of his air conditioning system. One example: a

timer that can be preset to automatically lower the temperature in the house during sleeping hours. Another: a warning light that signals when replacing filters will improve efficiency.

Now your customer can watch—as well as experience—perfect climate control in operation. He can custom-tailor indoor climate to the preferences of his family. And be sure that he's always getting the best from his system—the all-season comfort, the cleanliness, the health that truly fine air conditioning provides.

Hitch your wagon to this brilliant new merchandising star! See your Carrier dealer for full details. He has technical assistance, promotional support and merchandising programs. Look him up in the Yellow Pages before another selling day goes by! Or write Carrier Corporation, Syracuse 1, New York.

*Reg. U.S. Pat. Off.

MORE PROOF OF

BETTER AIR CONDITIONING FOR EVERYBODY



Need we say more?

The house you build is one of the largest dollar investments your prospective home buyer is apt to make . . . and probably one of the best. If the house you build is *adequately insulated*, the buyer stands a pretty good chance to *save upwards of 35% or more of his fuel costs*. What's more . . . the savings go on year after year, and your buyer is a real satisfied home owner!

If a cooler house, rather than a warmer one, is your buyer's concern ... you'll find that a good quality insulation, properly installed, can save you and your home buyer real money on the cost of air conditioning equipment. You can reduce the size of the cooling unit as much as 50% ... and save important money for something else to increase the quality of your house. A well insulated house is just that much easier to cool.

Doesn't it make good sense then to use the *best insulation* in the house you build . . . a quality insulation to make sure that your house is a *quality home* in every respect?

Want to start right now?

Specify and use

BALSAM-WOOL

SEALED INSULATION

WOOD CONVERSION COMPANY, Saint Paul, Minnesota Manufacturers of NU-WOOD® sheathing, Micro-Perf and Constellation acoustical tiles . . . other quality building materials

The price of land continues skyward; builders ask: 'Where does it end?'

Soaring land prices have become homebuilders biggest worry.

Chicago: "I know of an acre of land that cost \$3,000 four years ago and is now offered for \$17,000," says a north suburban builder. "I'm thinking of getting out of building and going into land speculation. Where else can you make that kind of dough these days?"

Cleveland: Land prices (even on land in less than prime areas) are getting beyond the point where they make sense. Builders are beginning to worry that scarcity and high prices may put them out of the housing business.

Philadelphia: Land inside the city limits has reached the \$10,000-an-acre level. Builders call it "absurd."

Los Angeles: A year ago it looked as if land prices were leveling off. But as soon as sales rose again so did the price of land. Says Larry Weinberg of Larwin Co: "A year ago we thought we couldn't possibly absorb higher land costs, but at the risk of sounding like a broken record we don't think so today either but land is \$2,000 more an acre [from \$6,000 to \$8,000]."

So little land is left in desirable, close-in areas that only high priced houses—or apartments—can be built on it. Builders blame the high cost of acreage for their troubles in building homes priced at \$13,000 or \$14,000 which they say they could sell in big quantity.

Denver: Land prices inside the blue line (beyond which builders cannot get city water, and there is no other major source) have risen steadily to a point where many builders look on asking prices as fantastic. One result: no more inexpensive new housing is going up inside the blue line. Projects outside it run into sales trouble because new residents have complained that drinking water from wells "has a bad taste."

Kansas City: Rising land costs are forcing prices higher, chorus builders. "It's nothing to pay \$100 a front foot for good land," says Builder Ray H. Shackelford, whose houses sell from \$50,000 to \$110,000.

Oklahoma City: Only dark spot on the housing horizon, as builders see it, is land. Lots are scarce, prices skyrocketing. Builder Ralph Green paid \$1500 an acre for a tract last year. In mid-March, he bought the acreage alongside it for \$3,000 an acre. He paid \$5,000 an acre for a 10-acre tract in another area. Some raw land is even costlier.

Other local market news:

Los Angeles: Apartment vacancies have zoomed to what rental operators call "alarming" proportions.

The Apartment Assn of Los Angeles County reports the countywide vacancy in unfurnished units was up to 9.03% on Feb 1. Last October it was 8.38%.

For furnished apartments, the vacancy rate slipped slightly, from 7.2 to 6.93% from October to February. But President L. D. Flickinger of the Apartment Assn says both present "a critical problem" in some areas.

Moreover, he warns, there are no signs that vacancies will shrink soon. Los Angeles experienced an all time record in apartment construction in 1957, and the pace has continued nearly as high since. Predicts Flickinger: "This oversupply, unless checked in the near future by curtailing multiple construction loans, will pose as serious economic problems as have ever developed in housing. The population increase of approximately 3.5% a year is simply not enough to absorb the continued construction of multiple housing units at the rate of 13.6% increase last year.

Highest vacancy rate is in the northwestern area (North Hollywood, Sherman Oaks, Studio City, Encino, Burbank, San Fernando). A whopping 15.36% of unfurnished units and 10.98% of furnished units were unoccupied. In unfurnished rentals, these areas also reported big February vacancy rates: Hollywood, 9.86%; Northeastern (Pasadena, Alhambra, etc.), 9.86%; Southern (Inglewood, Hermose, Manhattan Beach, Westchester, Baldwin Hills.), 9.40%.

Centrally located units are showing lower vacancy rates, the Apartment Assn explains, because they are more attractive to Los Angeles newcomers and unmarried persons.

The vacancy survey, says the association, is based on a 35% sample of Los Angeles County's rental units completed and offered for rent for at least 90 days (excluding Long Beach).

Pittsburgh: Median price of new houses sold last year was a whopping \$17,353, according to a survey by ACTION-Housing Inc. The price compares with a national '58 median of \$13,900 and underscores a major problem for local builders: site and development costs. FHA's last typical cost survey, which excludes land and heating costs, was \$11,731 for the area.* Builders report they put as much as \$3,000-\$4,000 into a lot before starting the house. Smaller builders complain at this price they cannot compete in the currently most active sale bracket, \$10-\$14,000. Their cries are supported by ACTION-Housing's survey covering 188 builders, 4,286 houses. It shows median price for 15 builders who produced half the houses was \$16,305 compared with median of \$18,775 for the 167 builders who produced the other half, even though each group built about the same number of houses in each size.

Most popular house was three-bedroom (78%), ranch style (51%). Splits (27%) and two-story (8%) accounted for most of the rest. Most active areas were suburban South and East (28% each) with North trailing (14%).

In spite of rising costs for everything, builders look for a boom in '59, with starts climbing 44% from an estimated '58 total of 6,800 in the area, lowest since '50. Price range is expected to shift down, with more houses selling under \$15,000, the median dropping to \$16,743.

Quizzed on trade-ins, 87 builders who answered were cool; 74% said they took none, three admitted taking 10 or more houses in trade, another 16 said they took one to three trade-ins.

*Reported in March '58, it was based on a 1,138 sq ft frame ranch style house, (three bedrooms, two baths, kitchen, dining room, living room), and ranked Pittsburgh 11th from the top cost among 71 cities surveyed.

MARKET BRIEFS

Prefab sales soar

Prefabbers are predicting the best year ever.

The forecast is based on a first quarter spree which has seen a median sales increase of 51% for 14 of the top firms.

They acknowledge that the first quarter of 1958 was poor and thus is a small base on which to figure gains. But they predict the gain for the whole year will still be 20% or more. (Last year's shipments, according to House & Home's count: 67,000).

National Homes, which accounted for 35% of last year's prefab sales, reports its first quarter sales up 51% in units; 41% in dollars. The firm calls a 10 to 20% gain for the year "conservative." Other first quarter reports:

- Kingsberry Homes division of Lumber Fabricators reports unit sales up 47%, dollar volume up 45%. Its order backlog is 125% above a year earlier.
- SCHOLZ HOMES says unit sales are up 35% with production in its three plants currently running triple last year's pace. President Don Scholz notes that 200 builders have signed up for his Mark 59 house promotion this year vs 105 in the Mark 58 program last year.
- HARNISCHFEGER HOMES reports shipments up 61%, dollar volume up 58%.
- ADMIRAL Homes notes shipments up a little but the order backlog up substantially. Second quarter shipments are expected to be up 50% from the second quarter of 1958.
- INLAND Homes lists a 63% sales gain, adds that reception given its new low-priced Thunder-bird line indicates sales for the year will be up 108%.
- Midwest Houses says orders are up 33% while shipments are up 85%.
- PLACE HOMES reports a sales gain of 51%, expects this to be its best year.
- THYER MANUFACTURING CORP says sales are up 55% in units, 30% in dollars. Dollar volume for the year is expected to be 40% from 1958.
- Pease Woodwork reports unit sales up 95%, expects a 50% gain for the year.
- RICHMOND HOMES says unit sales are up 21%, dollar volume up 24% and looks for a probable 35% gain in units in April.
- American Houses states its dollar volume is up 300% to \$1,045,052.
- Best Homes reports unit sales up 100% and expects a 100% gain for the year as well.
- KNOX CORP says that as of March 1 it had more dollar volume of orders under contract for delivery this year than it sold in all of 1958. And in 1958 its dollar volume was up 27.6% to \$8,239,134. Earnings increased from \$80,546 in 1957 to \$160,174, "the best in our history from practically every standpoint," according to President Peter S. Knox.

FHA's typical '58 mortgage

FHA mortgages averaged \$864 bigger than the year before in 1958—though houses were smaller and cheaper.

Effect of the 1958 Anti-recession Housing Act which cut down payments and touched off a boom in lower priced houses is thus clearly reflected in the statistics.*

Median loan-to-value ratio passed the 90% continued on p 78

^{*}The 1958 act cut the down payment from 3% of the first \$10,000 valuation to 3% of the first \$13,500, left unchanged the ratio above \$13,500: 15% of value up to \$16,000 and 30% of the balance with a \$20,000 maximum mortgage. The act put up \$1 billion in Fanny May special assistance funds to buy for FHA and VA mortgages up to \$13,500 at over-the-market prices.

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.

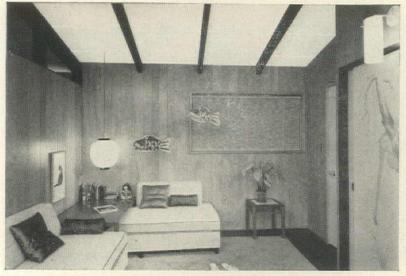
Save money, add beauty like this to homes you build with Insulite Roof Deck. See your lumber dealer for facts, or write: Insulite, Minneapolis 2, Minn.

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."





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—BondWood changes grain direction every 4%" 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 groove—no 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 . . .

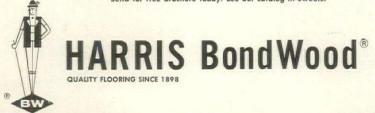
UNLIMITED PATTERNS—BondWood can be installed in a variety of patterns—plain, with divider strips, with insets, etc. Available in Oak, Walnut, Maple, Beech, Cherry and other domestic and imported hardwoods.

NO DIRT-CATCHING CRACKS—BondWood units are unbeveled, square-edged, with flush joints—no gaps, no cracks to catch dirt.

THICKER, LONGER WEARING SURFACE—BondWood'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, $4\%'' \times 4\%''$, 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 MANUFACTURING CO., DEPT. HH-59, JOHNSON CITY, TENN.

News

mark for the first time—hitting 91.5%. The median house was priced at \$14,261 with a mortgage of \$12,697.

Land prices continued up. FHA statistics show income of FHA buyers was up and so were monthly payments. Details with comparisons to past years:

| ITEM | 1958 | 1957 | 1950 | 1946 |
|-------------------------------|----------|----------|---------|---|
| Mortgage | \$12,697 | \$11,823 | \$7,101 | \$5,504 |
| Term in years. | 27.3 | 25.6 | 24.1 | 21 |
| Loan-to-value ratio | 91.5 | 85.1 | 88 | 87 |
| Monthly | | | | 100000000000000000000000000000000000000 |
| payment | \$96.10 | \$90.29 | \$54.31 | \$46.18 |
| FHA valuation | \$14,207 | \$14,261 | \$8,286 | \$6,558 |
| Price of lot | | | | |
| (avg.) | \$2,223 | \$2,148 | \$1,035 | \$761 |
| Site-to-value | | | | |
| ratio | 15.4 | 14.9 | 12 | 11.5 |
| Size (sq ft) | 1,092 | 1,105 | 838 | _ |
| Number rooms | 6 | 6 | 4.9 | 5.5 |
| Buyer's income | \$6,803 | \$6,632 | \$3,861 | \$3,313 |
| Monthly housing expense | \$120.87 | \$115.17 | \$75.41 | \$62.85 |

Court backs flat roof

A ban against flat roofs in an old New Jersey hamlet has been voided by the appellate division of superior court.

The court upheld a county court verdict that John R. Hankins can build a contemporary home in the Borough of Rockleigh (Oct, News). The borough council has tried to stop him by an emergency ordinance requiring any new home to conform to the prevailing traditional architecture of the 37 homes there.

Florida's land boom (cont'd)

Common stock of General Development Corp, the big Florida land company, took on all the earmarks of a speculative bubble briefly in March and April.

General is the land developing wing of the Mackle Co of Miami, 1958's biggest homebuilder. It is developing nine sites in Florida, including 90,000 acres at Port Charlotte. It sells lots as well as building

In February 1958, General's common stock was traded on the American Exchange at 8. By the end of the year it rose to 30. President Frank Mackle announced a one-for-four stock dividend and the price edged up toward 50. Early this March, it spurted, reaching a late March high of 77½.

Then it broke, falling as much as 7 points a day—to 47¼ early in April. On three days the exchange suspended trading as sell orders piled in. The SEC started an "informal investigation" to see who had bought and sold shares.

The stock recovered after General announced an additional stock distribution. Stockholders will get 10 shares for each four owned. General Development reported first quarter sales and earnings up 40% from first quarter of 1958. By late April, the stock was back to 56.

The Mackles as well as Financier Louis A. Chesler, General's chairman, disclaim knowing what caused the quick up and down.

Whatever the cause, General's gyrations affected other Florida stock. Lefcourt Realty, owner of several big tracts in south Florida (including 10,000-lot Carol City near Miami), slipped from 14½ to 8. But Arvida Corp, the landholding firm started by multi-millionaire Arthur Vining Davis, moved up from 13½ to 20 in the same period.

NEWS continued on p 83



Today a home of living beauty. But how

will it look to your great-grand children? Like this



Dunbar Furniture, Franklin Flarward Fabrics and decoration by Edward Wormles

Generations of living beauty go into

your home with every piece of wood from Crossett

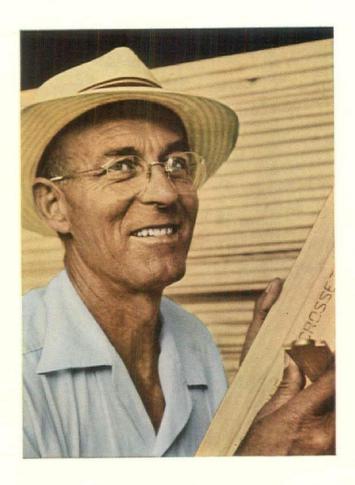
The Crossett people grow the trees, expertly season and shape the wood.

This is the Crossett wood that beautifies your gracious home . . . Crossett wood that keeps your home standing straight and true for generations.



Crossett Pine Sheathing provides extra protection against the elements. It stands for snug comfort generation after generation.

And behind this concept of quality ...



The Crossett People...



From the acorn or the seedling to the wood that builds your home, the Crossett people are concerned with one aim—to produce the finest quality lumber in the land.

Crossett treats trees as a crop, helping nature provide a never-ending supply of wood—America's modern building material yesterday and today.

When you're building, buying or remodeling, insist on seeing the name Crossett on the wood that goes into your home. Your great-grandchildren will be glad you did.



CROSSETT LUMBER COMPANY

A DIVISION OF THE CROSSETT COMPANY CROSSETT, ARKANSAS

This 4-page spectacular sells your best customers and prospects in

HOUSE BEAUTIFUL Building Manual
HOUSE & GARDEN Book of Building
LIVING'S New Guide to Home Planning
and Remodeling

Does FHA penalize efficient builders by insisting carpet be paid for in cash?

FHA still wants nothing to do with carpet even if it means penalizing some of the nations' most efficient homebuilders and their customers.

Still smarting from run-ins with retail furniture and carpet dealers in 1956 and again last year before the Senate banking committee, FHA top brass in Washington insist carpet included in a new home must be paid for in cash.

Builders argue that FHA should let a builder put whatever he wants into a home without penalty so long as he is not selling it for more than FHA's valuation.

But FHA clings to the theory that it must cut the price on which the maximum mortgage is figured by the cost of the carpet forcing the builder to collect cash for the rug.

FHA Commissioner Julian Zimmerman, informed of this by House & Home, expressed disapproval, said he would investigate.

Big Builder John Long of Phoenix cites this example of how FHA's logic works:

Long sells for \$10,000 a home FHA appraises at \$10,500. This situation is not unusual. Throughout the nation, FHA offices base their appraisals on the performance of average builders. Big efficient builders can sometimes build for less.

Long worked out a deal with the Luxor Carpet Co of Akron, Ohio to put \$300 worth of wall-to-wall carpet in each of his \$10,000 homes, with the sale price remaining \$10,000. Thus Long wanted to offer a \$10,800 house for \$10,000.

FHA in Phoenix and Washington turned the deal down flat. If he wanted to put in carpet, FHA told Long, it would cut the acquisition price on which it figures the mortgage to \$9,700 and the buyer would have to put up \$300 in cash for the carpet.

Long, of course, abandoned the plan. He would have been in the absurd position of offering a home with a slab floor which was valued at \$300 more than an identical home with \$300 worth of carpet—though both houses carried a \$10,000 price tag.

Complains Long's project boss, Dave Reade: "Why shouldn't we be allowed to pass along the advantage of our efficiency to the man who buys the house. FHA is taking away the builder's incentive to cut costs."

Cries Robert E. Brueggeman, Luxor sales vice-president: "This is an excellent example of how difficult it is for a builder to sell quality."

It's possible Long could have made his carpet deal—if he hadn't told FHA. Other builders throughout the US are giving carpet to buyers under the same circumstances, without FHA's knowledge. Occasionally, one is found out with an expectable result—his acquisition price is cut and he must ask buyers of any houses sold, but not closed, to ante up the price of the carpet.

Three years ago, FHA seemed on the verge of adding carpet to the list of items (washer, dryer, refrigerator, stove, storm windows, etc) which can be included in a package mortgage. Furniture and appliance dealers protested bitterly to the Senate banking committee then and in 1958—not just about carpet but about the entire package mortgage concept. As a result the committee instructed FHA to consult it before adding any more "rapidly wasting assets" to the list of mortgagable items.

CODES:

New Mexico builders win fight for sewer pipe choice

Albuquerque homebuilders apparently can continue using clay or asbestos cement sewer pipe in residential areas.

Another in a chain of efforts across the US to require cast iron pipe has been rejected by the city's board of standards and appeals—contrary to the wishes of the city building department.

The building department proposed a cast iron pipe requirement a year ago when it revised the city plumbing code. Local builders protested this would add \$25 to \$50 to the cost of every new home unnecessarily.

The standards board recommended clay and asbestos cement pipe also be permitted (but not fiber pipe which has been banned for several years). But in November the building department quietly notified plumbing contractors to get rid of stocks of any non-cast iron pipe since it would no longer be allowed.

Builders went back to the standards board, won a unanimous recommendation approving all three pipes. The change in the plumbing code has been delayed, however, until the board can consider a new building department proposal that cast iron be required on arterial residential streets, at least,

NY legislature saves code but shifts work

A last-minute compromise has spared New York State's model building code from sudden death.

In its closing hours, the state legislature voted to shift the powers and duties of the State Building Code Commission to the State Housing Division.

But instead of a \$423,000-a-year budget, the surviving technicians of the code group will have to make do with about \$148,000. This will mean cutting the staff from 38 to 15 people, says Technical Director Art Benline. This will let the code experts continue their No. 1 job of issuing certificates of acceptability for new building products, he predicts. Last year, the commission tested more than 200 products (including components of prefab homes), approved about 50. The certificates go to local building officials in the 293 cities and towns which have adopted the state code, to guide them in approving or rejecting building permits involving new products and methods.

The Code Commission's four \$16,900-a-year members and its \$18,500-a-year chairman are out of their jobs.

The Code Commission was created in 1949 on recommendation of Gov Thomas E. Dewey. It drew up a modern, performance-type code which has been widely acclaimed as one of the nation's finest. Its adoption is optional with localities. Big cities, where archaic technology usually has well entrenched defenders, have shunned it.

The commission ran into political trouble this year when Republican legislators balked at Gov Nelson Rockefeller's plans to boost taxes, insisted on making a \$40 million cut in the state budget before they would agree to trim state income tax exemptions. Moreover, some code commissioners had come into disfavor with influential Republicans.

NEWS continued on p 86

Michigan voids big building fees to pay costs of booming suburbs

Detroit builders have won a five-year fight against suburbs that jacked up building fees to put a brake on new subdivisions.

The Michigan Supreme Court has overruled two Circuit Court decisions and unanimously held that two suburban towns cannot collect fat building fees to help pay the general costs of government.

In 1954, the town of St Clair Shores and in 1956 the township of Redford boosted their permit and inspection fees so high that revenue swelled to three or four times the cost of operating the department.

The Supreme Court went beyond the details of the cases and forbade heaping the cost of truly community facilities on builders or homebuyers in any way. Excerpts:

"It was not the administration and enforcement of the building codes that caused the increase in governmental service. It was the increased population. The burden of additional revenue must of course be carried for fire, police and sanitation. But it cannot be loaded on to the administration and enforcement of the building code anymore than could the increased cost of schools occasioned by those who live in the houses built under the code.

"These are public problems of the community. And the expenses incurred in their solution are to be defrayed from the general revenues of the city and not on a fee basis under the guise of regulating such matters as plumbing and wiring new houses. . .

"The police power may not be used as a subterfuge to an act and enforce what is in reality a revenue raising ordinance."

Irvin Yackness, general counsel and executive vice president of the Detroit builders assn, predicts the decision will save Detroit homebuilders more than a million dollars a year in fees not just in St. Clair Shores and Redford, but others as well.

"Had the court ruled the other way" he explained, "undoubtedly every other municipality would also have raised their fees. There are 200 suburban governments in this area."

The Redford ordinance increased the building fees on a \$10,000 house from \$26 to \$91.50. The St. Clair Shores increase was about the same.

Now! CERTIFIED





GREATER ECONOMY AT LOW SPEEDS

Tests showed that, driving at 30 mph, Ford Pickup Sixes had an average gas-mileage advantage of 20.2% over all other makes

GREATER ECONOMY AT SUSTAINED SPEEDS

'59 Fords average

Beat average mileage of the other leading pickup makes by 25.2% in Economy Showdown U.S.A. All tests made by independent research engineers...and certified!

All tests conducted and results

CERTIFIED

by America's foremost independent automotive research organization*

*NAME AVAILABLE ON REQUEST.

Send inquiry to: P. O. Box 2687 Ford Division, Ford Motor Company Detroit 31, Michigan • Here at last is certified proof of the differences in gas mileage between six-cylinder pickups... evidence that you can use to save hundreds of gallons of gas each year!

It was compiled by America's foremost independent automotive research firm after testing 1959 sixcylinder ½-ton pickups of the six leading makes. All trucks were bought from dealers—just as you would.

The tests paralleled every kind of

driving—high speeds and low, open highways and city traffic, even doorto-door delivery. And in every test, '59 Ford Sixes delivered more miles per gallon than any other make. Here are the actual percentages:

'59 Ford Pickup Sixes gave

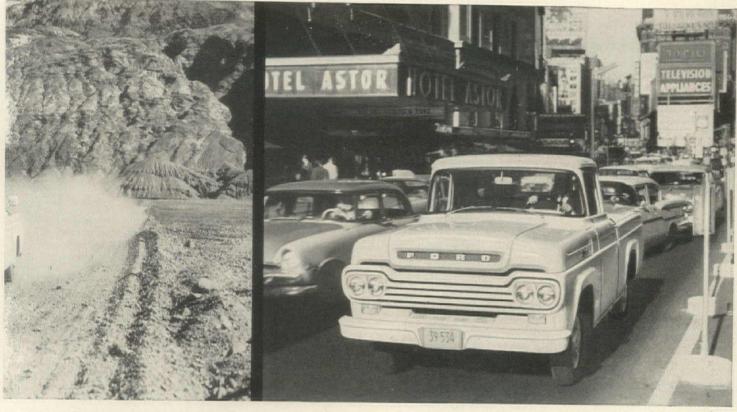
42.6% better mileage than make "D" 31.1% better mileage than make "I" 25.2% better mileage than make "C" 22.0% better mileage than make "S"

9.6% better mileage than make "G"

Now during DIVIDEND DAYS at your
Ford Dealers- Go FORD-WARD for Savings



PROOF of fuel economy



Ford held its edge at higher speeds, too. At 45 mph, for instance, Ford's average advantage was 20.0%

GREATER ECONOMY
IN CITY TRAFFIC

In city driving—which comes closest to matching average driving conditions— Ford's edge was a whopping 42%

25.2% over other makes

Taken together, Ford got 25.2% more miles per gallon than the average of all other leading pickups!

The complete results of the entire Economy Showdown have been gathered in a special free booklet, "New Facts About Gas Economy." In it you will see, for example, that all trucks gain their best mileage at 30 mph...get about 40% less mileage at 60 mph, and pay a tremendous premium in stop-go work. You'll see the standing of each make in every test. You'll learn the best time to trade your old truck for maximum fuel saving. And you'll see just how much a new Ford saves in gas—an average rate of 129 gallons a year

(10,000 miles) over the other makes!

What's the secret of Ford's economy? It's quite simple, really. First, of all pickup sixes, only the Ford Six has a modern Short Stroke engine. This more efficient design reduces engine friction and thus requires less fuel. Second, to this modern engine, Ford has added a new economy carburetor . . . by metering fuel more precisely in both high and low speed ranges, it boosts gas mileage in every type of driving! And you get this Ford Six standard . . . no extra cost.

If you'd like to pocket the Certified savings of a real worker—a truck that will save from the day you drive it home—see your Ford Dealer!

TRUCKS COST LESS

less to own...less to run...last longer, too!

| FACTS F SHOWDO | E BOOKLET LL FIGURES AN ROM ECONOMY WN U.S.A. OUPON TOD | ID A | GAS ECONOMY |
|-------------------|---|------------|--------------------|
| Box 26 | otor Co. 87, Dept. C, 31, Mich. | | |
| Please "New F | send me acts About (| without of | ollgation omy." |
| Name | in yiel | | |
| | | | |

Housing in Hawaii

Land and mortgage money are scarce, and building is costly. But a boom grows

Even a paradise has problems and Hawaii is no exception. The soon-to-be 50th state, where the only grass shacks are now museum pieces, has some whoppers.

Like Alaska, Hawaii's geographical separation from mainland US has produced two of its most nettlesome obstacles.

- Materials must be shipped in 2,400 mi from the mainland.
 So building costs are 50% over California levels.
- Money is scarce—for construction loans as well as permanent mortgage loans.

Moreover, most of the available land is in the hands of ten major landowners who, if they make their land available at all, prefer to lease rather than sell.

But booming Hawaii is attracting mainland builders who are mobile enough and smart enough to adjust to a highly competitive and very different market.

HONOLULU 2

HONOLULU 3

HONOLULU 4

HONOLULU 5

HARBOR HARBOR HONOLULU 2

HONOLULU 5

PEARL HARBOR HEAD

1-BLACKFIELD HEAD

2-CENTEX

3-KAISER-BURNS

4-PAO

5-COOPERATIVES

HAWAHAN HOMEBUILDING is concentrated around Honolulu on Oahu, one of eight main islands. Biggest current projects are numbered.

Every recent year gets bigger than the year before for housing in Hawaii. In 1958 there were 5,600 starts—3,100 single family and 2,500 multiples, excluding Capehart military housing units.

exclusive

And the outlook for 1959 indicates another big increase. The territory's population has climbed 27,000 each year in the last three, now stands at more than 585,000. Statehood should mean even faster growth.

Three-fourths of Hawaii's population and even more of its homebuilding is on the island of Oahu—the city and county of Honolulu. This is home to Pearl Harbor, Hickam Field and Schofield Barracks. The armed forces rank with agriculture (sugar cane, pineapple) and tourism as Hawaii's chief industries.

Blend of styles, builders

Typical new tract homes in Hawaii are a blend of contemporary California with oriental style. And the men who build them today include not only old-timers but also newcomers from the mainland like Tom Lively and his Centex Construction Co of Dallas, Bill Blackfield of San Francisco and T. Jack Foster of Oklahoma City.

For unlike Alaska where the private housing industry is struggling to get started, home-

building in Hawaii is already a robust and profitable business. And it's getting bigger.

- Those old collaborators, Industrialist Henry Kaiser and Realtor-Builder Fritz Burns, have just announced plans for a new resort and residential city for 50,000 persons on 6,000 acres leased from the Bishop Estate near Honolulu. Estimated cost of the hotels, apartment buildings and houses: \$350 million. Kaiser and Burns have already collaborated to build a \$14 million resort on Waikiki Beach, but this will be their first Hawaiian housing venture. In the years just after World War II, Burns, a Los Angeles builder and realtor, teamed up with Kaiser to build some 6,000 low-priced homes in southern California.
- Centex, one of the nation's largest builders of single-family housing, has leased about 12,000 acres, on the windward side of Oahu. It started 200 units last year and sold 400 leaseholds to other builders. President Tom Lively hopes to average 400 houses a year from now on. His prices run from \$17,000 to \$20,000.
- Bill Blackfield has three tracts underway on both the windward and leeward sides of Oahu with homes priced from \$15,000 to

\$19,000. He sold 143 in two weekends this spring.

• Joe Pao, who has been building in Hawaii since 1939, is doing perhaps the most noteworthy job of meeting competition from the mainland. He's just finishing a 1,500-home tract and is now starting on a new development of 2,000 homes to sell for \$16,000 to \$25,000. He will drain a leased marsh, rename part of it Enchanted Lake (74 acres). The project will include a shopping center, 18-hole golf course, a hotel and apartments.

Designed for the climate

Homebuilding in Hawaii is much different from that on the mainland. The mild subtropical climate (avg year-round temperature in Honolulu is 75°) means no heating, no air conditioning, no insulation, no storm windows. A house need be nothing more than something to keep rain off and bugs out.

Nearly all houses therefore are single wall construction—1x8" tongue in groove top quality redwood or fir fixed to posts 8' oc. Most are on slabs. On hillsides or low land, post and pier construction is common.

The typical new Hawaiian home is wideopen, stresses patios, lanais, open gardens within the home, vast glass areas, much

R. Wenkam



NEW CITY for 60,000 persons is planned on Oahu by Industrialist Henry Kaiser (1) and Realtor Builder Fritz Burns, president of Kaiser Communities. They expect to spend \$350 million.



REDWOOD-WALL home is offered for \$14,950 in one of his three tracts by San Francisco Builder Bill Blackfield. Japanese influence on roof lines is characteristic of most tract houses in Hawaii.



SIMPLICITY of Hawaii's single wall construction is illustrated in this \$9,250 three-bedroom, one-bath home built by the Mortgage Co of Hawaii. Architects: Wood, Weed & Kubala Ltd.

Photos: R. Wenkam

screening with louvers to keep out the rain.

Hawaiian tradesmen are expert craftsmen
—if perhaps a little slower than mainland
workers. The carpenters—65 to 70% have
Japanese ancestry—are especially talented.
Says Blackfield: "They have to be good.
When they're putting up those redwood walls
they're doing finish work. They can't hide
mistakes behind sheetrock or sheathing."

Builders had little trouble with the labor supply until the military services started their Capehart programs. With 2,000 units completed, and 4,000 more in the works (all multi-family) the labor force has been thin at times. Wages have gone up and unions have grown stronger (all the Capehart projects, subject to the wage-boosting Davis-Bacon Act, are being built by unionized general contractors). Carpenters in Hawaii now get \$2.85 an hour vs. \$3.37 in California.

Materials monopolies

Because all of Hawaii's basic building materials are shipped in from the mainland,* building materials dealers enjoy a unique prominence in Hawaii. Six firms dominate the business. They maintain huge inventories because of the vagaries of shipping schedules. (Building materials, especially lumber, occasionally are left on the mainland docks, as goods with higher tariffs take priority.)

But the dealers also maintain house plan services. Since there is virtually no construction financing by banks in Hawaii, most builders must depend on credit from suppliers.

Even big mainland builders like Centex and Blackfield buy their materials from these dealers since they are the only local source of construction money for tracts. (But some mainland contractors building Capeharts have by-passed the local dealers, getting both materials and construction loans on the mainland.) Democrats in the territorial legislature have taken note of complaints that materials dealers are "profiteering", contributing to the high cost of building. Witnesses at a territorial House housing committee hearing on the charges have accused the dealers of holding small builders in virtual peonage.

Suppliers deny it. They say that someone must bond the small builders, make construction loans to the big ones. Fred P. Lowrey of Lewers & Cooke protests that his firm made only \$128 on each \$4,000 of sales last year.

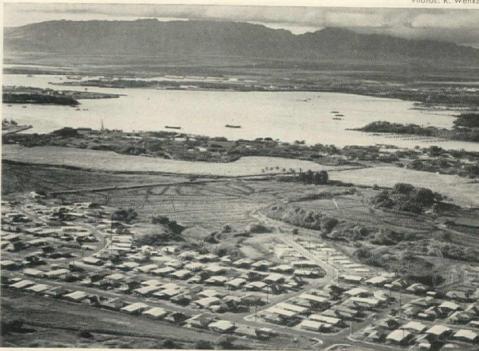
No new legislation seems likely. Nor is any change likely in the traditional building supply system.

The same legislative committee is also tak-

*Only exceptions: a little native hardwood, lava rock used in walls and facing and canex, a fiberboard made of sugar cane stalks.



californian ranch is one of several models in Foster Village (see photo above), priced from \$20,750 to \$24,000 with FHA Sec 213 coop mortgages. Richard N. Dennis is architect.



FOSTER VILLAGE is one of the Hawaiian ventures of Oklahoma City Builder T. Jack Foster. This tract is located on the leeward (southeast) side Oahu island. In the background are sugar cane fields and Pearl harbor.

ing a look at Hawaii's land problem—with much more specific aims.

There are only 387,000 acres on Oahu—a substantial part of it mountains.

Right now 47% of Hawaiian families own their own homes. Owners in fee simple outnumber leasehold owners five-to-one. But in the last five years, leasehold lots coming onto the market have outnumbered fee simple lots two-to-one. Thus pressure is growing to force the big estates to sell more land. When land is sold, current prices are \$25,000 per acre near Honolulu, \$5,000 to \$8,000 per acre for rural land.

Actually, the leasehold deal—much like those of Baltimore, has advantages of home-builders. The builder usually does not lease the land at all. He is simply an intermediary ties up none of his own capital. When he builds a home on a leasehold lot, FHA requires a lease of at least 52 years. Annual ground rent runs from \$125 to \$175.

The builder must put in his own improvements and FHA recognizes these in its valuations. (Up to now, VA has not—the big reason there has been virtually no VA tract building there.)

The lease is renegotiable on expiration though no one is sure yet what kind of second leases will be offered on the thousands of homes built since World War 2.

The Honolulu Chamber of Commerce concludes in a study that policies of the big landholders have been progressive. But Democrats in the territorial House of Representatives have introduced a bill which would require every owner of more than 5,000 acres to declare the value of each parcel each year. This statement would be a legal standing offer to sell at value plus 25%. If the owner refused to sell, then a new agency, the Hawaii Land Development Authority, could condemn.

Theoretically, the owners could put such a high value on their land no one would make an offer. But this value would be used as the assessment base for taxes.

Chances for passage of this bill look slim. And even if enacted a long court fight over its constitutionality would be certain.

Never enough money

Hawaii has had a chronic shortage of mortgage money. Builders hope statehood may help ease it. They particularly hope it will entice the eastern mutual savings banks off the mainland to Hawaii where their known holdings are now zero.

An estimated 40 to 45% of new homes in Hawaii are financed through FHA. Life insurance companies—who can't ignore the

continued on p 110; NEWS continued on p 90



POLYNESIAN and oriental influences are reflected in this three-bedroom, three-bath home designed by Lemmon, Freeth, Haines & Jones and built by Kaneohe Home Builders. Cost: \$22,350.



GARDEN in the living room is one of the subtropical touches in this large custom home designed by Architect Richard N. Dennis and built by M. Yoshimoto, Cost: \$40,000.

CURTIS offers both

Individuality and Quality

plus the O plan to promote them profitably



Introduce prospects to your quality house through a beautiful Curtis entrance. This is one of many designs in both traditional and contemporary styling. How will you profit by the brand-new market for quality homes? House & Home calls it "a market for more new quality houses than all the houses, big or small, that have been built since 1946." Right now, in your locality, your prospects are waiting to be sold houses with more built-in value, more design distinction than they can find in the present market.

Build better with Curtis I-Q products

Curtis can help you capture the quality market—with top-quality wood windows and doors, backed by the famous Curtis Guarantee ...with a line so varied that you can give every one of your houses its own distinctive personality.

Sell successfully with the Curtis I-Q plan

You'll get the most mileage out of Curtis Individuality and Curtis Quality through the Curtis I-Q selling plan. You'll get the tools to prove the extra quality, the extra attention to design refinements that you have added by installing Curtis products. (Some of the high lights are shown on the opposite page.)

Now's the time to build with Individuality and Quality. Now's the time to cash in on the powerful I-Q program. Send the coupon!



Add personality with an attractive Curtis bow window. It complements the design of the exterior, enriches the mood of the interior. Any or all of the casements can be operating sash.





Display quality with a beautiful New Londoner[®] door that provides a guaranteed long life of trouble-free service. Patented hollow-core construction prevents warping, checking, delamination.



Use Curtis louvre folding doors as dividers for living areas, to enclose closets, utility rooms, wardrobes. Here's a style trend many women are aware of and are looking for.

They're yours to build sales—all these tools in the Curtis I-Q plan



NATIONAL ADVERTISING

a big schedule of fullpage, full-color advertising in Better Homes & Gardens, plus fullpage advertisements in New Homes Guide and other consumer building manuals.



CURTIS GUARANTEE CERTIFICATE

a powerful salesmaking tool, as many builders have found!



BUILDER AWARD PLAQUE

certifying you as a quality builder who brings home buyers a high degree of individuality of design with quality materials and workmanship.



IDEA BOOKLET

sketches and ideas for builders to use in staging a unique, new model-home promotion.



SALESMEN'S SALES CLINCHER

a display folder giving facts and figures proving that it pays to buy a quality home, based on a realtor survey.



POINT-OF-SALE DISPLAYS

national ad display easel ... window stickers... signs to identify your model homes... plus literature, ad mats, radio and TV scripts, publicity and other localized sales helps.

See what I-Q can do for you— Mail the coupon today!

CURTIS

Individuality and Quality in doors, windows and FashionWood® cabinets

| Curt | is Con | apanies | Ir | corpora | ted |
|-------|--------|---------|----|---------|-------|
| 200 0 | Curtis | Buildin | g, | Clinton | , Iow |

HH-5-59

I want to know more about the Curtis I-Q plan for more sales and profits.

☐ Please have your representative explain the plan to me.

| Send full | informa | tion. |
|-----------|---------|-------|
|-----------|---------|-------|

| Address | | |
|---------|------|--|

| City | | Gr | |
|------|------------|----|--|
| Cuy | ********** | | |

Wilmington suburbs learn the bitter taste of race friction in housing

The six-room brick house on Bellanca Lane in the pleasant middle-class suburb of Collins Park, just south of Wilmington, Del, had been advertised for sale for three weeks with no takers. At \$13,500 it was priced a little higher than most homes in the area, but not excessively so. In mid-December, Francis A. Levering Jr, an independent real estate man (but not a realtor) and owner of the property, made an important change in his ad: he would sell to Negroes.

Thus started a chain of events that has stirred racial animosities for the better part of two months in the Delaware capital, produced a "house bombing" that police later decided was only a gas stove explosion in the kitchen and given rise to a unique boycott of Negro businessmen (and white businessmen doing business with Negroes) by white householders in the hitherto all-white Collins Park. Parts of the story are seamy. But it is told here, including many details so far unreported except locally, because it sheds light on how and why problems of Negro housing seem in some areas to be growing harder, not easier.

On Feb 10, 1959, Levering's ad was ananswered by Mrs. Lucille Rayfield, 35, of Wilmington. She arranged to look at the house that evening with her husband George, 43.

A \$36,000 gross income

Rayfield has been a laborer in Dupont Co's Deepwater, NJ plant for 23 years. On the side, he operates a two-truck, four-man garbage disposal service for some 2,000 Wilmington-area homes. Last year, he grossed an estimated \$36,000. In February, the family lived in a row house in a slum clearance area, knew they would eventually have to move.

A postwar development of 730 \$11,500-\$12,500 ranch style and two-story brick homes laid out along broad, winding streets, Collins Park was once heavily populated by military and civilian personnel from nearby (and now closed) New Castle County AFB. Recently, the community has shown a lower-than-normal turnover in ownership, now is a half-and-half mixture of blue and white collar families.

Real Estate Man Levering, whose license was lifted for 90 days in 1957 by the Delaware Real Estate Commission on charges arising from a client's 1956 lawsuit, says "about 50%" of Levering Realty Co's business in the past three years has been with Negroes. He purchased the Bellanca Lane house in November for \$11,096, says it is the first house he tried to sell to Negroes in an all-white suburb.

'Don't buy,' say churches

After inspecting the house, the Rayfields agreed to buy it. What they did not know: in December another Negro family interested in the Levering house had been advised by the Wilmington Council of Churches not to take it. Reason: a survey showed violence was likely to erupt in the all-white community. But by moving day, Feb 24, the Rayfields were fully forewarned. Church and social workers had canvassed the community, found it aboil with wild rumors (eg: five Negro families would move into the house), and ill-disposed to heed pleas for brotherhood.

By noon on the 24th, a dozen idlers lounged along Bellanca Lane in front of the house to watch the Rayfields move in. At nightfall, the crowd began to grow. By the time state police responded in force with troopers, plainclothesmen and guard dogs, 300 men, women and children were milling in the road.

Demonstration and disappointment

The demonstration began with a shout: "We don't want a garbage man moving into Collins Park." Somebody set off a firecracker. Somebody else threw a rock. In the house, Mrs Rayfield told newsmen of one neighbor's welcoming visit, sadly said: "We decided to move to Collins Park because we thought it would be a nice place to live. We had no idea anything like this would happen." By



THE RAYFIELD HOUSE, BLASTED & EMPTY Was it an accident?

morning, a half-dozen windows in the house were broken, three men and four boys were under arrest for breach of the peace. Fines: \$10 each.

In the days that followed, most Collins Parkers disclaimed wishing actual harm to the Rayfields. Said one: "We're not against Negroes. We just don't want them living here." Stymied by a state police guard at Bellanca Lane, the demonstration-minded vented their ire in another direction: they picketed Real Estate Man Levering's home in the well-to-do suburb of Carrcroft Crest, parading with abusive signs, shouting at passing motorists. On Saturday night they tried to burn a cross on Levering's lawn but were chased off by troopers. Then violence erupted in Collins Park again. Score: one trooper felled by a thrown brick, five demonstrators arrested.

On Sunday, as ministers throughout the area preached against the disturbances, the Collins Park Civic Assn took up a collection to pay the fines of those arrested. But the authorities had had enough. A magistrate escorted by 35 state troopers toured Collins Park in a sound truck to forbid gatherings of three or more near the Rayfield house.

In the following week, as a few pickets marched and state police stood guard, the Rayfields announced they would not move. But more subtle measures were being planned against them: 400 residents of Collins Park and nearby suburbs, meeting in a local firehouse, agreed to hire a lawyer to seek legal means of evicting the family. More directly, all agreed to join a growing boycott of merchants serving the house or employing Negroes, as well as Rayfield's own garbage service. The demonstrations were over, but a bitter siege of harassment was just beginning:

- Local and state police arrested Rayfield for not showing his new address on auto and truck registrations.
- The Rayfield home suffered assorted assaults including more window-breaking, one mysterious fire at the rear of the house, apparently gasoline-fused.
- Twenty-five whites asked Gov J. Caleb Boggs to intervene (he said he could only act within the law, did nothing).
- A woman appeared with the claim that Rayfield maintained her and two children in a Wilmington row house as his "second family."

While church and social groups tried to ease the tensions, charges and countercharges flew. Among them: that Rayfield had agreed to move for a price, then reneged; that "outside influences" were sparking the trouble (neither was proven). Rayfield himself contributed to the confusion by alternately announcing that he wanted to move, then letting his wife overrule him.

Levering, meanwhile, continued to find pickets at his door despite pleas that he only bowed to the inevitable in selling to the Rayfields. Arrested for throwing a flowerpot at a woman picket, he pleaded self-defense.

At month's end, it was clear that the boycott had failed to develop enough steam to be effective, succeeded only in creating misery for several innocent businessmen. Rayfield's own business, concentrated in other areas, was affected hardly at all.

Bomb or boo-boo?

Then, on April 7, an explosion ripped the kitchen and rear of the Rayfield home, demolishing interior partitions, blowing out doors and windows, causing \$4,000 damage. Headlines screamed the question: was it a bomb? The answer next day, by FBI and state police bomb experts: no, probably a gas explosion in the kitchen stove. Next question: was it an accident, or rigged by someone? The answer to date: nobody knows. Rayfield at first refused to take a lie detector test about his actions on the day of the blast. Later, he agreed. But his blood pressure proved too high for an accurate test.

Since the blast, Rayfield's lawyer, Theophilus Nix has filed and then withdrawn a court petition which, among other things, strongly criticized state police for failure to protect his clients (it also alleged that one night two shots were fired into a window by rowdies); Rayfield, his wife and 14-yearold daughter have gone into seclusion in Wilmington; insurance investigators are still going over the boarded-up house. Nix says his clients will repair it and move back. Whatever happens, it seems likely that the Collins Park affair qualifies as one of the year's seamiest instances of race friction, a sordid bit of mutual ill will that will be a bitter taste in Wilmington's mouth for a long time to come.

Civil rights official lauds Atlanta's 'gentleman's agreement'

An easy-going air of quiet amity pervaded the aldermanic chambers of Atlanta's city hall as the federal civil rights commission took a second polite look at discrimination in housing last month. In contrast to the circusy, floodlit air and sharp testimony of the commission's first hearings in New York (Feb, News), the Southern session was a homey affirmation of "cooperation" in solving Negro housing problems within a segregated framework.

"I often tell my colored citizens," said Atlanta's Mayor William B. Hartsfield in fatherly tones, "that the important thing is the direction in which we're moving and not always the speed." The direction: a "gentleman's agreement" under which a biracial committee has for seven years mediated housing frictions on Atlanta's West Side, prevented blockbusting by designating areas for Negro and white occupancy. The solution arose, said Hartsfield, in a context of strife: Negroes, confined to "second-hand houses in the old section," were blocked by white neighborhood committees in other sections. "It dawned on us that we would have to get both white and Negro committees working together . . . whites were asked to leave an area on the West Side. The cork was taken out of the bottle and a whole section of suburbs opened up for Negroes."

A dozen leading citizens of both races followed Mayor Hartsfield to assure the commission that Atlanta has made real progress in housing Negroes through such cooperation. Nearly all agreed that as a practical matter desegregation was out of the question, could kill programs like public housing, FHA and

But some qualified their approval.

Negro Insurance Man T. M. Alexander said political resistance to opening new areas to Negroes nearly killed FHA Sec 221 relocation housing, and with it Atlanta's urban renewal program. Though praising Atlanta's west side story, he noted: "The unusually large amount of decent housing for Negroes in . . . Atlanta is due to the initiative of the Negro himself . The problems we have solved would not have existed if segregation was not practised in housing."

W. O. DuVall, president of the Atlanta Federal S&L (and vice president of US Savings & Loan League) noted that his institution does "a considerable volume of home financing for nonwhite residents," but said it "as a policy does not invite, indeed does not make, any loans on property located in an area where there is racially mixed housing . . . We do not consider investments in an area of this kind stable and attractive." Another reason: "We do not want . . . to stimulate unrest among or people."

Bluntly out of tune with the general tone of swect reason, Q. V. Williamson, president of the Empire (Negro) Real Estate Board, said: "In other words, the denial of financing has been used as a substitute for the racial restrictive covenant." Williamson asserted cooperative efforts to provide segregated Negro housing falls short of the need. "Due to the very short supply of housing and vacant land ... Negroes have to pay 20% to 30% more . . . than do whites for a similar house in a similar area." Because whites resist living next to Negro areas, devices like green strips or buffer zones have had to be provided (sometimes at the developer's expense) in opening some areas for Negro housing. He predicted that program like urban renewal "will use the funds and facilities of the federal government to establish further residential segregation . . . create more ghettos subject to consequent civic and municipal neglect.'

Oiling the waters, Commission Chairman John Hannah summed up: "What has been described here today is definitely better than what we have in Northern cities." About the "gentleman's agreement" he added: "This is the sensible, practical approach, as opposed perhaps to New York where desegregation occurs in theory, but has not been realized in

Stiffest anti-bias laws yet adopted by two states; three reject them

Colorado and Massachusetts have become the first states to adopt laws forbidding racial discrimination in sale or rental of private housing.

The Colorado law, a sweeping measure that bans discrimination because of "race, creed, color, national origin or sex" in virtually all private housing, passed both houses of the Democrat-controlled legislature by wide margins. It became effective May 1. Only exceptions are individuals selling their own homes or renting quarters to four persons or fewer in a building they occupy themselves. Though no specific penalty is provided, enforcement procedure is set up so that violators may eventually face contempt of court charges. Sex discrimination got into the law when Rep. Lela Gilbert of Denver insisted realtors often shy from renting to women

In Massachusetts, racial discrimination is forbidden in apartment houses of three or more units and developments of 10 or more contiguous units. The law expands a 1957 measure prohibiting race discrimination in publicly assisted or insured housing. No penalty is provided. But conciliation by the State Commission Against Discrimination is expected to produce results.

The measures are among 12 pending or considered by states this year. Of the balance, three more-in Oregon, Connecticut and California-are given better than even chances of passage. Four others face active or passive opposition. Three have been defeated. The scoreboard:

• Connecticut: two measures-one to prohibit bias in developments or apartments of five or more units, another to allow the state antibias agency to start disciplinary action on its own—
"probably will pass" say sponsors, in spite of apparent apathy by Democratic majority leaders. The first bill passed the House April 21.

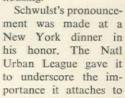
- California: passage by a wide margin in the Assembly gives sponsors hope that their bill prohibiting bias in publicly assisted or insured housing, will do as well in the Senate.
- Oregon: of five civil rights bills, the one with the best chance of passage forbids discrimination in sale or rental of any housing.
- Rhode Island: introduced with strong outside support and bipartisan sponsorship, a bill to ban segregation in any housing, however financed, has run into strong opposition, is drawing more attention than any other item before the legislators. They tried to shunt the matter to a referendum, were shouted down. Passage seems possible, but the measures are more likely to die quietly in committee.
- Pennsylvania: stuck in House committee, if the anti-bias bill gets out, chances in the Republican-controlled Senate are considered nil.
- Michigan: a measure to bring housing under the state's FEPC is expected to die in committee, as it did last year.
- · Minnesota: a bill limited to publicly financed and assisted housing is stalled in committees of
- New York: over protests of its own anti-bias enforcement agency, the legislature defeated a measure to extend present anti-bias laws to all apartments, plus developments of 10 or more
- · Washington: a measure covering private housing died in Senate committee after passing the House, 83 to 6.
- New Mexico: a bill covering publicly-assisted housing passed the House but was tabled in-definitely by the Senate.

Biggest savings bank boss calls for integration now

One of the nation's major mortgage lenders has demanded that the federal government stop letting FHA and VA mortgage-backing be used by builders who sell only to white buyers.

Says President Earl Schwulst of Bowery Savings Bank of New York City (the nation's largest): "If our government condones dis-

> criminatory practices in the bestowal of its housing benefits, it is in effect defending the practice of discrimination by all others operating in the field of housing."





News), of which Schwulst was chairman. The report accused the building industry of helping to thwart the nation's efforts to overcome race bias in housing. Schwulst charged that "public assistance has promoted segregation" in housing, with

the result that there is more housing segregation today than ever. He scoffed at white communities' fears of being inundated by Negro home buyers if they let any in at all. Said he: "If the entire housing inventory, or even a substantial part of it were made available to those relatively few Negroes who would afford it and who might avail themselves of it, the number of Negroes moving into white communities would be so diffused . . . as to have no effect upon any particular area." NEWS continued on p 94





"Full insulation helps us close even the toughest sale"

"We put \$500 more value in our homes," say Suburban Contractors Inc., Tonawanda, N.Y., and it doesn't cost our customer a cent. By putting full insulation in his house, we save our customer about \$25 a year on heat bills alone. And over 20 years that adds up to \$500 in savings. This extra cash can provide special features for our customer—makes the house more attractive for him—and full insulation

for future air conditioning makes a perfect closer.
"Naturally our insulation is Gold Bond: 3" regular

in the walls and Full Thick Twinsulation in the cap."

Full insulation can help you offer your customers what they want today—comfort and savings.* Ask your Gold Bond® salesman to show you our complete line of insulation products. For complete sales story, write Dept. HH-59.

NATIONAL GYPSUM COMPANY, BUFFALO 13, N. Y.

^{*}Full insulation specifications will vary with geographic location.



wilders: Suburban Contractors Inc., Tonawanda, N. Y.

Gold Bond
BUILDING PRODUCTS

a step ahead of tomorrow

New weapon in the war against slums

Maryland Real Estate Commission suspends license of Baltimore firm for racial blockbusting as city ponders law to make blockbusting a crime

The Maryland Real Estate Commission, in a primly-phrased decision that doesn't even mention the word, has just given slum fighters a new, sharp tool against what many see as the most virulent threat to sound city neighborhoods—the practice of blockbusting.*

The decision: suspending the license of Manning-Shaw Realty Co, a Baltimore firm whose business runs heavily to trading in panic-sale homes in transitional neighborhoods, for three months. The reason: "a continued and flagrant course of misrepresentation . . . misleading and untruthful advertising . . . bad faith and improper dealings" in the purported sale of a house in a formerly all-white block, to a Negro.

The decision is hailed as little short of epochal by slum-fighters in Baltimore, where block-busting is such a threat that a nonprofit citizens' group, Baltimore Neighborhoods Inc, was formed in March to fight it. The reason: constant pressure of a mushrooming Negro population (11,000 a year, from 227,000 in 1950 to 310,000 in 1959) without enough housing, makes blight an almost inevitable aftermath of a neighborhood's shift in racial population. Until now the profit potential in blockbusting has kept enough dealers active, in spite of criticism, to foil efforts to stop it. One problem: opponents of blockbusting are often thought to be anti-Negro, an untruth demonstrated by the biracial makeup of its critics. Says Reginald Johnson, Negro director of housing activities for the National Urban League: "Any real estate man who is active in blockbusting is guilty of an unethical act. I don't care whether he is a member of NAREB or any other group." Moreover, blockbusting itself, though decried by Negroes as well as whites as a poor way of uncorking the Negro ghetto, is not illegal. But the Baltimore decision makes it clear that public opinion is now starting to swing state agencies over to the viewpoint that blockbusting is evil. From there, it is no great trick to find its workings violate realty licensing rules. So the case has national implications.

New realty rules

Says ACTION President James W. Rouse, Baltimore mortgage banker and national leader in the fight against slums: "The Manning-Shaw case is going to reverberate across the country because here in Baltimore, for the first time, it has been proven that the fear clutching at the home owner, and the blight force mocking the urban planner—blockbusting—can be stopped. This is the first time . . . that private citizens have . . . won the ruling

*As defined by the Greater Baltimore Committee: "the deliberate creation or exploitation . . . of fear, ignorance, or panic, designed to induce a rapid change of a block's population from white to colored." In practice blockbusting means: planting a Negro family in an all-white block, buying fast as scared white home owners, rushing to get out, sell at far less than their houses are worth, while Negroes eager for housing flock to pay more than they are worth, often overcrowd them with roomers to meet the financial burden. Thus slums grow.

of an official body . . . that some rules must be observed in offering real estate for sale."

What was illegal in the Manning-Shaw case? According to the Commission findings, a bona fide sale simply did not take place, although it was made to appear so. The decision, capping seven months of hearings, 794 pages of testimony, came as a surprise. The Commission had already thrown out three counts against the partnership of white Manuel M. Bernstein and Negro Warren S. Shaw. Among them was a charge that Bernstein falsified his broker's license application by failing to report a 1950 federal court conviction for defrauding VA of \$15,000. On this the commission declined to take action "at this time."

It did not, however, throw out the charge by residents of Baltimore's Ashburton neighborhood that the partners had placed a "sold" sign, in "gaudy, luminous-type orange letters" on the house at 3800 Grantley Road to panic them into selling (because of the firm's wide reputation for dealing with Negroes)—even though the house was not sold.

The case in detail

Like most houses on quiet, residential Grantley, number 3800 is a 30-year-old detached house, built sturdily for upper-middle class occupancy. It enjoys the added amenity of a corner lot. On May 20, 1958, the house was bought by Eutaw Realty Co, a Manning-Shaw firm, from Edgar Foster for \$18,000. In June it was "sold" to Joseph C. Carter, Negro, 58, on a conditional contract of sale. He was to pay \$40 a week on a mortgage of \$11,500, plus \$120 yearly ground rent. The question: was Carter really buying the house, or was he a front man planted as an opening wedge in the neighborhood? The askers: Physician Allen Kleiman and Druggist Bernard Cherry, who live across the street and next door respectively. Their counsel, Attorney Melvin J. Sykes, 35, established early that race bias was not their motive. Both testified that they are willing to live in an integrated neighborhood-but not as the only white residents.

On the stand, Carter testified that he was indeed a real buyer. He swore he was an auto mechanic, had four children and with his wife a combined income of \$100 a week. But Attorney Sykes produced a Negro tavern owner to testify that in August Manning-Shaw had told him the house was still for sale, sign or no sign. This small conflict in testimony soon widened into a breach that upset the customary failure of such hearings to pry enough facts out of Negro householders to show realty dealers in a bad light.

The next day, Carter's wife sued her husband for non-support.

In the trial of this case it developed that Carter was not a mechanic, but a janitor and messenger in an auto agency, earning \$54 a week. Policewoman Violet Hill Whyte testified she found Mrs Carter and her nine children huddled around the kitchen range at

3800 Grantley Road, the children showing "extreme" signs of hunger and insufficiently clothed. The rest of the house was unfurnished and unheated. Sykes, looking further, found that Carter had recently (it was now February) contracted to buy another house in a changing neighborhood, was in the process of losing a third through foreclosure.

Brought back before the Real Estate Commission, Carter reluctantly admitted to "17 head of children" (nine by his present wife), was now somewhat vague about how long it would take him to pay off his mortgage. Thereupon Manning-Shaw's attorneys introduced photos of the family entertaining a friend in the well-furnished, cheerful living room and dining room of the house only the Sunday before. Sykes examined them, identified the "friend" correctly as the salesman who had sold the house to Carter (and who testified later that he had never received a commission on the "sale"). Finally, Sykes demonstrated that Manning-Shaw and the mortgage lender had investigated Carter, could not have been unaware of his minuszero credit rating.

Some surprising sidelights:

- Realtor Mal Sherman, a vice president of the Maryland chapter, and a nationally known builder, took the stand to defend Manning-Shaw's good character, was shown to have participated in some deals as the white purchaser of property resold to Manning-Shaw and again resold to Negroes.
- Of 99 recorded Manning-Shaw deals in the past three years, 45 were resales the same day; average profit was \$2,740; in about half the deals, because of speed and because they had a mortgage ready (often from highly-regarded S&Ls), Manning-Shaw had to use no money at all.

Despite the legal breakthrough he has scored Lawyer Sykes feels little glow of victory. A few days before the decision Manning-Shaw advertised the house at 3805 Grantley Road for sale, indicating the block is doomed to panic selling anyhow. Moreover, Manning-Shaw seems unlikely to be forced out of business by a mere three months suspension.

But the principle involved is growing. Baltimore's city council now has before it an ordinance which prohibits blockbusting by name.

Remodeled model house big hit in Fairfield, Conn.

A test to see if the model home idea can be used to merchandise home remodeling as well as new houses is paying off handsomely in Fairfield, Conn. Fairfield Lumber Co's "remodeled model", undertaken in cooperation with Life magazine (April News) drew 7,000 visitors in its first day. The crowd forced police to close roads to the site, turn away another 13,000 would-be visitors. Second week-end score: 1,250 visitors a day. Result: 40 solid remodeling prospects in the first week, more coming in.

Hailed as "an entirely new concept in marketing home modernization" by FHA Asst Commissioner (in charge of Title I repair loans) Roy Cooke, the house is the first in a series planned by LIFE in cooperation with local sponsors across the country. Next: Mt Clemens (Mich) Lumber Co's model, scheduled to open during the first week in June.

FRANK LLOYD WRIGHT

(1869 - 1959)

"After death we experience true freedom. Without that, we would not be true individuals. The sense of continuity is the soul of organic architecture, and it is equally essential to the individual."—FRANK LLOYD WRIGHT.

Mutely, with a barely audible sigh, Frank Lloyd Wright, artist, architect and individualist, found true freedom.

He died April 9 at the age of 89, just five days after he first fell ill at his winter home, Taliesin West, near Phoenix.

Almost to the hour of his death Wright seemed to be recovering from an operation to remove an intestinal obstruction. On April 12 he was buried in a small cemetery across the Wisconsin River from Spring Green, Wis., locale of Taliesin East.

Behind him this amazing genius, the greatest architect of the 20th century, left an amazing legacy. He created modern architecture. Most of the modern buildings of the past 40 years reflect in some measure the ideas he introduced.

He originated the open plan, joining of kitchen and living room by means of workspace. He pioneered opening the interior of homes to outside light and vistas by glass walls and corners—the first indoor-outdoor integration. He started low pitched roofs and big overhangs, built-in furniture to yield more space; radiant floor heating and carports (a name he originated).

Yet Wright, the sharp-tongued architectural critic, despised nearly all the millions of socalled modern homes which borrowed his basic ideas without his taste and style.

He considered the modern suburb "a sanitary slum," and most houses in them—particularly tract houses—nothing but boxes. "Except for the car, telephone, television, the bathtub, the kitchen and the water closet," he once wrote, "there is nothing natural to a free American humanity in any of these houses."

Destroy the boxes

Destruction of boxes on narrow lots (anything less than an acre) was one of his great drives—and he had many. He railed against anything he saw which displeased him, reserving his most caustic barbs for the city.

"The city is done, finished," he cried. "What is this impulse to impinge upon everybody, your elbows in somebody's ribs and standing on somebody's feet."

Wherever he went, he shook up the local gentry — particularly architects. He swept through city after city in his tailored suit, flowing tie, porkpie hat only partly covering his long mane of white hair, sniffed at what he saw. Then turning to local newsmen, his eyes twinkling, he would give his impression. Examples:

- "Miamians are living in houses pigs would be ashamed to live in."
- "It [Indianapolis] is so depressing. I can't imagine how you got me here."
- · "London interests me as a museum piece

but as a modern city it is not fit for human habitation."

"This city [San Francisco] is chiefly characterized by a kind of shanty building, a
peculiar type you seem to build here—thin,
cheap looking wooden things that look temporary."

Wright would occasionally admit he was not all the old curmudgeon he sounded. He told one interviewer: "When I say all those things, there's always a wrinkle in the corner of my eyes. That never gets in the paper. The words do."

But his words throughout the world *did* make people think—to question, to wonder, to hope and sometimes to expect something better from their architects and builders.

'Form is function'

Wright would have had a secure place in architectural history had he died 50 years ago. His career spanned almost three generations and his genius was established from the beginning.

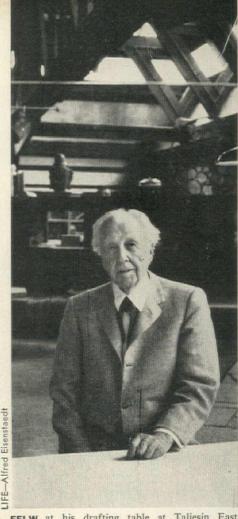
He was born in Wisconsin, son of a Unitarian minister and a strong-willed Welsh mother. His mother decided he should be an architect before he was out of the cradle. Wright studied engineering at the University of Wisconsin three years, decided he could learn no more there. He went to Chicago and joined the brilliant skyscraper architect, Louis Sullivan. It was Sullivan who said form follows function—a radical new theory that Wright first accepted, then rejected with the argument: "Form is function."

He spent six years with Sullivan, then opened his own practice in Oak Park designing the first modern homes—prairie houses embodying "organic architecture"—a phrase he coined. The homes caused a sensation—long low buildings with gently pitched roofs, houses nestling to the earth as if they belonged to it.

They embodied Wright's concept of space—enclosing it as a precious goal in itself for the benefit of the life within.

When one of his first houses was under construction Wright wondered what people were saying about it. He crawled into the

continued on p 98



FFLW at his drafting table at Taliesin East. The section of building behind him was built by his apprentices with local materials in 1934.

Hedrich Blessing



FALLING WATER, Wright's most famous house, was designed for Edgar Jonas Kaufman at Bear Run, Pa; cost \$90,000 in 1936.

Hedrich Blessing



ROBIE HOUSE in Chicago was due to be razed a year ago, was saved when Bill Zeckendorf bought it to assure its preservatoin.



Barney Loeb and Quinn Hogan, partners in L & H Builders, Inc., will build over 600 manufactured homes this year. The firm has building developments in seven locations in the Chicago area.



why

Loeb and Hogan (builders of 600 homes a year) are sold on

The "Overhead Door" Plan

Because Illinois builders, Loeb and Hogan, figure their construction costs with sharp pencils, they're sold on The "Overhead Door" Distributor Plan for installation of garage doors.

With every National Homes purchase, these Chicagoarea builders receive The Original "Overhead Door" selected by the manufacturer for that home model. As soon as the home is ready for garage door installation, the door is promptly delivered by the local "Overhead Door" distributor. And this distributor's factory-trained servicemen install the door in less time than the builder's own crew would require.

Under this plan, Loeb and Hogan get a famous-name,

top-quality door, and fast, professional installation that saves time and leaves their carpenters free for other work. There is never a maintenance problem because every job is warranted.

Another advantage of The "OVERHEAD DOOR" Plan: there is no extra financing of the garage door, because every door is included in the home package.

Home manufacturers like this plan, too, because it is popular with builders, and because the manufacturer carries no garage door inventory.

To learn about the many advantages offered to you by The "Overhead Door" Plan, look for "Overhead Door" in the White Pages, or mail the coupon, today.

The "Overhead Door" made only by

OVERHEAD DOOR CORPORATION

Originator and perfecter of upward-acting sectional doors

GENERAL HEADQUARTERS:

Hartford City, Indiana

MANUFACTURING DISTRIBUTORS: Cortland, N.Y. • Hillside, N. J.

Lewistown, Pa. • Marion, Ohio Nashua, N. H.

MANUFACTURING DIVISIONS:

Dallas, Texas • Portland, Ore.

In Canada: Oakville, Ontario



FOR 38 YEARS more people have bought The "OVERHEAD DOOR" than any other brand.

SOLD ONLY BY the Overhead Door Company of your city.

Overhead Door Corporation Dept. HH-5 Hartford City, Indiana

Please send more information about The Original "OVERHEAD DOOR" and installation economies by Overhead Door distributors.

Name____

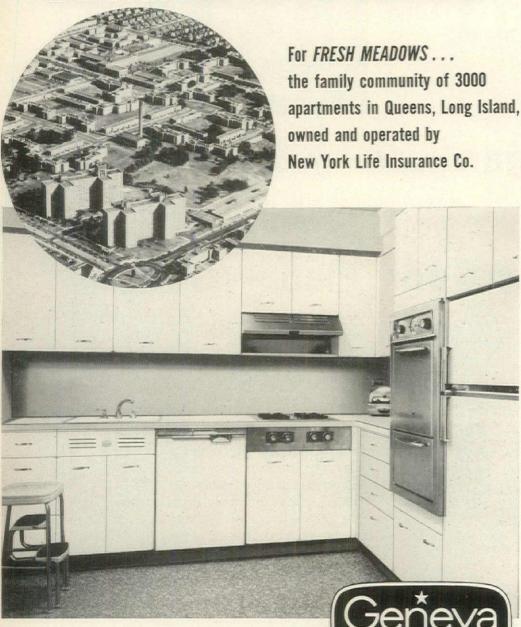
Company

Address____

City______State____

@ 1959, O. D. C.

GENEVA KITCHENS



GREATER DURABILITY, EASE OF INSTALLATION, WIDER CABINET SELECTION . . . these are the reasons GENEVA cabinets were selected to provide the ultimate in practical and gracious kitchen living in Fresh Meadows. In a two year modernization program for two and three story buildings, 3000 GENEVA KITCHENS will be installed in this famed project.

From architect to installation crew, to tenant, GENEVA steel cabinets are found easier to work with, more fully satisfying, permanently more charming.

ask about all-new

Impasto ®

GENEVA'S exclusive textured cabinet finish of etch-line patterned steel. It has the strength of Gibraltar . . . new warmth in appearance . . . superior stain and mar resistance.



Look in the yellow pages for the GENEVA "Kitchen Distributor" nearest you.

GENEVA MODERN KITCHENS

Division of Acme Steel Company
Dept. HH5-59 Geneva, Illinois

| end | Complete | Information | on the | Geneva | cabinet | line. |
|-----|----------|-------------|--------|--------|---------|-------|
| 7 4 | -6-144 | Duilden | | | | |

County Zone State

News

upper part of the house one Sunday, remained silent as a couple wandered in to look. Said one: "Have you seen the man who built this. God he looks as if he had pain." Remarked the other: "They say this costs \$30,000. I can't see it."

Said Wright in later years: "I learned my lesson. I never listened like that again. It was a long time before my fortunes as an architect recovered from those reactions."

And it was a long time before the reactions of most of his countrymen changed.

Even the magnificent Robie house in Chicago-the House of the Century-did not win him acceptance in his own land. To millions it was only the curious creation of a curiously strange man. Consequently the design of homes for the financial and cultural elite became the foundation of his careerand fame.

But if he was without honor at home, he was acclaimed in Europe following publication of his work in Germany in 1910.

Private lives

In his rise to architectural prominence he acquired notoriety as well. He left his wife and six children in 1909, built the first Taliesin (meaning "shining brow" in Welsh) in Wisconsin for his mistress, Mamah Cheney, wife of a client. In 1914 she, her two children and four friends were all brutally slain by a crazed servant who burned Taliesin as well. Wright was away at the time.

Wright rebuilt Taliesin (the first of two times) and married again-to sculptress Miriam Noel. The marriage lasted three years. He was later jailed-briefly-on Mann Act charges for crossing a state line with his third wife-to-be - Montenegrin Dancer Olgivanna Lazovich. She is now his widow.

Wright was bankrupt in 1927, was helped out by wealthy friends who had him incorporate himself, gave him \$50,000 capital. Two years later he set up the Taliesin fellowship, giving young men-some already architects-a chance to work with him and learn.

He later built the breathtaking Taliesin West, shuttled his school and his work between Arizona and Wisconsin with the seasons.

New fame at Bear Run

In the mid 30's Wright emerged from what had seemed like the forgotten past to achieve new fame with a new generation. Two buildings propelled him into the prominence again: the S. C. Johnson Co office and factory in Racine and the home for Edgar Jonas Kaufman at Bear Run, Pa.

Perhaps it was the years without recognition that caused Wright to heap scorn on nearly all his contemporaries-including almost every prominent architect in the world.

He once called the AIA the "Arbitrary Institute of Appearances," added: "Architecture is coming along fine except for the AIA. The only thing wrong with architecture is architects."

Despite this and though he was never a member, AIA gave him its Gold Medal in 1949 along with its highest praise. Wright later remarked: "My tragedy is that I like these fellows but I don't like what they do."

Mrs. Wright plans to continue operating Taliesin, has invited Wright's apprentices to stay. There are 86 projects underway, 26 of them under construction-enough work to keep the staff busy for two years.

Just before his death Wright also completed plans for the third in a series of prefabs. Priced from \$17,000 to \$18,000, it will be built by Madison Prefabber Marshall Erdman. NEWS continued on p 103

Baltimore woos URA Boss Steiner as major shakeup of agency looms

Urban Renewal Commissioner Richard L. Steiner is being asked to come back to his hometown of Baltimore to head its trouble-wracked urban renewal and housing agency.

He would succeed Oliver Winston, 42, long

one of the nation's prominent figures in public housing. Winston has resigned his \$18,-000-a-year job at the request of Chairman Walter Sondheim.

In mid-April Steiner was unsure what his decision would be. But he could hardly be unaware that HHFAdministrator Norman Mason has been dropping hints that he might ask Con-



STEINER

gress to combine the Urban Renewal Administration and the Public Housing Administration, in which case either Steiner or PHA Commissioner Charles Slusser would lose rank.

The fortunes of politics complicate Steiner's decision. If the Democrats win the Presidency in 1960, he may well be ousted. But in Baltimore, Mayor Thomas D'Alesandro has just been defeated in the Democratic primary, which assures a new city administration. And the mayor, not the renewal agency, appoints the renewal director.

Steiner, 45, was director of the old Baltimore Redevelopment Commission—predecessor of the urban renewal agency—from 1946 to 1954. Then he left to become deputy redevelopment chief of HHFA in Washington. After James W. Follin quit in 1956, Steiner was acting URA commissioner for eight months before he was given the full title.

In his 2½ years at the helm Steiner has won a reputation as an able urban renewal technician who can take the long range view of problems as well.

The shakeup in Baltimore followed a barrage of newspaper criticism alleging intramural feuds among renewal officials and slowdowns in the agency's sweeping 20-year program to make renewal work in Baltimore. (Oct. '56, News).

Winston, a former PHA regional director and a founder of NAHRO (president in 195354) had been Baltimore's housing authority director for eight years when he was appointed to coordinate the efforts of 26 public and private agencies that were spoiling the city's renewal broth with diverse and undirected efforts. Formation of URHA under a city ordinance followed in less than a year, was widely applauded.

Winston's resignation was preceded by only a few weeks by the resignation of the deputy, Ellis Ash. He becomes director of Doxiadis Associates Inc of Washington, DC, a newlyestablished American arm of the far-flung consultant planning, architectural and engineering operations of Constantine Doxiadis, former Greek minister of reconstruction. Doxiadis visited the US under state department sponsorship last fall to advise city planners in Norfolk, Baltimore, Detroit, and Washington, now will offer his services more widely. Ash was director of management for Baltimore's housing authority nearly 10 years before joining Winston. Senior consultant of the new planning service is Jacob Crane. past president of the American Institute of Planners, who held administrative posts with various federal housing agencies from 1938-54, has been consultant to the UN, Great Britain, and most recently the parent Doxiadis office in Greece.

California realty investor tells how he made a million

Dark horse on the best-seller list: California Real Estate Man William Nickerson, whose do-it-yourself manual, "How I Turned \$1,000 Into \$1 Million in Real Estate—In My Spare Time" is in its second printing of 55,000 copies (first was 10,000) bringing national fame to its heretofore little-known author.

Nickerson, who spent five years writing his book, is a former telephone company employe who retired at 42 to look at his real estate activities. In print, he bubbles over with optimism about them. Samples: "Expecting wealth from savings is an impossible dream . . . Millionaires, like banks, are made of borrowed money . . . Your chances are better than 1,600 to 1 compared to going into business." Sample chapter headings: "Grow Rich on Borrowed Money"; "How to Negotiate a Bargain"; "An Ironclad Lease."

Oregon-born, Nickerson was self-supporting at 12, now lives in Alamo, near San Francisco, deals mainly in Oakland, Stockton, Sacramento, Santa Cruz. His specialty: taking over sound properties in need of repair but in growing areas, fixing them up to increase their yield, and letting the profits roll in. Says one real estate broker who alone has sold Nickerson \$1 million in real estate: "He's a very unusual man and a very brilliant man. And he certainly knows a piece of property when he sees it."

An experimental glass-skinned house will be built at Pennsylvania State University by A. William Hajjar, professor of architecture. He expects it will eliminate paint, waterproofing and other maintenance problems, but more important, it may be a breakthrough on solar heating. Hajjar plans to have a 2' or 3' air space between his outer skin of glass and the inner walls as a climate controller.

Minto succeeds Edwards as FHA operations boss

When Daniel G. Minto, 51, a retired auto dealer with no previous experience in housing or government, took over last August as director of FHA's San Francisco office, people shook their heads glumly. In spite of

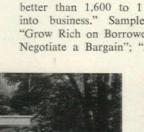
its importance (second largest in the nation), the office had been plagued with a succession of political hacks in the top job. Morale was at a low ebb, efficiency ditto. This seemed to be more of the same.



tant commissioner for operations (April, News), it is with universal good wishes—tempered only by regret at his loss—from his associates in San Francisco. For Minto had wasted no time in making it clear that high Republican connections were not his only qualifications for the job.

"He caught on quickly and never stopped learning," says one banker. When Minto took over, the office's woes were complicated

continued on p 106





AIA picks its award winning homes of the year

Only three homes were among the winners in AIA's annual award competition. All three received awards of merit. Seven other buildings also won merit awards. Five were chosen for first honors. The residential winners:

• Home designed by New York architect Ulrich Franzen for Mr and Mrs Richard Beattie in Rye, N Y (left). Builder was August Nelson.

 Home designed by George T Rockrise AIA of San Francisco for Mr and Mrs Dunbar Carpenter in Medford, Ore (right). Builder was Dunbar Carpenter.

· Home designed for his own family by

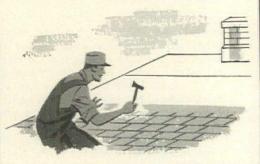
John Black Lee AIA in New Canaan, Conn. (not shown). Builder was Ernest R. Rau.

Contest judges were: Walter Bogner, Harvard school of architecture, chairman; Walter Gordon, University of Oregon school of architecture, and Architects Albert S. Goleman, Vincent G. Kling and Harry Weese.

A FAMOUS LINE OF QUALITY BUILDING PRODUCTS...



"CEILINGS BY CELOTEX." Sound quieting and decorative . . . today's mark of a modern home. New fissured or perforated Hush-Tone† Tile and printed Designer line, offer wide choice.



TRIPLE-SEALED* ASPHALT SHINGLES. Colorharmonized. Complete line includes strip shingles in standard weight, new square-tab wind-resistant Celo-Lok* and self-sealing Celo-Seal† shingles.



CELO-ROK* PLASTERS & LATH. Base and finishcoat gypsum plasters, "tailor-made" to assure proper setting qualities for your area. Plain, perforated, foil-backed or long-length lath.

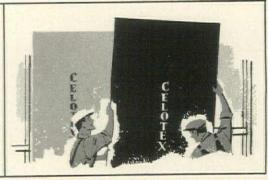
It pays to build



MINERAL WOOL BLANKETS. Preferred ceiling and wall insulation. Spun-Process manufactured for lighter weight, extra resiliency. Built-in vapor barrier. Reflective and regular types. Full, medium and utility thicknesses.

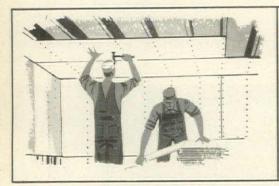


INSULATING ROOF SLABS. Roof deck, insulation, built-in vapor barrier, finished ceiling, plus continuous vapor seal at all joints. (Or without vapor seal and barrier.) Ideal for exposed-beam construction.



INSULATING SHEATHING. Industry's most complete line, including new STRONG-WALL† for direct nailing of shingles . . . plus famous Life-of-Building Guarantee. A type for every purpose, every budget.

with famous products



CELO-ROK* GYPSUM WALLBOARDS. Highpurity gypsum deposits plus rigid quality control in manufacture insure uniformly superior wallboard products. Also a complete line of joint finishing products.



HARDBOARD SIDINGS. Beautiful, durable, easy to paint. Channel-Lap* applies with aluminum channels; factory primed; invisibly fastened; self-ventilating. Verti-Groove* offers vertical plank effect. Texbord* striated surface panels or shingles.



FLEXCELL* EXPANSION JOINT. Asphalt impregnated fiber board. Non-extruding, resilient. Pre-cut strips. For use wherever concrete meets concrete. Also for perimeter insulation of slabs at grade; sill sealer; plate sealer. Variety of thicknesses.

"by CELOTEX"

TTRADE MARK
*REG. U.S. PAT. OFF.

pre-sold through over a third of a century of national advertising!



Top award-winning display available to builders! New "Brand Names Display" for model homes (above) won NAHB "Ideas for Builders" contest. Available to builders featuring products by Celotex and other famous brands. For further information, write The Celotex Corporation.

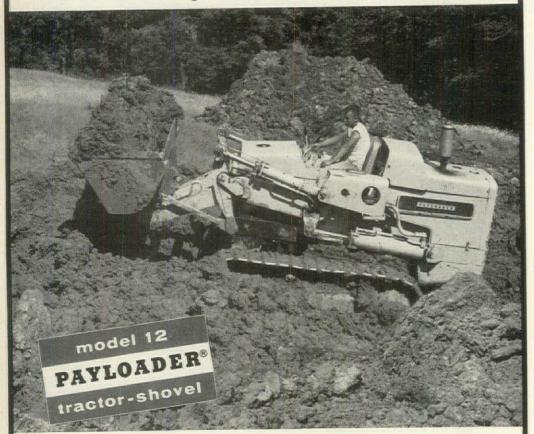
Your prospects have confidence in the brand name CELOTEX. It says "quality built." Speeds decision. Helps sell homes. Put the power of this famousname line of products to work . . . for you . . . now!



BUILDING PRODUCTS

For samples . . . helpful literature . . . construction data . . . contact your Celotex representative or dealer . . . or write direct to THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS

Beats anything on tracks



for basement excavating

"Cuts digging time more than 1/3", says D. L. Johnson of Pearson Construction Company, large-scale home builder of Joliet, Illinois. The operator says, "I do the same work in 5 hours that it took me 8 before. I can dig a 300-yard basement with half the effort."

"Balanced so well you can go out of the basement frontwards or backwards with ease", says contractor John Guildenzoph of Manhattan, Ill. "For finish basements or close grading, you can see perfect."

"Operates as easily as an automobile", says R. L. Shepherd, Muscatine, Iowa excavating and grading contractor. "A three-year old child could handle the power-shift and power-steer with ease. Although the Model 12 is rated 13/4 yds., the normal bucket load is always 2-yards plus. We've loaded out 8-9 cu. yd. dump trucks from solid bank in three passes, or 2 minutes per truck."

"Works where others can't", says John Beniger, Sheboygan, Wis., "the weight is spread over the entire track length - not concentrated on the front. This allows us to work on soft, spongy ground where others can't. Operating the Model 12 is a cinch and you're not all worn out at the end of the day. It's the best money-maker I ever owned".

THE COMPLETE STORY of the Model 12's design, its superior performance and its greater profit potential for any excavating or grading job is fully explained in an attractive 8-page bulletin. Write for your copy today.



| HE FRANK G. HOUGH C | 0. | Name |
|---------------------|----|------|
| 20 Europeide Avenue | | |

| THE FRANK G. HOUGH CO. | Name | |
|---------------------------------|---------|-------|
| 839 Sunnyside Avenue | Title | |
| Libertyville, Illinois | Company | |
| Send bulletin and other data on | Street | |
| Model 12 PAYLOADER. | City | State |
| | | 5-C-2 |

by a crisis: just as applications reached a peak rebound from the 1957 tight money spell, Washington demanded budget cutbacks and staff layoffs. Processing time ran into months despite late-hours by the staff. Minto's reaction was quick and direct: he picked up the phone, told Washington why he couldn't comply. Result: scheduled layoffs of 80 employees were postponed while the backlog was reduced; 30 more were reprieved en-

"He gave us our first positive direction in years," says one staffer. "His forte is good management and public relations. He has considerable intuition unsullied by previous government experience. He didn't know there were a lot of things he couldn't do, so he did them."

By the time Minto was in office a few months, his staff of 230 was handling nearly twice as many applications in one-third the time that a staff of 200 had a year earlier. On a typical day last month, the office approved 411 applications, had 3,044 in the works. But Minto did more than merely increase volume. He:

- Restored intraoffice communications through effective, lively staff meetings.
- Reorganized the underwriting staff, then kept hands off the complications of the insurance program, leaving details to the professionals.
- · Boosted the CAP program through personal talks to the people who would be using it. "The talks he gave were probably the same as he gave to the Kiwanis," says an associate. "But they exuded confidence and that's just what was needed. He has the psychology that everything's going up, nothing is going down. And, you know, that's the way it turns out."

Home Manufacturers elect Inland's Kurtz president

The new president of Home Manufacturers Assn (prefabbers), Eugene E. Kurtz, 44, president of Inland Homes Corp, foresees a banner year" for prefabbers, including a 112% sales jump for his own firm.

A bespectacled and avowed optimist, Kurtz notes he got into prefabrication just as illfated Lustron Corp was folding, "so you see it takes a lot to discourage me."

Son of a real estate man in Columbia, Mo, "Gene" Kurtz got out of high school in

the depths of the depression, first went to work for a Cleveland brewing company. He didn't get into building until 1940, when he ioined Perma Products Co, rose to executive vice president & general manager. In 1949 he resigned to become vice president and general manager of Manufacturing Corp. Toledo. Three years

later, he and Roger Thyer organized Inland Homes at Piqua, Ohio.

The most important component in the package his industry offers builders is price stability, Kurtz contends. "On too many oc-casions," he says, "the conventional builder has found that rapidly increasing prices have either greatly reduced his profits or, in some instances, wiped them out entirely. It requires many months to plan, develop and complete

a subdivision, and price stability permits the builder-dealer of manufactured homes to plan ahead with maximum security." Kurtz talks down what he calls the "popular misconception" that home manufacturers are in competition with local home builders. "In actual practice we are no more than a supplier of components and services to home builders, and home builders are our only customers," he says.

BRI picks a businessman as new executive director

A businessman rather than a technical expert has finally been selected to succeed William H. Scheick as executive director of Building Research Institute.

He is Milton C. Coon Jr, who has been

in charge of BRI business administration since Sept '57. He is former membership & promotion director of Tile Contractors Assn of America. His appointment completes a move by the National Academy of Sciences-National Research Council, parent bodies of industry-supported BRI, to separate its function from the Building Re-



COON

search Advisory Board. Robert M. Dillon was appointed recently as executive director of the 30-man board, which provides impartial advisory services to government and industry on contract basis.

Scheick, organizer of the University of Illinois Small Homes Council and a noted force in building research, formerly headed both bodies jointly. He left last year to become research boss of TECO. His top technical aide at BRI, Architect Harold Horowitz, remains as assistant director for technical programs.

HONORED: Builder Charles Ervin, 35, of Charlotte, NC, has been named his state's outstanding young businessman of '58 by the University of North Carolina's Delta Sigma Pi business fraternity. Ervin, who graduated from construction school and began work as a brick mason 10 years ago, now heads his own firm, one of the nation's largest builders of custom homes (708 units last year in two counties).

Architect Edward Larrabee Barnes, 44, is this year's winner of the \$1,000 Brunner Memorial Prize in Architecture of the National Institute of Arts & Letters. Chicago-born, trained Harvard-schooled, Barnes has ranged from individual homes to naval architecture, aluminum prefabricated houses (for Vultee Aircraft).

DIED: Henry J. Sullivan, 54, immediate past president of ASPO and assistant to the president, Detroit Edison Co, an organizer of the Detroit Metropolitan Area Regional Planning Commission and its chairman in 1953, a director of ACTION, March 8 of a heart ailment in Detroit; James H. Barron, 39, president of Darlington Clay Products Co, March 30 in Pittsburgh; Hawley W. Wilbur, 76, head of Wilbur Lumber Co, Waukeshaw, Wis, former director of NRLDA, April 10 at his home in Waukeshaw.

NEWS continued on p 110



the trend today is let in the sun...

and builders, contractors, architects everywhere are translating their plans into translucent with Barclite fiberglass panels for partitions, dropped ceilings, siding, roofing, glazing, carports, patios . . . for homes, farms, industry. Pound for pound stronger than most metals — yet so lightweight that installation costs are cut to a fraction. Low budget building gets a big boost with Barclite. Available in 14 colors plus new Designer's Group, smooth or crinkle finish, flat or corrugated. Always look for the Barclite label on every panel, it is your guarantee of genuine Barclite quality. Write today for free literature and samples of this amazing product.

BARCLITE







Barclite Corporation of America* Dept. HH5, Barclay Building, New York 51, N. Y. *affiliate of Barclay Manufacturing Company, Inc.



Tilt up wall construction and the use of the new, modular Andersen Strutwalls were big factors in bringing the huge job in on time.

18,700 Andersen Strutwalls* cut window installation time one-third at USAF Academy

Del E. Webb Construction Co. and Rubenstein Construction Co., a joint venture, faced a close and difficult schedule while building the first 1,200 housing units at the new United States Air Force Academy in Colorado Springs, Colorado.

Says Mr. Harry Rubenstein: "We estimate that a six man crew set 120, or more, Strutwalls a day. This, we estimate, would be about 50% more than the number of conventional windows that the same crew could install in a day."

The new Andersen Strutwall offers substantial savings in both time and costs in any kind of single

story frame construction. This modular unit comes completely assembled with load-bearing side struts, nailers and lower jack studs. Simply cut the load-bearing struts to fit header construction. Nail to adjacent studs.

Result—the tightest possible joining of window and wall. And greatly reduced chances of error.

Andersen Strutwalls are now available in 7 sizes, 2 styles, together with 2 sizes of Strutwall door frames. For more information, see your lumber and millwork dealer, Sweet's File. Or write: Andersen Corporation, Bayport, Minn.





ABOVE—Andersen Strutwalls afford tightest possible joining of windows and walls. Insure all-weather comfort. Clean, simple lines blend perfectly. Architects: Skidmore, Owings & Merrill, Chicago.

BELOW—Two Andersen Strutwall units butted together result in this handsome picture window effect. Lower operating sash are awning type. Permit ventilation even during rain storms.



continued from p 87

islands since they have customers there—have picked up about 80% of the FHAs. (Current prices: 94-96½). S&Ls and banks have the rest. Only 1% of homes are VA financed. (FHA can and has increased the maximum insurable mortgage in Hawaii from \$20,000 to \$25,000 because of the high costs.)

The rest of the homes have been financed conventionally by local lenders with 25 to 33% down payment and a 15 to 20 year term at 6 to 7% interest. S&Ls make some individual construction loans. Banks make none.

Fanny May does a negligible business in Hawaii because of building costs. The \$15,000 limit on eligible mortgages applies in Hawaii as on the mainland for the secondary market program. Few Hawaiian loans are this small.

The legislature is working on two bills which the territory's ten S&Ls think will be a big help to housing. One would allow 90% conventional loans; the other would let mainland S&Ls participate in Hawaiian S&L loans.

Mortgage Guaranty Insurance Corp, the Milwaukee-based firm which has pioneered insuring of 90% conventional loans (March '57, News et seq) has filed application to do business in Hawaii, a move that may soon give the islands their first 90% conventionals.

Boom in co-ops

Newest development in Hawaiian housing has been a boom in high-priced cooperative housing in the last year. Some 1,000 co-op units went up last year. Another 1,000 are planned this year. Most of them are around tony Waikiki beach. Prices begin at \$12,900 for a studio apartment; then go up from there. Developers include such diverse personalities as Hollywood Producer Joe Pasternak and former South Orange, N. J. Builder John Barkhorn.

Barkhorn went to Hawaii a year ago expecting to build homes. Discouraged with the land situation, he turned to co-ops. Now, he has plans for two. The first, with 162 units on the beach at Diamond Head, was two-thirds sold out in six weeks—though construction had not begun.

Though 1,500 other rental units were built last year, Honolulu still has a shortage. The Chamber of Commerce estimates that of 32,500 families (37% of the total on Oahu) who cannot afford to buy a new home, half live in overcrowded or dilapidated units, and 12,000 to 14,000 earn too much to qualify for public housing.

Urban renewal projects

Honolulu has three urban renewal projects. The first, the Wilson project, redevelopment of pig farms in the western section of the city, will be completed this year. There were 162 home sites resold to builders with houses selling for \$23,000 to \$26,000.

The Queen Emma area, 72 acres, will be cleared for redevelopment with 600 to 650 apartment units. The Kukui project is in the planning stage.

The local housing authority operates 4,400 public housing units in seven sites and plans 1,100 more.

Though Hawaii has a polyglot population, it has no segregation problem. There are 220,000 Japanese, 99,000 Hawaiians or part-Hawaiians, 74,000 Caucasians and 65,000 Filipinos. The rest include Chinese, Koreans, Puerto Ricans and Portuguese.

All areas are integrated but one—the Kahala district, running from Diamond Head southeast to Koko Head. It is home only to Caucasians and native Hawaiians.



When home buyers can actually see and touch the cedar shakes of Shake-A-Ply, they know it's "quality." What they don't know is that this beautiful siding costs less than any other kind of wood siding, installed . . .

AT



Easy to cut, fit and install around openings. Built-in moisture barrier prevents paint failure



Shake-A-Ply panels are 8'x18", made like plywood, but with genuine shakes and shingles. Available natural or painted. Interested? Write today for full information to The Shake-A-Ply Co., P.O. Box 7B, North Portland, Oregon.



Letters

Electric heat

Your article on electric heat (H&H, Mar) was excellent.

It has been an uphill battle selling electric heat these past five years, but public acceptance, helped greatly by articles like yours, is gradually swinging over. Now we feel the estimate that 15% of 1963 housing starts will have electric heat is rather conservative.

FLOYD D. ALSON Solar Electric Heat & Insulation Salt Lake City

Last week I attended the EEI convention, which included a panel discussion on atomic power. The information presented by this panel does not substantiate the statement (H&H, Mar) that a major decrease in electric power costs will result from nuclear generation.

'At present, the capacity costs of atomic projects are all above preliminary estimates. The only major station in operation—at Shippingport, Pa.—operates satisfactorily. But its cost per Kwhr is 14 mills—approximately four times the present cost of a coal-fired station.

And estimated initial costs at other nuclear power stations are also high—10 to 12 mills per Kwhr (with a probably low of 7½ to 9 mills) at Dresden, Ill.; 13.4 mills at Consolidated Edison's Indian Point, N.Y., station; 12 to 14 mills at the Yankee Atomic project, Rowe, Mass.; 10 mills at Detroit Edison's project.

Even if the Shippingport reactors can be operated above designed capacity, the capacity cost per Kwhr may be reduced, but this will have no effect on the fuel cost per Kwhr because extra fuel will be needed to produce the extra energy. Also, the fuel component in the cost of a Kwhr delivered to the customer is only 10% to 15% of the total cost. So even if the energy were furnished without charge, a large decrease in cost to the customer would not be realized.

W. W. BABCOCK, vice president Central Illinois Light Co Peoria

"How to sell houses"

The Walker & Lee merchandising story (H&H, Mar) is really outstanding. It sums up all of the best in merchandising not only tract houses but also re-sale houses. Reprints should go to every realtor in the country.

Frank W. Cortright, vice president Mason-McDuffie Investment Co Berkeley, Calif.

The "How to sell houses" article is terrific. Would is be possible for me to have 150 copies to distribute to local realtors and builders as a public relations service for you and us.

We keep plugging House & Home as the best trade publication devoted to mortgage lending and housing.

WILLIAM KELLINGER, secretary Yakima (Wash.) Federal S&L Assn

Mortgage bankers' future

Congratulations on the interesting and timely article ("Is there a future for mortgage bankers?", Feb, News). I hope it will stimulate more and more people in the mortgage banking business and in our own industry to be increasingly concerned with government intervention.

MILFORD A. VIESER, financial vice pres Mutual Benefit Life Insurance Co Newark, N.J.

continued on p 114

for homes in every price range . . .

BESTWALL HUMMER SYSTEMS



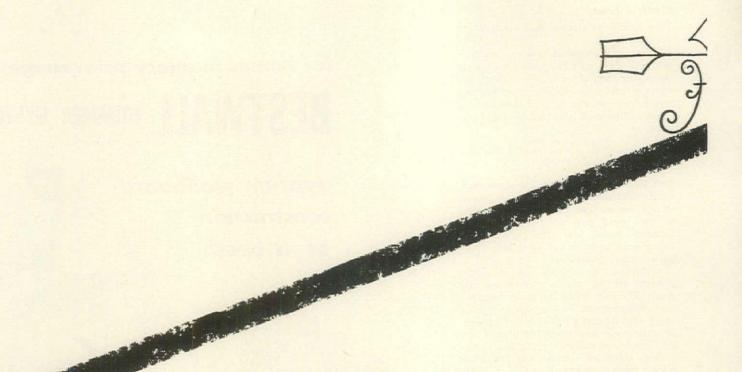
In the beautiful new home of Mr. Owen Jordan, Nashville, Tenn., the Bestwall Hummer System of laminated gypsum wallboard construction was used throughout.

This improved method of laminating two layers of Bestwall Gypsum Wallboard to frame construction makes possible a handsome, trouble-free surface; eliminates nail-popping and joint problems; and gives added fire protection and greater strength.

There is a Bestwall Hummer System for every type and price range of construction with or without framing. For savings in time and money and a superior finished job in drywall construction, contact your Bestwall representative for complete information.



BESTWALL GYPSUM COMPANY • Ardmore, Pennsylvania
Plants and offices throughout the United States



INSTALI ... FORGET

500-HOME TEST PROVES DEPENDABILITY OF THE ALL-NEW, ALL-TRANSISTOR

Delco-matic GARAGE

DOOR OPERATOR!

Delco-matic is the all-transistor garage door operator that's both completely new and completely tested. Not only was it built by a pioneer in the garage door operator field, but performance-tested across the country for a six-month period! Both the transmitter and receiver have been designed to take full advantage of transistor

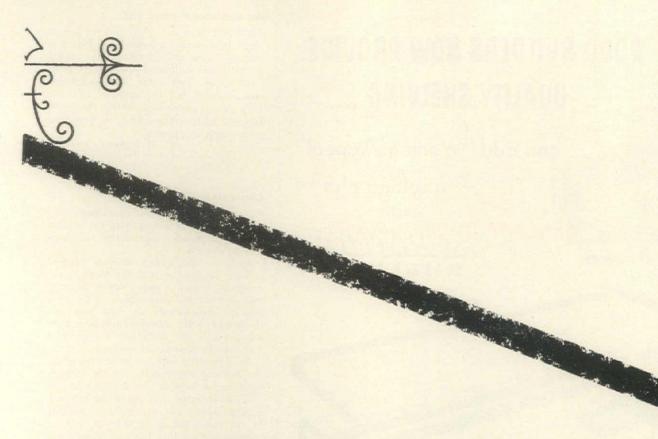
Trouble-free operation is further assured by a powerful Delco motor, high quality component parts, and careful construction by experienced craftsmen. Added to this are the all-important transistors, made by Delco Radio, to provide year-round service without interruption. The new Delco-matic is truly the first garage door operator you can install and forget.

NEW FEATURES

interference-guarded by operation in the 5-10 kilocycle signal range. Delco-matic tuning rejects all but the signal sent by its own transmitter. Not affected by higher frequency operation of most interference-causing electronic equipment. Different frequencies are available to prevent "cross-signal" with nearby operators.

trouble-free-Specifically designed for transistor operation, the Delco-matic is far superior to so-called "transistorized" adaptions which are merely revised versions of old door operator designs. Vacuum tube





burn-out problems, common to most door operator designs, are non-existent with the new Delco-matic. The tubes have been eliminated from both the receiving and transmitting units.

easy to install—Delco-matic operates any track mounted, overhead door—single, double, or twin. Transmitters can be mounted in any car, or any number of cars—and can be easily transferred from car to car.

built-in safety features—The Delco-matic has a load sensitive control that automatically stops the door if it contacts an obstruction. It can be reversed at any time, and will operate manually in case of power failure.

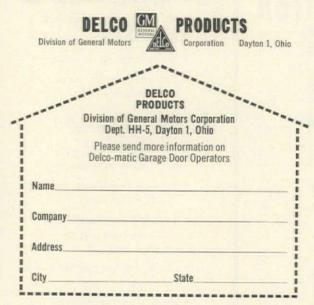
one-year warranty—Every part of the Delco-matic —transmitter, receiver, motor, shock absorber and tubing—is fully covered by a General Motors warranty.

3 YEARS IN DEVELOPMENT—READY NOW!

Space-age electronics! Mechanical engineering know-how! Delco Products and Delco Radio combined their efforts to perfect the Delco-matic, and it's thoroughly backed by General Motors. It was three years in developing, and six months in actual-use testing. You can install and sell this operator with complete confidence of owner satisfaction. Should service be necessary, a new warranty

policy covers service and maintenance through factory authorized electronics specialists. The Delco-matic is one of the best ways to make your new homes sell.

Delco-matic Garage Door Operators are sold, installed, warranted and serviced by Crawford Door Sales Company, the nation's leading garage door specialists.





An ordinance goes out

An article (Jan H&H, p 49) on the use of wood in a house in Lake Park, Fla. was very explosive and, in many ways helped get rid of the ordinance that banned wood construction. This home, now completed and occupied, has the approval of Lake Park officials and FHA. Many thanks to you, the Lumbermen's Assn, builders, and other interested people.

E. D. Hedrick, president Coastal Properties Corp West Palm Beach, Fla.

Confusion cleared up

House & Home was instrumental in breaking up a log jam between the Indiana highway department and several Indianapolis developers.

Early in the spring, after a year of fruitless negotiation with the highway department, I read in H&H (News) that FHA had directed its local offices to continue issuing commitments on land that was threatened with condemnation for highways, unless the taking of the right of way was imminent and assured.

At a meeting with the state FHA office, the highway department, and the builders involved. I brought out the H&H article. The FHA director then asked the highway department to tell the builders whether or not it was taking the right of way.

I am certain that the H&H article was solely responsible for clearing the air and allowing a settlement between the builders and the highway department.

EUGENE B. GLICK, secretary-treasurer Indianapolis Homes Inc Indianapolis

"We copied Bob Schmitt"

I have read and reread the Feb article titled "We copied Bob Schmitt-there's money in his method." It is wonderful.

E. J. Christensen, builder & contractor

Cincinnati

Schmitt's method questioned

We are about to embark on a small building program and are weighing the wisdom of certain procedures outlined in your September issue ("How to design and detail to build better for less").

Bob Schmitt's practice of erecting and finishing perimeter, ceiling, and floor prior to partitions is very interesting. But we intend to start on scattered lots, and one of our major problems will be expediting the subcontractors on each job. Even though most plumbing will be in interior partitions, some plumbing will be in an exterior wall. So in erecting the perimeter, therefore, we will need a plumber, similarly, an electrician, sheetrocker, and carpenters. Schmitt's practice would mean two trips to each job for these trades. It may also mean double delivery of certain materials, double handling, or longer exposure to the elements and vandals. Finally, it may mean only a partial day on the job for some trades.

Do you agree that the foregoing problems could create more expense and inconvenience to a scattered-lot builder than the time saving allegedly effected? Might not the harried builder develop two ulcers in place of one trying to keep up with his double scheduling?

JOE WILSON Wilson Mortgage Co Houston

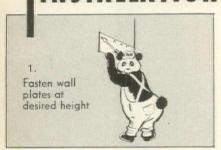
For answer to these problems, see H&H, Feb. p 111.-Ed.

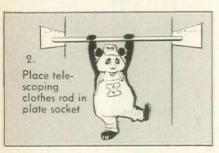


Comes complete, ready to install.

All you need is a screwdriver.

Expands to fit.







* Trade Mark of Home Comfort Mfg. Co.

products co.

3300 N. E. Adams St., Peoria, III. A PRODUCT OF HOME COMFORT MFG. CO. · Beautifully pre-finished

- · No shelf paper required
- · Easily cleaned

"Woman Appeal"

- · No splintering or warping
- · Designed for neatness and modern living

"Builder Appeal"

- · Telescoping shelf, pole and accessories in a package
- · Install in 5 minutes, nothing to cut, fit or paint
- · Save 80% on total labor plus major savings on installed costs
- · Closet can be painted before installing
- · Shelves and accessories for every need - clothes, closets, linen closets, wall shelves,
- · Choice of linen or greytone finishes

| | HC Products Co. | |
|-------|--------------------------------|----------------|
| | | A-101 |
| | 3300 N.E. Adams Street, Peori | a, III. |
| | Please rush me literature on X | Panda Shelves. |
| | | |
| Name | | |
| | | |
| Addre | 55 | |
| | | |
| | | |

All-fuel chimney

In your March Publications section, you "steel and asbestos". Builders would find this misleading. Actually, the insulating material is high-temperature mineral wool made from copper slag. It is vastly superior to asbestos for the following reasons: it is lighter; it has a high resistance to melting; it is very stable; it doesn't

> PAUL PURDOM Boland Associates San Francisco

Vacation houses

Thank you for your delightful March story "Today's vacation house."

CARL F. COULD, AIA Seattle

The whole section on vacation houses was very good . . . and a very good cover.

WILLIAM N. Breger Pratt Institute Brooklyn, N.Y.

You did a very fine job on the vacation house section-it was most interesting.

MARSHALL W. PERROW, AIA

Trade-in, trade-up editorial

While I would not like to see people trade homes as they do motor cars, I do think in this particular argument you had all the best of it.

JOHN TAYLOR, chairman of board J. C. Nichols Co Kansas City, Mo.

They like what they read

Your fine February issue has more ideas on sound home construction than in any other magazine I have ever read.

H. C. Hoaglan, natl dir nahb

I want to express my sincere thanks for everything you have done on behalf of homebuilding. H&H is one of the few trade magazines that has an acute knowledge of the problems confronting the building industry

All of our top management read your magazine religiously. We have urged many suppliers, financiers, and people connected with the real estate business to read it, too. I have used much of your marketing research data in laying out programs with national manufacturers of building supplies to give them insight into the building industry. Your merchandising advice is invaluable to us. Even though the volume of building in the Detroit area was reduced during 1956, 1957, and 1958, we increased our volume each year. And much of our success was gained from the knowledge that we got from H&H.

It is truly a wonderful publication, and I cannot see how anyone connected with the building industry doesn't read it.

Craig Smith, vice president, marketing Sullivan-Smith, Inc Dearborn, Mich.

Your magazine is wonderful. Thanks for asking us to subscribe.

CLARENCE L. HINKLE, realty broker Azusa, Calif.

I find H&H a most interesting and informative magazine, well worth the subscription price.

Hugh Storr, real estate & insurance Revelstoke, B.C., Canada

A most persuasive "salesman"... Philippine Mahogany paneling



As seen in the Better Living section of the February 1959 issue of McCall's

The features of a home that instantly and unforgettably convey to homebuyers a feeling of genuine quality are, in a sense, your most valuable salesmen. Certainly paneling of solid lumber-like rich, elegant Ilco Philippine Mahogany-is one of the features that can increase the appeal of your houses.

Ilco paneling offers an attractive basic unity of texture and color, and, at the same time, its grain patterns are strikingly varied and distinctive. Whether used alone or in combination with stone or brick, papered or

painted walls, the total impression is one of great beauty and style.

But the total cost is not great. Ilco lumber is graded after kiln drying to assure you of full count and finest quality. Highly resistant to splitting, twisting and warping, it can be readily installed. What's more, this superb solid hardwood takes all types of finishes easily with a minimum of preparation. Ilco Philippine Mahogany can help you give your homes a luxury look at a very reasonable

PANELING . SIDING . MOLDING . FLOORING . TRIM . ROUGH AND SURFACED LUMBER

Order from the distributor nearest you

UNITED STATES

ALABAMA-Birmingham Griffith-Coker Lumber Company, Inc.

CALIFORNIA-San Francisco

COLORADO-Denver ILLINOIS-Chicago

Frank Paxton Lumber Company Calumbia Hardwood Lumber Company

INDIANA—New Albany Chester B. Stem, Inc.

IOWA-Des Moines Frank Paxton Lumber Company MASSACHUSETTS—Charlestown

MISSOURI—Kansas City Frank Paxton Lumber Company

NEW JERSEY—Camden Du Bell Lumber Sales Company NEW MEXICO-Albuquerque

NEW YORK-Brooklyn Anchor Sales Corporat Black & Yates, Inc.

-Eden Griffith-Coker Lumber Company, Inc. (P. O. Box 478)

NORTH CAROLINA-Greensboro

PENNSYLVANIA-Philadelphia Fessenden Hall Plywood, In -Pittsburgh

Germain Lumber Corporation

TEXAS-Fort Worth

Frank Paxton Lumber Company -Midland

Frank Paxton Lumber Company WASHINGTON-Seattle

WISCONSIN-Milwaukee Frank Paxton Lumber Company

CANADA

ALBERTA-Edmonton Fyfe Smith Hardwood, Ltd.

—Calgary
Fyfe Smith Hardwood, Ltd.

BRITISH COLUMBIA—Vancouver
J. Fyfe Smith Co., Ltd. ONTARIO-Toronto

Robert Bury & Co. (Canada) Ltd. QUEBEC-Montreal
Robert Bury & Co. (Canada) Ltd.

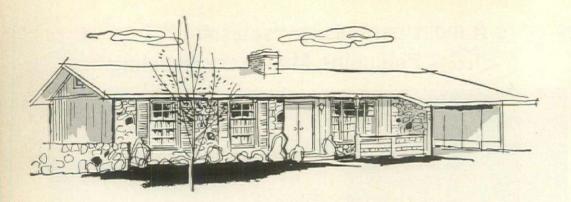
HONOLULU

American Factors, Limited Shuman Hardwood Lumber Company

If none of these distributors is near you, write us direct

INSULAR LUMBER SALES CORPORATION

1405 Locust Street, Philadelphia 2, Pa.



American Builder Award FIRST GRAND PRIZE \$16,000—\$40,000 category: Gerholz Community Homes, Inc. Flint, Mich.

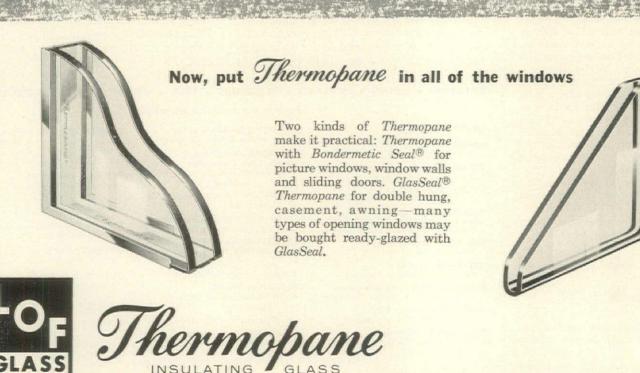
Why Robt. P. Gerholz put *Thermopane*° in every window of this \$23,950 prize winning house!

"There are three things my customers look for when buying a house—comfort, attractiveness and economy," says Robert Gerholz (NAHB Past President).

"With Thermopane insulating glass in the windows, we can offer all three. A house that's warmer in winter, less expensive to heat . . . cooler in summer, less expensive to air condition. And for folks who want a colonial effect, I use removable muntins that fit over the outside of Thermopane units. Washing windows and painting muntins are thus simplified.

"House shoppers seem to know about *Thermopane* (after all, it's been nationally advertised for 16 years), and are delighted to find it in our homes. We make sure they do find it: our salesmen point it out *always*. Believe me, it pays."

If you want to take advantage of the best-known name in insulating glass, put it in your windows and sliding doors. We will supply you with merchandising materials. Just phone your local L:O·F distributor or dealer (listed under "Glass" in the Yellow Pages), or write Dept. 1259, Libbey:Owens·Ford, 608 Madison Ave., Toledo 3, Ohio.



Made in the U. S. A. by LIBBEY • OWENS • FORD only Toledo 3. Ohio



Dear Subscriber

This issue of House & Home reflects a many-months-long team effort in which we had to ask almost the whole housing industry to help us.

Before the job was done we had to tap almost every expert for facts or advice or guidance—from the merchandising committee of NAHB to the mortgage officer of the biggest insurance company, from the chief underwriter of FHA to the heads of the Savings and Loan League, from the Bureau of Standards to the Small Homes Council, from architects to association secretaries, from the HHFAdministrator in Washington to a 20-house builder in Texas, from the sales managers of all our advertisers to the real estate executives who have had most success selling quality.

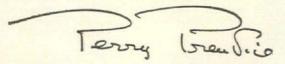
We have all been hard at work on this job ever since last September, when three off-the-record conferences with top builders, lenders, and manufacturers revealed how urgently the housing industry needs an item-by-item yardstick of quality with a price mark on every increase.

Every participant at those meetings was for quality, just as everyone is against sin, but at that point agreement ended and confusion began—confusion about what quality means, confusion about how much or how little quality should cost, confusion about how to sell quality, and quite some doubt whether it could be sold at all. If even these leaders had trouble telling what quality requires and what it costs, how could the housing industry hope to sell quality by the billion to its consumers?

So House & Home rashly volunteered to meet the two-fold need for 1) a yardstick of quality, and 2) a case book on successful quality selling.

Had we known how much blood, sweat, and tears we were letting ourselves in for—had we realized how many thousands of miles of travel would be needed, how many thousands of letters and telegrams, how many hundreds of long distance phone calls, how many product-manufacturer conferences—we might not have been so brave. There are many short single sentences in this issue that cost us well over \$100 to make sure each word was right, and Executive Editor Carl Norcross criss-crossed the country twice and interviewed more than 250 leading realtors, builders, and manufacturers to get you the selling points he has capsuled on pp 142 and 189.

Sincerely,



Editor and Publisher

Here, in seven sentences, is what we learned:

- 1. The quality house offers the housing industry the greatest selling opportunity any industry could want.
- 2. Quality costs so little more that "only the rich can afford a cheap house."
- 3. Quality cannot be sold until manufacturers do a far better job communicating with housing professionals on the quality of their products and what their value can mean to homebuyers and home modernizers in terms of better living and lower long-term cost.
- 4. The most important professionals to educate are the real estate salesmen who are the industry's front-line contact with consumers. Unless and until these salesmen are given a full understanding of quality, how can they sell quality to consumers?
- 5. Quality can be sold a lot faster and easier if the lenders can be persuaded to play a dynamic part by giving full recognition to quality in their appraisals, their loans, and their credit policies.
- 6. Quality requires a brand new kind of selling quite different from the way most houses have been sold since the war. We call this the "deep sell," and you can read all about it on *p 212*.
- 7. Salesmen who use the deep sell are tapping a great new market for housing—a market whose virgin potential is even bigger than the market that has bought 14-million new houses since the war.



PS This issue has already aroused such industry-wide interest that it carries more advertising than any building magazine has ever carried, and we have had to print more copies than any business paper has ever printed—141,000 copies.



Johns-Manville Corrulux Fiber Glass Panels will add beauty and style to your homes . . . qualities you can demonstrate and sell



You can use Johns-Manville Corrulux fiber glass panels to build light and color into your new homes . . . exciting selling features for home buyers. Corrulux translucent panels provide visible and practical values of luxury and custom-look styling.

Used for patio roofs, partitions, canopies, awnings, shower and bathtub enclosures, cabinet doors, fences, and carports, etc. Shatter-proof J-M Corrulux panels make homes more desirable and livable.

Corrulux is a premium-quality fiber glass reinforced building panel recommended by leading architects and builders for residential, commercial and industrial buildings. It comes in beautiful decorator colors that have been scientifically formulated to give light transmission with maximum diffusion, minimum glare.

Panels are available in many styles and in various widths from 26" to 42"...lengths up to 12 feet...in granitized and smooth surface finishes. Corrulux panels are light in weight, easy to handle and install.

For full product information contact your J-M distributor or write: Johns-Manville, Box 111, New York 16, N. Y. In Canada, Plastic and Allied Building Products, Ltd., Box 250, Dundas, Ontario.



JOHNS-MANVILLE





Here's quality you can demonstrate and sell!



JOHNS-MANVILLE FIBER GLASS home insulation gives home buyers more comfort-benefits at no extra cost

Better insulation performance

In winter, Johns-Manville Fiber Glass home insulation responds quickly to temperature changes—helps heating systems to operate more efficiently in maintaining home comfort. Saves heating fuel dollars.

In summer, it helps to hold back daytime heat. Because it does not retain heat, even homes without air conditioning cool off faster after sundown. In homes with air conditioning, electric power bills are lower.

Reinforced "Double-Fold" Tabs

This new and exclusive feature permits a tighter vapor seal. Tabs extend around the corner and onto the face of the framing member. When a plaster base (or dry wall) is added, the barrier against moisture travel becomes even tighter. The "double-fold" tabs, formed by two thicknesses of Kraft paper and one of aluminum foil, enable the staples to do a better anchoring job.

Aluminum foil facing on one side

This permits the insulation to "breathe" toward the outside . . . while the facing reflects radiant heat and acts as a vapor barrier

Resists setting and shrinking

Because of its resiliency, Johns-Manville Fiber Glass insulation retains its full thickness, fits snugly against studs and joists. It will not slump at the edges or sag between joists... will not rot or crumble to waste heating and cooling dollars.

Easy and Quick to apply

Contractors and workers like to use J-M Fiber Glass insulation because it is lightweight. One man can insulate an average home in a matter of hours. J-M Fiber Glass insulation holds itself in place between studs or joists until fastened. It is pleasant to handle. Installation time and cost are cut to a minimum.

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



Here's quality you can demonstrate and sell!

JOHNS-MANVILLE Seal-O-Matic® Shingles



A patented adhesive stripe runs the full length of each tab. Result: maximum bonding area and holding power.

POSITIVE PROVED PERFORMANCE. Johns-Manville Seal-O-Matic asphalt shingles have proved storm-tight by the dependable performance of millions of squares applied on roofs during the past five years.

entire butt edge sealed. The sun's heat automatically bonds each tab to the course below. The wide, thick stripe of adhesive is continuous. No breaks in the stripe to weaken the bond or permit wind-driven rain to blow under the shingles.

LAST LONGER. No blow-up or blow-off. Because the tabs of Seal-O-Matic shingles are sealed flat and tight to the roof they cannot flutter even in hurricane winds or curl in cold weather. This means less granule loss and longer shingle life.

BETTER LOOKING ON THE ROOF. Because they are

securely sealed down, Seal-O-Matic shingle edges retain a straight butt line . . . the roof has an attractive, even look at all times. Wide choice of decorator colors available.

COSTS LESS TO APPLY ON LOW SLOPE ROOFS.

Eliminates the costly hand cementing required when ordinary shingles are applied on roof pitches less than 4 inches.

in pairs back-to-back with the adhesive stripes together. They are easily separated by a quick snap. This patented method of packaging eliminates the cost of removing and disposing of paper tapes. The adhesive stripe is protected against contamination until the moment of application.

For complete information write: Johns-Manville, Box 111, New York 16, New York. In Canada, Port Credit, Ontario.

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

JOHNS-MANVILLE





NEW BUILT-IN SALES APPEAL

General Electric Dishwasher

DESIGNED AND PRICED RIGHT FOR YOU!

Two extra sales-makers for your extra-value homes



NEW! The Custom 4-Cycle SU-70 (24 in.). Only dishwasher with a cycle for every dishwashing need. A big, new trade-up feature for higher priced homes.



Model FC-15 Disposall®.Budgetpriced, high quality. Easy, oneman installation. One of a complete line of Continuous-Feed and Safety Twistop models.

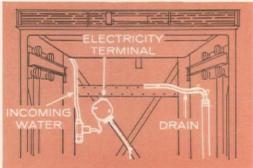


Model SU-60 Automatic Dishwasher—This "Princess" 24-inch budget-priced, quality-built dishwasher gives you the famous General Electric brand preference and consumer appeal . . . plus truly modern kitchen convenience.

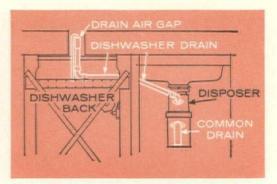
You get the extra value, visible quality, and competitive edge that help you sell your homes faster. Available in 5 colors, 5 woods, brushed chrome, and antique copper. Features famous Flushaway Drain, built-in pump, custom washing performance.

"Empress" 30-inch dishwasher with reserve capacity also available. And, you get world-famous General Electric dependability and service.

Look at this Easy, Fast Installation



Saves Time and Work—Entire tub rolls right out of cabinet—and out of your way—while you make electrical and plumbing connections. (Four wood wedges let you shim and level cabinet while in place.)



Sanitary Drain Air Gap—Eliminates need for prior roughing in, provides maximum sanitation, uses one drain for both dishwasher and sink. (Optional: sanitary drain which utilizes existing sink.)

We want to help you sell! Besides budgetpriced, high-quality models with easy installation and big sales appeal—we're ready to back you with a complete package of merchandising tools designed to help you benefit from nationally advertised G-E Dishwashers and Disposalls. Get complete information and all the profitable details about the new G-E Dishwashers and Disposalls—and the promotion help that goes with them. Get in touch with your General Electric representative . . . or mail the coupon below. Do it today! No obligation, of course.

Please send me complete information on the new G-E Dishwasher and the promotional material that goes with it.

| NAME | - | |
|----------|-----|--|
| TITLE | × 1 | |
| COMPANY | | |
| ADDRESS. | | |
| Н | | |



Get FULL INSULATION in

Comfort Condition your home with FIBERGLAS





FULLY INSULATED with FIBERGLAS

Full HOUSEPOWER for Electrical Living

TEXTRON METALS Insulated Windows

FIBERGLAS

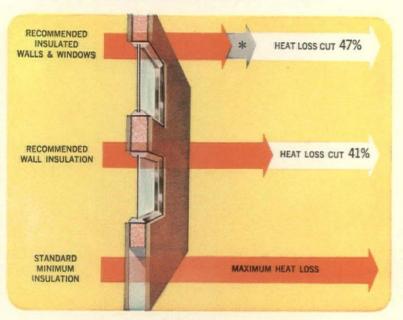
Here's another great selling point for you this spring from the Owens Corning Fiberglas Comfort-Conditioned Home Program. Fiberglas* insulation plus full "Housepower" teamed together with Textron Metals double glazed aluminum windows enables you to offer homes of true "Comfort" with sayings you to offer homes of true "Comfort" with savings to builder and customer.

When you install Textron Metals windows in the walls of Comfort-Conditioned Homes, you get double insulation efficiency. This means that you can further reduce the size of heating-cooling equipment. Extra bonus for summer comfort is the perfect insect protection provided by glareless Fiberglas* Screening.

WINDOWS and WALLS...



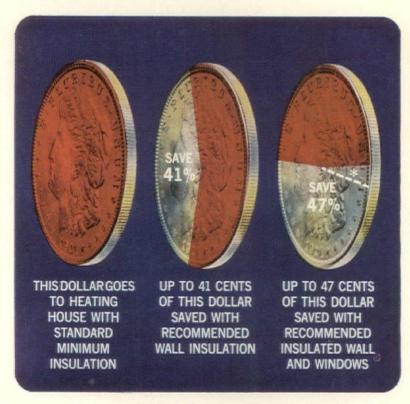
and Aluminum INSULATED WINDOWS



Relative Heat Loss Measured in BTU's

CUT HEAT LOSS BY 47%

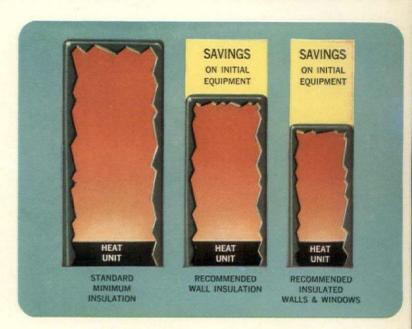
A tremendous savings in BTU heat loss is effected through Fiberglas* and Textron Metals "full wall" insulation. This Comfort-Conditioned team for insulating the complete wall means greater customer comfort and confidence. The combination means quality and satisfaction for the buyer.



Dollars Saved on Fuel

FUEL BILLS DOWN 47%

Here's a selling feature designed exactly for these competitive times. With your Fiberglas* and Textron Metals "full wall" insulation you assure your customers of the lowest possible fuel costs. Fuel savings as great as 47% can be achieved.



Heating Systems can be Smaller

HEATING UNIT COST REDUCED 11%

Fiberglas* and Textron Metals "full wall" insulation can mean smaller heating and cooling units. In the heating unit alone, the builder can save as much as 11% in the initial installed cost. When cooling equipment is included, savings as high as 24% can be achieved.



Income Requirements are Reduced

MORE BUYERS BECOME ELIGIBLE

"Full Wall" insulation as featured in Comfort-Conditioned Homes with Fiberglas* and Textron Metals double glazed windows increases the potential buyer market. Lending institutions lower the effective monthly income requirement of mortgagors as the monthly housing expense is reduced.

*Textron Metals windows reduce air infiltration providing an additional savings of 11% when family requirements will permit. This reduction of air infiltration through windows also permits the use of filtered air intake without increasing operating costs above normal.

Specific figures vary with different climates, fuel rates, home designs and family requirements. For further information talk to your TM representative.



TEXTRON METALS Aluminum WINDOWS Textron Metals Company, 39 James St., Girard, Ohio.



Burke Homes, San Antonio, Texas

AZROCK® CARPET TONES

an extra dimension of beauty in low-cost, high-performance flooring

New from Azrock...the soft, textured look of carpet in high-performance, low-cost asphalt tile. Azrock Carpet Tones are specifically designed to help sell your homes more quickly and profitably. And the striking good looks of these new Carpet Tones add charm and color to every room in the house. Ask your flooring

contractor to show you samples of these six new market-tested Carpet Tones.

Write for full information on Azrock's Model Home Program: Display floors, "hidden value" signs, identification cards, advertising and publicity. Extra selling power for you!

Azrock is a nationally-advertised product.



AZROCK FLOOR · PRODUCTS DIVISION
UVALDE ROCK ASPHALT CO. • 552A FROST BANK BLDG. • SAN ANTONIO, TEXAS



MAKERS OF VINA-LUX . AZROCK . AZPHLEX . DURACO

Panelok Wall

a flexible wall system with Adjust-A-Bilt accessories

Nothing like it before—at any price! A colorful, easy-to-install wall with hidden supports for shelves, racks, cabinets and other Adjust-A-Bilt* accessories that can be arranged and rearranged without harm to the surface. No wonder the National Association of Home Builders chose it for interior walls of the much-talked-about Knoxville Research House!

Here's the big feature that'll draw the crowds to your next Open House. Use it in the living room, family room, child's bedroom, or den; and as a wonderful, economical idea for getting more space out of closets. It'll be a prospect-pleaser in any room.

The Panelok wall system is available in 2' x 8' panels in the Royalcote colors shown below, or unfinished ready for painting.



in 4 exciting colors

NEW! Royalcote® wood-grain finishes offer beauty, low cost

Here are full-bodied tones designed to harmonize with any decor. Combined with the handsome walnut-grained pattern, they lend a rich warmth to room settings. A coat of wax or clear sealer on these smooth hardboard panels will make them a permanent part of any home.

For complete details about these newest Masonite contributions to better building value, see your lumber dealer or write Masonite Corporation, Box 777, Chicago 90, Ill.



Royalcote Misty Walnut Style #100. A cool and elegant shade to complement blond furnishings.



Royalcote Rosé Walnut Style #103. Rich in tone, it blends with Early American or Western motifs.



Royalcote Antique Walnut Style #104. For the more traditionally minded. Superb for an accent wall.



Royalcote Champagne Walnut Style #102. Light and sparkling, it sets the mood for the relaxing hours.

MASONITE



CORPORATION

Why is RHEEM-RICHMOND

The Fastest Growing Name in Plumbing Fixtures?

T WOULD be too easy to say that Quality is all that lies behind the rise of RHEEM-RICHMOND to such an important place in the manufacturing of Plumbing Fixtures. A lot of different things go to make up Quality.

Superior Materials

RHEEM-RICHMOND Plumbing Fixtures are made of controlled process enameling cast iron, the finest enamels and the best china clays. This means we start with the finest ingredients.

Exceptional Design and Top Engineering

For beauty of line, for arrangement of flat and curved surfaces, you'll find RHEEM-RICHMOND fixtures styled for today — and yet with good taste



that will be just as good years from now. And for functional engineering — you'll see that RHEEM-RICHMOND makes no compromises, insists on top performance. The Futura lavatory on the lower left is an example of RHEEM-RICHMOND'S modern styling and superior engineering . . .

Skilled Manufacturing Personnel

For length of service and pride of craftsmanship, the men of RHEEM-RICHMOND are outstanding in the industry. Supporting these craftsmen is an unequalled system of checking and final inspection. We add *Quality Control* to *Quality Materials* and *Quality Workmanship*.

Complete Line, Full Selection

By "complete" we mean complete in all aspects - color range, matching



design, price—for all residential, industrial and institutional uses. Throughout the completeness of this line, RHEEM-RICHMOND maintains its outstanding quality. There is a RHEEM-RICHMOND Plumbing Fixture for your every plumbing need.

Perfectly Matched Colors

The home-buyer or remodeler can choose from seven colors (plus "Whiter-White") of RHEEM-RICHMOND fixtures — each color per-



fectly matched, in a wide choice of matched designs. What's more, RHEEM-RICHMOND provides this variety of colors in each price bracket. For example, this new RHEEM-RICHMOND closet combination pictured above, The Lacrosse, with its modern lines, is actually priced in the economy bracket.

Colors are worth extra emphasis, because they are probably the quickest way to measure quality — again, quality that goes all the way from materials to final inspection. RHEEM-RICHMOND's non-fading colors really match — and match forever.

More New Products

Continuing product development is another reason for the rapid growth of RHEEM-RICHMOND. As an example, the 1959 line offers still more new closet combinations. Among others is the Claymore, pictured to the left, with its luxury look in the moderate price range.

What This Means to You

Apart from your pride in selling proved quality, you make more profit with RHEEM-RICHMOND fixtures by eliminating headaches and call-backs. So you profit and the ultimate consumer profits.

This is the story behind the Fastest Growing Name in Plumbing Fixtures. Write for literature.



EDITOR-IN-CHIEF Henry R. Luce EXECUTIVE ASSISTANT Albert L. Furth

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, AIA

ASSISTANTS

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, 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 XV, No. 5

HOUSE & HOME is published monthly by TIME INC. Time & Life Building, 9 Rockfeflor 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 agr.nolec and supervisory employes; teachers and students of architecture and trade associations connected with the building industry; advertisers and publishers: U.S.A., Possessions, Canada, 86.00; elsewhere, \$9.50. Single copies, if available, \$1. All copies mailed flat Please address all subscription correspondence to HOUSE & HOME, \$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.

All rights reserved.

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

WHAT THIS ISSUE IS ABOUT

| 134 | Why th | he quality | house is | your | opportunity |
|-----|--------|------------|----------|------|-------------|
|-----|--------|------------|----------|------|-------------|

- 136 Yesterday's house is as obsolete as vesterday's car
- Look at the fine new qualities we have to sell 138
- 140 Everything is set for a boom in quality houses

WHAT BUILDERS SAY ABOUT QUALITY

142 Nothing sells like quality—but you've got to prove you've got it

WHAT THE QUALITY HOUSE SHOULD BE

- 148 It will take cooperation from our whole industry
- 150 It must offer the most value per dollar
- And it should cost less than \$1000 more 153

HERE'S WHERE YOU CAN SELL QUALITY

- Sell it with space—big-enough rooms and big-enough garage 154
- Sell it with a bigger and better roof 158
- 161 Sell it with texture and variety in your walls
- 162 Sell it with better windows
- Sell it with the right flooring 165
- Sell it with the built-in convenience of big-enough storage 168
- 169 Sell it with a fully equipped kitchen
- Sell it with better baths 172
- Sell it with the economy of full insulation 175
- Sell it with sound-conditioned quiet 178
- 180 Sell it with better heating, cooling, and air cleaning
- 185 Sell it with the convenience of plenty of hot water
- 186 Sell it with adequate wiring and piping
- Sell it with the security of good hardware 188

HERE'S HOW YOU CAN SELL QUALITY

- 190 Display your wares like a showman
- Use cutaways to let buyers see the quality 200
- 206 Train your salesmen to point it out

NEW IDEA IN HOME MERCHANDISING

- What is the "deep sell"? 212
- 214 How Fox & Jacobs make it pay off

NEWS

Imported building materials: new competition for US producers Are mortgage rates poised for a new jump? Exclusive: the housing boom in Hawaii

Tax troubles face realtors over multiple listing services

Index to these and other News reports 43

NEW WAYS TO BUILD BETTER

- 238 Technology: how to build a slab for \$1 a sq ft
- What the leaders are doing: spring roundup of new models 255
- New products for homes and homebuilders 276
- 398 Reviews of new technical literature

DEPARTMENTS

- 111 Letters to the editor
- Advertising index



This merchandising issue is dedicated to

The homebuilders of America . . .

to help them double their sales in the great new market of newly prosperous families who still hesitate to buy the better new homes they can now easily afford . . . to help them use today's quality as a selling tool to tempt millions more able-to-buy families out of their present homes . . . to help them bring down the cost of quality and so make quality doubly effective as a sales aid.

The appraisers and lenders of America . . .

to give them a practical yardstick of quality . . . to let them see how little more it costs to build much more long-term value into the houses they finance . . . to encourage them to give full appraisal credit for quality's extra cost and so play a more dynamic part in raising the American standard of housing.

The realtors of America . . .

to help them make a selling point of each added quality and so encourage more builders to put more quality into the houses they contract to sell . . . to let them see how much better we can build houses today than ever were built in "the good old days" . . . to help them sell low-maintenance, and long-term value, and better living instead of just talking low price and easy terms.

The architects of America . . .

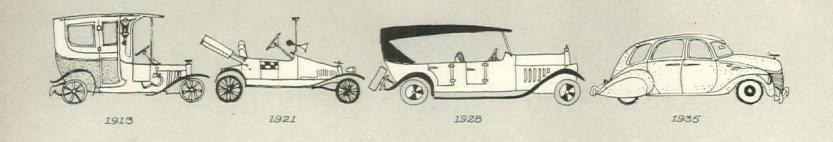
to help them understand why sales appeal is an indispensable requirement of every house they design for the built-for-sale market and so help them play a more direct and effective part in raising the American standard of housing.

The building products manufacturers, distributors, and dealers . . .

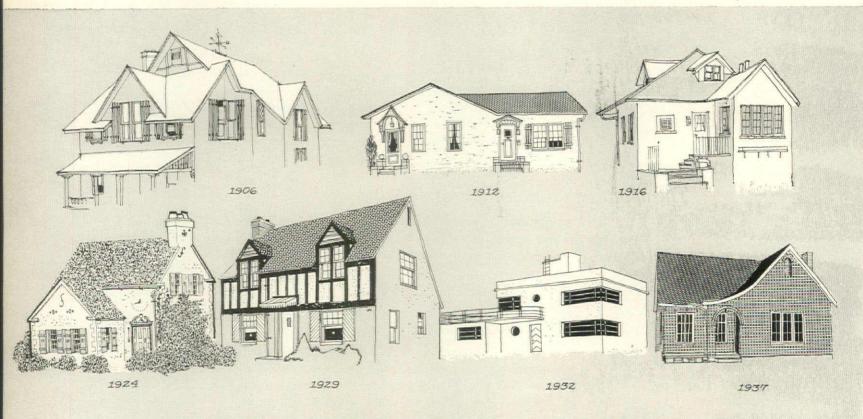
to help them see why it is so important to give more selling help and much better sales ammunition to their own "second sales force" which includes the builders who put quality products in their houses, the architects who write quality products into their specifications, the mortgage lenders who provide the long-term financing without which quality products cannot be sold, the appraisers who fix the price of quality, the dealers who stock and merchandise quality products, and the realtors who sell quality products to the homebuying consumer as part of the finished house.

The homebuyers of America . . .

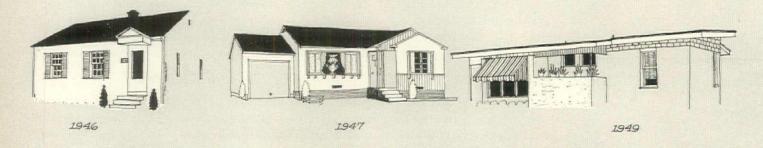
to help them enjoy homes where they can live much better for less, homes whose low operation and low maintenance cost will pay twice over for their better construction, homes that will not need costly changes, additions, and replacements because the rooms and the closets were not built quite big enough, the building products and materials used were not quite good enough, the pipes, the wiring, and the conveniences were not quite foresighted enough.



Yesterday's house is as obsolete as yesterday's car



That means: almost all houses built before World War II



and perhaps half the houses built since World War II



and too many houses built today to yesterday's standards

The technical and construction sections of this issue were written in collaboration with our Technical Consultant Leonard Haeger, AIA, former research director of HHFA, former research director of NAHB, and former vice president and technical director of Levitt & Sons, Inc.

All cost comparisons in this issue are based on a 1500 sq ft house, with a 3'-roof overhang and 20% glass in



So this issue is all about

How to sell today's better houses and how to sell QUALITY

For today's living, today's good new houses have it all over yesterday's best, but . . .

not enough homebuyers know it, and not enough builders and realtors know how to sell it.

So millions of families who could well afford to trade up to better new houses go on living in old houses; old houses outsell new houses three to one; and our industry misses out on hundreds of thousands of sales we could be making if more homebuyers were made to understand and appreciate quality, and if more homebuilders dared ask a little more money for the new features and the new quality old houses lack.

Old houses, like old cars, are usually cheaper, but they can seldom compete with good new houses in convenience, comfort, operating economy, or quality.

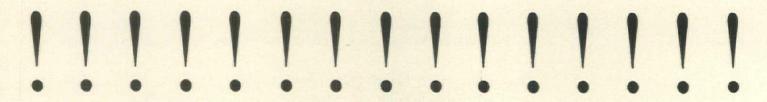
So the housing industry can tap a great new market if it learns to sell

> The advantages of the new The economy of quality The expensiveness of cheapness

From now on it will get harder and harder to sell the price appeal of minimum new houses,

because:

- 1. In most markets the shelter shortage is over; the American public is now better housed than ever before, thanks to the 13-million new homes our industry has provided since World War II;
- 2. In most markets enough good used houses are becoming available to meet the needs of first-time buyers who cannot afford a good new house; the millions of two-bedroom houses built right after the war are fine for young couples just starting out, but their present owners have outgrown them;
- 3. The price of houses built before 1950 is falling; and
- 4. No matter how much the builders cut their costs, today's wages and today's material prices make it almost impossible to build strippeddown models cheap enough to compete with the falling prices of secondhand units.



But look at all the fine new qualities we have to sell

Today's good new houses can be built much better and tighter than houses were built in "the good old days."

Today's good new houses can be cooled in summer and heated in winter for less than old houses cost for heating alone. Today's good new houses are well oriented and well insulatedand the better they are insulated the less it costs. Today's good new heating and cooling equipment is much more efficient, so a well-built 12,000 sq ft house can be comfort-conditioned all year round for an operating cost of less than \$150.

Today's good new houses can make servantless housework easy. They have fewer stairs to climb and fewer steps to walk. They can be cleverly planned with the kitchen handy to the front door to answer the bell, handy to the garage door to bring in groceries, but handy to the patio too for alfresco lunches and barbecue suppers. They can cushion the kitchen floor to save the housewife's feet, and they can include built-in dishwasher, disposer, refrigerator, range, oven, freezer, intercom, washer, and dryer—all sold under a package mortgage with up to 30 years to pay.

Today's good new houses can have more baths and much better plumbing—and the second bath costs only half as much as the first. They can be built with adequate wiring for electrical living, and adequate piping for today's use of gas. They can be much better lighted day and night. They lend themselves to today's fresher decoration, today's better colors, today's richer textures. They can make use of scores of fine new products and new maintenance-free materials.

Today's good new houses can have much better floors in a great variety of surfaces and textures—hardwood, linoleum, vinyl, rubber, cork, ceramic, terrazzo, or even carpet.

Today's good new houses can have more windows, bigger windows, and much better windows—windows with self-storing screens, windows you can wash from the inside, windows that leak less air—double-hung windows, double-glazed windows, sliding windows, casement windows, awning windows, jalousie windows, piggy-back windows, windows that need no putty, windows with removable muntins, wood windows, aluminum windows, steel windows, sashless windows, and skylights.

Today's good new houses can have better roofs with a choice of materials for every need—cedar, copper, aluminum, asbestos, tile terne, built-up or self-sealing asphalt. They can have wide roof overhangs that let you keep the windows open even when it rains, wide overhangs that shade the glass so you don't have to pull down the shades, wide overhangs that protect the walls so they need less maintenance and less painting.

Today's good new houses can provide much better storage where storage is needed. They can have more closets and better closets for today's much bigger wardrobes. They can have drawers that will not stick or warp. They can have ceiling-high closets for seasonal storage on the upper shelves. They can have medicine closets big enough for today's much greater use of more medicines, more antibiotics, more cosmetics. They can have disappearing stairs to ample out-of-the-way storage in a dry well-ventilated attic. And they can have garages wide enough for today's much wider cars.

Today's good new houses can be planned for far more enjoyment of the land (which is what most families move to the suburbs to get). They can be planned for rear living and privacy, instead of front living in sight of every passing truck. They can be planned for indoor-outdoor living with sliding glass walls between patio and parlor. They can be set close to the ground, so indoors and outdoors can be united all on one level.

Today's good new houses can be kept quiet with acoustic ceilings. They can have built-in range hoods and built-in exhaust fans to blow out kitchen heat and kitchen odors, bathroom moisture, and clothes-dryer steam. They can have intercoms to answer the front door, listen for the baby, or talk from room to room.

Today's good new houses can be more efficiently planned for family living and larger families, with two separate rooms for daytime life—a formal room and a family room, a room for parents and a room for children, a room for TV and a room to get away from TV, a room for quiet and a room for talking.

Today's good new houses, in brief, can be packed with sales appeals few old houses can match, sales appeals that cost two and three times as much to add to existing houses as they cost to build into new houses during construction.

Here is the housing industry's great new chance to increase its sales.

Everything is set for a boom in Quality houses if we build them and learn to sell them

A brand new market is opening up just as the old minimum-house market is closing down—a brand new market twice as big as the market the industry has been selling—a market for more new quality houses than all the houses, big or small, that have been built since 1946—a new market for at least a quarter of a trillion dollars (\$250,000,000,000) worth of quality homes.

Says housing Economist Miles L. Colean:

More than 24-million families could qualify FHA to pay at least \$12,000 for a good home, but there are only 10-million units in today's housing inventory priced for that market.

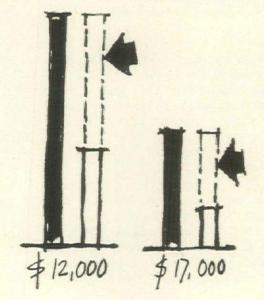
More than 12-million families could qualify FHA to pay at least \$17,000 for a better home, but there are only 4-million units in today's housing inventory priced for that market.

Here is a shortage of quality homes even greater than the shortage of shelter right after the war. Here are more than 14-million ableto-buy prospects waiting to be tempted with something much better than the used houses they live in now—something much better than our industry has dared to offer them.

Here is a quality market well worth learning to tempt and to sell—a market of second-time buyers we can sell only by making them want the new features and the new qualities lacking in their present homes.

Incomes in constant dollars are climbing close to 2% a year, so each year the need for cheap houses will get smaller and the present surplus of cheap houses will get larger; the market for quality houses will get bigger and the shortage of quality houses will get more acute.

By 1980 the average family will have an income well over \$8,000 (vs \$5,480 in 1957 and \$4,600 right after the war, all in constant 1956 dollars). By 1980 nearly 25 million families can qualify FHA for a \$17,000 house, and 21 million of those 25 million quality houses would have to be built and sold in the next 21 years.



FHA is going all-out to encourage quality

Look at all the Federal Government is doing to help you sell better homes.

1. The 1958 Housing Act cuts the FHA down payment to buy a \$20,000 house to less than the down payment required to buy a \$12,000 house before 1954, and the 1959 act may cut down payments still lower!

- 2. FHA requires less income to buy a \$20,000 house than FHA required to buy a \$15,000 house two years ago; less income to buy a \$17,000 house than FHA required to buy a \$14,000 house two years ago (H&H, Jan '58, p 150).
- **3.** FHA requires no more income to buy a quality house built with maintenance-saving quality materials than FHA requires to buy the same house \$1,000 cheaper built with minimum materials (H&H, Jan '58, p 152, Paragraph B).
- **4.** FHA requires no more income to buy a house fully equipped with labor-saving quality appliances sold under the package mortgage than FHA requires to buy a stripped-down model of that same house (H&H, Jan '58, p 152, Paragraph A).
- **5.** FHA requires no more income to cover the operation cost of air conditioning than FHA requires for the same house without air conditioning (H&H, Jan '58, p 152, Paragraph C).
- **6.** FHA is rethinking its whole appraisal procedure to assure builders they will get full credit in FHA replacement cost estimates for every extra dollar they spend for quality products and quality materials (H&H, Sept '58, p 84A; Feb '59, p 134).

For most of these changes in FHA to encourage quality and raise housing standards, the homebuying public can thank HHFAdministrator Norman Mason.

Trade-in and trade-up are making quality houses twice as easy to sell

Already two new houses out of three are sold to second-time buyers trading up from the too-small or too-cheap houses they bought a few years back.

More and more builders are taking old houses in trade to help present homeowners trade up. More and more builders are tying up with realtors to make a trade-in team (Los Angeles Realtors Walker & Lee have opened eight resale offices to handle houses taken in trade by the 52 builders for whom they sell (H&H, Mar).

Soon new legislation, new FHA regulations, and new Home Loan Bank Board rulings may make trade-in much easier to finance (H&H, Jan). Said Nels Severin when he was president of NAHB: "The biggest single help we still need from Congress and the President is a financing tool to make it easy for homeowners to trade up to better homes by trading in their present homes, just as car buyers trade in their old cars.

"That tool need not cost the taxpayer a penny, but it could easily triple the sale of better new homes."

Before the year is out, the better financing needed to make tradein work should be available. "Quality really sells houses –

but you've got to display it," says Mel Larsen



Tampa never had a sales success like Mel Larsen's.

Last September he opened a new 4500 lot subdivision, the largest ever seen in Tampa. He sold over 200 houses the first week, and then settled down to a steady run. In six months he had sold 662 houses in the \$9,000 to \$13,000 range—all the production he could handle

A big reason for his success, he says, is that he tied in with quality products and displayed them handsomely in his sales and display building (photo above). When thousands of visitors came out to Larsen's Clair-Mel City, they first went through his furnished models, then were routed past his special displays (you will see them on p 190). His promotion program got an extra boost from York Corporation which helped him promote "Tampa's first air-conditioned city."



Thomas & Herrig

LARSEN (above) stands in front of his new sales and display building which he put up as a showcase for quality products after his original display area (below) proved that good displays pay off.



We instill confidence in our buyers by displaying a trade mark showing a house and a hammer with our slogan "Craftsmen with imagination and integrity." This trade mark appears on everything from paychecks to pickup trucks, from newspaper advertisements to a brass name plate sunk into the driveway of each house. We also display a magazine award we won for building the best house for the money in our state. MARTIN GLEICH, builder San Diego

We find that people who buy the surface gloss still need reassurance about the products used in the house. So we use product displays to reassure them.

Marvin B. Myers, builder

Rockford, Ill.

Quality is a big sales appeal if the builder talks about it and gives it a good display. We had used a few product displays before but never a whole group until now when we have a big show in each of our model houses. They are a real boomfactor in our sales. We know they work because of people's interest in them and because of the new kind of technical questions our salesmen are getting now. We also know our displays are making both our buyers and our competition quality conscious.

DAVE EDMUNDS, builder Clearwater, Fla.

There is no basis whatsoever for the statement that people cannot recognize quality. They can. They do. But by quality I don't mean high overall costs in houses nor the most costly product. Construction economy can permit quality.

Lindell Peterson, past president
Mortgage Bankers Assn

Quality is the key word in the production of any new house -quality materials, quality workmanship, quality in planning and quality in engineering. It is possible to have all this and still keep the cost within reasonable bounds.

JOHN G. JEWETT, vice president
Prudential Insurance Co of America

We gain acceptance with customers who never heard of us by tying in with Saturday Evening Post-advertised products. We display the Post-advertised brand names and the magazine's name in our salesroom. Throughout the model house we show the names of the products along with a plastic plaque which shows a checkmark and the words "a mark of quality."

DICK Fox, builder Plymouth Meeting, Pa.

Most people are shoppers. We know they've seen or will see a lot of other houses before they buy ours so we convince them we have the best deal by showing quality products in a good setting—the model house. In it we name all the brands to reassure them we're giving them "old fashioned quality at old fashioned prices."

JIM HILL, builder Houston

We hand out a brochure we call a "Checklist for quality specifications" and ask people to check our products and workmanship against others before making a choice. BILLY UNDERWOOD, builder Dallas

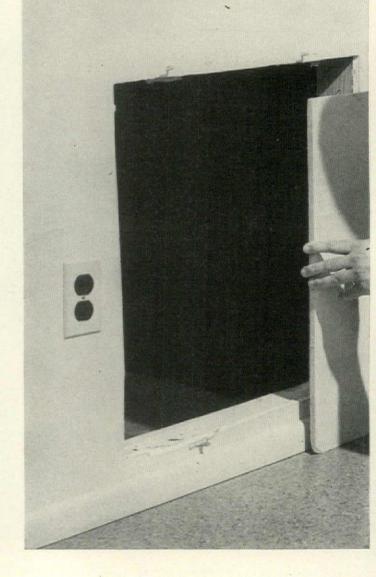
If manufacturers will spend time educating appraisers about quality, it stands to reason that higher appraisals for higher quality will result.

Cut-rate builders can sell low, but they are the best friend the quality builder can have, for the "cheapie" makes prospective buyers shop with a suspicious glint in their eye. The quality builder's products can withstand sharp scrutiny.

W. H. Hunt, vice president Georgia-Pacific Corp.

"Quality pays off –

but you've got to prove you've got it," says Charles Huber



Year after year Charles Huber sells more houses in his price class (now about \$13,500) than anyone else in Dayton and Columbus.

Last year total sales were close to 900. Despite this big volume, Huber's sales are not automatic. He is like a man hawking silver dollars on Fifth Avenue for 85ϕ —people are suspicious. "What's wrong with those houses?" people ask. "At that price they must be using cheap materials."

A big part of Huber's success results from the way his salesmen use cutaway exhibits and cutaway construction to prove they have a good house. They start out knowing they have to prove quality construction and they sell quality products, materials, and methods all the way (you will see how on p 200).



HUBER (above) puts cutaway panels at convenient locations around his model house so prospects no longer need wade in the mud to the construction site (right) to see how the house is built.



Buyers who have been stung by a bad house before or by bad products in a house are wary when they look for a new one. They check the weight of shingles, the size and make of the furnace, the type and quality of insulation, the traffic pattern within the house and the outdoor living around it. You've got to give them their money's worth and usually you can convince them they're getting it with well known products.

GORDON WILLIAMSON, ex-president

Even among low-income groups people are becoming acquainted with quality merchandise which they never knew existed nor thought they could afford. As more quality merchandise is offered to them. they are going to demand more-and get

STEWART B. MATTHEWS, general director International Trader's Club of NAREB

Too many people in the building industry -who basically aren't builders-take the attitude that you should only build quality if you plan to stay in business for a longtime. What they don't realize is that you can actually make more money building quality today. It takes so little to do a job right.

JAMES STRAUSS, builder Lincoln, Neb.

There is really only one way to build a house and that's the right way. I build a lot of houses-as many as 2,000 a year -and if I don't build them right my telephone can jingle an awful lot of times. It's only logical to conclude that if I want to build more and more houses-and I do-then I have to build my reputation on quality.

AL BRANDEN, builder San Jose, Calif.

Quality of workmanship is perhaps the most common fault of merchant building. It is also the most easily corrected. And it also costs very little, if any, more than shoddy workmanship.

The most successful merchant builders are invariably the ones who are most quality conscious, particularly in workmanship. They not only have made more money but have had better relations with their customers. Quality of this type does not need to be sold; it sells itself.

Donald Honn, architect Tulsa, Okla.

Today the builder must act like a gigantic purchasing agent for his customers. To get customers he must buy the right things for them. A builder makes a mistake if he fails to choose products which have the most value and reliability per dollar. If the builder is careless about the quality of items he chooses, his reputation slips and his sales slip with it.

BURTON W. DUENKE, builder St. Louis

I'm sure that most buyers are looking for quality-not only in materials, but in design, livability, environment. If elements of quality are made evident in the house this should reduce the sales cost-and that is no small item as most builders are beginning to find out.

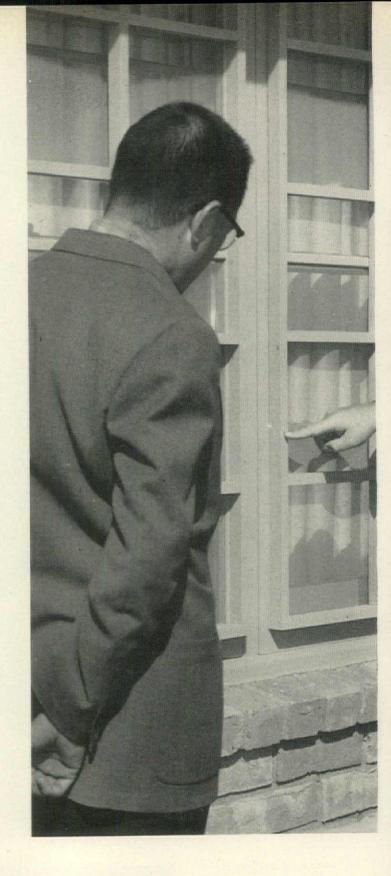
A. Quincy Jones, architect Los Angeles

The modern informed buyer is probably the least difficult to convince that quality is not a luxury but rather is an economy. Better quality shows up in longer wear, lower maintenance, fewer replacements. And since this decrases the drain on the family wallet the economy of quality becomes one of the most important tools a realtor has.

Alexander Summer, ex-president

"Nothing sells like quality –

if you point it out and demonstrate it," says Bill Beck



Last year in four southwestern towns Bill Beck sold 750 houses. This year his target is 1,200. His price range runs all the way from \$8,250 to \$60,000.

Beck sells a lot of houses because his salesmen are trained demonstrators. To help them, last year Beck decided to supplement his four furnished models in Odessa with a special demonstration room where salesmen could show all the quality features and quality products that go into his houses. Did it pay off? "Very definitely," says Beck, "it helps our salesmen and it gives buyers more knowledge of our products and a lot more confidence in them. It is a big factor in making people conscious of our quality." (You can see how Beck's salesmen demonstrate on p 206.)



BECK (above) points out quality feature of new window used on model house; salesman (below) greets prospects in Beck's product demonstration room.



We demonstrate quality by leaving part of a house unfinished. Salesmen then take the prospects around and demonstrate everything they can: we even throw flaming lighter fluid on countertops to show their resistance to burns. We also found that the display area is a good place for salesmen to close the sale: a prospect is under a constant urge to sign up after he has seen all the quality items around him.

ANDY PLACE, ex-chairman NAHB Research Institute

The day of easy selling is gone. The public recognizes quality more every day. I'd say 80% of the people buying houses know the right questions to ask. We answer a good many of them by using all the standard big-name brands. Name brands which imply quality are what is selling-not pony rides and gimmicks. And it doesn't cost much to use quality productsonly 3% of your sales price.

GEORGE HELTZER, builder Anaheim, Calif.

When we sell quality we do it not in terms of ourselves but in terms of the customer and the benefits the qualities have for him. We sell the benefits in terms of easier maintenance, better health, greater economy, pride of ownership.

John G. Clarke, realtor

Portland

We offer our model houses as meeting places for women's clubs to get a chance to talk about and point to quality features in our houses. It is amazing how much time women will spend to see and hear about quality products in houses. And once they are convinced, they go out and talk about it to others.

NILS P. JOHNSON, builder Youngstown, Ohio

We sell quality all the way because it is more important for us to stress quality than for builders of higher-priced houses. We are proving that it is possible to build high quality at a low price. We give our salesmen field training so they can demonstrate to customers.

JOHN LONG, builder

As a lender I'm vitally interested in quality. We encourage builders to put in more quality by getting our appraisers to give them added value for it. We know it pays. The public is more conscious of quality than ever before. People are now better educated to housing standards and many new purchasers have had previous houses to guide them in their next selection.

HENRY BUBB, past president US Savings & Loan League

The best materials are the cheapest in the long run. I can buy doors 50¢ cheaper and save, say \$6 a house, but if I have to have a man come in to fix just one of those doors, it costs me more than \$6. I use a mixed line of appliances -I buy the best regardless of who makes it. The best manufacturers have good service to back up their quality. That's important because callbacks can grind down a builder faster than anything else.

JOE EICHLER, builder Palo Alto, Calif.

We know people like to buy brand names in which they have confidence.

JOHN R. WARD, builder Lafayette, Calif.

People are crying for greater quality. They are very conscious of items with little or no maintenance and a long life. The sale of quality equipment could be quadrupled this year if appraisers would recognize quality.

WILLIAM FLOYD, architect

But here, alas! are seven sad obstacles to overcome before the quality house can be the best seller

Unfortunately:

Too few homebuyers recognize quality when they see it. Too few homebuyers understand the importance of quality, so too few homebuyers are willing to pay even a little bit more to get it. Too few homebuyers really know the difference between a good house and a house they will soon be sorry they bought.

Too few homebuyers know the difference between asphalt tile and vinyl asbestos tile, between a ten-year roof and a 20-year roof, between brass bathroom fittings and white metal fittings, between cheap electrical devices that won't last and specification-grade devices that are twice as good. Too few know that a shaded-pole direct-drive motor that saves \$20 on the first cost of the forced hot-air blower can add \$17 a year to its operating cost. Too few know enough to ask whether the "full insulation" hidden in the walls is 1" thick or 2" thick, paper-wrapped or foil-wrapped.

Equally unfortunately:

Too many lenders do little or nothing to encourage quality, even though quality offers them the best assurance of long-term value and security. Too many appraisers give too little added credit for quality to cover its added cost. Until just recently, even FHA was stacking the cards against quality, discriminating against quality first in its mortgage pattern, second in its income requirements, and third in its valuation practice and procedure.

Equally unfortunately:

Too many building product manufacturers discourage quality by quoting more favorable prices on their poorer grades than on their better grades (because they give the poorer grades a break based on bigger volume). For example: An electrician who buys specification grade devices pays twice as much for them, though on equal volume their cost might be less than 30% more.

Equally unfortunately:

Too many subcontractors load installation mark-up for better products, even if their labor cost is the same. For example, some New York paper hangers charge \$1 a roll to hang \$1-a-roll paper, \$2 to hang \$2-a-roll paper, \$3 to hang \$3-a-roll paper. Resilient flooring contractors often quote 10ϕ more a sq ft for vinyl asbestos tile in place than for asphalt tile that costs them only 2ϕ less. Apparently these subs figure that anyone who specifies the cheapest product is too price-conscious to overcharge; and anyone ready to pay more for quality is less likely to watch the pennies on labor.

Equally unfortunately:

Too few better-house builders work as hard at cost-saving as the builders of minimum houses. Too few better-house builders build as efficiently and economically as builders in the far-more-competitive minimum-house market. A production builder should be able to build as good a house for \$25,000 as could be built one-at-a-time for \$40,000 or perhaps more. Too often the builders dissipate half this advantage by getting lax about their construction economy.

Spending a little more for better materials and better components makes it even more important than ever to waste less on obsolete methods or faulty scheduling.

Equally unfortunately:

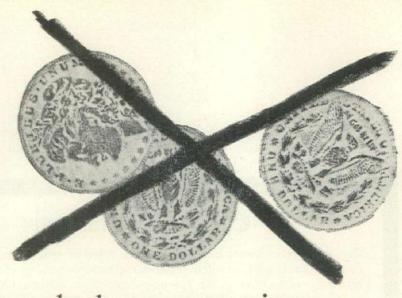
Too many dealers try to take a bigger mark-up on brand-name quality products. This is a particularly sore point with brand-name manufacturers in many lines like windows, cabinets, and hardware where they have to compete with many small concerns that short-circuit established distribution channels.

Most unfortunately of all:

Too few builders and too few realtors know how to sell quality, and too few manufacturers give them adequate help and adequate information to sell quality. (Most manufacturers think their selling job is finished when they sell the builder, instead of realizing the builder is really part of their own secondary sales force and their sale is completed only when the builder has resold their product to a consumer as part of the finished house.)

Here is a selling problem that can be solved only by the most intelligent and understanding cooperation among architects, builders, appraisers, lenders, manufacturers, subcontractors, dealers, and realtors.

This issue of House & Home is planned, researched, written, and edited with this single purpose—to give everyone in the industry a better understanding, item by item, of what quality means and to lay a foundation for industry-wide cooperation to sell it.



A quality house

need not be large, or plush, or expensive

Quite the contrary, in fact: a quality house should cost less to own, even if it costs more to buy.

A quality house is a house where quality has not been sacrificed just to get the price down. A quality house is a house built for maximum long-term value instead of minimum initial price. A quality house is a house whose hidden values are as good as the surface values everyone can see.

A quality house should be the best house for the money; it is seldom the best house money can buy.

A quality house must always be economical, even if it can seldom be cheap.



A quality house

lets builders offer consumers the most value per dollar

We all know that below a certain price level (which varies from city to city) builders must begin taking value out of their product much faster than they can take dollars out of its price. For three reasons:

1. "All your costs per sq ft come down as the house gets bigger."

So says Rudard Jones, director of homebuilding's No. 1 research center, the Small Homes Council. If the first 1,000 sq ft cost \$12, the next 500 should cost less than \$5. If the first bath costs \$1,200, a second bath back-to-back should cost less than \$600. If an almost useless 18" overhang costs \$100, making it a good 36" should cost only \$50 more.

2. Quality costs no more to install

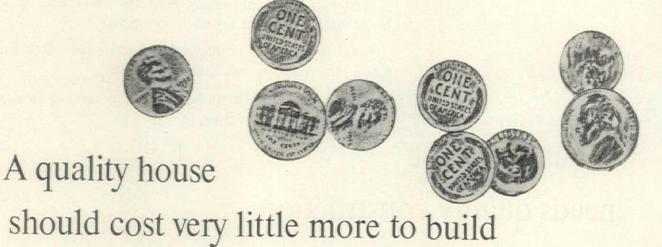
On-site labor is the big cost in homebuilding. And the labor cost for installing quality products should seldom be more and often be less

than the labor cost for installing inferior products. For example: A tenyear hot-water heater costs not a penny more to install than a heater that will fail on the 366th day. Copper pipe costs less to install than galvanized. A 20-year roof costs hardly a penny more to lay than a ten-year roof.

3. Everything costs less to install while a house is being built.

For example, adequate wiring (at least 100 amp service) costs less than half as much to provide before the house is finished. Full insulation costs 60% less if it is installed before the walls are closed. And the cost is a fraction as much to provide a second bath during construction as it costs to tear the house to pieces to add a second bath later.

The quality house is the biggest bargain builders can offer. So it is penny-wise pound-foolish for builders to build anything less, for architects to plan anything less, for lenders to finance anything less, for suppliers to manufacture products for anything less, for realtors to sell anything less, or for consumers to buy anything less.



Most builders could absorb all the added cost of quality without raising their prices at all if they would adopt more of the new ways to build better for less we reported last September (in collaboration with the NAHB Research Institute). Most builders could save enough to use only quality products if they would cut their costs with trusses, modular wall panels, coordinated windows, etc. Many builders could get adequate wiring for less money than they now pay for inadequate wiring. Some builders could get two baths for little if any more than they now pay for one ("I began saving \$300 a house after I took time out to learn about plumbing costs," says Research Institute Chairman Bob Schmitt).

All the added costs for basic quality (see p 153) add up to less than the wasted cost of archaic and conflicting building codes, (H&H, June 1958). They add up to a lot less than the useless cost of land price inflation. They add up to less than the discounts most builders have to pay for tight money.

Says Stanley Edge, the homebuilders' No. 1 merchandising consultant: "You can't sell more houses by taking out quality and sales appeal to get your price down. That's the worst way to economize. The only good way is to use better design, better methods, and better new labor-saving components to offer more value and more quality for less money. And this year hundreds of builders are proving it can be done."

Of course-

a quality house should look like quality

If a builder's architect can't help him build a better looking and better living house for less money, then the builder is working with the wrong architect. And that is almost as true of the decorator and the color consultant.

Good looks are an essential ingredient of any quality product. So is good color, whose sales appeal has been proven again and again. Good color costs not a penny more than bad color, and very little more than plain white.

A more pleasing effect is a good enough reason for spending more money for shakes than for shingles, more money for pure vinyl flooring than for vinyl asbestos that will wear just as long, more money for many other costlier products.

And even the best-looking products won't add up to a good house unless they are tastefully combined.

Good design costs no more than bad design; often it costs less. Good taste costs no more than bad taste.

All this House & Home has said many times before, so we will not say it again in this issue.

A quality house needs quality construction

Quality products won't guarantee a quality house unless they are well installed. The best heating equipment won't assure comfort at low cost unless the system is properly balanced. The best 20-year roof won't last unless it is properly installed. The best flooring is seldom much better than its subfloor. The best windows will leak air if they are carelessly fitted.

This, too, House & Home has said many times before, so throughout this issue we will just assume that the quality products we specify will be properly installed.

A quality house will use brand-name products

Best assurance of quality a homebuyer can expect is the maker's brand-name on his product and the advertising dollars the maker spends to build confidence in his good name. Quality must be more than skin-deep; the looks of most quality products are too often easy to imitate in inferior substitutes; and few homebuyers can tell the difference just by looking at the part that shows.

This, too, House & Home has said so often before that we shall not repeat it again in this issue. It holds true for every housing component and every quality standard.

Last month the Brand Names Foundation honored five merchant builders with awards for the excellence of their brand-names merchandising. First award went to Willard Woodrow. Certificates were also awarded to Ronald S. Brock, Fox & Jacobs, Bob and Dick Fox, and Harry W. Reed.

Meeting minimum quality standards could cost less than \$1,000 more

On a 1,500 sq ft two bathroom plan, here is a rough item-by-item cast-up of how little more it could cost a merchant builder to build quality into every part of his house instead of using the cheapest materials and components FHA would pass:

| Better flooring |
|--------------------------------|
| Better hardware 20 |
| Better walls |
| Better roofing 60 |
| Bigger overhangs 60 |
| Noise control 60 |
| Adequate insulation |
| Better baths |
| Better heating and cooling 125 |
| Better windows 75 |
| Better water heater 20 |
| Adequate wiring 50 |
| Total\$995 |

The added monthly payments on \$1,000 added to the mortgage would be about \$8, but the better quality could save two or three times that much on operating, maintenance, and repair costs.

Says Carl Mitnick, president of the NAHB



own home, you must offer them something better, not just something further out. For example:

If their home is too small, you must offer them more space.

If the family have grown too big for one bath, you must offer them two.

If their heating bills have been too high, you must show how your new house will cut them.

If high maintenance costs have been their headache, your house must cut maintenance to a minimum. 99

Says Bob Mitchell, president of the USS&L League



66Our member associations plan to play a much more active and dynamic part in encouraging builders to build more houses for the quality market.

As quality standards for housing evolve, we can render a real public service by using them as the yardstick for our appraisals and by increasing our loans to reflect the greater value they assure.

Where the higher price of a house reflects the higher cost of low-maintenance quality materials and equipment, the League advises its members to require less income* to buy it (rather than more). **

^{*}FHA may soon announce a similar policy (H&H, Feb '59, p 145)



How to sell quality space with big enough rooms and a big enough garage

Everybody wants more space. From coast to coast the best sellers are houses that offer more space per dollar.

Lack of space is the homebuyers' No. 1 gripe against new houses. Lack of space is the No. 1 reason more homebuyers buy old houses than buy new; and lack of space makes a house hard to re-sell. Says

one of the biggest mortgage lenders (Metropolitan): "Proper room sizes facilitate the rental or re-sale of residential properties, thus reducing the possibility of loss through foreclosure... This element of security is of primary importance."

A quality house need not be big, but it must be big enough to have big-enough rooms. And it is mighty hard to squeeze three big-enough bedrooms, two big-enough baths, a big-enough kitchen, a big-enough living room, a big-enough family room, a big-enough entry, and big-enough storage into much less than 1500 sq ft. (The small quality house shown in the frontispiece has 1450 sq ft of air conditioned space plus 468 sq ft of garage and outside storage.)

Minimum sizes for big-enough rooms are much bigger than FHA standards require. Here are some Quality House minima which represent a rough consensus of the Small Homes Council, the Cornell Kitchen Study, and the mortgage department of Metropolitan Life, which has done such effective work to raise room-size standards and encourage builders to provide rooms the furniture will fit:

Add 70 sq ft for partitions and you are already up over 1350 sq ft, with all your spaces the rock bottom minimum for big-enough rooms and with no allowance for extra space needed to give each room pleasing proportions, no allowance to meet door and window requirements, and no allowance for the impossibility of making six minimum rooms and two minimum baths fit together without adding a foot to any of them.

| Master bedroom | 171 sq ft |
|--------------------------|--|
| Second bedroom | |
| Third bedroom | |
| (minimum bedroom width | |
| Bath | |
| Bath | |
| Living room | 196 |
| Family room | |
| Kitchen | |
| Entry (4'x16') | 64 |
| Bedroom hall (3'4"x16'). | 52 |
| Laundry and heater | 50 |
| Storage | 130 |
| Total | A STATE OF THE PARTY OF THE PAR |

More space is the cheapest thing to add



Too-small rooms are just about the easiest and cheapest fault to avoid, but they are the most expensive if not impossible fault to correct. If a too-small room costs \$10 a sq ft, a smart builder can add enough space to make it big enough for less than \$5 a sq ft, for the big-enough room needs no more corners and no more openings to run up its cost. (Builder Bob Schmitt, chairman of the NAHB Research Institute, adds finished space for as little as \$3.37 a sq ft, including overhead and profit.) So, for example, if a too-small 80 sq ft bedroom (FHA minimum) costs \$800, you can make it 37.5% larger and just-big-enough at 110 sq ft for only \$950.

The master bedroom:

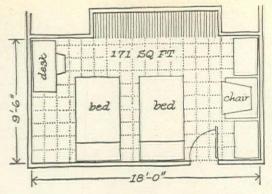
FHA will accept 120 sq ft, but the Small Homes Council* says "The smallest desirable size for the master bedroom is 171 sq ft (9½'x18') or preferably 187½ sq ft (12½'x15')." And SHC warns that "these dimensions may have to be increased if doors or closets are so located as to conflict with the most space-saving furniture location."

Figure it out for yourself.

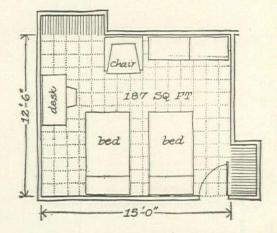
"It is essential to provide for twin beds in the master bedroom," says SHC. "Even if the homebuyers do not own twin beds it is important to provide for the minority who do, in order to insure maximum marketability for quality houses." Twin beds side by

continued

^{*}SHC material on bedroom sizes is taken from Livability and dimensions for bedrooms by W.H. Kapple, 13th annual short course in residential construction.

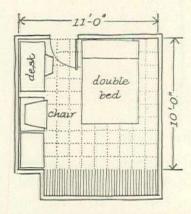


Here are the furniture plans shc used to figure minimum sizes for a good master bedroom.

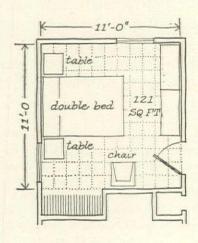


side are 7' wide and 6½' long. You need at least 3' of go-space at the foot, so the minimum room width is 9½'. You should also allow at least 3' of go-space on one side of the two beds, 1½' between the beds, and 1½' on the other side (otherwise the bed will take twice as long to make—and Metropolitan requires 2' in all but the cheapest houses). That makes the minimum length of a twin-bedroom at least 13' without a single piece of furniture except the two beds. For the other four pieces recommended by SHC (dresser, vanity, easy chair, and one optional item), "it is necessary to provide two additional areas of free floor space—one at least 2'x8', the other at least 3'x8'." With a 9½' room width, this would make the minimum length 18' and the minimum area 171 sq ft, "provided the closets are on the long side. With closets on the short side, the area must be increased slightly."

"A bedroom 9½'x18' permits the most efficient use of space" says shc, "but it is not as pleasing as a room 12½'x15', which has the further advantage of permitting more than one bed location."

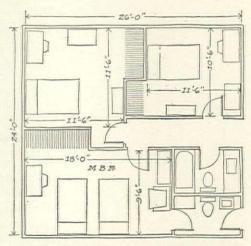


Above is how she figures the minimum size for secondary bedrooms. Below is the smallest secondary bedroom Metropolitan shows as "acceptable."



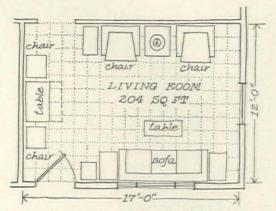
The other bedrooms

FHA will accept secondary bedrooms as small as 80 sq ft, but SHC sets the minimum for good livability at 110 sq ft; the smallest bedroom Metropolitan shows as "acceptable" is 121 sq ft, and shc points out that its 110 sq ft minimum is unworkable if the hall door is within 2' of the bedroom corner or if the closet is located on the short wall. Both sHC and Metropolitan use double beds and two other pieces of furniture as the basis for their minimum bedroom plans. Minimum room width with 3' of go-space at the foot of the bed is, of course, 91/2'. The double bed with 11/2' free on one side and 3' on the other needs at least 9' of wall. The other two pieces of furniture need 2' depth. If the 3' go-space beside the bed can do triple duty to provide for the hall door and to provide go-space for the other pieces, you can get by with 11'. So sho says: "the minimum that will comfortably accommodate three pieces with a dual bed location is 91/2'x111/2'—an area of 110 sq ft." And this would have to be increased to 101/2'x111/2' if the closet is located on the short side.



This is the tightest sHC plan for the bedroom wing.

Fitting minimum quality bedrooms together is a hard problem. SHC says: "The bedroom wing cannot be reduced below 24' width without squeezing the bedrooms below the minimum desirable dimensions." And the smallest bedroom wing SHC shows with three bedrooms, two baths, and bedroom hall is 624 sq ft.



This is Metropolitan's furniture plan for the smallest good living room.

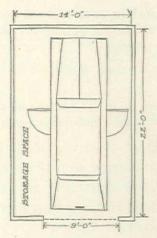
Living room

Smallest living room Metropolitan considers "acceptable" for even the cheapest house is 196 sq ft, with 12' the minimum dimension, because "the living room should be large enough for a sofa, a coffee table, two upholstered chairs, two or three occasional chairs, and incidental furniture such as lamps and end tables," and "all the comfortable furniture should not be placed on one wall."

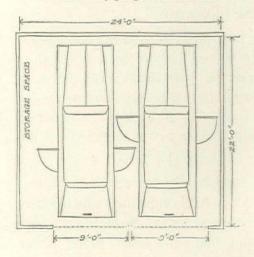
Now that general acceptance of the family room is turning the living room into a quiet room and a formal room, the minimum set by Metropolitan for the cheapest houses may be accepted as the bare minimum for a quality house too.

Family room

Family rooms get more use by more people for more purposes than any other room in the house, so the family room should be the biggest room in the house—at least 220 sq ft not counting the kitchen work area. This 220 sq ft is only twice the 110 sq ft minimum the Metropolitan requires for eating space in even the cheapest three-bedroom house.



Here is why garages must be wider.



Kitchen

The Cornell Kitchen Study recommends a kitchen work area of 96 sq ft. The Small Homes Council found an 8'x10' U-shaped work area the smallest to which it could give a maximum score. With the oven separate from the burner top and with a dishwasher the shc researchers found the minimum had to be increased to 112 sq ft.

Garage

Most families with money enough to buy a quality house need a two-car garage. To take today's wider (up to 6'8") cars with today's wider bicycle, a two-car garage should be 24' wide, and at least 22' deep. A one-car garage should be 14' wide. Garage doors should be at least 9' wide. The only good garage doors are upward acting doors, well balanced, sturdy enough to take plenty of wear, and designed with a gasket at the bottom to keep rain from running in. Says Sales Manager Warren Messer of Crawford: "The garage door is the biggest piece of moving equipment in the home. It is well worth paying a little more to be sure it will give good service." Two 9'x7' doors are much better than one 16'x7' door and cost no more installed (because the center post saves the cost of a long beam).

Entry

Metropolitan lists an entrance vestibule as "essential" in mediumor higher-priced houses and "desirable" in low-cost houses. If the entry is to be anything more than a vestibule it should be 6' wide and long enough to give access to the bedroom hall and the rear rooms of the house without passing through any other room.



How to sell a quality roof

A bigger and better roof is a bargain for builder and buyer alike.

A quality house should have a big roof with at least a 2' overhang and preferably 3', because:

- 1. It will make the house look bigger. In fact, it will do more to make the house look bigger than making the house itself bigger without increasing the size of the roof.
- It will make the house look better. A strong roof line will help pull all
 the design elements together, and a strong roof line just above the
 window head will give the house the long low look so many buyers
 like.
- It will keep the house cooler. By keeping the midday sun off walls and windows it will make the house much easier to keep cool without air conditioning and cheaper to keep cool with air conditioning.
- 4. It will make the house cheaper to maintain, because it will protect the walls and trim so they will need less repainting and less refinishing, (and the windows will need less washing).
- It will make the house pleasanter on rainy days, because all the windows won't have to be closed.
- It will make the house quieter, reducing all outdoor noise and minimizing airplane noise, which is becoming a nuisance in many areas.

A wide overhang costs very little more than an overhang too narrow to do much good, because a narrow overhang must be framed the same way as a wide one and must meet all the same soffit problems. So almost the only added cost is a little more roofing and soffit material at, say, 35ϕ a sq ft.



A better roof is a bargain for the buyer too

Re-roofing a house when the first roof fails can cost the homebuyer a lot of money (anywhere from \$300 to \$1,000 for a 1,500 sq ft house), but most homebuyers know so little about roofs and take so little interest in them that most builders feel they have no choice but to use the cheapest-first-cost roof FHA will approve, whether or not it will be the cheapest for the homebuyer over the length of the mortgage.

And the National Bureau of Standards* comments: "Unfortunately the salesman may be little if any better informed. As a consequence, price is too often the determining factor. Without question, many purchasers of inferior roofing materials would prefer better materials if the advantages of the better materials were made plain."

^{*}All Bureau of Standards quotations are from BMS6 or BMS70.

For pitches less than 3-in-12 the cheapest roof is built-up gravel, which costs as little as \$13 a square (100 sq ft) in Los Angeles, or \$12.50 in Miami (plus the cost of the plywood or solid sheathing under it). This is the easiest kind of roof for the subcontractor to skimp on, but if properly installed it will last a long time, especially on pitches under 2-in-12. (That is why it it used on most commercial and industrial buildings, where costs are figured by the year.) In the warm climates where low roof pitches are most common it will last 40% or 50% longer than the cheapest roofs commonly used on steeper slopes.

For pitches of 3-in-12 or more the cheapest roof FHA will pass is 210 lb asphalt strip shingles with 5" exposure. At \$6.80 a square to the roofing contractor or about \$8 to the builder, this is priced even lower than the cheapest sheathing. It is a lot of roofing for the money, and it has been greatly improved in recent years; but it is seldom as good a bargain for the homebuyer as a better asphalt-shingle roof or a better roof in some longer-lasting, higher-first-cost material. It is least apt to be the best bargain in hot humid climates, where the Bureau of Standards found that "asphalt shingles weather more rapidly than in cooler climates with less sunshine." Asphalt-prepared roofings "may be expected to give 50% to 100% longer service in the Northeast than the same materials exposed similarly in the southeastern states."

So BLs found asphalt shingles used on 88% of the new houses built in 1956 in the Northeast, but only 59% in the South and 40% in the West. Conversely, wood shingles or shakes were used on 33% of the new houses in the West, but only 2% in the Northeast.

The weight of the shingles is important when you are selling a second-time buyer.

GORDON WILLIAMSON, realtor Detroit

Terrible cheap roofing was used during the depression, and FHA did a great service by making a 210-lb shingle the minimum. Now the time has come to upgrade the minimum again.

H.H. WHITTEMORE, general sales manager Building Materials Div, The Flintkote Co.

Any asphalt roof is good value. A better asphalt roof is a better value.

ROGERS WEED, sales manager-roofing Bird & Son, Inc.

Asphalt doesn't wear out, it dries out; so it lasts longer in the North.

D.B. HUMPHREY, merchandising mgr US Gypsum Co.

Sheathing under the roof costs twice as much as the 210-lb roof used to protect it!

LLOYD A. FRY SR, chairman Lloyd A. Fry Roofing Co.

The self-sealing shingle came into being because the insurance companies had greater wind damage than fire damage.

J.F. Simpson, director, building material sales Barrett Division, Allied Chemical Corp.

Most lock-tabs are 220-lb roofing. Manufacturers will replace locktabs and self-sealing shingles at their own expense.

F.K. SWEENEY, vice president sales The Ruberoid Co.

Cheapest way to get better roofs: buy better shingles

The shingle itself is a very small part of the total roof cost (about \$8 a square out of an installed cost of \$25 to \$28 including the sheathing). So paying 50% more for better and longer-lasting shingles would raise the finished roof cost less than 10%.

Asphalt shingles don't wear out. They dry out in the sun, or they blow loose in the wind, or they curl at the edges from temperature differentials, or they lose the colored surfacing granules that make them look so nice when new.

There are three good ways to upgrade asphalt shingles and cut their long-term cost.

- 1. Seal down the shingle tab, either by using self-sealing shingles or by using plastic cement under each tab. This will help control curling, help minimize wind damage, help keep the granules from working loose as the shingle flexes. FHA requires self-sealing on any roof pitch less than 4-in-12, and self-sealing shingles cost only about 80¢ a square, or \$16 more on a 20-square \$500-plus roof (or you can use interlocking shingles for only 25¢ a square more).
- 2. Use heavier shingles. Says the

Bureau of Standards: "The greater the weight of the shingles, the better the service." Most makers give some sort of 10-year bond with 210-lb shingles; they give some sort of 15-year bond with 250-lb shingles, which cost about \$2 a square more, thereby raising the total first cost of the roof from about \$25 to about \$27; and they give some sort of 20-year bond with 300-lb shingles which cost about \$5 more. On that basis the heavier roofs would be a much better buy, except that the coating

- granules will work loose almost as fast. Sears Roebuck gives an unconditional 10-vear materialsand-labor warranty when it lays 210-lb shingles, and a 12-year warranty with 250 lb, but neither warranty covers the granules.
- **3.** Lay the same shingles with 4" exposure instead of 5". Says the Bureau of Standards: "Roofings that provide the best coverage resist weathering best," and also, "as exposure is reduced the possibility of wind damage is lessened."

continued

There are many other kinds of good roofing-

Most houses that are not roofed with asphalt (built-up or shingles) are roofed with red-cedar shingles or shakes.

Their extra cost varies widely from place to place with freight rates and local labor conditions. In Seattle roofers bid only \$5.70 more for cedar shingles in place than for 210-lb asphalt; in Los Angeles \$9.50 more; in Dallas \$11 more; in St Louis \$16 more. In New Orleans, where asbestos shingles are a local standard, local roofers had so little experience with wood shingles that Webb & Knapp planned to bring roofers from California to nail them up.

cedar shingles

The Red Cedar Shingle Bureau says builders can cut the above cost differential \$3 or \$4 by laying shingles on 1x4 or 1x3 nailing strips, which cost a lot less than the solid sheathing needed for composition shingles. (The Bureau of Standards noted "no appreciable difference in the rate of weathering on shingle lath and on tight sheathing."

In Los Angeles, good cedar shingles laid on shingle strips cost about \$31 compared with about \$25 for the cheapest asphalt shingles laid on solid wood sheathing. Wood shingles last 40% to 50% longer there, so over the years they will actually cost the homebuyer quite a bit less. But in the Northeast, where wood shingles cost more and asphalt shingles last much longer, the long term cost balance is different.

and shakes,

Light cedar shakes cost from \$5 to \$8 more per square in place than shingles, and heavy shakes cost another \$4, but they will last even longer and many homebuyers like their looks.

Here are some local roofing bid prices to give you an idea of how they vary from city to city:

| | Los Angeles | Dallas | St Louis | Seattle |
|----------------|-------------|--------|----------|---------|
| built-up | 12.50 | 16.50 | 13.00 | 13.30 |
| 210-lb asphalt | 13.50 | 11.50 | 12.00 | 13.30 |
| cedar shingles | 23.00 | 22.50 | 28.00 | 19.00 |
| light shakes | 28.00 | 30.00 | 33.00 | 24.70 |
| heavy shakes | 32.00 | 34.00 | 37.00 | 27.55 |

Los Angeles prices from Hadley-Cherry; Dallas from Fox & Jacobs; St Louis from Burton Duenke; Seattle from Albert Balch.

aluminum,

Until last year aluminum roofs were seen mostly in research or demonstration houses, but now National Homes has focused wide interest on their possibilities by offering a choice of aluminum shingle or panel roofs in its new Viking line. For a 1500 sq ft house, they are priced about \$300 higher than asphalt shingles and National Homes reports that about 20% of its buyers this year have paid the extra to get them.

For hot climates a metal roof offers special advantages because 1) it has a higher heat reflectance and 2) it does not deteriorate under the hottest sun. Says the Bureau of Standards: "Climatic conditions in the Southeastern states are very favorable toward the durability of metallic roofings."

AND

terne.

Terne roofing has enjoyed a top rating for quality for centuries. If repainted regularly it will last a long time. New manufacturing efficiencies are now making it available at substantially lower prices.

and tile Tile is the other Cadillac of roofing.



Forde Photographers



Fogarty Studio



Texture and variety - the way to sell quality walls

People trading-up to quality houses don't want to pay that much money for houses that look just like the houses next door. Big builders who should have known better learned this lesson the hard way when they tried to sell bigger and better look-alikes the way they sold low-cost look-alikes.

Outdoors, stucco makes a good-enough plain wall surface, but plain surfaces are not what trading-up buyers are looking for.

Indoors, wet plaster with steel reinforcing makes a good plain wall—(its sponsors say it makes the best). Wallboard 3/8" thick on studs 16" oc also makes a good plain wall*; wall board 1/2" thick on studs 24" oc makes a better one for less money—better because it lies smoother and because the heavier weight makes a better sound barrier, cheaper because the heavier weight costs only 1/2¢ a sq ft more and saves every third stud. But plain painted plaster or wallboard all through the house is not what trading-up buyers want either.

Trading-up buyers want some individuality. They want some texture, some variety, some accent, inside and out.

Outdoors their first choice in most cities is at least some brick. One good way to use it is a sill-high band that helps make the house look longer and lower; another is panels between the windows. But there are many other good ways to give character and variety to your exteriors—redwood, aluminum, cedar shingles, colored asbestos, hardboard, fiberboard, or plywood panels that do double duty as sheathing.

Indoors it costs comparatively little to give warmth and richness to at least one wall with hardwood plywood paneling, which comes easy-to-install in a wide range of veneers and long-lasting factory finishes (some of them in colors). It costs still less to accent one wall with photographic or coated finishes on hardboard or on plastic coatings (which are also good to moisture-proof a bath or grease-proof a kitchen). It costs still less to use fabric wall coverings in decorator patterns, and it can cost least of all to use wall paper, which is still as good today as when it first pioneered the economy of factory finishes.

But even the best quality materials won't add up to quality on your walls unless the builder gets good professional advice from a good architect and a good decorator on where to use them and how to make them work together. This is no job for amateur designers. Without professional advice, spending extra money for variety and fine finishes will end up nine times out of ten in a banana split.

*You can reduce nail popping and save a lot of finishing labor on dry wall if you use No. I framing lumber kiln-dried to the right local moisture content. (Builder Doelger in San Francisco even reports he got better walls for less money by using redwood studs for their hard-to-beat dimensional stability.) You will have still less trouble with nail popping if you 1) use shorter grooved nails instead of longer plain nails or 2) use less nails and an adhesive to hold the dry-wall to the studs.

Second-time buyers know a house has four sides, and they look at all four walls from both sides. They like some variety, and they like the new materials and texture interest. And they want the salesman to show them what is inside the wall.

STANLEY EDGE Stanley Edge Associates

On interior walls, quality is more the way a house looks than anything else. . . . Factory finishing is increasing the use of fine plywoods in the home, because a better finish can be put on at less cost with big equipment than by hand.

EUGENE M. FORD, eastern sales manager Roddis Plywood Corp.

Component construction is here to stay; it permits higher quality at less cost.

PAUL B. SHOEMAKER, vice president Masonite Corp.

Identification is the No. 1 problem for wall materials. . . . We must let the appraiser see exactly what kind of increased quality a wall surface may have.

We increase value when we cut site labor.
. . . Combination siding and sheathing 34" thick can be applied in 11-12 hours per 1000 board-feet.

Byron C. Wagner, director of marketing The Upson Co.

We should use dry and better framing lumber to get good walls. . . . Some 2% or 3% of drywall is now applied with an adhesive. The only way to eliminate nail pop is to eliminate nails.

TED UNDERWOOD, merchandise manager US Gypsum Co.

For ceilings where joist spacing is 24" oc and humidity is very high, we recommend 5%" wallboard. In high-humidity areas ceiling sagging has been a problem, and the 5%" board has reduced this trouble considerably.

JOHN W. BROWN, senior vice president National Gypsum Co.



How to sell quality windows

After July 1 FHA will begin requiring all wood windows at least to meet commercial standards (which is more than a big percentage of the windows used in recent construction could do).

Since 1957 FHA has insisted that aluminum windows should meet AWMA minimum standards, but now many builders and many manufacturers believe these standards are too low to do double duty as quality standards for better homes.

For both wood and metal House & Home suggests a quality standard for windows would further require that:

- 1. They should be easy to wash from indoors (for double-hung and sliding windows this means they must be easily removable);
- 2. In cold climates they should be condensation-free at O°F outdoors and 30% relative humidity indoors;
- 3. They should include storm windows and screens wherever these may be needed—both of them easy to remove and easy to store.

These quality standards are met by good windows in either wood or metal frames, except that the condensation-free requirement raises special problems for metal. Only the best aluminum windows break the direct heat transfer around the glass with an insulating layer of elastomer like vinyl or neoprene.

Wood windows have a distinct advantage in lower heat transfer, so they are used in most houses where winters are cold. Metal windows have an offsetting advantage in lower maintenance costs because aluminum needs less repainting; they have a second offsetting advantage in greater strength with thinner members, which permits larger glass sizes in the same opening; so metal windows are now widely used in mild climates.

All brand-name wood-window makers and most brand-name metal-window makers set themselves standards much higher than the commercial standards FHA accepts. For example, the commercial standard for air infiltration around double-hung sash is .7 cfm per lineal foot of crack. Most brand-name double-hung windows cut this almost in half. The commercial standard for awning windows also permits .7 cfm infiltration. At least two brand-name awning window makers cut this to less than one-sixth as much.

As a further example of brand-name quality, one manufacturer points out that: "On our double-hung windows, we not only furnish the stops, but install them exactly; we not only furnish the stool, but the ends are already returned; we not only furnish the sash lock, but pre-drill the sash rail accurately to locate it. We rout the sash lifts into the bottom rail of the bottom sash. All our exposed wood parts are toxic and moisture-treated after milling and before assembly, and our aluminum weatherstripping is anodized."

Any builder who puts in windows that just meet commercial standards is putting in real junk windows. . . .

HUGH ANDERSEN, vice president Andersen Corp.

I do not think metal-window manufacturers are satisfied with FHA standards.

B.L. LEVINSON, general manager F.C. Russell Co.

Too often a cheap window and a good window both have the same apparent features.

A.E. LIND, merchandising manager Truscon Div, Republic Steel Corp.

I would specify, as an architect, manufacturers who will fix their windows at their expense.

WILLIAM KAPPLE, AIA Small Homes Council

Our problem is to get the mortgage lender to recognize extra value in windows.

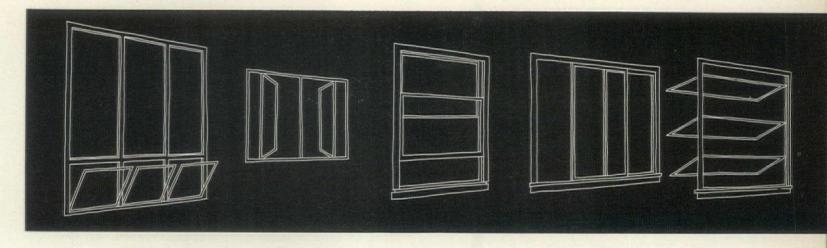
L.T. RIORDAN, sales manager Silcrest Co.

Quality is the sum total of craftsmanship, engineering know-how and esthetic design sense.

> PAUL V. FARVER, sales manager Rolscreen Co.

FHA should check job sites unannounced, just as the UL does in factories. That might stop a lot of chiseling in the window business.

H.J. GOULD, advertising manager General Bronze Corp.



How little more does quality cost?

Competition between window makers in both wood and metal is so keen that manufacturers say a builder can buy the best brandname units with all the new improvements for not more than \$5 or \$6 more per window (or \$75 to \$100 more per house) than he must pay for the cheapest unit with cheap hardware that just meets commercial standards.



Better windows usually cost less for labor to install them, and most builders can more than save every penny of added material cost for window quality if they will:

1. Switch to window sizes that will fit their wall openings, instead of wasting framing lumber, sheathing, siding, insulation, dry wall, and labor fitting their wall openings to misfit window dimensions (H&H, June '55 and Jan '57).

continued



Ad Photo Studios



If we could spend ten minutes talking window quality to every salesman selling homes, everybody would be better off as a result.

WILLIAM M. MISHLER, sales manager Winter Seal Corp.

Some of our distributors want a higher mark-up for good brand names, and this is a situation we have got to change. . . . If you can show that your windows will save the homebuyer money on heating-cooling costs, then FHA will let you raise appraisals.

Tom Hugenin, sales manager Caradco, Inc.

. . . . The best way to make sure of quality in aluminum windows is to make sure the maker will back them up.

T.Y. SMITH, president Fleet of America Inc.

If the right modular size of window fits just right into component construction there can be a \$5 saving for labor and material per opening, and this can balance off the \$5 difference between the most expensive and the cheapest window.

JOHN HERTZBERG, assistant sales manager R-O-W Sales Co.

The convenience of cleaning windows without risk of life or limb on ladders is very important in rating a window product. . . . Weather stripping and other items must be easily replaceable to restore their original effectiveness.

A.H. Kiehl, vice president Textron Metals.

Some builders buy cheap windows with 230% more infiltration than UL standards allow.

HAROLD W. CLAYPOOL, vice president F.C. Russell Co.

Brand-name manufacturers are constantly trying to upgrade their product.

VERN GESSNER, sales manager The Malta Mfg Co.

- 2. Switch to less and larger windows to get the desired glass area. Two small windows cost almost twice as much to install and fit as one large window, and small windows sell for almost twice as much per sq ft of glass.
- 3. Switch to single-pane sash, using the new removable muntins when the homebuyer prefers the effect of small panes. These slip-in muntins also make a window much easier to wash and much cheaper to repaint. They never need to be puttied, and they can be thrown out if the homebuyer changes his mind about small panes.
- 4. Combine fixed glass with movable sash for some of their window areas. Fixed glass costs only half as much, and today's much bigger glass area seldom needs to be 100% openable for ventilation. (Only drawback to fixed sash: it is harder to wash from indoors.) Says the Small Homes Council;* "Large window panes (more than 12 sq ft) are economical only in fixed glass installations.

Best way to save the homebuyers money on windows is to include storm sash and screens in the house package, for the builder can buy them correctly engineered for his windows for less than half what the homebuyer will have to pay later for what may be an inferior product. The builder can finance them at low interest under the mortgage, where as the homebuyer must finance them at high interest on short term credit. And FHA requires no more income to buy the house complete with screens and storm sash than to buy it without those two essentials.

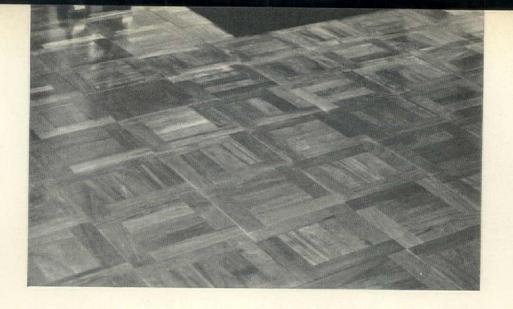
First cost of windows with sealed double glass (Thermopane or Twindow) avearges about 10% higher than prime windows plus storm sash, but the Small Homes Council points out that double glass does not have to be put up or taken out with changing seasons, that it has only two surfaces to wash instead of four, and that it never interferes with ventilation or opening at night, so easier maintenance may make it a better buy over a period of years.

Most new types of windows cost nothing extra

Before 1933 almost all windows were wood, and all wood windows were milled and assembled in local millwork shops, glazed on the job, and weatherstripped (not too effectively) after the first winter. Today about 40% of all wood windows are factory-made by a dozen big manufacturers who ship them pre-glazed, pre-weatherstripped, and pre-hung. (Cleveland and Chicago were the last cities where windows had to be glazed at the side.) Before 1933 almost all windows were double-hung units that had to be washed from the outside. Today 45% are new types developed or perfected in the past 25 years. All the new types of window (awning windows that can be kept open when it rains, hopper windows for low-level ventilation, sliding windows for horizontal openings, top-hinged for ribbons, etc) are available in either metal or wood, and they cost about the same per sq ft as good removable double-hung windows, except that casements (which used to be the most troublesome but can now be the tightest) most slightly more.

Brand-name quality is doubly important in aluminum where commercial standards are so low and competition is so keen that many irresponsible manufacturers offer builders cheap windows whose glass is too thin for its size and whose frames are too light, while others offer sliding doors that let rain run in over the sill and permit so much air infiltration that they can be used only in warm climates. This situation has become so serious that Miami has taken local action to require windows four times as strong as the minimum FHA will accept, ie, 40 lbs windload instead of ten. This 40 lb requirement may well be excessive, for it would allow a 50% safety factor in a 125-mile hurricane, but the threat is spurring the aluminum window manufacturers to adopt higher commercial standards that would freeze out the most inferior makes.

^{*}See Circulars F11.1 and F11.2, price 15¢ from the University of Illinois Small Homes Council, Urbana, Ill.



How to sell quality flooring

Floors get more wear than any other surface in the house. They also get more cleaning, because they get more dirt and dirt stays there. They get wet more often with more kinds of liquid, from detergents and water to gin and tonic. They also make more noise and cause more fatigue. They are the first thing most home shoppers notice when they enter an unfurnished house.

Floors, in brief, are very important surfaces.

What is the quality standard?

The quality standard for flooring must be different for almost every room of the house, because almost every room presents a special problem, and in some rooms it is more important than in others to spend more money for better flooring. For example:

The formal living room is the showplace of the house. Most women want hardwood flooring there, and 84% of them get it.

The kitchen floor must stand up unprotected against more wear per sq ft than any other. It must also be greaseproof, easy to clean, immune to frequent wetting. So in the kitchen linoleum has long been the favorite; vinyl asbestos is now strongly recommended; and sheet vinyl over a rubber cushion is best of all to save tired feet. A 112 sq ft kitchen can have as little as 55 sq ft of exposed floor, on which the very best cushioned flooring would cost less than \$20 a house more than the cheapest.

The bathroom floor gets little wear but a lot of water. A 5'x8' bath with a 30" tub has less than 28 sq ft of exposed floor, so once again the best costs very few dollars more. Ceramic tile is good, and BLS found it used in 38% of all living-floor baths installed in 1956. Terrazzo is a bargain where local labor can put it in cheaply, as in Florida. Many buyers like cork because it is warm underfoot. Sheet vinyl is fine because its edge can be turned up around the wall to be watertight.

In the family room the No. 1 need is a floor that is cocktail-proof and easy to clean. Vinyl tile is fine and so is linoleum over a wood subfloor. Hardwood is handsome and just as easy to clean if it has one of the new durable finishes.

The children's bedroom, like the family room, needs an easy-to-keep-clean floor, because children so often sit and play on it.

In master bedrooms, most families prefer hardwood and BLs found it in 81%.

A finished basement is usually the best place to cut costs with asphalt tile.

continued

How little more does quality cost?

For the 1500 sq ft house whose room sizes are listed on p 155, the material cost differences between the cheapest flooring builders use (group C asphalt tile) and a quality flooring picked to meet the needs of each area would run between \$150 and \$200. This extra money would, for example, provide prefinished strip hardwood flooring throughout the bedroom wing, sheet vinyl, or cork, or ceramic tile in both baths, vinyl tile in kitchen, family room, entry, and bedroom hall, prefinished hardwood parquet in the formal living room.



Labor costs should be about the same no matter what flooring material is used. Says the biggest maker of resilient flooring: "All sheet goods and all resilient tiles cost the same to install, except the so-called solid vinyls, which require a more expensive and time-consuming adhesive." Says the National Oak Flooring Manufacturers' Association: "Installation cost for factory-finished oak flooring in the average community would not vary much above the installation cost of composition tile except that strip hardwood requires screeds to lay over concrete." Prefinished flooring should cost less for local labor than flooring that has to be sanded, filled, and waxed on the job.

Here is how material prices per sq ft compare. Resilient prices are the largest manufacturer's lowest published dealer prices fob mill plus 20%. Hardwood prices are fob Memphis and are the oak flooring averages quoted by the Hardwood Market Report plus 20%, except that the quotation for ½" stretched hardwood tile is the carload price fob New Orleans quoted by manufacturers.

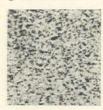
| Resilient | | | | | | |
|----------------|-----------------|------|------|-----|-----|-----|
| Asphalt tile, | 1/8" | | | | | |
| Group B | | \$ | .088 | per | sq | ft |
| | | | .126 | ** | ** | ** |
| Corkstyle | | | .132 | 17 | | |
| Group D | | | .145 | 17 | " | 2.7 |
| Grease proof | | | .234 | ** | ** | ** |
| Vinyl asbesto | os tile | | | | | |
| Standard mark | oles, .065 | | .176 | ** | ** | 7.9 |
| | , .065 | | .217 | ** | ** | ** |
| | oles, ½" | | .342 | ** | " | ** |
| | imperials, 1/8" | | .397 | " | " | ** |
| Homogeneou | is vinyl tile | | | | | |
| Standard mark | oleized, .08 | | .378 | 21 | 77 | " |
| Standard mar | bleized, 1/8" | | .518 | ** | 7.9 | rr. |
| Cork tile, 1/8 | 3" | | .398 | ** | ** | |
| Rubber tile, | .08 80. | | .292 | ,, | *** | 11 |
| Rubber tile, | 1/8" | | .404 | ** | " | " |
| Linoleum | | | | | | |
| Marbleized, .0 | 90 | | .19 | ** | ** | ** |
| Embossed, .09 | | | .293 | ** | ** | ** |
| Sheet vinyls, | .070 | .34- | .455 | ** | ** | ,, |
| Special deco | rative effects | .54- | 1.63 | ** | 11 | " |

| Hardwood | | | |
|---|---|---|---|
| Unfinished strip | 25/32x2 ¹ / ₄ " | 1/2×2" | 3/8 x 1 1/2" |
| Clear plain white Clear plain red Select plain white Select plain red #1 Common white #1 Common red #2 Common Common & better 11/4' | 304 .287 .295 .281 .283 .203 | \$.241 .241 .234 .234 .218 .218 .162 .162 | \$.233 .258 .226 .248 .165 .182 .091 .115 |
| Prefinished strip | | | |
| Prime | 015 | | |
| Solid block unfinished | | | |
| Clear | .420 | | |
| Solid block prefinished | | | |
| Prime Standard & better | | | |
| Laminated block prefinished | 396 | | |
| Prestretched hardwood, 1/8" | 22 | | |

A quality floor for every need

Good hardwood flooring has such natural beauty that before the war most homebuyers thought of hardwood as the only quality flooring for the living room, just as they thought of resilient flooring or tile as the logical surfaces for bathrooms, kitchens, and work areas.

But today resilient flooring makers are challenging hardwood's quality monoply in the living areas with luxurious new plastics, at the same time that the hardwood manufacturers are challenging the preference for resilient in the family room with new lower-priced lines and with new long-lasting, easy-cleaning finishes.



Among resilient floorings, asphalt tile is still best where you have to economize, but it should not be used in the kitchen, family room or bath because it will not stand up under grease, urine, and strong soaps and detergents.



Vinyl asbestos is good anywhere in the house. It costs very little more than asphalt tile, and it is so durable that its makers say 1/16" is thick enough if the subfloor is smooth.



Linoleum is best for covering up an imperfect subfloor, and it is least apt to show footprints; but it must not be used in the basement or on a slab because dampness coming up through the concrete will rot the backing and decompose the linseed oil binder.



Cork and rubber tile are easy to walk on, and cork is warm to the touch.



Pure vinyl is resilient flooring's luxury challenge to hardwood.

If a builder spends more money for a better kitchen floor, it's up to us realtors to make the buyer realize it will be easier to clean and cheaper to maintain, that it will not be damaged by grease, and that it will be more comfortable to stand on.

JOHN G. CLARKE, realtor Portland, Ore.

No one floor is perfect for the whole house. There is one good floor for one area and another good floor for another. You could put asphalt tile in the basement, vinyl asbestos in the kitchen, perhaps pure vinyl as an accent in the entry, cork tile in the den and oak floors in the living room.

WILLIAM A. NEWMAN, contract sales manager Kentile Inc

You must talk about color and appearance when you talk about quality in flooring. AL TURNER General Tire & Rubber Co

The trouble is that quality in resilient flooring is something homebuyers can't see at a glance. Vinyl asbestos looks too much like asphalt tile.

JAMES BINNS, general sales manager Armstrong Cork Co

Vinyl asbestos is twice as grease-proof as grease-proof asphalt tile, and it costs less money.

LEON HARPER, general sales manager Tile-Tex Co

A heated floor is more uncomfortable under foot than an unheated floor, because the sole of your foot is 74F and the heated floor is 80F. This is extremely uncomfortable, and that is why the housewife complains that slabs are hard on her feet.

LEONARD HAEGER, AIA

The most important thing in a quality floor is to have a quality subfloor. . . . Nine out of ten criticisms involve faults of the subfloor.

VINCENT SELLS, sales manager Long Bell Lumber Co

We're out to impress builders that they need to get better real estate salesmen to sell quality better.

ROBERT HARKINS, sales manager Harris Manufacturing Co

We're doing basements with laminated block laid on an adhesive.

Roy Cobbett, sales manager Wood Mosaic Corp

A quality house needs a lot better storage

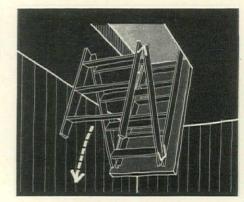
For fourteen years all America has been on a buying spree, buying more clothes for more different occasions, more household equipment, more toys for children, more games for grown-ups, more gadgets and more gimmicks than any people anywhere have ever bought.

And still the buying rush goes on!

Trouble is: Most of today's new houses provide no more storage for all this mountain of purchases than houses built before the buying rush began; many of them, in fact, actually provide less, for yesterday's attic is gone and yesterday's basement is going. So most families in desperation turn their garages into two-car attics and still go half crazy trying to find a place for the golf clubs, the sewing machine, the winter blankets, the card table, the Christmas ornaments, the vacuum cleaner, the musical instruments, the suitcases, the smelly sports clothes, and the outgrown basinette waiting for the next baby to need it.

Too little storage for possessions drives more people to move than too small rooms for people, and the Home Improvement Council's big consumer research found more homeowners complaining of inadequate storage than of anything else. And closets are the first thing second-time buyers look for after the woman has sized up the kitchen.

Says the Small Homes Council*: "More and better storage space is of extreme importance." Many studies recommend ten sq ft of storage for every 100 sq ft of living space; others say 15 sq ft will soon be minimum if the buying pace keeps up.





Charles R. Pearson

All quality houses need a \$26 disappearing stair to the attic, where 400 sq ft of good dead storage space can be floored for only \$50. (H&H Sept '58, p 128). All quality houses need a garage wide enough to store bicycles, and baby carriages alongside today's wider cars (that means one-car garages at least 14' wide; two-car garages at least 24' wide). All quality houses in two-season climates need at least twice as much outside storage as FHA requires to provide winter shelter for lawn and patio furniture along with the lawn mowers, hoses, and garden tools.

Indoors the Small Homes Council recommends that most closets should be 2' deep with ceiling-high full-opening doors to permit full use of every sq ft of storage all the way to the top. It recommends a clothes closet at least 9'x2' in the master bedroom, and a clothes closet at least 4'x2' for every other occupant. It recommends three linen closets, each about four sq ft—one for bedding, one for table linen, one for bathroom supplies. It recommends a coat closet by the front door at least 4'x2'. It recommends a broom closet at least 2'x2', preferably 3' long. And it recommends at least 55 sq ft for miscellaneous storage.

For a family with three children, these minima listed by SHC add up to more than 120 sq ft!

For eleven ways to provide better storage for less money see н&н, Sept '58, pp 128-131.

^{*&}quot;Household Storage Units," SHC circular CS.1, 15¢.





A quality house should have a fully equipped kitchen

A quality kitchen should include range, built-in oven, range hood, oven hood, exhaust fan, garbage disposer, dishwasher, refrigerator-freezer, intercom, and appliance center or plug-in strip for small appliances (mixer, toaster, blender, broiler, etc); and the house should include, (either in the kitchen or somewhere else) a washer and dryer. Perhaps soon one of the new smokeless and odorless incinerators will also be standard equipment for a quality home.

A 25-house builder can buy them all for less than \$1,000, and he can install them and connect them all to water, gas, electricity for less than \$50. A homebuyer would have to pay at least \$1,600 to buy these appliances on time and pay at least \$300 more to install them (unless the builder wired, and piped the house for them while the house was being built, which too few builders do because they are not sure FHA and their mortgagees will allow them the added cost).

THE PLANT OF THE PARTY OF THE P

So making all the appliances part of the house will save the homebuyer something like \$850.

Most FHA offices and most s&Ls will let the builder finance them on 20-to-30-year low interest credit under the package mortgage instead of three-year high interest consumer credit.

Two years ago people could argue whether buyers would rather get more space or more appliances, but under the new FHA credit policy builders can play safe and add both—for today FHA requires no more income to buy a good house with all the appliances installed than FHA requires to buy a stripped-down model of that same house for \$1,500 less (H&H, Jan '58, p 151).

A good labor-saving kitchen will help close more quality house sales than anything else, and the appliance makers, the appliance dealers, and the local gas and electric companies offer builders more selling help than builders can get from anyone else.

Quality standards for electric appliances are set by the National Electrical Manufacturers Association (NEMA). Quality standards for gas appliances are set by the American Gas Association (AGA), and the Gas Appliance Manufacturers' Association (GAMA) sets a still higher quality standard with its gold star program.

FHA requires all gas appliances to carry the AGA seal of approval and all electrical appliances to carry the NEMA seal, but there are two very important places where FHA requirements are too low for a quality house:

The added cost of a good fan or hood is seldom more than a dollar or two.

Don Harper, building products mgr Emerson Pryne Co

We must make the meaning of quality clear to the man selling the house if he is to sell quality to the homebuyer.

David Werman, sales manager Yorktown Kitchens

A fan without a hood is no good, because it makes the whole kitchen serve as a highly inefficient hood full of fumes and heat. . . . In an air conditioned house, you can't afford not to have a good hood.

Miles Woodall, general manager Vent-A-Hood Co

The price difference between a good and a bad fan or hood is seldom more than a dollar or two. . . . When you divide this by many years of dissatisfaction, it is "penny wise pound foolish" not to spend a little more.

Don Harper, building products manager Emerson Pryne Co

Even the cheapest new-house kitchen usually looks good to a woman by comparison with the kitchen in her present home.

HARRY HOWELL, sales manager Youngstown Kitchens

Unsatisfactory cooking ventilation is being installed in too many of today's homes. Last year 11% of our business was replacing ineffective equipment builders had installed.

MILES WOODALL, general manager Vent-A-Hood Co

Most kitchen equipment should retain its original appearance with little maintenance expense for the life of the mortgage.

expense for the life of the mortgage.

D.D. Couch, vice president
American-Standard



Quality kitchens need quality ventilation

The range hood should have a fan capacity of at least 35 cfm per sq ft. It should run the full width of the range and extend about 20" out from the wall so as to catch all the heat and odors (a big enough hood costs only \$1 or \$2 more than a small one). A second hood is just as important over the oven door.

A good hood and fan will cost a builder about \$33, and if he locates the cooking units on the outside wall he can vent them directly outdoors and save close to \$40 on the cost of a duct and the more expensive squirrel-cage fan a duct requires. He can also save the homebuyer a lot of grief from kitchen grease in a long duct.

A good kitchen exhaust system is a must for any air-conditioned house, for one gas burner can create more heat in an hour than an extra ton of cooling capacity can take out. It is also the only way to keep the kitchen comfortable and the home odor-free if the house is not air conditioned.

Quality kitchens need enough quality storage

FHA's new standards for kitchen storage will be born next month already as obsolete as coal kitchen stoves. They are too low to meet the storage needs of even low-income families, for they do not provide the far greater cabinet space needed for the post-war revolution in food buying, food packaging, and food preparation. Many women today buy most of their foods for a week on a single trip to the supermarket-and that calls for more storage. Women buy far more packaged foods and more ready-to-heat-and-serve foods, and that too calls for more storage. Women cook for more than one meal at a time, and that too calls for more storage. Women have more china, more pots and pans, more kitchen tools, and more kitchen appliances-and all these call for a great deal more storage.

FHA's Advisory Committee on Housing Standards recognized the growing need for far better kitchen storage and wanted to up the old FHA minima roughly 50% all along the line, but after a 15month battle FHA settled for a one sq ft increase in its shelf space standard for three-bedroom houses and a three sq ft reduction for four-bedroom houses.

The only increases in the new standards are more shelf space in one- and two-bedroom houses (few of which are being built this year) and 11 sq ft of counter space (which is almost unavoidable

A quality standard for kitchen storage today would require cabinets filling every sq ft of wall space in a 112 sq ft kitchen, and the cabinets should extend ceiling-high* to provide protected storage for little-used items. Even that would be too little storage for the kitchen needs of a trading-up family with income enough to buy a quality home.

You can buy quality cabinets in steel, or wood, or in steel with wood or plastic doors. You can buy quality cabinets from a local millwork house or from a national manufacturer. You can buy the cheapest cabinets cheaper locally, and in some cities like San Antonio, where skilled Mexican cabinet makers work for low wages, you may even be able to buy equal quality as cheap or cheaper locally. But in most cities, for equal quality, you should be able to buy brand-name cabinets cheaper (unless someone is taking too long a mark-up at your expense), because almost anything can be made cheaper and better in a factory than on the job.

You can buy factory quality cheaper if you dimension your kitchen wall space to fit the module of standard cabinets, so you won't have to ask local labor to make odd sizes to fill an offmodule wall. And factory-made cabinets offer the further advantages of baked-on factory finishes and many special features reflecting recent research into kitchen needs.

Quality steel cabinets should be at least 22 gauge, bonderized and cold rolled, with a 345F baked enamel finish. Quality wood cabinets should use only treated lumber kiln dried, with dense surfaces and good joinery to prevent warping. All drawers should have metal slides on nylon rollers (see Hardware, p 188). Best latches for the money are magnetic. Baked enamel finishes will last much longer, and the best baked enamel finishes can be applied only in the factory.



Roger Sturtevant

We invite the buyers to hit our sample with a hammer to demonstrate our no-chip finish.

J.C. Marshall, sales manager Geneva Kitchens

Steel cabinets should be at least 22 gauge. They should be bonderized and cold rolled. The bonderize gives a good base for enamel finish, prime and finish coat.

MARTIN COFFEY merchandising & marketing mgr Philip Carey Manufacturing Co

Most builders don't realize how much their home-made kitchen cabinets cost them.

HARRY HOWELL, sales manager Youngstown Kitchens

builder's reputation depends on the quality of the components he assembles into his house.

J.J. Clarke, marketing manager GE, Major Appliance Div

Many quality features are hidden and have to be pointed out to the homebuyer. E. CARL SORBY, vice president, merchandising George D. Roper Corp

Minimum standards are a long way from what we want. Selling opportunities are easier in the kitchen, and it's a dynamic area, changing all the time. . .

C.R. Hunsicker, general manager Fashionwood Div, Curtis Companies, Inc

Kitchen and bath are the only furnished or fitted rooms in a new home, so more and more people are judging the quality of the whole house by the quality of the kitchen.

M.L. Ondo, vice president, sales Youngstown Kitchens

Selling quality products is the easiest job in America. Homebuyers will give up the tinsel and the pushbutton to get something that will really work for years.

C.E. Parson, advtg mgr
Chambers Built-in Inc

Range and oven make the best place to start selling quality because women can see and understand quality construction and quality features there quicker. Once the house salesman has put over the idea of quality in the kitchen he will find it easier to sell quality in the rest of the

H.T. Anderson, vice president, sales director Preway Inc

^{*}Best way to get ceiling-high storage is to put 44" doors on your 32" wall cabinets. That costs even less than furring the ceiling down to waste the space.



Willard K. Purves

How to sell quality in the bathroom

A three-bedroom quality house needs two full 5'x8' baths.

Builders recognize the sales-appeal importance of their bathrooms, so they fill them with glamor features like colored fixtures, luminous ceilings, double vanitories, plastic-and-aluminum shower enclosures, and disappearing toothbrush racks.

Here is a checklist of eight other items that add a lot of long term value for very little more first cost and quite a bit less maintenance cost:







As a former realtor, I realize fully the value of being able to talk to the home-buyer about quality.

CHARLES W. BETZ, sales director AllianceWare, Inc.

A too-small lavatory is a never-ending disappointment. . . . All working parts of fittings should be of high quality material and easily removable for servicing.

D.D. Couch, vice president American-Standard.

Low-priced fixtures annoy in small ways . . . being too small, too noisy, too easily soiled, too hard to use.

JOHN W. STRANDBERG, marketing manager Eljer Div, The Murray Corp of America.

For fittings, all-brass has superior wearing qualities and maximum resistance to corrosion.

A.G. ZIBELL, vice-president Kohler Co.

A window does not solve the bathroom ventilation problem.

DON HARPER, building products manager Emerson Pryne Co

Quality in ceramic tile is precise sizing (exact to plus or minus 1/64") and careful blending of color.

Louis D. Methfessel American-Olean Tile Co.

Quality must combine both tangible and intangible benefits, including service, appearance, durability, prestige, reputation, and brand name.

W.O. Brown, vice-president sales Crane Co.

1. Big enough water pipes for today's much heavier water use. The street connection should be 1", which will carry 80% more water than the common 34". Pipes inside the house should be big enough to provide an adequate flow with a velocity of not more than 8' per second. Otherwise, the plumbing will be noisy with water hammer and hissing and wear out at the bends, requiring costly replacement (see Round Table on bathroom standardization, H&H, Aug '55). Added material cost of the bigger pipes to the plumber, about

Of course, all the pipes should be copper (or perhaps soon plastic) which actually costs less than galvanized because it requires less labor. \$5.00

7.00

12.00

10.00

1.00

12.50

16.00

2. A big enough lavatory—specifically, a lavatory 24"x20" (or its built-in equivalent). This is 49% bigger than the widely-used 19"x17"; which is too small to wash your face in without splashing water on the floor. Added cost to the plumber, about

3. A quiet, easy-to-keep-clean toilet—specifically an elongated (long-lipped) siphon-jet toilet instead of the more usual round washdown unit, which is bad because 1) it is twice as noisy, 2) the bowl often needs to be wiped off by hand because of its high-soil area, and 3) the floor around it often needs to be cleaned. Added cost to the plumber, about

Manufacturers say this added cost would be much less if more builders specified the better toilet.

4. A big enough medicine cabinet. Builder Andy Place pays \$29 for a cabinet 20"x30" with two built-in lights and a built-in double outlet. He could get a 14"x18" black steel cabinet with spray-coated paint and no lights for \$7.50, but he saves half the added cost on easier wiring and easier installation because the twice-as-big unit just fits between his studs 32" oc without blocking or shimming. Net added cost, about

6. An exhaust fan, which is the only good way to ventilate a bathroom, inside or out. A 300 cfm fan costing \$20 would change the air in a 5'x8' bath in about 60 seconds, blowing out all the odors and steam. For an inside bath FHA requires such a fan. For an outside bath it can be installed through the wall for about \$5, and half its cost can be saved by using a fixed window. Net added cost

8. Moisture-proof walls all the way to the ceiling, instead of just splash-high in the tub enclosure. No job-applied paint will

continued

Here are two new quality features which may soon be adding sales appeal to many Quality Houses:



- 9. A wall-hung toilet, as demonstrated in the 1957 NAHB Research House. In addition to the advantages of the long-lipped siphon jet, this will also make the bathroom much easier to clean. It will give builders a small saving on bathroom flooring installation and a substantial saving (\$40 or more, in slab construction, says NAHB Research Director Ralph Johnson) on one-call, above-the-floor plumbing if used with a raised-bottom tub (H&H, Sept '57 p 240). This \$40 saving would more than cover the higher price of the wall-hung fixture.
- 10. A wider tub—32" wide instead of 30". The wider rim is much more convenient, especially for bathing children, and if the tub is 32" wide at the wall the builder can save the needless cost of moisture proofing an off-module strip of wall 2" wide alongside the fixture. Net added cost, perhaps

5.00

Will these quality features make bathrooms more expensive?

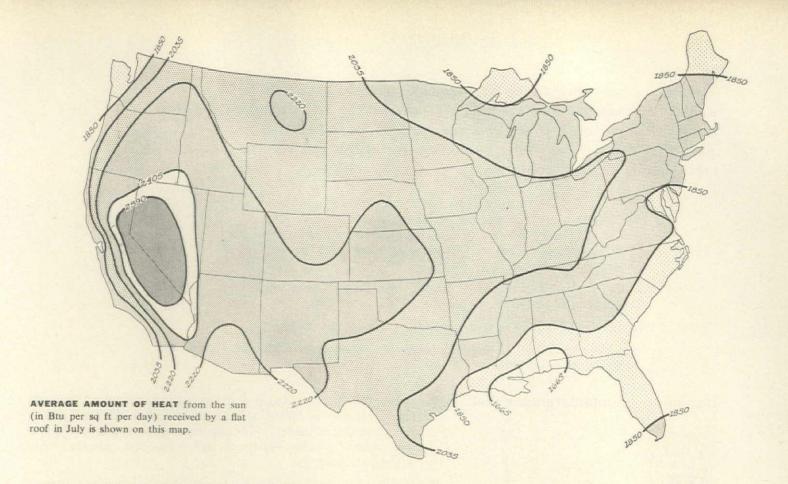
Not necessarily. Many builders could build all this added quality and sales appeal into their baths for less money than they now spend for uneconomical plumbing layouts and uneconomical plumbing installation. Not one of these quality features costs as much as an extra vent or the worse-than-useless house trap required by many archaic codes. All of them combined cost less per bath than using two wet walls for two baths instead of planning the two baths back to back on a single wet wall. (For 29 ways to get better baths for less money see H&H, Sept '58, pp 144-7.)



Most builders know comparatively little about plumbing and its plumber-dominated pricing system, under which no two builders pay the same prices. Says NAHB Research Institute Chairman Bob Schmitt: "I began saving \$300 a house as soon as I took time to learn something about plumbing costs."

Says Ralph Johnson, research director of NAHB: "Few builders can put the cheapest single bath in a low-priced house for less than \$1,000 (including in that \$1,000 the cost of the space the first bath takes up at \$10 a sq ft, plus the cost of bringing the water to the house, plus the cost of sewer lines or septic tanks to get rid of the waste, plus the cost of vents, plumbing, fixtures, fittings, and lighting.

"So \$75 more to transform a minimum bath into a low-maintenance quality bath should be a bargain, even if the builder cannot save every penny of that \$75 by working with his plumbing contractor to get his other costs down."



How to sell quality insulation

The quality standard for insulation is enough insulation to hold the heat loss to 45 Btuh per sq ft of floor inside measure area in winter, to hold the heat gain to 20 Btuh per sq ft of floor area on a hot sunny day, and to keep space near the outside walls as comfortable and usable as the rest of the house.

The best way to sell quality insulation is to get to the money-man.

JOHN MCKAY

JOHN MCKAY Owens-Corning Fiberglas Corp

FHA does nothing for heat gain, so that you can build in Florida almost uninsulated.

MYRON MILLER, secretary National Mineral Wool Assn.

Paper-covered insulation doesn't make enough impression on a prospect, but seeing a house in the bare stage with aluminum foil shining in every direction creates an atmosphere of quality which is longlasting and effective.

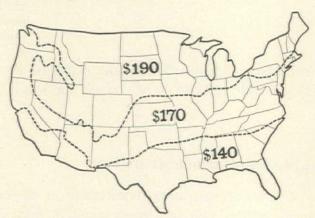
E. Price Hampson, general manager Dale Bellamah Homes Albuquerque

If a builder provides extra insulation, it's up to us to show the buyer how this will make his house more comfortable all year round and how it will cut his fuel bill.

JOHN G. CLARKE, realtor Portland, Ore.

Our first step to educate homebuyers and homebuilders on quality is to get appraisers and lenders to use a quality yardstick to protect their mortgages.

JOHN A. MCKAY, sales manager Owens-Corning Fiberglas Corp



Dozens of lived-in test houses all over the country have now proven that a well-built 1500 sq ft house whose insulation meets this quality standard can be heated and cooled all year round for about \$190 where winters are cold, about \$140 in the South, and about \$170 in between (see lower map and H&H Apr, p 168).

In a cold climate you need more insulation against heat loss than you need in a warm climate, but in a hot climate you need more insulation against heat gain, so as a practical matter the two come close to balancing each other out. (The heat gain problem is particularly tricky. Summer sun intensity is greater in most of California than anywhere in Florida, greater in Minneapolis than in New Orleans—see map at top of page.)

So almost everywhere in the US the quality standard works out to about the same amount of insulation, provided the house has storm windows where it is very cold and provided the house has a good glass shading and good attic ventilation where it gets very hot (which is almost everywhere):

In the ceiling—3" of foil faced mineral wool blanket insulation, or 6" of blankets with no foil, or its equivalent in wood fiber blankets or foamed plastics, or nine foil sheets separated by air spaces, or fiberboard deck with supplemental insulation to provide a U-factor of 0.05;

In the walls—2" of foil-faced blanket and 25/32" insulating sheathing or its equivalent, to provide a U-factor of 0.07;

Around the slab-1" of rigid insulation (FHA requires this anyhow);

With crawl space—1" of perimeter insulation around walls or 2" of blanket insulation between the floor joists, or its equivalent.

Insulation manufacturers say that:



- 1. Putting this much insulation in the walls and ceiling of a 1500 sq ft house will cost the builder about \$120 more than the 1½" ceiling insulation that is the least FHA requires anywhere, and it will cost him about \$75 more than the insulation FHA now requires where winters are cold; but
- 2. It will cut the first cost of a good central heating plant \$45 by permitting the use of at least one size smaller furnace; it will cut the first cost of air conditioning by up to \$200 by permitting the use of a smaller cooling unit. So, for a non-air-conditioned house in a cold climate, the net extra cost of quality insulation would be only about \$30; for a non-air-conditioned house in a warm climate the net extra cost might run a little over \$100; but for an air conditioned house anywhere there may actually be a net first-cost saving of up to \$100.
- 3. In a non-air-conditioned house in a cold climate, the \$30 increase in first cost should save more than that \$30 on fuel the first year. For the air conditioned house, whose first cost may actually be reduced by the added insulation, there will be a further average bonus of \$75 a year in lower operating cost for the heating and cooling equipment all year round.

So manufacturers say: "Adequate insulation costs the homeowner nothing at all; and the more you use the less it costs."

FHA insulation standards are low

FHA still has no insulation requirement at all specifically designed to make houses easy and economical to keep cool in summer—even though HHFAdministrator Norman Mason has said that "within a few years any house that is not air conditioned will be obsolescent." And the FHA insulation requirement to stop wasting heat in winter has been raised only about 15% since it was first imposed in 1941 (as a conservation measure to save metal in heating plants and conserve fuel. The 1941 standard allowed a maximum heat lost of 60 Btuh per sq ft inside measure; the 1955 revision lowered the limit to 55; the new standard effective July 1 allows a maximum heat loss of 50 Btuh per sq ft outside measurement, or between 52 and 53 Btuh per sq ft inside measurement.

When the first FHA insulation standard was written, not one house in ten had any wall or ceiling insulation at all, not one house

in ten was factory weatherstripped, not one house in ten had storm windows, not one house in a hundred had a roof overhang, not one house in ten thousand was air conditioned, no manufacturer made fog-free double glazing, only a few theorists had even thought of a vapor barrier for houses, and no one had ever sponsored a lived-in test house to prove how much money adequate insulation could save on fuel.

So no wonder FHA set its original insulation standard low.

Two years ago the construction experts on the FHA Advisory Committee on Housing Standards unanimously recommended that the heat-loss maximum should be cut from the 1955 limit of 55 Btuh per sq ft inside measurement to 50 Btuh per sq ft inside measurement. They thought that on a 1500 sq ft house this modest increase in insulation requirements would cost builders not more than \$50 anywhere and perhaps only half that much in mild climates. They also thought it would cut the heating bill about \$25 in two-season climates and cut cooling cost still more if a two-climate house is air conditioned.

The homebuilders singled out the proposed change in insulation requirements for their strongest attack. Finally FHA backed down from the suggested 50 Btuh per sq ft inside measure to 50 Btuh outside measure, which is about 52 or 53 Btuh per sq ft inside measure.

This attack may prove to have been penny wise, pound foolish, because adequate insulation is one of the hardest of all new-house advantages to duplicate in an existing house. Wall insulation costs two or three times as much once the house is finished. Furthermore, quality insulation should be wrapped in paper or foil—and once the walls are finished it is too late to do this. Quality insulation requires a vapor barrier, and once the walls are up the only way to get a good vapor barrier is to put it on the inner face of the wall, which can be expensive and limit freedom of decoration. Good insulation calls for ventilating the wall cavity and letting it breathe—and that too is difficult once the walls are up.

So now that the builders' most serious competition comes from old houses, it might be smarter for the builders to fight for higher insulation standards instead of lower and to make adequate insulation a big talking point to make people buy new houses instead of old houses.

H&H Staff

Vapor barriers should be required for the inside of all outside walls.

MARVIN GREENWOOD, vice president Celotex Corp

We need a comfort standard for houses to spell out quality.

J.D. FISCHER, sales manager Wood Conversion Co

Balanced insulation is more important than ever before because houses today have a lot more glass in them.

M.C. FAIRFIELD, sales manager Insulite Div, Minn & Ontario Paper Co

The right way to buy insulation is by U value.

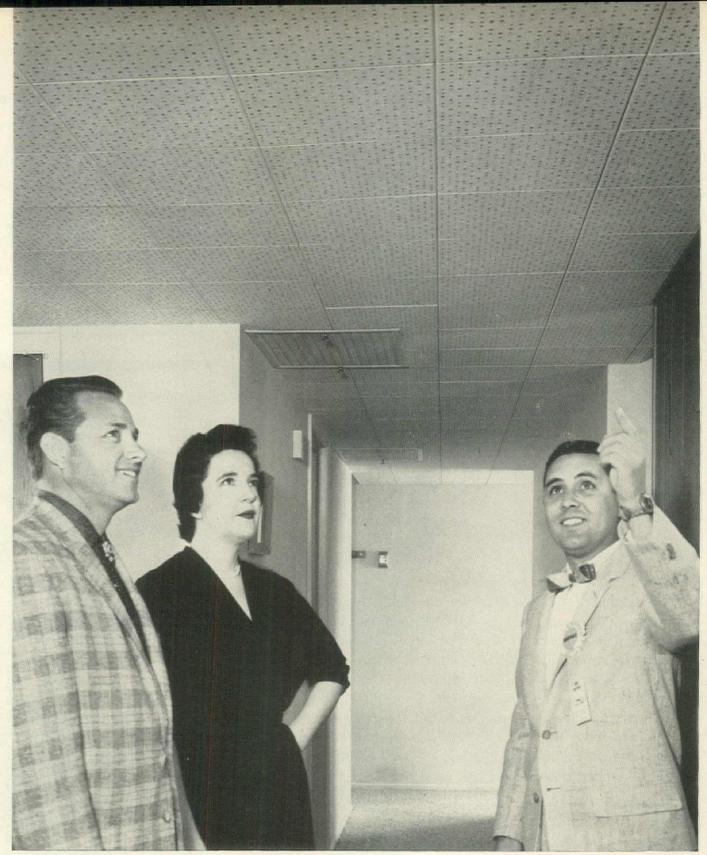
J.W. Brown, sr vice pres, marketing National Gypsum Co







Hedrich-Blessing



Bob Markow

How to sell quality sound conditioning

No one can enjoy a quality house where it is too noisy to think.

Most of today's small houses crowd in every noisemaker except firecrackers. Noisiest noisemakers are babies and young children—especially boys—and today's little houses have big families of children. Second noisiest are radios and TV—and many small houses have three radios and two TV sets. Third noisiest are motors and appliances—and all small houses are full of motors and appliances—garbage grinders, mixers, blenders, dishwashers, clothes washers,

vacuum cleaners, and what have you. Sometimes four or five of them may be running at the same time.

So you can't have a quality house without doing something to control its noise.

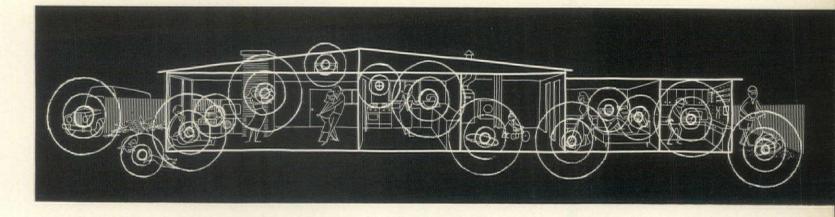
Most noise starts in the kitchen-family room area. This is an extra-bad place for noise to start, because these rooms usually have more hard surfaces to bounce noise around and fewer rugs, draperies, and upholstery to absorb it. So all kitchens should have acoustic ceilings wherever the ceiling is exposed (with ceiling high cabinets the exposed ceiling area of a 112 sq ft kitchen may be only 60 sq ft or so). And all family rooms should have at least one-third of the ceiling sound-absorbing. (Says Acoustics Expert Richard H. Bolt of MIT: "Acoustic treatment over one-third of a given surface is 80% as effective as acoustic treatment all over.") And acoustic treatment on part of at least one wall is almost equally necessary to absorb the horizontal component of the sound waves. Any acoustic material used in kitchens should be washable, because there is too much grease in kitchen air.

Except for babies, not much noise starts in the sleeping area, but with today's open plan and hollow-core doors too much noise drifts back from the day-time areas.

Some of this can be kept out by using the fireplace, the closets, and the two bathrooms to create a buffer zone, but even so the bedroom hall can funnel back too much noise. The bedroom will be a lot quieter if this hall has acoustic treatment on the ceiling and at least part of one wall.

The rapid increase in noise generation in modern living—whether from household appliances, radio and television, automobile traffic, or larger families—makes some form of noise control (through the use of acoustical ceilings) essential in quality homes.

WILLIAM A. MEHLER Armstrong Cork Co

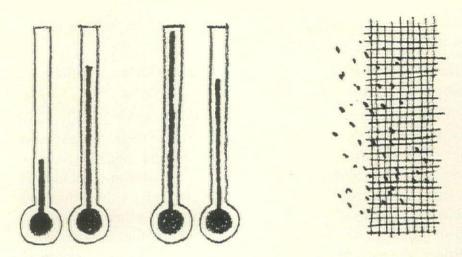




How much will it cost?

At the lowest published dealer price plus 10%, acoustic tile costs a builder a minimum of 13ϕ to 17ϕ a sq ft. If you add $2\frac{1}{2}\phi$ for 1x3 nailing strips and $5\frac{1}{2}\phi$ for labor and then subtract 10ϕ for the installed cost of the dry-wall it replaces, you come out with a net added cost of 12ϕ to 16ϕ a sq ft. If you fasten the tile on top of the dry-wall with adhesive, instead of nailing it to 1x3 strips, the cost is about 10ϕ more.

So the net added cost of acoustic tile on nailing strips would be about \$15 in the kitchen, about \$30 in the family room, and about \$15 in the bedroom hall. Fastened on top of the dry-wall, the cost would be almost twice as much.



How to sell quality heating, cooling, and air filtering

You can get quality heating by spending a little more money for either forced warm air or forced hot water.

Quality standards for hot-water heat are no problem. FHA standards for hydronic systems are good, and if the local FHA offices apply them wisely all hot-water systems that pass FHA must be quality systems.

Specifically, FHA requires that all hydronic equipment should carry the appropriate seal (like IBR, SBI, AGA, ASME, UL), and FHA requires that all installations should follow time-tested guides (like those issued by the Institute of Boiler and Radiator Manufacturers). So, for example, no hydronic system is supposed to pass FHA unless all the baseboard or convector units are located on the outside wall where the heat is most needed.

Quality standards for forced warm air are almost non-existent. "FHA standards are minimum," says the biggest maker of residential units. "So are American Gas Association (AGA) and Underwriters' Laboratories standards (UL), and Air Conditioning and Refrigeration Institute (ARI) standards are less than that. There are no standards at all for the efficiency and economy of cooling equipment."

So on p 182 you will find the first quality standard ever published for forced warm-air heating, cooling, and filtering. It was developed for this issue of House & Home by a large manufacturer and submitted for comment and criticism to executives of nine other big manufacturers and also to the engineers of the ARI and the National Warm Air Heating and Cooling Association (NWAHACA). It was then revised and re-written, and now the manufacturer has formally submitted it to ARI and NWAHACA to serve as the basis for a badly needed industry standard of quality.

Quality standards like these for air conditioning could be of very great importance to the sale of more good new houses because:

- Good year-round air conditioning, including good heating, good cooling, and good air cleaning, offers homebuilders their one most obvious chance to dramatize how much more livable and how much more economical today's good new houses can be than yesterday's best, and
- 2. Most second-time buyers have had experience with cold or overheated rooms, high fuel bills, high maintenance cost, or recirculated dust from heating and cooling installations that do not meet quality standards.

Within a few years any house without air conditioning will probably be obsolescent.

HHFAdministrator NORMAN P. MASON

Tomorrow's buyers are all going to want cooling.

STANLEY EDGE Stanley Edge Associates.

A quality heating installation must have a minimum expected life of 25 years.

D.D. Couch, vice president American-Standard.

Two-thirds of the cost is labor and ductwork.

WILLIAM MORRISSEY, sales manager The Lau Blower Co.

With hydronic heating you can have any number of zones off one boiler; you can get instantaneous hot water from the boiler; you can even melt the snow in the driveway!

W.D. Braden, National US Radiator Corp.

You can often buy a 75,000 Btu and a 50,000 Btu furnace system cheaper than you can buy one 125,000 Btu furnace system. This is excellent for zoning purposes.

William H. Baker, vice president sales American-Standard.

How little more would quality cost?

Says John Norris, president of Lennox: "For a well-insulated 1500 sq ft house, a forced-air system that meets these proposed quality standards should cost a merchant builder not more than \$75 extra for heating alone (not counting about \$150 more for the optional electrostatic air filter and about \$35 more for the optional added cost of a 10-gal.-a-day humidifier), and not more than \$125 more for year-round comfort compared with the cheapest system a builder would be likely to buy.



"But it should save the homebuyer at least \$20 per year on electricity and fuel for heating alone, and twice as much for heating and cooling combined. His maintenance costs will be less, and he will have a quieter and much more comfortable home to live in."

Here is a high-spot quality checklist for forced air:

Cloetingh & DeMan



- Continuous air circulation, properly adjusted instead of intermittent (see Section 19). "This is the most important single requirement. It will save more on fuel than the total cost of running the blower and it will achieve a wonderful balancing effect between different zones."
- 2. Perimeter floor duct air distribution with high level return inlets below the ceiling insulation in each major area (see Section 15). A dropped ceiling in the bedroom hall often makes a fine plenum for return air. Supply air ducts should be sized big enough for cooling and return air ducts should be kept below the ceiling insulation.
- 3. Big enough cabinets to permit big enough fans, big enough filters, big enough cooling coils, big enough air passages, big enough compressors, and big enough condensers (see Sections 3, 4, 9, 12). Operating efficiency and economy are too often sacrificed to space saving.
- 4. Belt-driven blowers (see Section 5). "They cost a merchant builder \$20 more than the cheapest direct-drive blowers . . ." but they can ". . . save \$15 to \$20 on current in a seven-month heating season."
- 5. Air cleaning (see Section 7). Seven years ago the cheapest electrostatic filters cost nearly \$700, but new manufacturing efficiencies (including printed electric circuits) have cut the builder's price as low as \$135 to \$175 for a less-than-1500-sq-ft-house. Electricity cost will run less than \$1 a year. Replacement filters will cost about \$12 a year for the cheapest units. Slightly more expensive units will have washable semi-permanent filters.
- 6. Low current consumption (see Sections 2 and 12). This is the best easy way to measure the efficiency of the system and its equipment.
- 7. Ten-gallon-a-day humidifiers (see Section 7).
- 8. Ten percent fresh-air supply (see Section 18).
- 9. Zone control (see Section 20). Most common reasons for needing it: occupied basements, spread-out or split-level plans, large glass areas in one or two rooms. Some times the best way to get zone control is to use two separate systems, which may cost no more installed than one large one.
- 10. Individual system design (see Section 14).

But no matter how well the system is designed and no matter how good its quality parts, no system will be a quality system unless the heating contractor installs and adjusts it right. This is the need NWAHACA is trying to meet with its Silver Shield program.

Here is the proposed quality standard for forced-air heating and cooling

This proposal was developed by John Norris of Lennox, studied by industry experts, revised to meet their comments and criticism, and has been formally submitted to ARI and NWAHACA as the basis for an industry standard.

Furnaces and heating units

1. All furnaces and the heating section of all combination units should carry the American Gas Association (AGA) seal of approval if gas fired, the Underwriters' Laboratories (UL) label if oil fired, and they must comply with commercial standard CS 195-57.

Blowers

- 2. All moving parts of the blower assembly should be resiliently mounted to isolate vibrations from the unit cabinet.
- 3. The furnace cabinet, filters, blower, and cooling coil should all be big enough to deliver the required air volume quietly at a reasonable electric power cost. Specifically:

For heating: When air volume is adjusted to provide a 90 F to 100 F temperature rise through the furnace, the electric input to the furnace should not exceed:

2.00 watts per 1,000 Btuh of furnace input for a total system resistance of 0.1" static pressure (wg) for both the supply and return air systems.

2.50 watts per 1,000 Btuh of furnace input for 0.2" static pressure (wg) total system resistance for both supply and

For cooling: When blower speed is adjusted to deliver 400 cfm per ton of cooling required, the electric input to the blower should not exceed:

160 watts per ton of cooling required with total system resistance, external to the air conditioner, of 0.2" static pressure (wg).

180 watts per ton of cooling required with total system resistance, external to the air conditioner of 0.3" static pressure (wg).

If the cabinet is too small, the blower inside it and the air passage through it will have to be too small too.

If the air passage is too small, it will take more power to push the proper air volume through the restricted space.

If the blower motor is too small, it will have to run faster, making more noise and more wear and tear, and that will take more power too.

So power input required per 1000 Btuh of furnace input and per ton of cooling offers an easy check on the efficiency and quality of the system.

- 4. The blower motor must be big enough not to be overloaded when delivering 400 cfm per ton of cooling required.
- 5. All blowers should be belt driven, with a variable pitch diameter pulley on the motor that allows the blower speed to be adjusted to the needs of the individual duct system.

Comment:

Direct-drive blowers capable of comparable performance are more expensive (except in large sizes). Belt-driven blowers cost a merchant builder about \$20 more than the cheapest direct-drive blowers using shaded-pole motors, but they will 1) save \$15 to \$20 on current in a seven-month heating season; 2) provide greater comfort because direct-drive

blowers (shaded-pole or permanent-split capacitor) are often hard to adjust; and 3) usually run slower and quieter, thereby making it possible to set the system for continuous air circulation. Furthermore, belt-driven blowers are easier to adjust to the needs of air conditioning when it is added later.

Humidifiers

6. When needed, humidifiers to add moisture should have the capacity to evaporate at least ten gallons of water per day and be adjustable from zero to the maximum.

Comment:

Tightly-built houses may need no added moisture at all; houses with more air infiltration may need as much as ten gallons of water a day. The simple evaporating segment humidifiers which are standard equipment with many furnaces will evaporate only one to two gallons per day, too much for some houses and too little for others.

Air filters

7. Recirculated dust is a common complaint against heating and cooling plants. Furnace filters should be large enough and sealed at edges. Pipes and registers must be sized according to the National Warm Air Heating and Cooling Association (NWAHACA) manuals for proper air velocity. Electrically-powered electrostatic filters using high-voltage direct current to charge and hold dust and other particles should be used in areas with substantial air pollution.

Comment:

This is the only device available today that provides nearly 100% removal of air-borne dust, lint, pollen, smoke, and other microscopic particles. It consumes no more power than a small light bulb and has a low-maintenance cost. Only electrically-powered devices meet these requirements.

Cooling coils

8. Cooling coils should make at least 30% of their total capacity available for removing moisture.

Comment:

Too many cheap cooling coils (evaporators) cannot do a good enough job of dehumidifying to produce comfort. Unfortunately, ARI standards do not as yet require a manufacturer to publish the per cent of moisture removal his specified coils will accomplish.

- 9. Whether the tubes are 3/8", 1/2", or 5/8" diameter, the net face area of the coil should be not less than:
 - 1.16 sq ft per ton of cooling with three rows of tubes.
 - .80 sq ft per ton with four rows of tubes.
 .62 sq ft per ton with five rows of tubes.

Compressor-condenser units (high sides)

- **10.** The unit should carry the Air Conditioning and Refrigeration Institute (ARI) seal showing it has been tested and rated in accordance with ARI standards. It should also carry the UL seal showing it is listed by the Underwriters' Laboratories.
- 11. The cabinet should be properly weatherproofed to be placed outdoors. Preferably it should be made of hot-dipped galvanized iron, properly cleaned and enameled. If uncoated steel is used, it should be protected by finishes as required for UL listing.
- 12. The compressor, condenser and condenser fan of both air-cooled and water-cooled condensing units up to 5hp must have enough capacity to deliver an actual 7.5 Btu per watt of power input to the compressor and condenser fan motor as measured at ARI standard conditions of 95F outside temperature with the cooling coil used as specified by the condensing unit manufacturer. For water-cooled units, this power input should include the power input to the cooling tower, compressor, and water pump at ARI standard conditions.

Comment:

If the condenser (air-cooled or water-cooled) or the condenser blower is too small, the system will be inefficient and noisy.

If too small a condenser blower is operated slowly enough to be quiet it will put too little air over the condenser and run up the power consumption of the compressor. If this too small condenser blower is speeded up to handle enough condenser air and so reduce the power consumption of the compressor, the higher speed will increase the power consumption of the fan. So power consumption offers a reasonable measure of quality.

Unfortunately the standards of the air conditioning industry include no cooling efficiency requirements like the minimum efficiency requirements of AGA and UL for furnaces.

13. Air-cooled condensing units should be located and "aimed" to cause minimum disturbance to neighbors.

System design

14. Each heating and cooling installation must be specifically designed for the particular house at its particular site with its particular orientation. Its heat loss and heat gain should be calculated as directed by the official manuals of NWAHACA and the heating and cooling equipment must be sized accordingly.

Air distribution

15. For maximum comfort, conditioned air should be distributed through perimeter floor ducts using narrow floor diffusers on the room side of drapes. The ducts should be sized large enough for cooling.

Comment:

Perimeter floor distribution is especially important in splitlevel houses, too many of which use low-cost ceiling diffusers or high sidewall registers in the on-grade or below-grade rooms, which are usually the hardest to heat properly. With good floor diffuser outlets in these lower levels and with correctly-sized return-air inlets on all levels, excellent comfort can be provided at all levels by properly adjusted continuous air circulation. (See below)

- **16.** Return air inlets should be located on each floor and in each major area. Return air ducts should run below the ceiling insulation.
- **17.** All openings should be located and sized as directed in NWAHACA manuals or equal.

Fresh air supply

18. For optimum freshness in the conditioned space, a fresh air intake into the return side of the unit should be sized to provide about 10% of the total air volume to be circulated. It should be properly insulated and have a manually operated damper.

Continuous air circulation

19. Every system should be completely adjusted for continuous air circulation as described in NWAHACA manual No. 6. The thermostat must be of a type that will allow the burner to operate for frequent and very short cycles (about three minutes) during mild weather.

Comment:

This is the most important single requirement, and it is the requirement most often skipped by careless heating contractors.

Continuous air circulation saves more on fuel than the total electric cost for running the blower, and continuous air circulation achieves a wonderful balancing effect by pulling air continuously out of all zones and recirculating it. This minimizes the need for complicated and expensive zone controls. Even though rooms on the sunny side of the house need cooling in winter, the extra heat gain in these rooms can be drawn out by continuous operation of the blower and used to maintain warmth on the cold side of the house.

Zone control

20. Even small houses may need separate thermostats to meet special conditions, and larger or more spread-out houses frequently require multiple heating and cooling units for proper zoning of temperature control. But most houses where design heat losses are 90,000 Btuh or less can be handled with a single thermostat if the blower is properly adjusted for continuous air circulation.

Safety requirements

- **21.** When the furnace is located in a closed room or small closet, an opening for combustion and ventilation air should be provided as outlined in the National Board of Fire Underwriters' Codes. For other locations, normal infiltration plus the fresh air ducted into the furnace will usually provide adequate combustion air.
- 22. All installations must comply with local building and underwriters' requirements.

Here is a top salesman's sales pitch

This is how Chrysler AirTemp's vice-president for sales would sell quality heating, cooling, and air-filtering if he were the real estate salesman showing a model house. We believe every builder and every realtor can profit by pondering his thinking and following his advice.—ED.

By J.B. Ogden

If quality is to be sold, it must first be pointed out and then related directly to the comfort, convenience, health, and pocketbook of the prospective buyer.

This can be done with the full support of the buyer if the salesman first piques his curiosity and if the salesman lets the potential buyer participate in the decision to go into details (instead of forcing details on him unasked).

Consider the furnace, for example:

You don't have to sell the *need* for a furnace. If it's there, it's needed; so the first step here is for the salesman to call attention to it, saying perhaps: "You'll notice this is a — furnace. As I'm sure you know, — is one of the oldest and finest names in the field, and this is a very fine product. It does have some outstanding features which I'd be happy to tell you about if you're interested."

By merely calling attention to the furnace, the salesman shows that he is proud of it. By offering to prove the justifiability of his pride, he strengthens this impression—and all without boring the potential buyer with details before the buyer has stated his interest in them.

If the buyer says he's interested, the salesman goes on to point out the quality features. He mentions the "contour flame", explaining that this makes the furnace more efficient and he adds the all-important explanation that this means lower fuel bills. He relates the sealed motor to the fact that this ends the fuss and worry of furnace lubrication; and shows how quality controls end the need for resetting the thermostat mornings and evenings.

Finally, he mentions quietness, relating it to a more restful, relaxing home, and then he demonstrates. At the same time, he shows that the home is draught-free and explains what this means in terms of more comfort and better health.

He concludes his pitch by asking if there are any questions, and if the customer now sees just why this is a quality product, and why quality is so important.

Selling air conditioning is different

Selling air conditioning and electrostatic air filtering isn't quite so simple, because fewer people know why they are needed. So before you can start talking about why your brand is good, you have to show why they should want any brand of cooling and air filtering.

Take the electrostatic filter package, which includes the electrostatic filter for dust, pollen, etc, plus a germicidal lamp and an activated charcoal filter to screen out odors. Here the unit is an exclusive. This is important, but first the salesman must prove the need for such a unit to screen out dust, dirt, pollen, germs, and odors—and he must prove it in terms of direct benefits to the homebuyer.

The benefits are obvious enough, but for that very reason they may be overlooked. In other words, the salesman may feel that by saying that germs are killed, he has made his point. He hasn't! He must add that this means your families stays healthier, your children are less susceptible to colds and flu. He must point out that eliminating odors makes your home more pleasant for family and guests, a place friends like to visit. And he must show how better dust and dirt filtration means less housework, brighter walls, cheerier drapes and curtains, and cleaner, fresher air for the whole family.

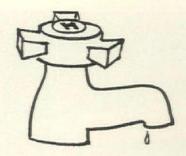
Only after he has taken his final step in pointing out direct family benefits can he start selling the quality of his product.

You must sell the benefits first

Turning to air conditioning, the salesman here has a non-exclusive product whose benefits are unknown to many families. His first step, then, is to talk about air conditioning in general, how it ends sweltering on summer days, how it reduces sticky humidity, how it freshens and cleans the air, and how it adds to the value of your home, and how it makes your whole family healthier and happier. Not until the salesman has shown that air conditioning is something you need and want, can he start in again where he began with the furnace, by stating that this is a quality product by a quality manufacturer, and that it has many fine features in which you should be interested.

At this point he indicates the sticker showing that the unit conforms to ARI standards, pointing out just what that means to an owner in terms of confidence. He shows how the "Climate Minder" controls give year-around heating and cooling with just one setting—no forgetting to turn back the furnace or turn on the air conditioning, resulting in hot, humid sleeping nights. He shows how specific features cut operating or maintenance costs, or how they simplify operation by the family.

And again, as with the furnace, he demonstrates. / END



How to sell quality with plenty of hot water

The quality standard for the water heater in a two-bathroom house is nothing less than a 50-gal. quick recovery unit with an unconditional five-year warranty.

> For gas, quick recovery means 50,000 Btuh input in cold-winter areas, 35,000 Btuh input in areas where the supply water is warmer than 60F all year round. For electricity in cold-winter areas it would mean a 66-gal. tank where 9 kw is permitted by the local utility, or an 80 gal. tank where 41/2 kw is the limit.

This quality standard is much higher than FHA requires. For a two-bathroom house anywhere FHA will accept a 40-gal. 33,000 Btuh gas unit or a 66-gal. 3 kw electric unit. And FHA requires only a two-year unconditional warranty with three more years pro rata.*

But University of Illinois studies for the American Gas Association show that nothing smaller will meet the hot water needs of the average family with dishwasher and clothes washer, and in most areas the longer warranty unit will end up costing homebuyers only half as much as a cheaper-first-cost unit. House & Home has talked to many homeowners who had spent hundreds of dollars replacing two cheap heaters within five years. Says Builder Dave Slipher: "Many one-year warranty units were miraculously engineered to fail on the 366th day."

A salesman selling a home should let quality punctuate his pitch and have the facts to back it up. If his pitches are convincing enough, the homebuyer will pay the higher price for quality.

JOHN H. WOOD, sales promotion manager
Heater & Tank Div, John Wood Co.

What is the added cost of quality?

One fairly typical manufacturer lists his 5-to-10-year warranty, gas-fired, glass-lined, quick-recovery 50-gal. heater at \$136.50; his 2-to-5-year warranty galvanized unit with the same capacity at \$118. If both units just last out the maximum warranty period, the cheaper priced unit would cost the homeowner \$22.80 a year; the better unit would cost him only \$12.80 a year, or about half as much.

This same manufacturer lists his smaller unit that comes closest to the FHA minima at \$108 with a 5-to-10-year warranty, or \$88 with a 2-to-5-year warranty. This works out that the smaller tank with a slower recovery costs a lot more per gallon of hot water capacity than a larger tank with a quick recovery. Also, in this smaller size, as in the larger size, the unit with the longer warranty should cost about half as much to own.

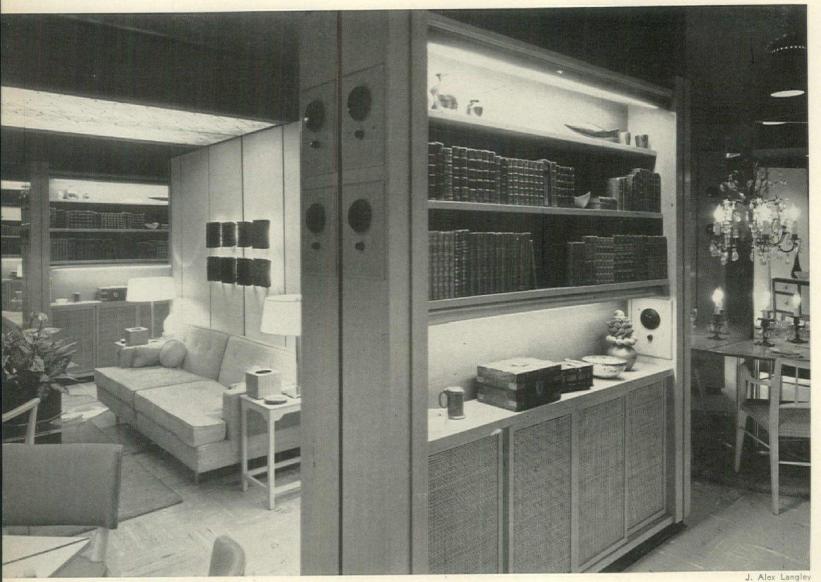
Four out of five new houses today use gas for their water heaters, partly because their first cost is usually slightly less, partly because at present rates their operating cost is substantially less almost everywhere except in the TVA area and

the Pacific Northwest. Oil-fired heaters have the lowest operating cost, but their first cost is much higher.

Tank corrosion is the most common cause of water heater failure. Copper tanks have long been considered the best, but these are quite a bit more expensive and are seldom found in project houses. Most tanks with 5-to-10-year warranties are glass-lined; short-warranty tanks are just galvanized iron. These galvanized tanks have a relatively long life where the water is hard, because the mineral salts in hard water soon form a protective coating on the metal. Consequently, they can be quite economical in large parts of the Middle West and some parts of California. They have a relatively short life in most parts of the East and South, where the water is soft and aggressive.

Where the builder is in doubt about his water (and water hardness shows great variations even in the same locality and even from the same wells at different times), the slight added cost of glass- or aluminum-lined tanks can be cheap insurance.

^{*}This means the homeowner can get a re-placement unit installed for 40% of the list price if the unit fails in the third year, 60%



How to sell quality wiring and piping for gas

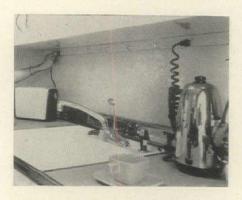
Of course a quality house needs adequate wiring and adequate piping for gas.

For gas this is no problem. It just means adequate provision for the gas appliances-furnace, range, oven, washer, dryer, and soon the new smokeless odorless incinerator.

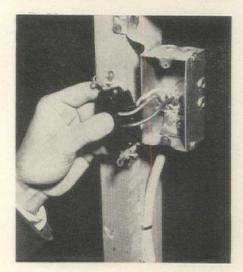
But for electricity it means a lot more than meeting the adequate wiring standard of 100-amp service which is essential to provide current enough for today's better lighting and all today's commonly used appliances. (For electric heat 150 amps will be needed.) For 20 ways to get better wiring for less money see H&H, Sept '58, pp 148D-148F.

In many large projects half the homebuyers have to spend nearly \$100 within six months for additional electric service that the builder could have provided during constructon for less than \$20.

Here is a checklist of inexpensive electrical features you need for a quality house:







1. Twice as many base plugs. The National Electric Code minimum of one convenience outlet for every 12' of usable wall space will never meet today's needs, let alone tomorrow's. People use more lamps than they used before the war, and they use many small appliances all over the house. FHA and the code require only one convenience outlet by the beds in the master bedroom—but as many as 13 different units are likely to be plugged in there—two bed lamps, two electric blankets, radio, TV, razor, alarm clock, room cooler, and what else.

In the kitchen so many small appliances are used that every housewife will be grateful for a continuous plug-in strip behind the counter, and so much cooking is done in the dining area that extra base plugs are sure to be needed there too.

- 2. More and better fixtures. FHA requires as few as five (one each for kitchen, bath, bedroom hall, and outside each exterior door) and FHA sets no standard at all for their quality, so builders often spend less than \$35 a house for them! The Home Lighting Institute says 26 fixtures should be the minimum and recommends more than twice that many. Homebuyers want much better lighting, and most middle-income families pay as much for just two lamps as most builders pay for all the fixtures in the house. Better lighting is one of the biggest advances a new house can offer, but too few builders cash in on its sales appeal potential (which is extra high if the model house is to be open evenings).
- Outdoor lighting. Half the value of a patio is lost unless it is lighted for evening use. Half the beauty of a flower garden is wasted if it cannot be seen at night.
- 4. Underground wiring. Lighting poles are the No. 1 eyesore in most new tracts, so more and more builders are putting the wires underground and more and more utilities are cutting their charges for underground service (which is likely to cost them less in the long run because of lower maintenance and freedom from storm damage). For example: both Detroit Edison and Commonwealth Edison in Chicago offer underground wiring free in any tract whose houses use two heavy-load electric appliances (like the range, water heater, dryer, or central air conditioner), and in some states the telephone company will also bury its wires free.
- 5. Adequate switching. FHA requires only one switch per room, but the living room lights should switch by the front door and also by the bedroom hall; the light in the bedroom hall should switch at either end. Extra cost: not more than \$10.
- 6. Specification grade devices whose two-side electric contact assures far longer service. The electrician may have to pay 20¢ more a piece for them, but he can cut his labor cost more than that by using the push-in (pressure lock) connection that is not available in the competitive grade.
- 7. Grounded outlets. This safety measure is required by code and by FHA for all outdoor outlets and all outlets near water (kitchen, bathroom, clothes washer), but too few builders check to make sure they get it. All outlets anywhere in a slab house should be grounded. Added cost: about \$5.

Builders can buy quality lighting equipment for no more than they pay for inferior merchandise, or at most an added 5%. And this would be offset by faster installation and less breakage and returns, for the makers of cheap fixtures often cut their costs by leaving out necessary hanging accessories and by less factory assembly. Hundreds of thousand of fixtures are sold

that do not bear the UL label. Many of these are a potential fire hazard.

R.W. MINETT JR, general sales manager John C. Virden Co.

If we can show the builder that more and better fixtures help sell the house, he will buy them and quality will follow.

Tom Fuller, sales manager Moe Light Div, Thomas Industries Inc. FHA on Long Island allows \$35 for lighting fixtures, but many merchant builders put in up to \$60 worth.

M. LOBELSON, sales manager Lightolier, Inc.

Today new house buyers seem to spend 50% to 100% more for fixtures than the builders' allowance.

LEONARD HAEGER, AIA

How to sell quality hardware

FHA sets no standard at all for hardware, because there is no commercial standard FHA could adopt by reference.

The front-door lock is the first thing most home seekers touch when they visit a model house, so it could be a good place to start selling quality. And millions of second-time buyers have learned to their sorrow that too-cheap locks are likely to give trouble and need replacement in a few years, at a minimum cost of \$6 even for another too-cheap lock.

A quality standard for exterior door locks would require that:

- 1. They should have a deadlocking latch, without which a smart burglar can open them almost as easily without a key.
- 2. They should have strong-enough brass or steel stampings for all their critical working parts.
- 3. They should meet the minimum Federal standard (Type 160) or at least the slightly lower special standard set to allow two more lockmakers to qualify for Capehart housing (159). Unfortunately, these Federal standards are now so loosely drawn that some makers can meet them with a very cheap lock while others meet them only at considerable added cost.

The need for better lock standards is so obvious that, at the Government's request, a committee representing eight manufacturers developed a performance standard and submitted it to the Department of Commerce a year ago. So far, no action has been taken on this proposal, and its terms have not even been circulated to the industry.

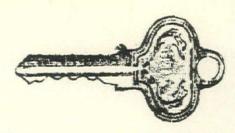
How little more would quality cost?

Says the National Builders' Hardware Association: "Most merchant builders now pay only from \$3.75 to \$4.75 each for their exterior locks, depending on their volume and their purchasing power. For less than \$1 more they could get a good plain lock with a dead-locking latch and all brass and steel working parts.

"And here are two more quality specifications whose general adoption would add very little to the cost of a good low-priced lock:

- 41. A backset longer than the common 23/8", because with a short backset too many people are likely to catch their thumbs between the door and the jamb;
- 442. A latch-throw longer than the common 3/8" because a 3/8" latch-throw may not hold the door firmly enough if the door warps (as too many doors do)."

For interior doors the story is about the same. Latches with steel or brass working parts that meet 160 would cost about 35ϕ a door more (about \$1.85 vs \$1.50). Privacy locks would cost another 35ϕ more (all locks for bathrooms or other places where a young child might lock himself in should be openable from the other side with a hairpin or any common small tool). Anodized aluminum knobs and roses will keep their finish better than any other metal except stainless steel (which costs more).



Quality means hardware that will perform its required function for the life of the house.

WM. S. HASWELL, secretary National Builders' Hardware Assn

80% of the hardware in built-for-sale houses won't meet the minimum Federal specification.

C.D. MILLER, manager Hardware Sales, Yale & Towne Mfg

The long backset installation reflects the quality approach.

STUART B. KNOTT, asst sales mgr Schlage Lock Co.

What about hinges?

Homeowners would have much less trouble with warping if all doors were held by three hinges instead of two (as FHA requires for exterior doors).

The extra hinge should cost the builder not more than 20ϕ a door, and the cheaper the door the more important it is to have a third hinge to help minimize its warping. Labor cost of a third hinge could be cut (perhaps at some sacrifice in looks) by using a non-mortise type (as in the NAHB Research House in Knoxville).

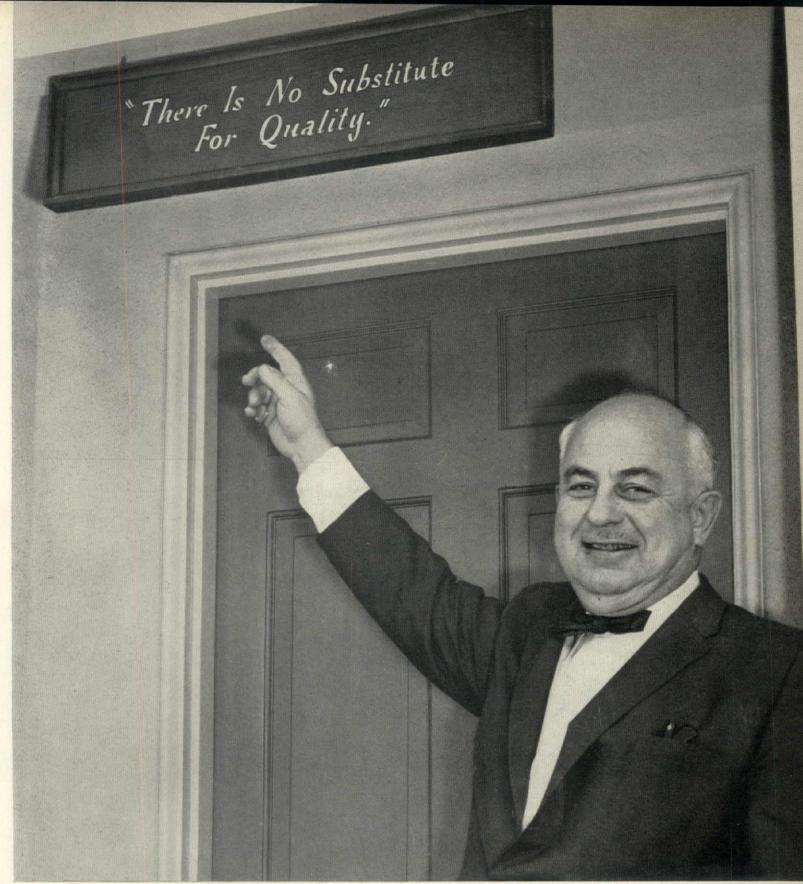
Hinges would take 50% more wear if they were .123-gauge, on which the dealer price is 53¢ a pair vs 29½¢ for the cheapest US made hinges in .101 gauge, and 17½¢ for the cheapest Japanese hinges. The longer service is most important for bathroom doors because they get closed more often.

What about sliding doors?

Too many sliding doors stick or buck because their hardware is too cheap. All interior sliding doors should be top-suspension, with at least two-wheel hangers up to 50 lbs (added cost: about \$1 a door) and four-wheel hangers above 50 lbs. Up to 100 lbs the wheels should be nylon on self-lubrication axles. Over 100 lbs they should be ball-bearing with a nylon outer rim and a steel inner race. All sliding door tracks should be aluminum extrusions (preferably anodized) which cost a builder about \$1 more for a 4' opening than steel, which is hard to roll to close enough tolerances to keep the wheels from jumping the rail.

What about drawers?

Best way to keep drawers from sticking is to specify rust-proofed metal and nylon drawer-slides permit pulling drawer all the way out without sagging. These are integral on almost all good steel cabinets. They are standard or optional (for about \$1 extra to builders) on most brandname wood cabinets, and builders who buy their built-ins locally can get them for about the same added cost.



"I am now selling houses to grandchildren of my early buyers," says Los Angeles Builder George Heltzer "because through the years I have built and sold

quality. Today people are educated and 80% of our prospects are second-time buyers who know what to ask for in a house."

Successful builders, right now, are merchandising quality

On the next 36 pages you will see dozens of their ideas—

each sales-tested and sales-proved. . . .



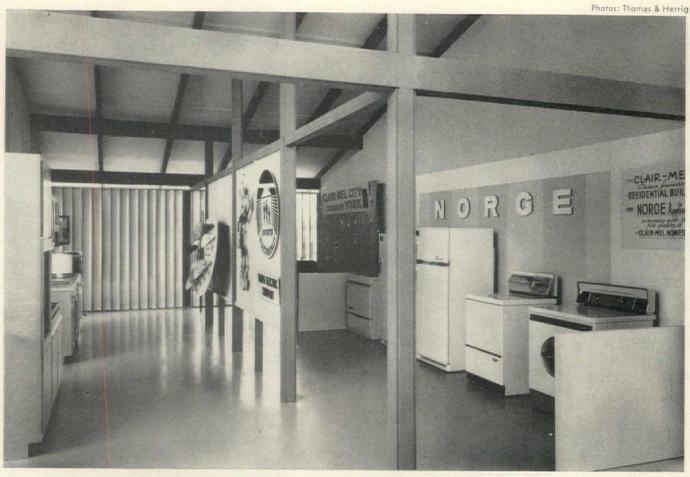
Mel Larsen's rule for selling quality: Display your wares like a real showman

Builder Larsen (see his sales success, p 142) is a real showman.

He displays his wares—the materials and equipment used in his houses—in an eye-catching setting: the sales office (background, above) at Clair Mel City, his new subdivision in Tampa.

Any builder who doubts the value of product displays should talk to Larsen, who is scoring Tampa's biggest sales success (see p 142). He says:

- 1. Displays are an ideal way to draw attention to your quality story.
- 2. Displays keep prospects around by holding their interest after they have been through your model houses.
- 3. Displays give your salesmen a chance to walk up to prospects and begin conversations in an easy, casual way.
 - 4. Displays help you separate serious prospects from those just looking.



Larsen puts quality products in this quality setting

Any artist's painting looks better in a handsome frame. That is why Larsen displays his products in this attractive setting.

Larsen's display building gives most prominence to York air conditioners and Norge appliances. His Clair Mel City promotion ("Tampa's first air-conditioned city") is built around his York units (right rear, above). Some of the Norge units displayed here are included in his sales price; others are optional.

Also shown: his "full housepower" display and displays by the telephone company and other suppliers.





Larsen dramatizes quality . . . and identifies himself with quality products

Take this unusual display of drywall, for example. To show how the drywall retards fire, he directs a lighted blowtorch against it. "It's a sure attention getter," he says, "and strong proof of quality." Sign above the display lists other features of the drywall.

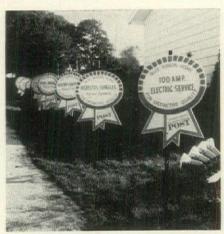
Photos of several Larsen houses, mounted on this Masonite display, help identify the builder with his brand-name products. The simple but professional looking display lists convincing reasons why siding and other materials used in his houses are quality products.



Builder Joe Eichler starts his quality story with this display pole

The Palo Alto builder puts an eye-catching display like this in front of every model house. The box mounted on the pole contains a lighted and animated product display (sample:

oven model with door that opens and closes) and a sign saying: "Eichler approved . . . tested and selected for you." Kelly Snow Sales Development produced the displays.







Here are three ways to use outdoor signs to sell indoor features

Fox-Bilt Homes, Plymouth Meeting, Pa. posts a string of Saturday Evening Post feature signs (left) along a model-house driveway. Young Construction, Phoenix, uses Carrier

promotion displays to help explain benefits of a heat pump. Willard Woodrow, Miami, uses triangular signs (right) to promote house features and "Advertised in LIFE" products.













Several smaller signs often score more points than one big one

That's why the builders of Park Village, Los Angeles, string out signs like these on the approaches to their model houses. Each registers a single feature of the houses. Since the

average buyer comes out to the models three to six times before he signs up, displays like these are a constant reminder of quality features he might otherwise miss.



If you are a real merchandiser you can make your office a real store

This impressive "Sales Showcase" is, believe it or not, a model-house garage. Gibraltar Homes, Anaheim, Calif. uses the area as a sales office and as a display center: there are

revolving displays, in color, of houses and floor plans; a master tract map, a construction-specification display. Patio outside is set up for conferences.





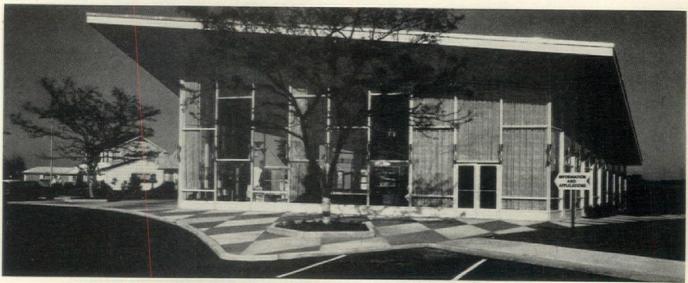


You can convert a garage for sales displays—or put up a special building

Perma-Bilt Homes in San Leandro sets up its displays in a modified garage (left). But the builders of El Dorado Northridge, Los Angeles, use a separate sales building (center). So

does John Long—his new sales building (right) includes a series of product displays (you'll see them on p 197). Buyers pass through sales building to get to model houses.

Lawrence S. Williams



This special building is the stage for Levitt's big product show

Each time he moves to a new area, Bill Levitt builds a better sales and product-display building. And he has done it again, with this new office in Levittown, N.J. It is in the middle of

a row of furnished models, is usually surrounded by crowds looking in the big windows at the product displays. To see what it looks like inside, turn the page.



Inside . . . Levitt's product display suggests prestige brands

room like this, you show your respect for them. Notice the floor-to-ceiling glass. Notice the lighting fixtures. And notice the generous space around the displays. With each display is

When you display your brand-name products in an inviting a neatly printed message telling why the product benefits homebuyers. And Builder Levitt always makes sure he has enough salesmen on hand (behind the counter at left) to answer visitors' questions.



Here is a new way to show off your quality of kitchens and baths

This imaginative display by Gibraltar Homes, Anaheim, Calif., makes the most of valuable selling space that often goes begging. Along the left wall is a complete kitchen with all the products that go into it. Along the rear wall is a complete

bathroom plus a section of the master bedroom. Along the right wall (not shown) are other products plus a display of services offered by an interior decorator. Product names stand out because they are framed in the lower panels.





You can show visitors everything

In this big room Leonard Long Jr of Atlanta shows visitors all the materials that go into his houses. Among his unusual displays are bins of gravel, piles of concrete block, stacks of lumber. And on the ceiling is a full-scale, three-dimensional floor plan of one of his models.

. . . or display a few brand names

This modest but attractive display features products of one manufacturer (Johns-Manville) but also points out community facilities with a photo of a nearby shopping center. It occupies one corner of the garage that Builder Frederick W. Zink of King of Prussia, Pa., uses as a sales office.

Franklin Studios



When you display it tell why it is good

Both these displays tell and show why.

Left: George Goodyear of Charlotte mounts samples of his quality floors on a 5x5 panel. His display catches the eye of visitors and gives his salesmen a chance to tell why his floors are quality. Prospects are invited to feel the wood, see its "precision manufacture," choose among oak, walnut, cherry, or maple.

Right: MacKay Homes of Sacramento, builder of Foothill Farms, displays a cutaway wall to stress the importance of full insulation. Copy talks up brand-name quality and benefits like greater comfort and lower utility bills.

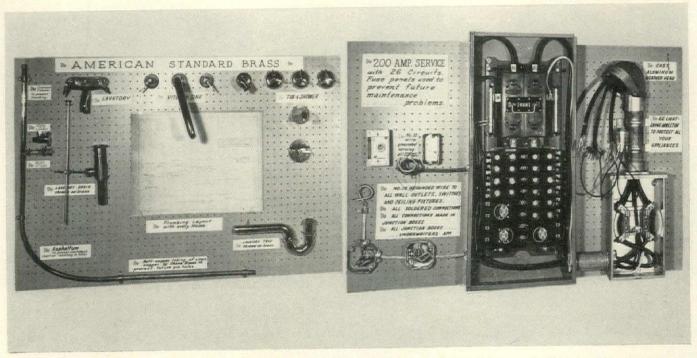






Always tell your quality story from the prospects' point of view

To the prospect, adequate electric power means enough power for all the appliances he wants to use. Both these displays make that point. Left: Centex Construction Co shows that its buyers in a Chicago subdivision get power for at least 20 appliances (pictured in circles) instead of seven which is all 60% of Chicago families can use. Right: Bernie Seidman, Wellington Park, N.J., puts across the house-power story with a display by Public Service Electric & Gas.



"You'd be surprised how much time people spend looking at these displays"

They spend time looking, says Charles Pride, sales manager of Dave Edmund Homes of Clearwater, because: "Women, and even a lot of men, have no concept of what is in a house. The displays give our salesmen a chance to tell them."

The displays (on three walls of a two-car garage) make people remember the model houses because, says Pride, many are "audience-participation displays." For example, prospects can push a button, see how much current an electric iron uses (part of "full-housepower" display). They can turn on an electric heating system, they can ring door chimes. Also featured in the electrical heating display: a letter from the power company explaining rates. Says Saleswoman Clara Honold: "Displays are terrific for me as they let me explain technical points to men without hurting their feelings."

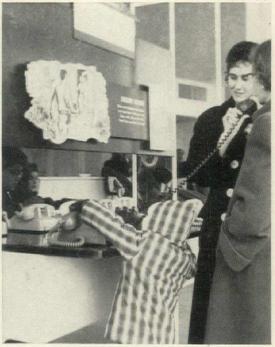


"Sell quality systems as well as quality brands," says Joe Eichler

He follows his own advice with displays like the one at left above, which explains what radiant heating is and how it works. This display board, in one of his Palo Alto models, attracts attention with a large, unusual picture, then talks up "the wonderful comfort, even heat distribution, complete decorating freedom" with a radiant-heat system. All of his displays are summed up by the slogan: "another reason why you should buy an Eichler home." He also uses a series of product displays (like the one directly above) which talk benefits to buyers.

Eichler uses these displays to "dress up" his unfurnished models, which he shows along with furnished houses.





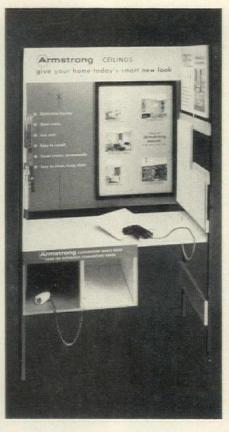
Both John Long and Bill Levitt are using new types of displays

Latest innovation by the Phoenix builder is a series of institutional-type displays—mostly rear-projection color slides which hold prospects attention on Long's main product, design, and construction features. A color and sound strip film tells *The John Long Story*. "We know a good product display helps us sell," says Sales Manager H.C. Pease.

Photo at right shows one of more than 50 displays in the

new Levitt sales building. Prospects pick up telephones, hear a taped message about the new Levittown and its advantages (the message discusses community facilities like shops, schools, and churches, as well as quality features of the houses). This display is a telephone-company tie-in that explains via the taped message: "When you buy a Levitt house, you won't have to wait to have your telephone installed."



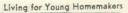




Displays like this let your prospects "try it" for themselves

At the display of siding at Brickman Homes, Mt Prospect, Ill. (left) visitors are supplied with a hammer, invited to "Hit it hard. Do you know any other siding which will take this kind of punishment?" Few prospects are able to resist the temptation, and few leave the display without reading the accompanying signs. At an Armstrong acoustical-ceiling dis-

play (center) prospects can operate a bicycle horn first in an untreated box, then in a box lined with sound-absorbing material; "hear the difference." At a flooring display (right), visitors can compare softness of floors with and without underlayment by standing with one foot on a section of flooring "with," the other foot on a section "without."





Even without a display area, you can make a dramatic show like this

"Nothing shown at the San Antonio Parade—and there were 78 houses—got more comment than this kitchen," says Builder Tom McGovern. In the kitchen, which has no burner

top, visitors saw coffee perculating, a variety of portable Westinghouse counter-top appliances in use, a Philco splitlevel oven roasting meat and making pies.





... and feature quality brands without messing up your model house

With the sign at left, above, Fox Brothers of Plymouth the basement sales room, not in the furnished part of the Meeting, Pa. make sure prospects realize all the brand-name products that go into the house-but they put the sign in out features of Lord Chesterfield Homes on Long Island.

house. The door-mounted checklist in right photo spells

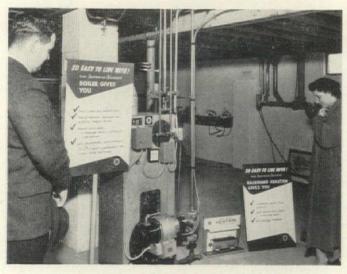




To make signs work, put in some factual "reasons why"

Sign above left, in an Earnest Homes' model in New Orleans, doesn't just say "big kitchen"—it spells out the advantages of a big kitchen to the buyer. Other similar signs spotted

around the house carry the same "Another sign of quality" slogan. Builder Jim Burke of San Antonio sets up Azrock sign (right) to check off advantages of vinyl tile he uses.





Signs keep talking quality when your salesman is busy elsewhere

Builder Bob Schroeder of Brentwood, Long Island, wants all his prospects to know why he uses hydronic heating in his houses—and if there's no salesman around, the signs

(left, above) tell at least the main points. And a sign (right, above) calls attention to the "Pull 'N Clean" feature of the Frigidaire ovens in Wenzler Bros' houses, Dayton.



Use a booklet display rack so they can take your quality story home

In this neat Masonite pegboard rack, M.H. Paulson Lumber Co (Milwaukee) stacks manufacturers' literature covering all the materials and products used in its "Showcase of famous

brands" house. Advantage of pegboard: holders can be adjusted to take any size booklet. One space holds cards which prospects can sign and leave, if they wish to be contacted.



Charles Huber's rule for selling quality:

Use cutaways to prove you have it

Huber proves he has it by making one model a cutaway display house.

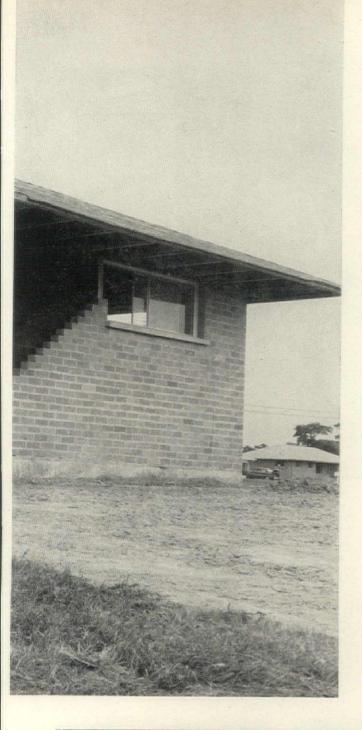
Outside and inside, the house shows materials and workmanship in different

stages of construction.

"Most people really want to know about construction," says Huber, "and a good salesman can make effective use of cutaways to show why one house is better than another. But he has to be enthusiastic, has to know his subject. And, above all, he has to tell his story from the prospect's point of view. In other words, he must show how good construction pays off in such things as comfort, low maintenance, and low heating costs."

Huber (see his sales success, p 144) builds relatively low-priced houses in Dayton and Columbus, relatively high-cost areas. He sells a 1,060 sq ft house, (plus garage) with brick veneer and deep overhangs, for \$13,495.

"At that price," he says, "we have to prove quality. Otherwise people may get the idea that our moderate price indicates cheap materials and so-so work-manship."





Cutaways let buyers see the evidence

Here the evidence is insulation, pulled out of one of many inspecton openings in Huber's cutaway house. Seeing and feeling it helps convince prospects of quality of house.



Cutaways convince the skeptics

This wall, left open to show the quality of its construction, helps Huber salesmen persuade people that even at a price as low as \$13,495, they will get long-term value.





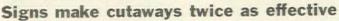
Cutaways show the materials and the construction

Salesmen use these open walls to demonstrate the quality of Huber's drywall construction (left) and copper plumbing (right). Open construction like this also helps Huber train

new salesmen, who are taught how his houses are built, how to discuss any phase of building, and how to point up the benefits of materials and workmanship.

To see how other builders use cutaways turn the page





A cutaway works best when there is a salesman standing by to explain it. But on weekends, salesmen are often too busy, so a cutaway doesn't do much good unless there are signs which point up the things to look for and the benefits. This cutaway is in an Orrin Thompson house in Minneapolis.

A ceiling cutaway shows what's up there

Few prospects will climb up into an attic to see ceiling and roof construction. But they'll all look up. Builder John Tilton of Rochelle, Ill. framed an opening into the attic, lighted the space so prospects could see his construction.









Here's how three builders use X-ray houses to sell second-time buyers

Most second-time buyers know quality construction and quality materials when they see them. And they want to be shown. That's why (left) Builders Stone & Schulte of the San Francisco peninsula show prospects a partly finished house with neatly lettered signs to point up construction features. That's

why (center) Coronet Homes, Richmond Homes dealer in Trotwood, Ohio, leaves one model unfinished so prospects can see the components and how they go together. And that's why (right) Ibec Homes in Florida has its salesmen show houses under construction.





Andy Place uses heating cost figures to prove the economy of quality

He uses a cutaway (above) to show his prospects the difference between insulating to minimum FHA standards and insulating to the "Comfort Conditioning" standards he follows.

Then he uses cost-comparison signs to show his prospects the dramatic difference in operating costs that proves the benefit of his quality insulation.

The signs show: 1) a house in South Bend insulated to minimum FHA standards would cost \$192 a year to heat with gas, \$224 with oil, \$227 with coal, and \$474 with electricity; 2) but with "full thick" insulation, operating costs would be

\$71 less with gas, \$84 less with oil, \$85 less with coal, and \$177 less with electricity. So these signs make it clear to prospects that quality insulation will save them \$1,420 over 20 years in Place's gas-heated homes; and save them even more if the house is air conditioned.

For a year now, Place has built without sheathing, and the \$125 he saves just pays the extra cost of "full-thick" sidewall insulation and 6" ceiling insulation.

The photo at right shows a cutaway of an optional fireplace which 35% of Place's buyers pay an extra \$475 to get.







New methods need explanation

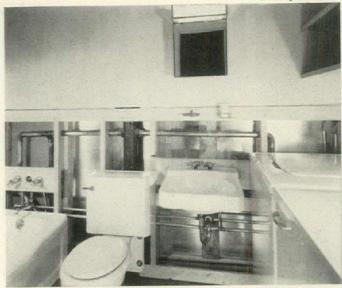
And a cutaway is one of the best ways to explain them. Here, T.H. Kennevan, sales manager of Style Builders in Pittsburgh is using a US Steel Homes cutaway to show a prospect how the sidewalls of the house are fabricated, what materials are used, and what the advantages are.



Here's a salesman's conversation piece

It lets him show prospects the structure of the sidewalls, the insulation, how the wall is plastered, and how windows are set in. Builder Dale Bellamah of Albuquerque had this cutaway display built, keeps it set up near the model house to help salesmen sell good construction.

Cloetingh & DeMan



Here's an inside quality story

Malone & Co of Niles, Mich.—a Place Homes dealer—uses this cutaway to show the materials and fabrication of the prefab plumbing wall in its \$11,250 (with land) houses. Point to remember: A builder of lower-priced homes often has to do more than builders of higher-priced homes to prove that he offers quality features, because buyers tend to take quality for granted in a higher-priced house.



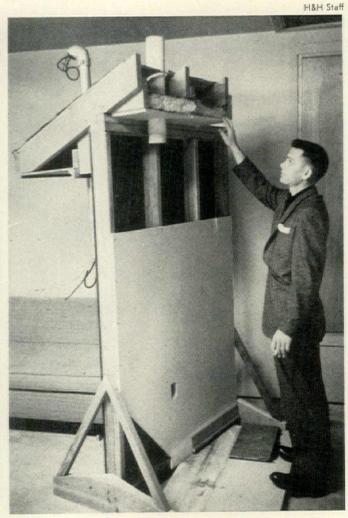
This exhibit explains fine floors

To attract the attention of prospects to their quality flooring, Stone & Schutle-who build and sell in half a dozen areas on the San Francisco peninsula-use this "cutaway floor" display. It shows an oak floor at several stages of completion, dramatizes the quality of materials and workmanship involved. This display is built in one room of an unfurnished model and used to show many construction features.





H&H Staff



Here's how Raleigh Smith takes full credit for 7-Star construction

As soon as this Houston builder had tied in with the Johns-Manville 7-Star promotion, he built this cutaway display to highlight the construction features, set it up in the garage of one of his furnished models. It shows off his quality shingles, sheathing, insulation, and drywall; the redwood fascia, the soffit, the vent pipe, and the conduit used to bring wiring through the roof. Says Sales Manager Ben Goolsby: "The cutaway slows people down, so it gives our salesman a better chance to talk with them and sell our quality. We know it has interested men especially."





These big mockups explain how an aluminum house works

When Builder Jerome Cardin (Admiral Homes, Baltimore) introduced National Homes' new line of aluminum houses, he knew his salesmen would have to answer hundreds of questions about how the houses are made. So, with the help of the factory, he built these cutaways. They work two ways: 1) they are so interesting that they arouse curiosity, and 2) they are so complete that they show clearly how the house is made. The display at left, above, shows aluminum horizon-

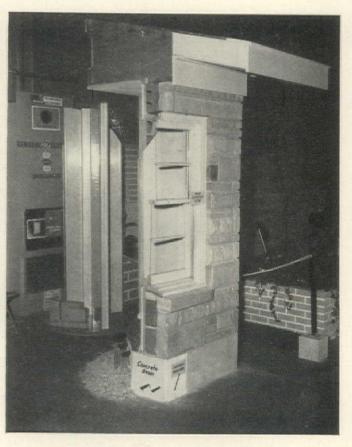
tal siding and shingle roof. The display at right explains aluminum "board-and-batten" siding and sheet roofing. Both displays feature several color choices; and show, clearly labeled, the metal corner post, aluminum gutter, fascia.

The two mockups were shown in a large tent, along with other product displays, and, says Builder Cardin, were a major help to his salesman in racking up opening-month sales of some 400 houses.



Inside-outside cutaway tells all

The elaborate wood and masonry display explains how a masonry wall is built, how radiant heating pipes and reinforcing are laid in a slab. Dan Caimotto displayed it at the Annual Central Pennsylvania Builders Show in Harrisburg, reports it attracted a lot of favorable attention.





Bill Beck's rule for selling quality:

Train your salesmen to be demonstrators

"Don't just tell your prospects what quality equipment will do for them," says Beck. "Show them—or, better yet, let them show themselves."

That is what Beck salesmen like J.W. Tippett (see photos) do in his demonstration room. They demonstrate how equipment works. They demonstrate its special features. And they invite prospects to "try it yourself."

Because of his wide price range (\$8,250 to \$60,000), Beck (see his sales success, p 146) does not put all his optional equipment in every model house. So his salesmen take their prospects to the demonstration room to show them the whole line. Says Beck: "Before we had the demonstration room, we sold optional equipment to about one customer in ten. Now we sell five in ten."







Bill Beck's salesmen show it . . . tell why it is better . . . and explain the guarantee

Salesman J.W. Tippett uses demonstration to focus visitors' attention on oven, furnace, and water heater. Then he points out benefits and quality features. Opening the oven, he says, "Let me show you why you can be sure of even tempera-

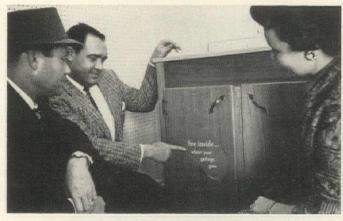
tures." Removing the front of the furnaces, he shows how air circulates and how filters keep the house cleaner. Demonstrating the water heater, he talks up advantages of its insulation, glass lining, and ten-year guarantee.





Beck's salesmen invite the prospect to try it for herself

"See what you can do with this food center," says Tippett as he invites the housewife to experiment with it. Comments we have—partly because we let them try it."





Beck's salesmen get the husband interested in kitchen equipment

Turning to the husband, Tippett points to a sign that reads, "See inside where your garbage goes," opens the door to show Beck: "Most men want to know what makes equipment tick."





Beck's salesmen make the most of a surprise like this

Tippett as he demonstrates a bathroom scale that folds into this stir up interest. We always make them a strong point."

"Now here's something you won't see in most houses," says the wall when not in use. Comments Beck: "Surprises like





Always point out the advantages

You can show advantages of a sliding door, for example, with a small-scale model or with the actual installation. John Pagliuso, Glendale, Calif., uses a model (left) by Ador. George Springhart, Lincoln Park, Mich. (above) demonstrates a Fenestra door in one of his \$18,000 houses. He shows how well it works and how it is weatherstripped.





Show how easily it slides and how tightly it fits

Demonstrating the easy movement of a Fenestra window (left), Builder Ted Pratt, Royal Oak, Mich., slides it. One of his sales rules: "Do something." Demonstrating the tight fit

of an Andersen window (right), Bill Lofink of Strauss Bros, Omaha, has a visitor pull a ribbon between the frame and sash. One of his rules: "Get the prospect to do something."

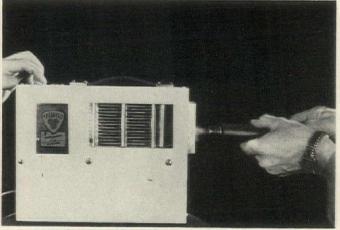




Get your buyers to see and feel the difference that quality makes

Here is how two builders do just that. Jennings & Lewis, Lubbock, Tex., invite prospects to examine a sample cabinet drawer (left) that shows fine millwork and nylon guides. Says Cecil Jennings: "We insist on demonstration by our salesmen." Parkway Homes, Milwaukee, urges visitors to "compare the difference" between quality and nonquality paneling on a display board (right). Prospects feel the two panels and read the checklist-type copy between them.





Seeing is believing

To show why an electronic air filter "works better than any other kind," Fred Becker of Pittsburgh uses this Trion demonstrator. A lighted cigarette is put in a tube with a rubber bulb at one end, and smoke is pumped into the demonstrator. Smoke floats through and out the top until a button is pushed to activate the filter; then it disintegrates.





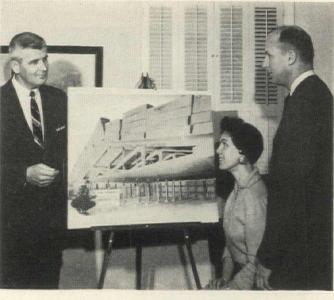


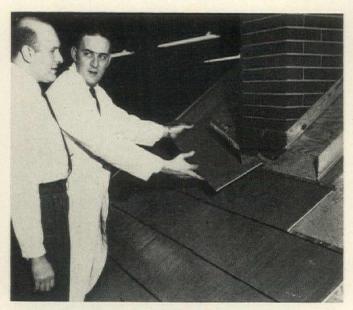
"Let me show you . . ." always gets your prospects' attention

That's what salesmen say at each of these displays. Left: salesman at Oak Park Home describes electric heat with a display from Salt River Power District, Phoenix. Center: sales

manager of Residential Developers, Baton Rouge, shows benefits of attic fans with full-scale model. Right: George Johnson, Lincoln, Neb., shows benefits of gas air conditioner.







A salesman can make his point with a photo, or with an actual sample

With the photo display at left, the salesman shows the strength of a truss roof. This large-scale photo of a strength test is displayed in the Hamilton, Ohio, showroom of Pease Homes because prospects cannot be taken into the field

to see the actual test. In the picture at right, salesman uses a sample roof section (a display prepared by Reynolds Aluminum) to explain an aluminum roof and to show the advantages of aluminum shingles and flashing.





Show what living there could mean

Builder John Held dramatizes how pleasant cooking would be in his Kingsville, Tex. houses by having M.A. Compton (left), Chambers range dealer, broil chickens for opening-day crowds. Borovicka Enterprises dramatizes how easy housework would be in its Glen Ellyn, Ill. houses by having a home economist (above) from local utility demonstrate appliances.





If you have quality flooring, let them know why it is better

Builder Robert Grant (left) of Stardust Royalty Homes, Los Angeles, uses this sample display board to show optional patterns and colors, and sell the advantages of the Congoleum-Nair vinyl in his houses. At right, a salesman for Centex Construction Co uses a display panel to show prospects the pattern and finish of the wood-block flooring used in its big Chicago development. Sample block in salesman's hand shows thickness of flooring.





An off-beat display gets attention

Above, Builder Dan Caimotto (New Cumberland, Pa.) demonstrates the durability and washability of the Luxor carpet he uses: this sample had been used as a doormat by hundreds of visitors, then washed at one end. At left, salesman for Young Construction Co of Phoenix invites prospects to "feel the quality" of wool wall-to-wall carpet used in its houses.





Help buyers pick a quality product

As prospects look over displays showing choice of hardware, (left), salesman for Builder Jacob Lefferts (Middletown, N.J.) demonstrates quality features of line. Above, salesman for Builder Carl Kamhi, Shrub Oak, N.Y. helps prospects choose paneling, using Georgia-Pacific display that highlights "family-proof" finishes.



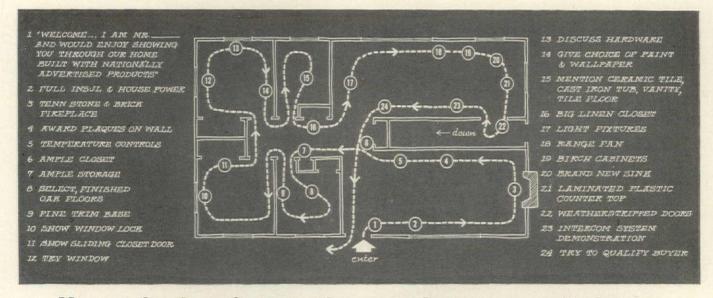
Get your story into a book

An easel-type manual, like this one used by John Long's salesmen, is ideal for showing prospects all of your quality features—not only in the house but in the community. Book is shown after prospects have gone through the models.



Don't forget community facilities

Durable Construction Co (which developed Village of Carol Stream, Chicago) use this display to dramatize the advantages of a modern sewage plant. Display was built with the help of the manufacturer, Yeomans Bros.



Map out the places for your salesman to demonstrate quality features

Salesmen for Builder Wes Reed of Hartford, Conn. use this annotated floor plan to remind them to talk about a specific quality feature at specific points in the tour through the

model house. With a hot prospect, salesmen try to cover every point. Reed drills salesmen in use of the map by making occasional "test runs" with them.

Something new is happening in home merchandising -

The deep sell

All over the country today smart home merchandisers are coming up with the same new idea. We call it "the deep sell."

The deep sell *includes* all the proven techniques H&H has recommended in earlier merchandising issues: it starts by featuring a good neighborhood, good design, and curb appeal; it uses well furnished models and offers prospects a new way of life. Some successful builders call this part of the deep sell an appeal to romance and glamour—certainly it is aimed at the emotions.

But the deep sell does not stop just with an appeal to the emotions. It adds an appeal to reason. When you use the deep sell, you convince your prospect that your house is not only attractive to look at, but that it is also good quality and sound value. You convince him by informing him, by giving him the knowledge he needs in order to judge for himself. In short, you convince your prospect with facts that let him convince himself. When you have done that, your prospect becomes a buyer and he also becomes your enthusiastic backer—in a very real sense he joins your sales force.

This kind of selling obviously takes effort and time. To start with, builders agree, you must have basics like a good location, good neighborhood, good design—a house suited to the market and priced competitively. If you are going to convince your prospects that your house is good quality, obviously you must begin by *delivering* quality.* Then you follow these steps:

Changing conditions created "the deep sell"

First, what is changing? Well you builders are changing locations. You ran out of land so you moved to another surburb or to another town. Wherever you moved you are not as well known. Merely saying you are a good builder isn't enough. You have to prove it.

Second, if you haven't moved, your customers have. Statisticians agree that 20% of American families move every year. The smart merchandiser knows that when new people move into town he has to convince them he is a quality builder.

Third, a new kind of buyer is developing who has to be sold by new methods. Stan Edge said recently: "Today we are building up an inventory of experienced buyers. They know what they want and they want a lot of new things."

1. Build up your name so it is synonymous with quality

Advertise and promote skillfully over a period of time. You can develop a consistent theme in which you always associate yourself with high standards. Don't use the word "quality" itself as often as you talk about the things that quality means. Be sure you keep your own name or your firm name consistently in front of the public. Don't change your name each time you change locations. Most good merchandisers have decided they need a professional advertising man to help them.

2. Begin with an emotional appeal

The good merchandisers with whom I've been talking all start by building up a glamorous "new way of living" concept. They try to sell the complete house (as a part of the complete neighborhood). They don't sell separate features. The whole house is greater than its parts. So they do everything to give the house strong emotional appeal.

3. Always sell from a furnished model

There was once disagreement among builders about whether you really need a furnished model. Those days are past. To-day I am told in every city I visit that to appeal to the emotions and to give an air of quality to a house you need

furnishings. Bill Levitt, one of the pioneers of the furnished model idea, opened some new models last summer, decided he would include a few unfurnished houses. He found he had lines of people waiting to see every furnished house, but almost no one at the unfurnished houses. So he quickly furnished all and immediately got crowds at all.

The smart merchandisers are doing a better job of furnishing these days. By their furnishings they suggest that families who buy are going to live a happy, worthwhile life and are nice people. Merchandising experts advise doing a complete job of accessorizing to give an atmosphere of quality. This does not mean putting \$40,000 furniture in a \$20,000 house. Usually it means hiring a professional decorator.

4. Get better salesmen and train them to sell quality

Builders are learning it takes a quality salesman to sell a quality house. Just teaching salesmen to appreciate quality is an enormous job. They have to go through indoctrination and know enough about quality to be enthusiastic about it. Builders tell me that far too many salesmen are "pointers"—they point to a product and name it, but they don't talk up its advantages. Pointing is not selling.

Many builders run product and construction schools for their salesmen. They invite manufacturers' representatives in to tell all they know about what makes a quality product. Salesmen spend a day with each foreman or sub-contractor to learn about construction.

5. Try to catch "lookers" who don't see a salesman

Leading builders never forget that at least half the people going through their model houses don't have a chance to

^{*}And, of course you must get recognition for quality from your mortgage lender. You must convince him that you have a quality house so you can get a higher valuation. You should work constantly with your appraisers and FHA-VA representatives and expose them fully to your deep sell.

talk with a salesman. This is especially true on weekends when salesmen get tied up with a hot prospect and cannot talk with everyone. Today nearly every builder is competing with other builders who also have a good location and an attractive house. So you don't sit back any more and say, "The glamour sells itself. If people are interested, they will hunt up a salesman." Too many people make a superficial size-up of the model, miss many of its fine features, and walk out never to come back.

Signs inside the house are a debatable point. Many smart builders use them, many others don't want to detract from their fine furnishings "with a lot of pasteboard." For builders who use signs, there is a definite trend to smaller, better designed signs mounted neatly so they are not obtrusive, or to small signs in closets, drawers, kitchen cabinets, furnace rooms, where they won't spoil the furnishings.

6. Tie in with big names, but put your name first

"A lot of people who move to Florida never heard of me," Builder Dave Edmunds told me, "but they have heard of my national brand names, so all that prestige rubs off on me."

More builders are promoting brand names than ever before. There are also more big national promotions. Several manufacturers have large-scale merchandising programs; so have some prefabbers; national magazines offer real help to builders; and a growing number of gas and electric companies are doing an outstanding promotional job. In a sense, all of these are brand-name promotions.

These programs have been the making of many builders. The sponsor moved in with a variety of aids: professional advertising, sales training, help with furnishing and merchandising. Most builders, except perhaps the very largest, can profit from this help.

But there is a growing trend among successful merchandisers not to take so much help that they lose their identity. They don't want the big national promotion to sweep over them like a hurricane. The smart builder wants people to know his name and his house. So most of the new national promotions are designed to play up the builder's name. For if he sells his houses, then the sponsor sells his products.

7. Set up a "show window" and make full use of it

One of the strong new trends in home merchandising is to a better use of product displays. I see evidence of this all over the country. Bill Levitt has a new one that is the best he's ever had (p 193). John Long has gone to an entirely new display, more dignified and less flag-waving (p 197). Andy Place, American Housing Guild, Dave Edmunds, Sullivan & Smith, the Mackle Brothers, and dozens more have convinced themselves that you can't sell quality if you don't have a special place to show it.

A lot of builders still pooh-pooh a product display. But my observation indicates that if a product display doesn't work for a builder it is probably because it isn't a very good show. In the last few months half a dozen builders have told me their product shows worked so well for them last year that they are bringing out brand-new displays this spring. They got a taste of how well the idea works, and now they want to do it better. They put displays many places.

Any builder would admit that if Saks-Fifth Avenue boarded up its show windows it would lose business. Yet builders have over 400 sq ft of display space in every garage which they throw away. Here is highly valuable show-window space which can be turned into an important element in the deep sell. Here is a place to catch the attention of those 50% of the lookers who miss the salesmen's talk (see box below).

8. Back up your displays with your brochures

Make your brochures or any sales literature you use an extension of your sales force. Put in facts that tell why your house is a quality house. People will read reasons why a product is better if you make them interesting. But you must talk facts and benefits, not just empty phrases. Don't just claim quality; tell them what it means and prove you have it.

9. Continue the deep sell after they have bought

Some builders sell half their houses to friends of last year's buyers. So keep your buyers happy, keep them sold on you and they'll keep telling their friends. The deep sell pays off best this way.

Look at all these features you can sell in your show window

First, sell yourself

The first step in selling quality is to sell yourself, your name, your reputation, your past achievements, your prestige. So show your awards, your best publicity (but not yellow newspaper clippings), testimonials. By all means show large photos of your best-looking older neighborhoods.

Sell neighborhood and location

Use a big map to show out-of-towners where your subdivision is in relation to schools, churches, shops, transportation, recreation areas and other points of importance. When possible, show photos of these features. Also show your street plan and include comments that explain why it is a good one.

Sell your brand names

Some brand names are conspicuous to visitors. But many are not. Most builders throw away two-thirds of their brand names. This is like throwing away thousands of dollars worth of advertising.

Sell the benefits

Tell people in every way you can the reasons why your materials and products

are good. There is little selling-value in pointing to a piece of vinyl asbestos flooring and just saying, "We use vinyl asbestos." Tell its advantages, tell why your buyers will benefit because you use it.

Sell your warranties

To a prospective home owner, a warranty is like a free insurance policy. It is one of the best confidence-builders you can find. It is foolish not to collect all your warranties and put them up together on a board in your display room.

Sell long-time value and savings

The strongest appeal a quality product has is its money value. Almost any home-buyer will spend a little more to get a lot more. Who wouldn't spend \$90 more for a roof that is guaranteed for 20 years instead of ten years? Who wouldn't spend \$15 more for a ten-year water heater instead of a five-year heater? But the benefits of quality products have to be told before they can be sold.

I met a man in Houston who had lived in his subdivision house for five years. He told me, "I've just put in my third water heater." When he moves, it should not be hard to sell him the best water heater made. Many builders tell me that two-thirds of their buyers are second- or third-time buyers who want quality products because they are economical.

In your displays you can put in cost figures the way Andy Place does to show the value of his insulation (see p 203.)

Always sell against the old house

Most sales you lose are to an old house. Of the ten million families who move this year, nine million go into apartments or old houses. New house builders get only one family in ten. Doesn't it make sense to show your visitors how much better your house is than an old house?

The chances are you have a better roof, better framing lumber, better siding, sheathing, insulation, wiring, heating, plumbing, flooring, kitchen, bathrooms and so on through the whole list. Your greatest single sales advantage over the old house is the quality of your materials and products. A lot of other things about your house should be better, too. If they are not, you're in the wrong business.

If you keep the old house in mind and build your exhibits to show why your new house is better, you can't help but come up with some convincing displays.

HOMES NOW SOLD

OMPANY BUILDERS OF HAWY How well can the "deep sell" merchandise quality? Builders Fox & Jacobs are posting their answer on the billboard at left.

Why nobody else gets a bigger pay-off from quality

Last year Dallas Builders Ike Jacobs (left in photo) and Dave Fox (right) sold 20% more houses than they had sold in all six previous years.

Their 1958 record: 650 sales—105 over their '52-'57 total. Their 1959 prediction: "better than '58."

Why the boom? Mostly because Fox & Jacobs used the "deep sell" to cash in on their reputation for quality in a big market.

In 1956 their first *Flair* community of \$23,000 houses established their reputation. It also sold well (135 sales the first year) in the middle of the worst market Dallas has ever had.

Last year their Accent community of \$14,000-\$18,000 houses brought the big

pay-off—a sellout of the first section (502 houses) three weeks after opening day. Says Jacobs: "Accent, like Flair, was an all-out effort to build and sell quality. It got the same quality construction, the same quality products, and the same 'deep sell'." (F&J also sold 148 Flairs in six months.)

But the key question is this: Why does Fox & Jacobs have such a reputation for quality? Here is the two-fold answer:

1. F&J's basic building idea is to do a quality job

"The best advertising any builder can get is word-of-mouth advertising by satisfied buyers," says Jacobs. "So we lean over backwards to put quality into our houses."

Item: sliding-glass doors. F&J tested a dozen different makes for air leaks, water leaks, and other possible faults. They wound up with a door that cost \$50 more than many others they could have bought. But they also wound up with no complaints from buyers.

Item: air conditioning. F&J houses are engineered around their air-conditioning systems. This produces efficient cooling with smaller units than might have been necessary. So the builders pay less for the equipment, and their buyers pay less to operate it.

Sums up Jacobs: "Your present sales don't start with your present subdivision. They start with the first house you build. Right now we are reaping the benefits of the quality we have been building for years."

2. F&J's basic sales idea is to merchandise quality

"You can't count on selling a prospect if you simply tell him he's getting a quality house," says Fox, who is chairman of NAHB's Merchandising Committee. "You have to show him why it is a quality house—and what this quality means to him."

The "deep sell" does just that. It builds desire with an appeal to people's emotions: an atmosphere of quality in model houses. Then it builds confidence with appeals to reason: displays of brand-name products and quality construction, demonstrations by trained salesmen, and fact-packed sales brochures.



MARKS OF LUXURY in this Fox & Jacobs Flair model include double front door with automatic door closer, wide entry hall with quarry-tile

floor, expensive light fixture in hall, combination dining counter and serving bar, built-in china cabinet with natural finish and glass doors.

"We create a first impression of quality"

C.J. Laughlin



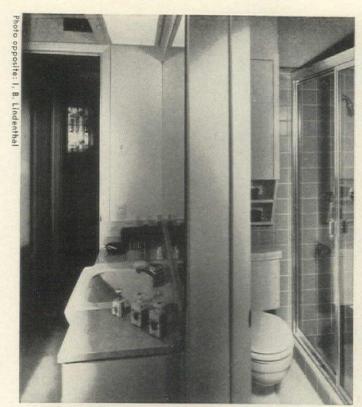
BROAD ENTRY HALL gives immediate impression of quality with planter, space divider, and view of raised hearth in living room.

"The first impression—the impression people get when they walk into your model house—is all-important," says Dave Fox.

"This is where you appeal to their emotions, start them dreaming of a better home than they now have—in short, get them to see themselves living in one of your houses."

How do you make your model say quality? Here is Fox's answer:

- 1. Set it off by careful landscaping: "We treat our houses with respect because we want our buyers to respect them."
- 2. Don't skimp on furnishings: "We use a top interior decorator, C. Tony Pereira of Los Angeles."
- 3. Insist on good housekeeping: "Dirty windows, unwaxed floors, and overflowing ash trays don't sell houses."
- 4. Build in the kind of luxuries (see photos) that are a mark of quality in higher priced, custom houses.
- 5. Never rope off rooms, and never put "don't sit here" signs on furniture: "We want people to feel at home."
- 6. Avoid commercialism: "We have no 'selling' signs in our furnished models. But, of course, we make good use of them in our X-ray house and other display areas (pp 218-219)."



COMPARTMENTED BATH has sliding door, recessed lights, marble counter, big mirror, extra storage over toilet, glass shower enclosure.



LARGE KITCHEN provides plenty of dining space. Other quality features: lights in cabinets, pass-through to family room, vinyl floor.

Photos: C. J. Laughlin



FAMILY ROOM invites informal dining at table (left), outdoor living on terrace (right). Quality items: paneled wall, top-grade wall-to-

wall carpet. Says Fox: "People may not notice every quality item in our models, but they are impressed by the over-all effect."



DISPLAY ROOM in garage of X-ray house at Flair-North subdivision shows quality of craftmanship, materials, and equipment in F&J homes.

Signs point out other quality features inside and outside house. For more photos of X-ray house, see below right and pp 220-221.

"We show that quality is more than skin deep"

"Emotional appeal may start a sale, but it doesn't wrap it up," says Dave Fox.

"Most prospects aren't likely to buy unless you justify their first impression of quality. So you must build up their confidence by giving them *reasons* for buying." F&J set aside one model house for "reason-why", competitive selling.

They build confidence in their construction by showing cutaways of walls, floors, ceilings, and roofs.

They build confidence in their brand-name products by showing manufacturers' displays (example: a ten-year water heater with a cutaway section revealing the glass liner and two replaceable rods that attract impurities in the water). Salesmen tell prospects: "Fox & Jacobs pick these products as your professional purchasing agents."

Fox & Jacobs also use two sales brochures to put across their story of quality

The first is handed out to all display house visitors. Its purpose: to show an over-all picture of quality.

But it also includes a four-page insert—called *Home Buyers' Guide*—which invites prospects to compare F&J with

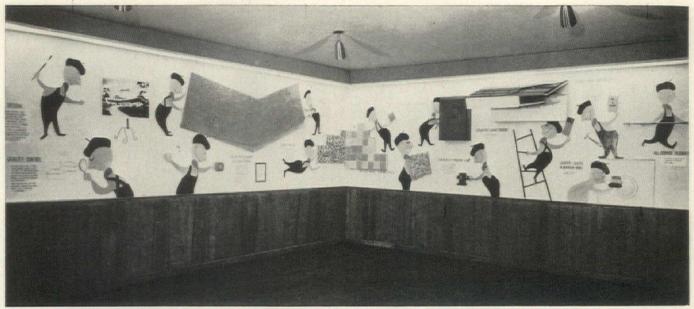
other builders. The insert's center spread is a 70-point checklist that covers everything from construction details to neighborhood facilities.

Sample points: Are the windows guaranteed for the life of the home? Does the house have three eating areas? Does the fireplace have a gas starter and a trap door for ashes? Will the average monthly cost for heating and air conditioning be under \$10? Is the entrance foyer designed to direct traffic and relieve bad-weather entrance problems?

The second brochure—called *Custom home planning kit*—goes only to hot prospects.

It is an eight-page foldout with pockets that hold alternate plans of 1) sleeping areas, 2) living areas, 3) garage and playroom areas. Buyers are invited to individualize their homes by working out their own combination of the three elements.

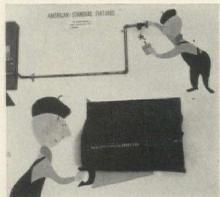
This brochure also includes the kind of detailed information that builds up confidence in buying a new home. Items: a page on guarantees and warranties, two pages on hidden values, a page headed "Why did Fox & Jacobs choose Carrier air conditioning?", a page telling why "a new home is your best investment."

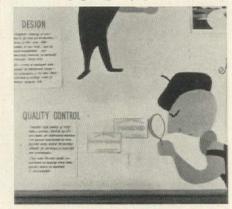


SPRIGHTLY MURALS brighten garage walls in *Accent* display house and tell a light-hearted story of F&J quality. Caricature of happy workman—in a variety of poses—has a hand in each display of products and workmanship. Copy is brief and to the point. Example (below

center): "American-Standard fixtures—the highest quality in design, construction, and operation." Comments Fox: "These murals are a great drawing card. People like them—and tell us so. What's more, they eliminate crowding and confusion by getting displays off the floor."







Durwood Hayes



CORNER CUTAWAY shows wall insulation and unorthodox floor construction—wood floor is laid on sleepers over slab foundation.



BRAND-NAME DISPLAY PANEL draws on prestige of nationally advertised products to back up F&J's reputation as quality builders.

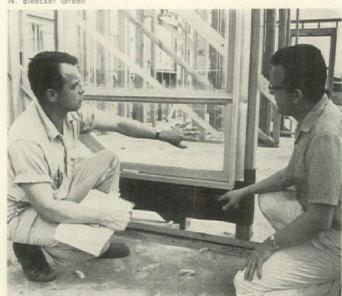


LEARNING ABOUT BRAND-NAME PRODUCTS in F&J houses, salesmen attend product schools where manufacturers' representatives point

out quality features and show how to demonstrate them. Advises Fox: "Sell your salesmen on quality if you want them to sell your buyers."

"We demonstrate quality to our salesmen

N. Bleecker Green



LEARNING ABOUT F&J CONSTRUCTION, salesman (right) listens while construction foreman explains weatherstripping around window.

"It takes a confident salesman to give prospects the confidence they need to buy a house," says Dave Fox.

"He must be confident of the house itself, confident of the products in it, and, of course, confident of himself."

How do you build this confidence? Here is how F&J do it: 1. "We hire intelligent, aggressive men who want to learn. We want them to be \$10,000-to-\$15,000-a-year salesmen, not \$5,000-a-year order takers."

2. "We teach them the principles of selling—how to sell themselves, how to interest prospects (tip: find out what he's a bug about, and then concentrate on it), how to answer objections, how to close a sale. We put across these principles in informal 'bull' sessions and by having every trainee watch experienced salesmen in action."

3. "We show them all the quality in our houses. Our trainees spend two weeks in the field with construction foremen (left), attend product schools (above) to learn how to demonstrate the quality of products we use, and visit other builders' subdivisons to compare their quality with ours."

4. "We explain our particular sales problem." Example: how to handle trade-ins. Advice: "Don't talk trade details until you've made the prospect enthusiastic about the house you're selling."



DEMONSTRATING A BRAND-NAME PRODUCT, F&J salesman shows prospects features of heating and cooling system. Furnace room, often

overlooked by visitors in most model houses, gets plenty of attention in X-ray house because it has glass door.

... so they can demonstrate it to our buyers"



"JUST HEFT THIS," says salesman as he hands kitchen faucet to prospect (left), "and you'll realize this is a top-grade fixture."



"EASY ACTION, ISN'T IT?" says salesman as he demonstrates awning-type window. "You'll never have any trouble with sticking windows."



"To profit from quality you must build quality



metal plate in guest closet of each house.

Take this Fox & Jacobs Accent model, for example. With land, it sells for \$15,590—or \$10.75 a sq ft.

At that price, here are some of the things buyers get:

They get 1,450 sq ft of space and a double garage. The smallest bedroom is 24 sq ft larger than FHA's minimum. The bedroom corridor is 4" wider than the usual 3'.

They get air conditioning with low operating costs. Cooling and heating costs average less than \$10 a month. Reason: the house was designed for its cooling and heating system. Its roof overhangs are deep (2' and 3'). Its walls, ceilings, sheathing, and ductwork are insulated. Its ducts are dropped into furred-down hall space, don't run through the hot (or cold) attic. And it has top quality windows and doors—all fully weatherstripped.



- and offer it at the right price"

They get 115-amp electrical service—plus remote-control light switching and at least four electrical outlets in each bedroom

They get a ten-year guarantee water heater—plus copper plumbing with no galvanized fittings.

They get a fully equipped kitchen—double sink, built-in range and oven, dishwasher, disposer, and exhaust-fan hood.

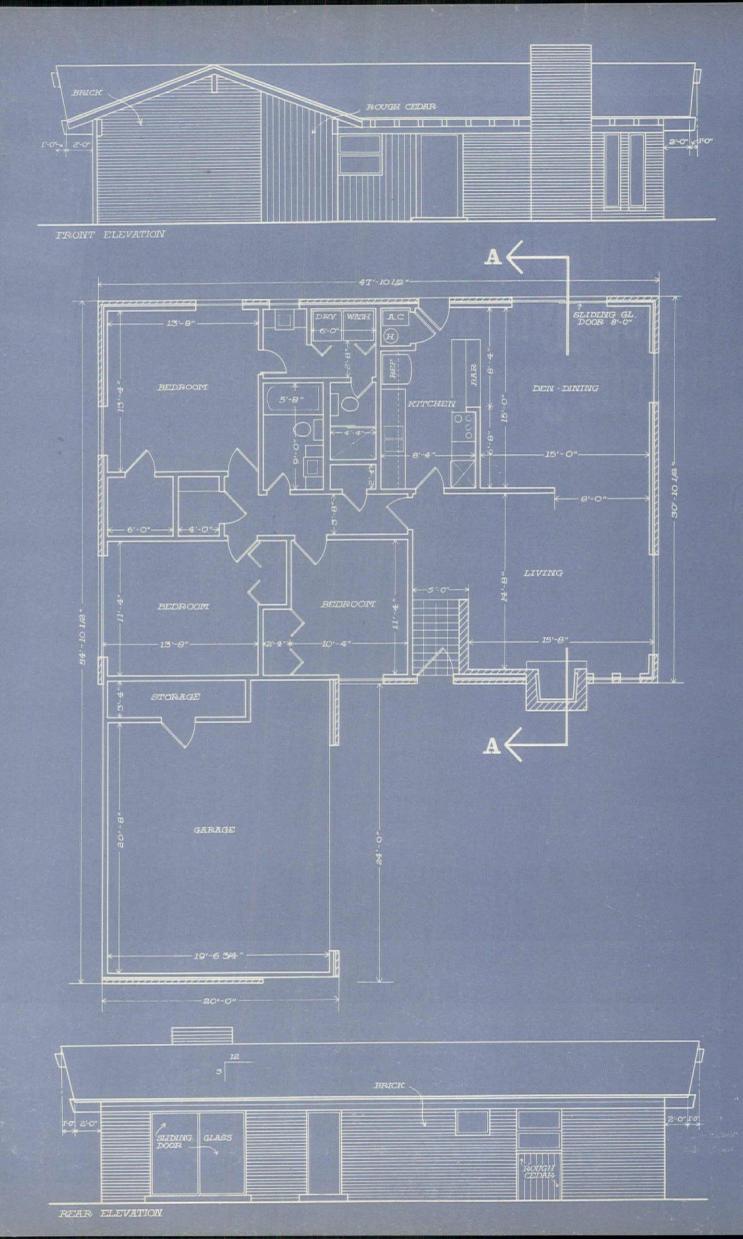
They get bathroom extras—an exhaust fan in the outside, as well as inside, bath; auxiliary heat in both baths, where it is needed most; and ceramic tile halfway up the walls.

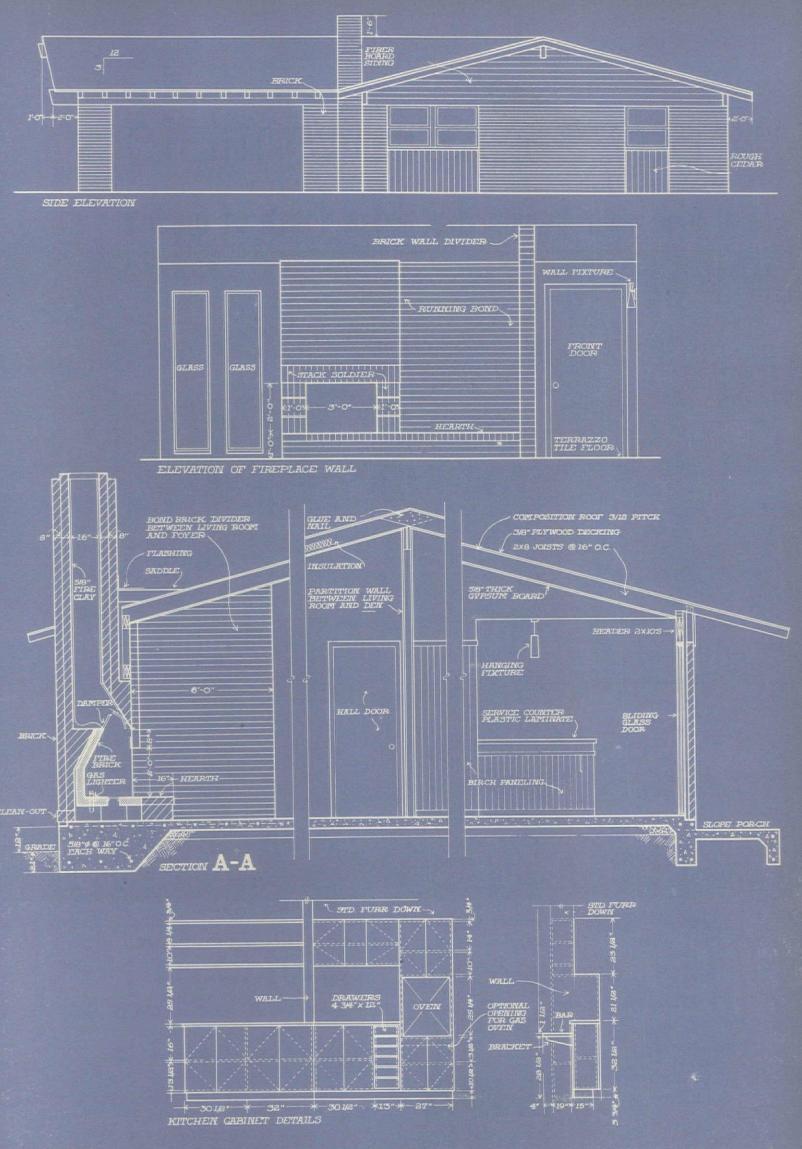
They get plenty of storage—a walk-in closet in the master bedroom, big closets in the other bedrooms, a walk-in linen closet, and a 36 sq ft closet in the garage.

They get quality materials. Items: 1) a 240-lb asphalt-shingle roof; 2) brick veneer and brick window sills; 3) weatherproof rough-cedar siding; 4) SPIB No. 1 yellow-pine lumber or grade-marked Douglas fir; 5) 5/8" gypsum-board ceilings; 6) birch or ash paneling; 7) vinyl-asbestos flooring in the kitchen; 8) pre-cast terrazzo tile in the foyer; 9) top-grade cotton wall-to-wall carpeting on heavy rubber padding throughout most of the house.

They get quality workmanship. For instance: 1) wood paneling is mounted on ½" gypsum board instead of on the studs; 2) joints in kitchen cabinets (made by F&J) are dovetailed and glued; 3) all mortar joints (spaces between bricks) are filled.

Turn the page for plan and selected details

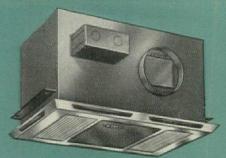




Buy Fasco Ventilators

and give your homes that extra touch of quality

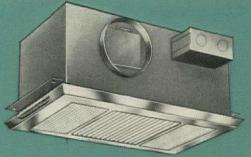




657C

MODEL

Here's everything wrapped up in one smart package. 120 watts of recessed, soft, abundant illumination . . . efficient ventilation to keep bathroom dry and odor free plus the gentle warmth of a capable heater.



655C

MODEL

For bath and utility room. Designed with the builder and contractor in mind because it's engineered to save installation time. Powerful ventilator plus 120 watts of ample-soft illumination.



650A

Absolutely the trimmest. Only 5½" high, fits inside 6" joist without protruding. Permits installation on shallow beam cathedral ceilings. No header necessary. Easiest of all to install.



Powerful, deluxe turboradial impeller for the most difficult exhausting jobs—by pressure through ducts. Develops pressures unobtainable by ordinary fan blades. For ceilings or side wall installation.

MODELS 720A · 1020A



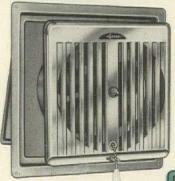
Ideal for ceiling installation, easy to install, attaches to standard 8" round duct when used with damper reducer. Exhausted through roof using Fasco roof jack. Additional framing not required for installation.

MODELS 880A-1080A



Gives automatic through-thewall ventilation. Powerful pressure blades exhaust odors and vapors outward and downward. Weather tight damper opens and closes automatically. Model 888A (illustrated) has remote switch — Model 889A is chain operated.

MODELS 888A - 889A



Sturdy, low-cost, chain operated ventilator. Deep pitched fan blades remove odors, vapors and fumes. Ample overlap on outside door frame and inside tube makes flush finishing easy and neat in any type wall construction.

MODELS 847A-1047A

FASCO INDUSTRIES, INC.

North Union at Augusta Rochester 2, New York

HH559

Please send me your new full-color catalog of Fasco range hoods and ventilators.

Name____

Company______Address_____

City_____Zone___State___

NEW WAYS TO BUILD BETTER

A monthly report on home building ideas, products, and techniques

Starting here

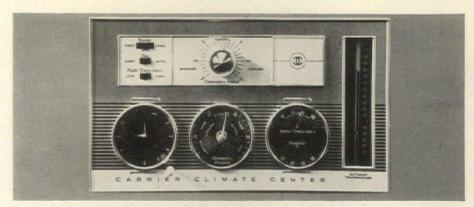
New products



Ador's new Idor is a budget unit with quality features: screens are full frame, top hung; each panel has two enclosed adjustable nylon sheaves; glazing bead is one-piece vinyl; sloping threshold includes stucco trim; hardware is slim,

decorator designed. Idor is 6'9" high, 5'107's" or 7'107's" wide, can be glazed with 3/16" or 1/4" plate or crystal glass or with 5/8" insulating glass.

Ador Sales, Inc, Fullerton, Calif. For details, check No. 1 on coupon, p 418



Complete temperature control dramatizes air conditioning, is a natural for model homes. For your buyers it monitors inside and outside temperature, pressure, and humidity; includes two thermometers, barometer, and hy-

grometer. Switches control heating, cooling, fan, and night temperature. Signal lights warn of operating failures. Price: about \$75.

Carrier Corp, Syracuse. For details, check No. 2 on coupon, p 418

And on the following pages

Technology

Research report on how to build a slab for less . . . More states approve sewage lagoons . . . Computer figures cooling load . . . Jointless gutter made at site. . . page 238

What the leaders are doing

A big H&H roundup of models from all over the country shows what 30 leading builders are offering buyers this spring. . . .

page 255

Publications

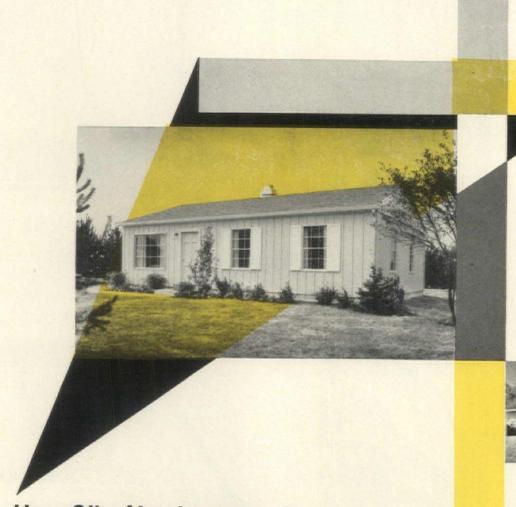
New ideas in ceramic tile . . . US Plywood revises catalog . . . How to insulate . . . How to control noise. . . page 398

More

New products

Six new kitchen packages . . . Six new bathroom fixtures . . . 30-second sliding door . . . New ranges, new hardware, new tools, new wall coverings. . . . page 276





The Chateau, luxury model in National Homes Viking line. Sliding windows and doors, produced by Capitol Products Corporation, Mechanicsburg, Pa., are made with quality Olin Aluminum.

How Olin Aluminum service helped launch the fastest selling homes in America

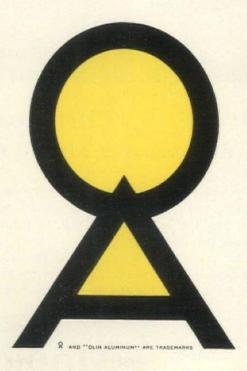
Assignment: Start from scratch. With nothing but a builder's blueprint to work from, design, manufacture and deliver in 13 days a completely new type of window for the Viking Fairlane Home. That's how Mayfair Industries, depending on Olin Aluminum service, captured a substantial window order from National Homes.

Quickly, we developed dies and produced extrusions in our Gulfport, Mississippi Plant... and the pilot lot of single-hung and unique top-pivoted picture windows were manufactured and rushed from Mayfair's Lafayette, Louisiana Plant to National Homes in Lafayette, Indiana. All this in 13 days.

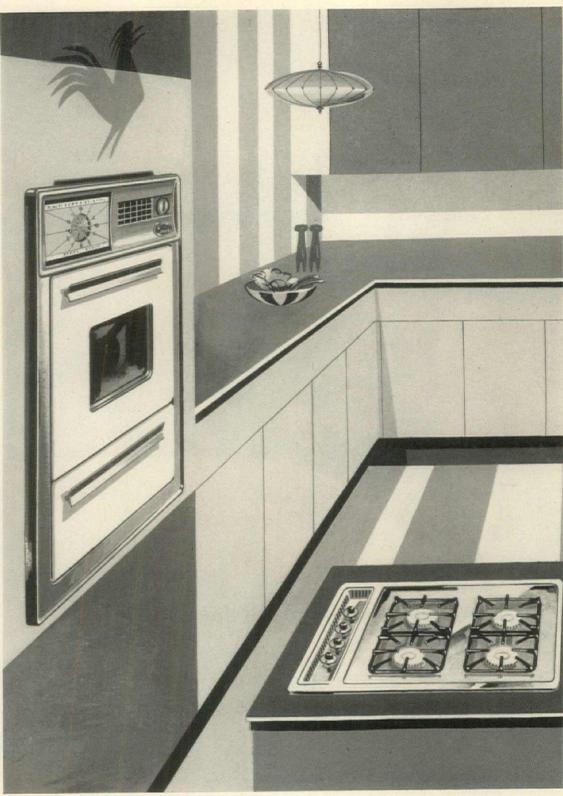
Whether you have "impossible" deadlines to meet...or just need a regular shipment of mill products, call your nearby Olin Aluminum Sales Office or Authorized Distributor. Metals Division, Olin Mathieson Chemical Corporation, 400 Park Ave., New York 22, N. Y.



New Standards of Quality and Service in the Aluminum Industry







The name is Magic she *knows* Magic Chef is the Quality range

This young woman is about to share in one of life's major decisions—the purchase of a new home. Familiar brand names will, of course, influence this decision.

And Magic Chef is a name she *knows*... and *trusts*. For that matter, she grew up with the name Magic Chef. In her family's home,

at school, too, and as a young homemaker she has learned to trust Magic Chef quality.

Now that she is a prospective home buyer, Magic Chef will help sell her on your homes . . . in fact, will even serve as an index to the quality of the homes you build. For full details about Magic Chef built-in quality contact . . .



More Women Cook on Magic Chef than on any other range.



To capture true regal elegance, we added the richness of old gold to the enduring good taste of marble. Better yet, new "Gold Tones," like all Bolta-Floor, is solid vinyl to make it long-on-wear and short-on-care.

Next time your interior theme calls for the Midas touch, remember new "Gold Tones" in marbleized Bolta-Floor... available in black or white, in standard 9" x 9" tiles, or in other sizes and rectangulars on special order, all in $^{1}\!/_{8}$ " or .080 gauge. For other beautiful Bolta-Floor patterns see Sweet's file 13K/Ge.

*DuPont Reg. T. M.

A decorative durable vinyl for every surface

Bolta-10

furniture surfacing material.

This Marble pattern glitters like gold. It's *Mylarprotected to withstand abuse as a counter-top or



THE GENERAL TIRE & RURRER COMP

Building Materials Division . Akron 9, Ohio



There is more of everything for everybody in this NEW Broan Hood. The housewife gets a better performing installation — the extra power of a dual blower. The contractor gets more to "sell" — at a better price. For example, the hood and blower are factory prewired and are put in place as a single unit. Many contractors report their installation time is only half of

their former experience. That difference can mean many more successful jobs for you.

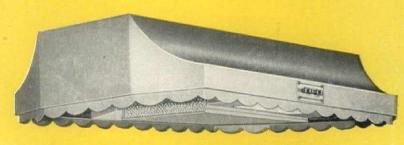
Get the full facts on this BEST ENGINEERED hood today. See your distributor, or write for full information.

Brown MANUFACTURING COMPANY, INC.

924 West State St., Hartford, Wisconsin | Near Milwaukee Specialists in Quality Ventilating Equipment for More than 25 Years.

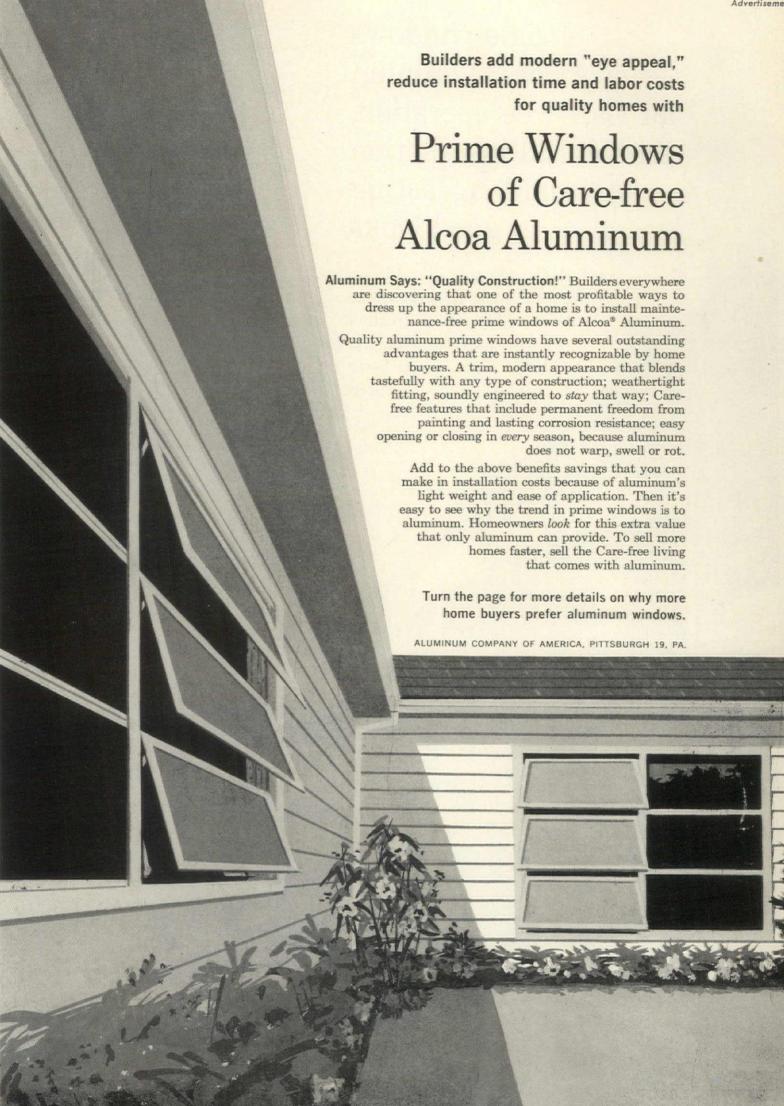
Additional Features—

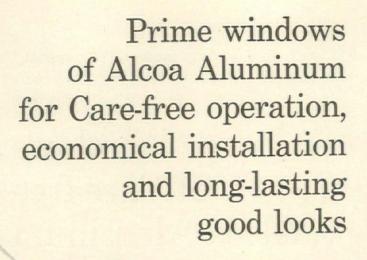
- Vertical or horizontal discharge directly into 3 ¼" x 10" standard duct.
- Built-in spring-loaded backdraft damper.
- Blower removable without tools. Two lifetime aluminum filters.
- Brilliant illumination ribbed crystal lens.
- Seamless welded construction no greasecatching trim strips or rivets.
- Saves cabinet space self contained.
- "Contour-corner" design out of the way of cabinet doors.
- Modern or colonial styling, five widths, stainless steel or colors.



Dual-Blower Island Hood

The Broan Island Hood is completely self contained, offers fast, economical installation plus dual-blower power. Combines all the engineering advances and features of the regular Dual-Blower Hood. Choice of styles, widths, finishes.





produced by quality manufacturers
in a variety of styles and sizes
for every type of construction
— frame, masonry,
concrete block
or stucco

Built to outlast the mortgage

Aluminum prime windows of high-strength Alcoa alloys are made for a lifetime of Care-free living for any home in any climate. Aluminum's natural resistance to corrosion means it can stand up under the most severe weather conditions—including seacoast and industrial atmospheres—and still look smart and complimentary to the house.

Smooth operation with no painting

Aluminum prime windows shed moisture and never swell, rot or warp out of line. No painting is necessary. They open and close smoothly every day of the year.

Fast installation at less cost

Lightweight aluminum prime windows are easy to handle, so they go up fast. They can be shipped preglazed and as an integral unit with all hardware included. In many cases, one man can then handle the complete installation in only a few minutes. Once installed, aluminum windows stay up and work smoothly. From the start, eliminate costly service calls for replacements and adjustments.

Low initial cost

The cost of aluminum prime windows is competitive with other types—yet they are by far the biggest bargain for both builders and homeowners. Only with aluminum can you couple low *first* cost with minimum maintenance costs.

A style and size for every home... contemporary and traditional, new construction and remodeling

Aluminum prime windows come in an infinite variety of styles, sizes and modifications to meet virtually every architectural design. Those shown at right are the most popular models.



Sliding windows glide open and shut easily. Require only seasonal cleaning and are strong enough to withstand heavy winds without damage.

Double Hung windows keep out drafts, yet are easy to open in warm weather. There's never any warping or rotting to interfere with the smooth gliding action.

Casement windows never need painting, never rot or stain. They are easy to open and close all year round, economical and good looking.

Jalousie windows have clean, horizontal lines that accentuate modern architectural styling. Glass or aluminum louvers adjust for convenient ventilation.

Basement windows are a natural for aluminum, because they are constantly exposed to moisture. But neither rain, mud nor snow bothers aluminum. Projected (Awning) windows let cool air in, keep the rain out. Their sleek, smooth lines add beauty to any home.

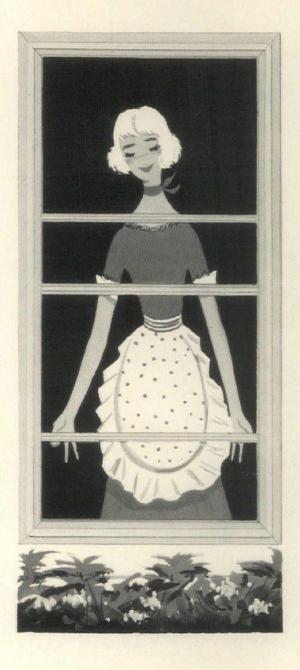
Quality features generally found in today's aluminum prime windows

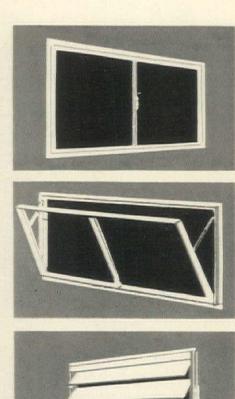
Finish. Etched finish is usually standard; mill and anodized finishes also available. For all finishes, insist on a suitable factory-applied clear coating for protection during handling and construction.

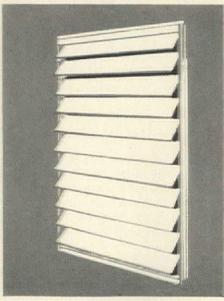
Weather Stripping. Compressive vinyl plastic seals, nylon sash guards, woven pile weatherseal and metal are the most common types.

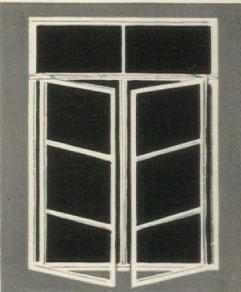
Hardware. Operating mechanisms, nails and screws are of solid aluminum or of other metal suitably treated where required for noncorrosive contact with aluminum.

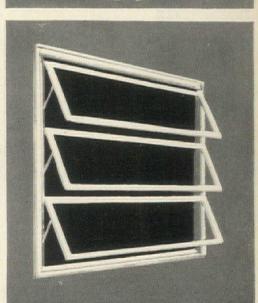
ALUMINUM COMPANY OF AMERICA, PITTSBURGH 19, PA.









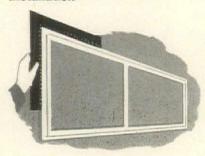


Installation and Handling Procedures for Aluminum Prime Windows

Handling

Aluminum prime windows, like bathroom or lighting fixtures, are a finished building product and should be handled to protect against scratches and dirt. They should be *lifted* on and off trucks and never dropped. At the job site, they should be stacked vertically. Crates or other covering should not be removed until installation. If the windows will be exposed to weathering prior to installation, a protective covering should be fitted around the stacks loosely enough to permit air to circulate. The windows should always be kept dry and off the ground.

Installation



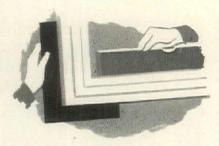
Check to make sure window is perfectly square: transit damage may have caused



If hoisting is necessary, place sling so as to distribute load equally without distorting window in any way.



If the aluminum surfaces are kept free of dust, dirt and plaster during construction, no cleaning is necessary with aluminum win-dows. When needed, the window surface can be brushed with a stifffiber brush and soap and water, followed by a thorough rinsing with clean water.

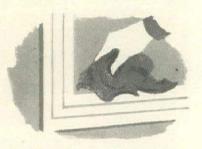


Check window opening to make sure it is square, level and has sufficient clearance.



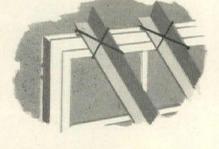
facturer's instructions, providing enough clearance at sill where under-screen opera-tor is used. Care should be taken not to twist or distort window by pulling too much on one side. Sash should be locked in closed position during entire installation.





Use a quality, nonstaining compound for calking. Seal the entire window perimeter, the joints between mullions and frames and all unfilled holes or openings except those for screens and storm sash. Remove wet plaster, mortar or cement from win-dow surfaces before it sets.





When window is to be built in as construction progresses, it should be braced plumb and square after checking to make sure sill is level. Subsequent masonry work should not crowd or bow frame.

The Alcoa Care-free tag helps stimulate your sales

When your homes feature prime windows of Alcoa Aluminum, you gain another active partner on your selling team: The Alcoa Care-free tag. Promoted via two network television programs, radio, national magazines and local newspapers, it identifies quality building products of Alcoa Aluminum, immediately says lighter, brighter living to your prospects. Eight out of ten adult Americans now know and look for this tag as their guide to aluminum value.

Join the trend to aluminum for more Care-free homes. Alcoa would like to share with you the experience gained in over 30 years of researching and developing better products and building techniques for American homes.

For the names of manufacturers who make prime windows of quality Alcoa Aluminum, call your nearest Alcoa sales office or write: Aluminum Company of America, 1882-E Alcoa Building, Pittsburgh 19, Pa.







SERIES M700. This is the newest concept in modern kitchen styling ... built-in units with a "furniture look," as designed for Mutschler by Paul McCobb. This contemporary cabinetwork is made of finest northern maple, finished in walnut (as shown) and in striking modern colors. Leg stanchions are anodized satin aluminum. Series M700 is especially suited for open-plan kitchens, and also may be used for built-in storage throughout the home ... in dining area, living room, den, bedrooms and bath. For modern décor, Series M700 is the answer in home or apartment . . . whether the budget is large or small.

New kitchen stylings from Mutschler

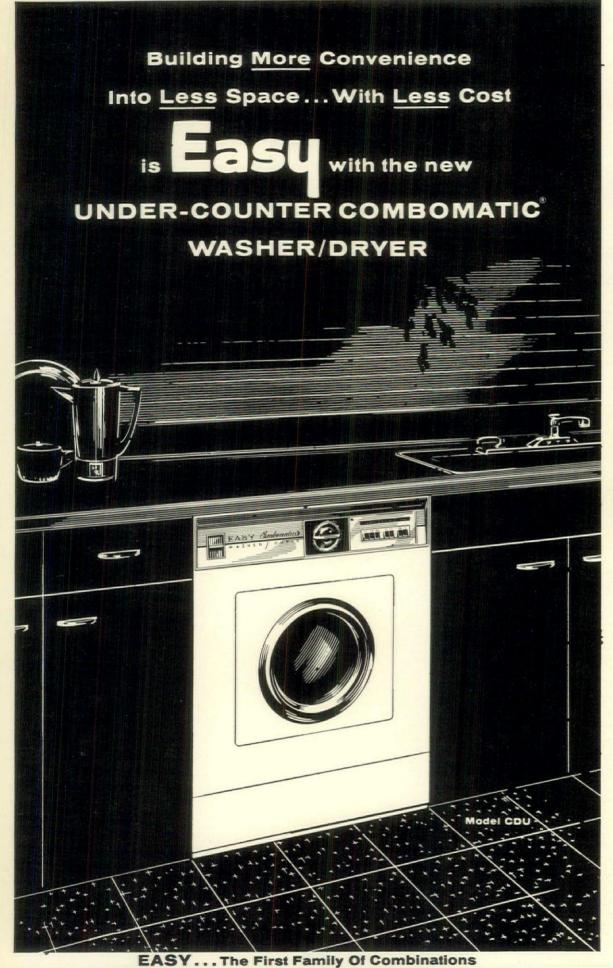
M500 kitchens are unequalled for quality and value at reasonable prices. This northern maple cabinetwork of conventional styling is available in many natural grains and decorator colors, with choice of hardware. Period molding on doors and drawers, if desired. Series M500 is extremely versatile as to décor... from Cape Cod to Oriental Modern, and is a wise choice for new homes and apartment buildings, as well as those being remodeled.

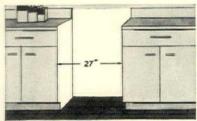
To help acquaint builders and architects with newest developments, Mutschler planning specialists offer the experiences of a nationwide organization. These services are available at no extra charge. See your Mutschler specialist or write—

MUTSCHLER Nappanee, Indiana

For complete specifications, see: Sweet's
Architectural File 24b-Mut







OCCUPIES JUST 27 INCHES OF FLOOR SPACE



FITS EASILY INTO ANY COUNTER SET UP



PULLS OUT LIKE A DRAWER FOR EASY SERVICING

Creating even more excitement than the built-in ovens of a few years ago, the builtin laundry combination stamps your kitchens as the ultimate in modern convenience. And EASY gives you the edge on competition with the ONE washer/ dryer combination that can handle big family loads (as large as any separate washer) in just 27 inches of floor space. Take advantage of the EASY Combomatic's proven performance-of the confidence the EASY name inspires. Spotlight quality and convenience by featuring the EASY Combomatic in your kitchens. You'll be leading the procession! And doing homemakers a favor they'll enthuse about for years.

Consider EASY's
Free-Standing
Combomatics, Too.
Just 27-Inches Wide
And Counter High,
Ideal For Many Kitchens
—New As Well As
Remodeled.



#CDK-G



MORE PROFIT PER DOLLARI

For full information on the space and cost savings effected by the EASY Under-Counter Combomatic, write:

EASY LAUNDRY APPLIANCES DIVISION,

The Murray Corporation of America, Palmolive Building, Chicago 11, Illinois.

NOW...SPECIAL LAMED DESIGNS

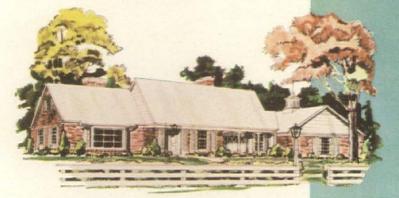
FOR EVERY AREA...



WEST-PLANTS: LONG BEACH, CALIF. GREELEY, COLO



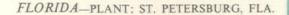
Now the famed Scholz prestige designs are available to builders in every part of the United States. In addition to these plans, specifically developed for maximum sales appeal to the peculiarities of buyer preference in each region, access is provided to all of the merchandising know-how and selling techniques developed by America's largest and most successful seller of quality homes—land development assistance, model display financing and cost-cutting pricing assistance. Call or write today: Mr. Howard Trinz, Scholz Homes Inc., 2001 N. Westwood, Toledo 7, Ohio.



NORTHEAST-PLANT: LONG ISLAND, N.Y.



CENTRAL-PLANTS: TOLEDO, OHIO · KANSAS CITY, KAN.





SOUTH • SOUTHWEST-PLANT: HOUSTON, TEX.

SOUTHEAST-PLANT: DURHAM, N.C.



Safe, clean, automatic heat without furnace or ducts!

New CHROMALOX Electric Heating for added rooms or entire house

Here's the easiest way in the world to enjoy modern, automatic heating in your home. Install "Chromalox" electric heating units . . . and forget about furnace, ducts, flues, pipelines and the other costly central heating

"Chromalox" Electric Heaters produce heat right in your rooms. No wasted heat up chimneys or in long ducts or pipes. No masses of forced warm air to spread dust, dirt or fumes. And with automatic thermostat controls, each room can have its own best temperature.

Low cost installation is easy as installing an electrical outlet. With proper insulation, operating cost is surprisingly low. Convenient, attractive, space-saving! For the whole story on "Chromalox" Electric Heating, see your local electrical contractor or write to:

EDWIN L. WIEGAND COMPANY

Dept. B, 7500 Thomas Boulevard Pittsburgh 8, Pennsylvania

LOOK! NO RADIATORS! This is "Chromalox" Electric Baseboard Heating. Units fit snugly, unobtrusively, wall-to-wall. They radiate and circulate heat where you need it—at floor level, and along outside walls and windows.



ADDING A ROOM? Maybe you plan a new game room, sun porch, closed-in breezeway, or finished attic room. Save time, work, money and space. Heat it the modern, easy way with your choice of the new "Chromalox" Electric Heaters.



WONDERFUL RADIANT HEATI "Chromalox" Electric Radiant Wall Panels radiate heat like the sun and gently circulate it around the room Mounted in minutes on any wall.



COMPACT BLOWER UNITS I

"Chromalox" Electric Wall-Insert Heaters provide quick heat, gently circulated by a smoothrunning, low-speed fan. High capacity. Recesses readily between wall studs.

World's largest manufacturer of electrical heating equipment

FEATURE QUALITY AT LESS COST

tapered track

plus full five year guarantee



One nudge—and the Berry sectional is up and over ... thanks to the tapered track with adjustable roller brackets. Here is the quality feature found only on much higher priced doors—and one that helps sell prospects. It means easy opening, easy closing—without friction or wear. And always a snug, tight fit. Pre-assembled track mounting brackets make installation a cinch, too.

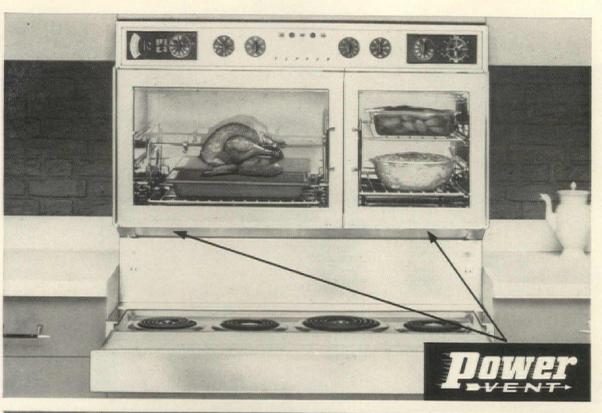
Check the dozen other exclusives and know why Berry sells more residential garage doors than any other manufacturer. And remember—only Berry protects you with a full five year guarantee. One-piece or sectional models. Window lites and trim optional. See your distributor or write: Berry Door Corp., 2400 E. Lincoln, Birmingham, Michigan. In Canada: Berry Door Co., Ltd., Wingham, Ontario.



Last year: Tappan outsold all other built-ins!

THIS YEAR: TAPPATI BUILT-IN SALES OO/V AHEAD OF LAST VEAR!

and here's why...





new ideas like

TAPPAN'S 'FABULOUS 400'

—the most daring, most exciting electric range in 30 years. Certainly the FIRST range you can use as a real traffic-builder in your model home

- Easiest built-in to install—all in one unit only 40 inches wide!
- Two built-in power vents eliminate all venting problems.
- Hangs on wall or put it on its own base cabinet.
- Two ovens at reach-in height, all controls at eye-level, surface units hide away when not in use.

new styling in all

1959 TAPPAN BUILT-INS

—the best-looking, best cooking gas and electric built-ins you've ever had to dress-up your kitchens, sell your houses!

- New wide spanning doors with slimmer, trimmer handles.
- New Constellation control panel
 —beautifully illuminated, gold-tinted glass.
- Completely interchangeable gas and electric ovens and surface units. Same size cut-outs fit both without extra carpentry.
- Choice of color-matched ovens and surface units in Yellow, Pink, Turquoise, White, Lusterloy and Copperloy.

New Ideas! New Styling!
Famous Name! Big National Advertising!
You have so much more working for you
when you specify TAPPAN

Get all the information you need today.

MAIL THIS COUPON

for complete information on Tappan built-ins

| Please send comp | olete information o | n the following |
|------------------|----------------------|-----------------|
| ☐ Tappan 'Fabul | ous 400' | |
| ☐ Tappan Gas ar | nd Electric Built-In | S |
| ☐ Tappan Refrige | | |
| Tappan Electro | - | |
| ☐ Tappan's New | Builder Merchano | lising Plan |
| I am a 🗌 Builder | Re-Modeler | |
| | | |
| Name | | |
| Address | | |
| City | IN THE STREET | State |



ers who can build for the \$10,500 market—and sell at a good profit.

BEFORE YOU START— Get the construction financing plan that beats them all—team up with Harnischfeger!

WHEN YOU BUILD—The carefully-engineered P&H House goes up fast—no call-backs. Every hour saved is a profit.

when you show the display home-P&H architecture, landscaping, color styling, and promotion assistance are prepared for you by specialists for the extra professional touch that adds top saleability to your homes.

In addition to more floor space, the Conover offers these exciting Family Plan advantages: two spacious dining areas—one adjacent to the living room, another in the kitchen; architect-planned interior and exterior styling variations for complete home individuality; an abundance of closets. Top-quality construction includes 2 x 4 framing members in exterior walls, vapor-barrier insulation, Weiser hardware, easily-installed wood or steel kitchen cabinets, and many other P&H features.

You, like so many other builders, can find new profit in the \$10,500 market during 1959. If you are now building in the P&H Midwest*, write us today for information.

*Select dealerships are available in Wisconsin, Iowa, Indiana, Michigan, Missouri, northern Kentucky, Illinois and eastern Minnesota.



Harnischfeger Homes, Inc.

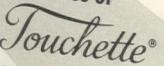
Dept. HH-559 500 Spring Street • Port Washington, Wisconsin



@1959 Harnischlager Homes, Inc.

BECAUSE SUCCESSFUL BUILDERS FIND "EXTRAS" HELP CLINCH THE SALE

the convenience of



touch switch on the market*



Just the merest pressure on Touchette turns lights on and off. Gives you an added "convenience" talking point when you install it in your homes. (On the practical side, it's also least expensive of all touch switches!) Quickly installed, Touchette measures 1" in depth, fits standard outlet boxes and plates, needs no special wiring. Single or double pole, 3 or 4-way. Brown



*Press Touchette and any other touch switch together, button to button. Touchette actuates first!

RODALE TOUCHETTE... IMITATED BUT NEVER EQUALLED

U. S. Pat. No. 2,820,113—other patents pending—foreign patents applied for

the after-dark guidance of SAFETY-GLO

in hall, bathroom, stairway, nursery, etc.

Every homeowner will appreciate the practical convenience Safety-Glo provides: enough light for safety, yet not too much to be distracting, particularly in children's room. Chrome or brass finish, with or without push-button switch.







Because the "extras" count, why not check into these and other "convenience-minded" Rodale wiring devices? You'll find a complete line scaled low in price for a better profit picture.

Contact your electrical wholesaler, or write Rodale direct.



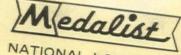


Distinctive

There's every reason why you'll install NATIONAL LOCKset with confidence. Offering a complete selection of smartly-styled knob and decorative escutcheon designs, NATIONAL LOCKset adds the touch of distinction to your modest and palatial homes alike. What's more, NATIONAL LOCKset is soundly engineered and quality built from knob to knob . . . assuring long-term, troublefree service . . . eliminating costly "call-backs." Ask your building material supplier.

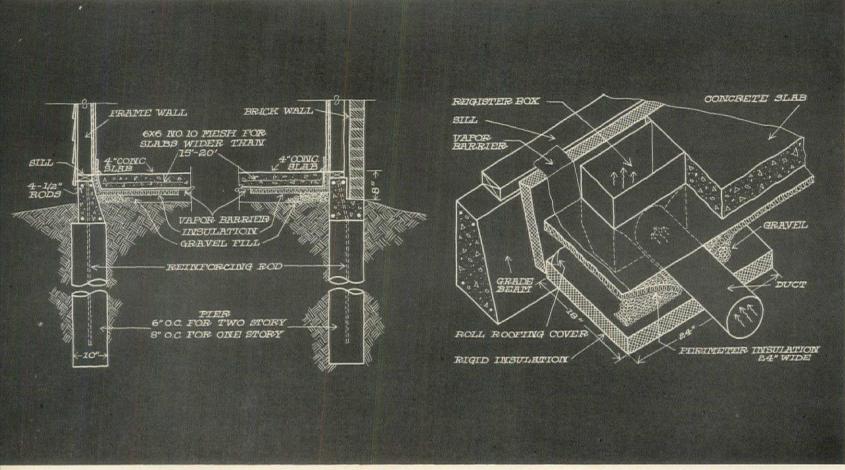
NATIONAL LOCK set.





HARDWARE DIVISION

NATIONAL LOCK COMPANY . Rockford, Illinois



PIER-AND-BEAM SYSTEM is detailed at left, above. Piers are on 8' centers for one-story houses, 6' centers for two-story houses. Note that grade beams do not support the slab, and that 6x6 No. 10 mesh is used

in slabs spanning more than 15' or 20'. Detail at right shows installation of warm-air outlet at edge of slab, shows recommended position of insulation.

In the first of a new series of research reports, Penn State tells

How to build a slab for \$1 a sq ft

"A slab-on-ground floor built with grade beam and pier foundation is the cheapest system for northern homes."

That's the conclusion of *Better Building Report No. 1*, researched and written by a new homebuilding research team at Penn State (see box, facing page).

The drawing above, taken from the report, details the construction of this slab, and the table on the facing page shows the research team's \$1-a-sq-ft cost breakdown.

Piers are made by boring holes in the ground with a post-hole auger and filling them with concrete. Then grade beams are then poured. They span from pier to pier, support the exterior wall and roof. The report points out: "Proper grading away from the house is essential. . . . Excessive water under the slab floor, and frost heaving that might result from excessive water under the beam are averted by good drainage."

Cost figures given in the table are for a 1,000 sq ft slab. Do they hold for larger slabs? The report says: "Material costs for a floor slab of 2,000 sq ft should be twice those given in the table. But length of foundation wall, perimeter insulation, piers, bolts, reinforcing rods, and sill materials are increased only about 41% when floor area is doubled. Labor is increased even less, and depreciation not at all."

This system is cheaper than other slabs or basements

Says the report: "A continuous-footer foundation with concrete-block or poured concrete walls will cost 25% more [than a pier-and-beam foundation]." The main reason: even

though both systems require the same amount of concrete in the floor slab itself, "only three cu yds of concrete may be needed for the piers and beams of a house that would require ten cu yds for a poured foundation wall."

On basements, the report says: "Depending on the difficulties of excavation, the extra cost of the basement for a one-story house of average size (1,200 sq ft) will be \$1,200 or more*, not including any basement finishing. Unless there are definite advantages because of sidehill location, more desirable floor space can be provided above grade. The money saved will build at least 10% more living area or provide adequate unfinished storage space on the first floor."

Report covers all phases of slab construction

The 23-page report covers slab work from grading to floor covering; including foundations, under-slab utility lines, perimeter insulation, protection against ground moisture, reinforcing, concrete mixes, heating systems and termite control.

For a copy of *Slab-on-ground construction for homes*, send \$1 to the College of Engineering & Architecture, Pennsylvania State University, University Park, Pa.

^{*} The \$1,200 saving is based on direct costs only and does not include 1) the savings in plumbing, sewer lines, fireplace foundations, and garage floors which a slab makes possible; or 2) the additional indirect savings which result from the use of building methods possible only to slab builders. These extra savings can total two or three times the direct savings. —ED.

| Item | Labor | | Materials | | Tools | | |
|--|---------------|---------------|---|----------------|--------------------------|---------------------------|----------------|
| | Skilled | Unskilled | Item | Cost | Item | Rental or Depreciation | TOTA |
| Bore 20 pier holes | \$ 5 | \$ 6 | | \$ | Power auger | \$10 rent | \$ 21 |
| Pour and level piers | 5 | 4 | Concrete, 2 cu. yd. | 30 | Transit | l dep. | 40 |
| Pier reinforcing rods | | 2 | 80 ft., 84 lb. | 11 | | | 13 |
| Beam reinforcing rods | | 8 | 540 ft., 360 lb. | 47 | | | 55 |
| Set grade-beam forms | 10 | 8 | | Y STATE OF THE | Forms | 25 dep. | 43 |
| Pour grade beams Install sill bolts | 5 2 | 12 | Concrete, 2.5 cu. yd. 30 bolts | 38 | | | 55 8 |
| Remove, clean, and store forms | | 8 | 30 00108 | 0 | | | 8 |
| Install and adjust sill | 5 | 4 | Lumber | 15 | | | 24 |
| Excavate for ducts | 2 | 2 - | Lumber | | | | 4 |
| Rough-in plumbing and heating Water Sewer Fuel line | 25 15 2 | 20 12 2 | Soft copper Soil pipe Soft copper | 37 28 10 | Hand tools Hand tools | 3 dep. 2 dep. | 85 57 14 |
| Heating ducts (8 registers) Add and tamp fill (if used) | 30 | 12 | Ducts, boxes | 90 | Hand tools | 2 dep. | 146 |
| Coarse gravel base | 5 | 12 | 12 cu. yd. | 48 | | 0. 1 | 65 |
| Vapor barrier (polyethylene) | 2 | 4 | 30' x 40' sheet | 30 | | | 36 |
| Perimeter insulation (foamed plastic) | 2 | 2 | 240 sq. ft. | 36 | | | 40 |
| Register box insulation (foamed glass) | 2 | 4 | 48 sq. ft. | 12 | | | 18 |
| Slab reinforcing mesh | 2 | 4 | 1000 sq. ft. | 32 | | | 38 |
| Pour slab | 10 | 40 | Concrete, 12 cu, yd. | 180 | Y | | 230 |
| Finish slab Miscellaneous (incidentals) | 5 | 10 | | | Power trowel | 5 rent | 40 |
| TOTAL | \$136 | \$200 | | \$650 | | \$48 | \$1074 |

TABLE OF COSTS for 1,000 sq ft slab can be used in any area by inserting corrections for local labor and material costs. In this table, labor costs were figured at \$2.50 per hr for skilled labor, \$2 per hr for

common labor. Material costs are considered typical for smaller-volume builders. Costs include most of plumbing rough-in and ducts for warmair heating system.

Future Penn State reports will offer more help in cutting costs

Better Building Report No. 1 inaugurates a new program in homebuilding research that can be of real importance to builders everywhere in the country.

Some of Penn State's future reports will cover building techniques and methods, adding to the store of technical information being developed by research groups at University of Illinois' Small Homes Counsel, Michigan State's Home Builders Foundation, Purdue's Agricultural Experiment Station, NAHB Research Institute, and the Building Research Advisory Board.

But the Penn State research team will also devote considerable attention to the *management* of building. The reason:

Most builders say management is their big problem

At a "short course" held at Penn State in March, builders listed these subjects as their biggest problem:

- . . . purchasing methods
- . . . record-keeping and accounting practice
- . . . planning for better labor efficiency
- . . . scheduling of on-site construction
- . . . building in winter

Penn State's research team, surprised by the strong interest in the business end of building, side-tracked a proposed study of labor-saving tools and equipment, began research into the management problems.

To get the information they need for the Better Building Report series, the researchers will work closely with builders. For example, the figures for slab costs given in the table above are from records which were kept during the construction of many typical 1,000 sq ft houses.

The homebuilders' views on the program are expressed this way by HBA Executive Secretary W. Howard Parsons: "We're very much impressed by what they're going to try to do for us. We need a professional group like this to uncover things a builders' group might not uncover. We're going to try to increase the scope of the program and expand it so it becomes a real force, because Pennsylvania builders need all the help they can get. Our builders have been hard hit economically. While the research program is only one area where we can get help, on a long term basis it will be very fruitful."







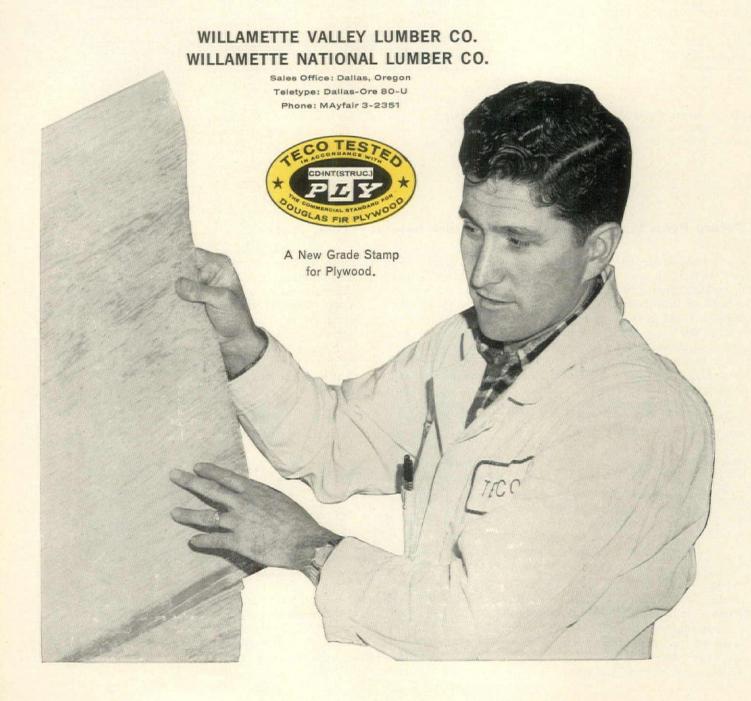
G. J. STOUT

F. A. JOY

E. R. QUEER

Here is the Penn State Research team: Research Associate G.J. Stout has been working full time on the project since early in 1958. On the early reports, he is working with Prof F.A. Joy. The program is directed by Prof Elmer R. Queer, director of the Engineering Experiment at Penn State.

meet JOHN LAND... one of your Teco-Testers at Willamette Valley Lumber Company. This Teco-Tester is the same as having your own quality control man at our manufacturing plant. He is employed by Timber Engineering Company {TECO}, a top rated independent research and testing agency in Washington, D. C. His production line inspection and testing enables TECO to certify that the plywood you buy meets or exceeds commercial standards. And, look for the "Struc" mark on Teco-Tested plywood. This stamp certifies that it complies with FHA's structural standards of dependable quality for all load bearing plywood applications. Remember your "Teco-Tester," a trained technician ... your personal guarantee of quality plywood. Contact your plywood supplier or write us.



What price quality?

IN HOME HEATING AND AIR CONDITIONING

BARNEY R. MORRIS, co-owner of Grandview Construction Co.,

Beverly Hills, California, (at right) discusses this timely subject with

JOHN W. NORRIS, President of Lennox Industries Inc.

Known coast-to-coast, Grandview Construction Co. is one of the nation's leading builders-outstanding for the quality of its homes.



Quality in heating and air conditioning: sense or nonsense?

Mr. Morris We home builders are like home owners. We want quality, but the only time we're willing to pay for it is when we fully understand what we're getting for our money—but in a complicated business like heating and air conditioning, how does the home builder judge quality?

Mr. Norris Code requirements of AGA and UL and FHA have done a great deal to upgrade the quality of furnaces, but the labels themselves can't be expected to tell the builder everything he needs to know. For example: I might show you 20 or 30 similarly priced furnaces that carry the AGA label. This does not mean that these furnaces are all the same or that they'll all heat your home satisfactorily. You would find difference in expansion and contraction noises in the heat exchanger, difference in blower noises, in room temperature, in fuel consumption, in the nicety of temperature control that comes from the kind of thermostat that the manufacturer picks—and so on. Pick the right one and you'll give your customers quality and comfort.





John W. Norris, right, gives Barney R. Morris the inside story of why quality in heating and air conditioning is vital to home builders.

Mr. Morris We depend on our sub-contractor to provide us with trouble-free equipment.

Mr. Norris Yes, that's the way to do it. The sub-contractor is the hero or villain here. If he's a real "pro"... if he's thoroughly trained in this complicated business of installing heating systems, you'll have no trouble. In this regard, Barney, I'd be interested in learning how you pick your sub-contractors.

Mr. Morris Mostly on reputation, stability, and past performance. If we followed price—the low bidder, that is—we'd be in real trouble. In our operation we can't afford to work with fly-by-nights. We limit our bids to subs who have demonstrated in the past that they know their jobs, deliver what they promise, and guarantee their work. I might add that we pay a little more for all this, but, considering the satisfaction we get, the troubles we don't get—it's well worth it.

Mr. Norris This is in line with our thinking and practice at Lennox. As you know, every Lennox dealer is thoroughly trained by our factory engineers. By working directly with dealers, by training their crews, we're able to help them render the type of professional service you demand of your subs.

Mr. Morris That's extremely important.

The installer is the actual manufacturer of the heating-cooling system in the home

Mr. Norris Barney, I'm not sure you'll agree with me, but I think the heating-air conditioning man is the most important sub-contractor the home builder selects. What are your views?

Mr. Morris Before I answer, tell me what you base your statement on?

Mr. Norris Consider the fact that a furnace or central air conditioning system is designed and manufactured by the installer. He's the one who selects and sizes the equipment, designs the duct system, makes the installation, and sees to it the home is properly heated by tuning and adjusting the furnace for proper performance. There's nothing cut-and-dried to his job. Ittakes special skills and training and long experience. This is not a "plug-in" type of installation.

Mr. Morris I think you're basically right, John. However, at Grandview we emphasize the teamwork aspect of all sub-contractors. For example: you mention the heating contractor. Well, he can't do everything himself. He has to work with the foundation contractor for his ducting and space. If those walls aren't true, he's in trouble. He has to work with carpenters, and if something goes wrong here, he's in trouble. If the plaster isn't smooth, or the floor isn't even, his registers won't level out—and so on. So—no matter how good your heating man is (and he's plenty important), he's got to have some A-1 subs to work with.

Mr. Norris I agree with that analysis completely. It's interesting to see how all this ties in so closely—and why it's important for a home builder to hire good subs.

Mr. Morris Yes, you can't take risks in any phase of home building—that is, if you want to stay in business long.

You know, John, our best prospects are our present customers. We are now selling to the same people for the third time as their families grow and they move up into larger and more expensive homes. They refer their friends to us, too, and we've been successful in making customers out of them. The whole thing seems to snowball.

Mr. Norris Yes, you win them with quality, and you keep them with quality. You can't do it any other way. Let me ask you a real pointed question, Barney. You've been in the home building business for many years. You've built thousands of homes. If you had one major complaint to register toward manufacturers, what would it be?



Mr. Morris Poor product, primarily. Poor service. Actually they go together. Let me explain. Too many manufacturers, in my opinion, are downgrading the quality of their product in order to be competitive. What they're looking for is the quick, volume sale. They're sacrificing everything for the immediate buck. What happens? The product breaks down. The builder gets the complaints, the manufacturer suffers loss of goodwill—although he doesn't feel it immediately. John, we believe in trouble-free products—and we're willing to pay extra for them.

Mr. Norris That reminds me of an experience we had at Lennox a few years ago. A group of our dealers were burned up about all the business they were losing to competitors who were underbidding them with a stripped down model. Why, they wanted to know, didn't Lennox come out with a "cheapie", too, so they could compete? Well, I drew a diagram of one of our units, and explained what

quality features we had to eliminate to get our price down. I also told them about the complaints that would certainly pop up. Everybody soon realized that this sort of product cheapening could only do harm. The subject was dropped and it never came up again.

Mr. Morris That explains pretty well why Lennox is the biggest, most successful manufacturer in the business. (Now, with that free plug out of the way, let me bring up a common complaint leveled against your industry.) Why is it, John, that the heating-air conditioning manufacturers do not take the proper interest in the end result of their product? The general feeling is that all the manufacturer wants to do is sell his furnace, and take no responsibility whatever for the actual installation.

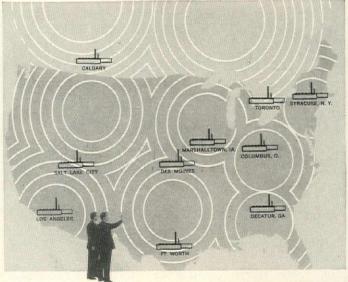
Mr. Norris Well, Barney, builders must realize, as I stated before, that the installer is the actual manufacturer of the system. He's an independent operator. It would be impossible for the manufacturer of the equipment to double check every installation. However, I believe that Lennox—by dealing direct with its dealer organization, by training them in the proper installation methods, is better able to assure the product satisfaction you speak of. I might add that in our own advertising, Barney, we've made quite a point to assure the homeowners of our interest in his comfort and satisfaction. And we mean every word of it, too.

Everybody agrees on the importance of quality... but it's got to be sold!

Mr. Morris We both certainly agree on the overall importance of quality, but the fact remains that it's got to be sold. This what's-in-it-for-me idea must be communicated to home buyers.

Lennox Comfort Craftsman Tom Pinatelli discusses Lennox builder selling aids with Barney R. Morris and John W. Norris.





Lennox operates factories and warehouses in 41 localities throughout the U.S. and Canada. These factory outlets provide direct service to nearly 6,000 factory-trained dealers in over 4,184 towns.

Mr. Norris I agree wholeheartedly, and this is precisely where manufacturer selling help for builders becomes important. I have reference to this business of creating effective selling aids, promotion kits, ideas—whatever it takes to get across the builder's quality story: whether it has to do with his tract location, floor plans, construction materials, furnace, etc. This has got to be done—and by professionals.

Mr. Morris Our advertising agency is fine. They do a hell of a good job.

Mr. Norris They can't help you on the site.

Mr. Morris No.

Mr. Norris This is precisely why Lennox organized a special builder Merchandising Department. Do you know, Barney, we have over 100 people engaged in developing, writing, and preparing brochures and selling aids for individual builders throughout the U.S. and Canada? It's been a highly successful program for us—and for the builders, too. We've been able to help them better merchandise the quality of their homes through the personalized brochures, feature signs, newspaper ads, billboards, displays—all built around their individual homes and developments. So, you can see Lennox does a whale of a lot more than manufacture good heating and air conditioning equipment. We don't believe our job is finished until the builder sells his homes, and even then, our dealers make sure the home owner is satisfied.

Mr. Morris This is the kind of thinking and planning that makes good sense—both for the manufacturer and the builder.

© 1959 Lennox Industries Inc., Heating and Air Conditioning, founded 1895; Marshalltown and Des Moines, Ia.; Syracuse, N.Y.; Columbus, O.; Decatur, Ga.; Ft. Worth; Los Angeles; Salt Lake City. In Canada: Toronto, Montreal, Calgary, Vancouver, Winnipeg.

Printed in U.S.A.

Builders who "look ahead" specify hardware by National of Sterling



Fold and Slide Door hardware provides full access to closets and...

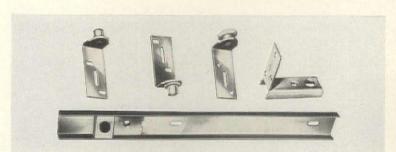
Stops Costly Call Backs

Nothing irritates a new home buyer more than to have a sliding closet door hang up. When you install National's Fold and Slide Door hardware you know it's right! Nylon pivots carry door weight; nylon roller smoothly guides door in track at top of opening. It's simple to install . . . sure to please discriminating home buyers. That's why so many prominent builders insist on hardware by National of Sterling. It helps build customer satisfaction—today, tomorrow and through the years.

WRITE FOR FREE CATALOG TODAY

NATIONAL MANUFACTURING CO.

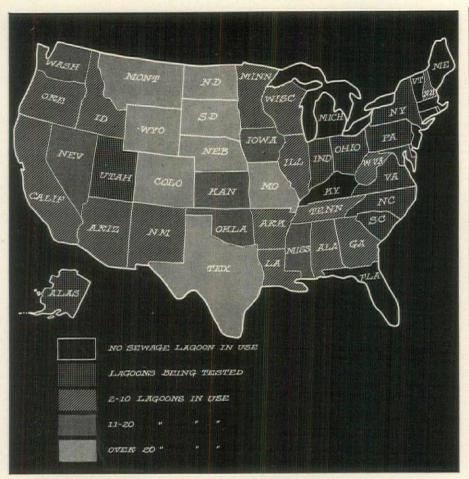
19905 First Ave., Sterling, Illinois



No. 380 Fold and Slide Door hardware







MAP shows that lagoons are most popular in central belt, still scarce along east coast.

More and more states approve sewage lagoons

Sewage lagoons—largely unknown a few years ago even to many top sanitary engineers—are now serving close to a million people.

That is indicated by a survey House & Home has just conducted among health authorities in the 49 states. The study shows that nearly 700 communities now have low-cost public sewer systems made posible by raw sewage lagoons. Most lagoons are in small towns, but some have proved practical even in densely populated, high-land-cost areas like Kansas City and Pittsburgh (H&H, Nov '56 and Oct '58).

State-by-state poll, first ever made, shows these figures:

Twenty-nine states now approve lagoons to take raw sewage from residential areas. (Three years ago, only about 12 states approved lagoons.)

Another ten states are now conducting tests of lagoons.

Only ten states have no lagoons, and of these only one (Florida) says it definitely will not allow them.

Here is a rundown of the states with lagoons now in use:

States with ten or more raw sewage lagoons in use or under construction, and where acceptance is generally strongest:

Colorado, 24; Iowa, 12; Kansas, 13; Misissippi, 18; Missouri, 76; Montana, over 30; Nebraska, 21; Nevada, 11; North Dakota, 102; Oklahoma, 12; South Dakota, 40; Texas, 182; Washington, 14; Wyoming, 35.

States with two to ten lagoons:

Alabama. 2; Arizona, 4; Arkansas; California; Georgia, 2; Idaho, 2; Illinois, 9; Louisiana, 3; Minnesota; New Hampshire, 3; New Mexico, 4; Oregon, 4; Tennessee, 3; West Virginia, 2; Wisconsin, 5.

States making or observing tests:

Alaska; Indiana, 2; Maryland, 1; New York, 2; North Carolina, 1; Ohio, 1; Pennsylvania, 1; South Carolina, 2; Utah, 2; Virginia, 2.

Most states without lagoons do not ban them

Kentucky, Rhode Island and Vermont indicate no objection to lagoons.

Connecticut, Delaware, Maine, Massachusetts, Michigan, and New Jersey do not ban lagoons but say they do not believe they would prove practical in their area of high density land use. (Actually, one New Jersey town has long had a lagoon.)

Florida permits lagoons for secondary treatment of sewage received from a conventional plant, but will not allow them to handle raw sewage.

Gas-fired air conditioning gets a market boost

First ASA standards for gas fired residential air conditioning units are about to give a big boost to this small but growing segment of the industry.

The only* gas-fired unit now on the market is Arkla Servel's heating-cooling Sun Valley unit (H&H, Jan '58).

A new entry in the field will be made shortly by Bryant Div of Carrier Corp, which has been experimenting with gasfired air conditioners for some years. It will produce a limited number of units this year.

Carrier's new unit is air cooled (eliminating a cooling tower) and uses an ammonia-type gas in its absorption unit. Arkla's is water cooled (it has a cooling tower) and uses lithium bromide.

Why gas-fired air conditioners?

Because in many areas gas units are cheaper to operate. Carrier points out that first costs of gas-fired units usually run about 25% more than for the electrically powered compressor-type units used all over the country. But, it says, in some areas the saving in operating costs of gas over electricity is enough to offset the increased first cost in three to five years.

What is gas-fired air conditioning?

Gas-fired units operate on basically the same principles as electrically powered units (see H&H, Mar, p 177). They both have evaporator and condensor coils, or cold and hot sides. But where the electrical unit is operated by a compressor, the gas-fired unit is operated by an absorption unit. This unit has three elements replacing the mechanical compressor: the absorber, the pump, and the generator which is powered by a gas flame.

How the absorption cycle works:

The refrigerant vapor from the evaporator coil is absorbed by a low-temperature fluid in the absorber. This vapor-laden fluid is then pumped to the generator where the refrigerant vapor is boiled off at low temperature by gas flame. The hot vapor then goes through the condensor coils where its heat is given off to the outside air. The gas then flows to the evaporator coil where it expands and absorbs heat from the house (ie, cools the house).

Gas utilities are particularly anxious to get a share of the big summer air conditioning market now almost totally an outlet for electrical power.

^{*}All "gas-fired" units referred to in this article are gas absorption type units. Two companies —Comfort Products of Dallas and Weatherbuster Corp of Camden, Ark.—make units that are driven by gas-fired engines but work on the principle of conventional electrically powered compressor-type units.



LUCKY KEY CONTEST

Sales Tested in '58-Now Proving Itself a Solid Profit Builder in '59

There's still time to tie in . . . still time to cash in on one of the most exciting contests ever developed to help you sell homes.

Builders all over the country are putting the "Lucky Key" Contest to work and they're getting results:

- · steady, continuous traffic to model homes
- a growing list of home-buyer prospects
- an invaluable record of consumer reactions to new home features

ALL FREE FROM SARGENT!—a bright new package of "Lucky Key" merchandising material, Westinghouse prize radios for local awards, and a \$500 National Cash Award.

For details on the new 1959 Lucky Key Contest, or on Sargent's complete line of residential hardware, call your Sargent Distributor or write: Sargent & Company, New Haven 9, Conn.

EXCITING NEW LOCK DESIGN

. . . patterned metal insert now available with

Alignalock and Sentrylock.

SARGENT



Computer: newest way to figure cooling load

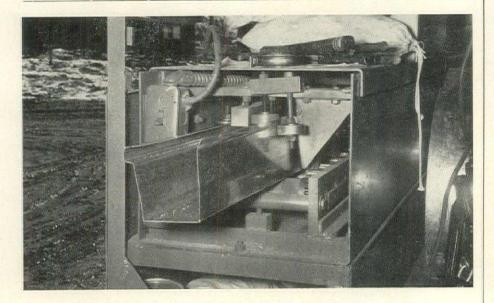
This impressive array of electronic devices can analyze some 50 factors affecting the cooling needs of a house—and in 24 seconds feed out a record of indoor and outdoor temperatures for any given house and air conditioner.

Westinghouse, the developer, will make this design service available to tract builders through its dealers.

Here, briefly, is how the machine works: Voltages are fed into the ma-

chine to represent temperature, capacitors are set up to represent heat storage in the roof, walls, and foundation, and resistors are set up to represent thermal resistance. The resultant current can be equated to heat flow.

Here are some of the factors that can be fed into the computer: latitude, orientation of house, construction materials, overhangs, window area and type—and even the effect of shade trees.



Jointless gutter can be made at your job site

This roll-form rig makes gutters as long as a house from coils of galvanized iron. The sheet metal contractor for Burton Duenke, St Louis builder, mounts the rig on a trailer and rolls out his gutters at the site. Only solder-

ing needed for a leak-proof job: fixing end caps. The roll form equipment (Weltyway, Cedar Rapids) is powered by a gasoline engine, turns out 24 ft of gutter a minute. The rig above is owned by the Maplewood Sheet Metal Co.

Sprayed-in-place insulation moves closer to market

A practical way of spraying insulation on wall panels in place is a lot closer to reality than it was a year ago.

Biggest boost has been the creation of portable spray equipment (by several manufacturers, see below) that proportions and mixes the plastic resins continuously to get just the right depth and density of foam insulation.

(The most promising foam insulation: urethane. This is composed of two resins—ethylene diisocyanate and ethylene glycol—which when mixed together will foam up to many times their original volume.)

Latest development in this specialized spray field is a rig by Minnesota Mining. The spray gun is a high-energy internal mixer designed for hand or automated spraying. When spraying stops, recycling valves recirculate the resins so they cannot foam inside the gun. The equipment has been used successfully in spray-insulating walls and ceilings of refrigerated buildings.

Nopco (North Arlington, N.J.) has a truck-mounted rig that can be taken to factories or job sites by a field service team. Initially, the equipment will be used on an experimental basis to test economy and practicality of various foam insulations in various types of work.

And Martin Sweets Co (Louisville) also has perfected portable foam spray rigs for use primarily in factories or shops. Their compact unit is about the size of a washing machine, and weighs about 900 lbs with cart and hoses.

Wood stabilization research to be stepped up

"Shrinking and swelling is one of the most serious problems affecting the use of wood as a construction material."

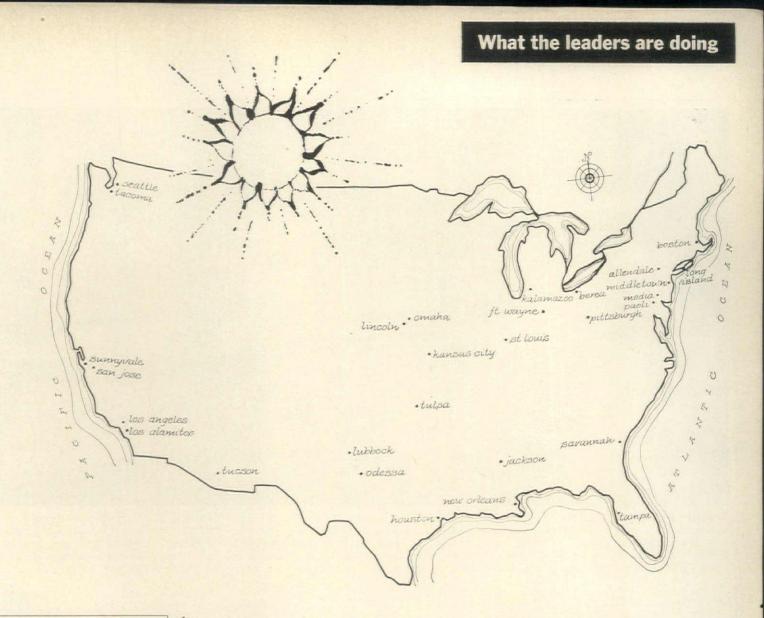
To help lick this problem the wood industry's top scientists and manufacturers recently met at Forest Products Lab, for the first meeting ever devoted solely to dimensional stabilization. They outlined the major areas of research and urged the industry to treble these research efforts in the next few years.

These are the mechanical methods now under study:

- Use of thin water repellent films as vapor barriers just inside the surface of wood.
- 2) Development of better bonds with adhesives used in particle boards, plywood and fiberboards.
- 3) Use of paper overlays which also gives low-grade lumber a better finish.

Two basic chemical methods to make wood more stable are under study:

- 1) Cross-linking cellulose molecules in the wood fiber.
- 2) "Bulking" or filling the spaces between cellulose molecules. /END



What the leaders are doing

EAST

| Allendale, NJ: Bier-Higgins Babylon, LI: Paulsen & Risbergs Boston: Campanelli Bros, Media, Pa: Seal & Turner Middletown, NJ: Jacob Lefferts Paoli, Pa: Fox-Bilt Homes Pittsburgh: Roland Catarinella | 160 167 161 166 157 161 168 |
|--|---|
| MIDWEST | |
| Berea, Ohio: Bob Schmitt Fort Wayne, Ind: John R. Worthman. Kalamazoo, Mich: Property & Insurance Exchange | 156 169 |
| Kansas City, Mo: Sturgeon & Taylor. Lincoln/Omaha: Strauss Bros. | 161 |
| St Louis, Mo: Fischer & Frichtel | 167 |
| SOUTH | |
| Jackson, Miss: J. W. Underwood New Orleans: Morgan Earnest New Orleans: Tom Lattie Savannah: Clayton Powell Tampa, Fla: Matt Jetton | 167 167 160 161 157 |
| SOUTHWEST | |
| Houston: Raleigh Smith Jr. Lubbock, Texas: Jennings & Lewis Odessa, Texas: Bill Beck Tulsa, Okla: L. R. Latch | 161 156 167 169 |
| WEST | |
| Los Alamitos, Calif: Ross Cortese Los Angeles: Willard Woodrow San Jose, Calif: Joseph Eichler Seattle: Albert Balch Seattle: Bell & Valdez Sunnyvale, Calif: Brown & Kauffmann Tacoma, Wash: Herman Sarkowsky | 166 169 160 157 156 168 167 |
| Tucson, Ariz: Busby-Carroll | 169 |

Spring is model change-over time for 30 leaders in 29 major markets

On the next eight editorial pages you will see more than 60 photos and floor plans of 1959 models introduced this spring by the experienced builders listed at left.

You will see many new designs, new floor plans, and smart new features for production houses. Most are wholly new offerings. Some are best sellers from last year with a few changes—or even none, as in Jake Lefferts' case in New Jersey. ("If you have a good model, why change?" he asks.)

The models vary widely in size and price, from a 960 sq ft Texas house selling for only \$8,850 to 2,500 sq ft models in Los Angeles priced at \$35,000 or more. But most of the models pictured fall in the brackets most builders are interested in. Over half the houses have 1,200 to 1,700 sq ft, with the average about 1,450 sq ft. Most prices fall between \$15,000 and \$25,000 (including land). The H&H survey

shows that most of the 30 leaders are staying in the price range they were in last year, with a few moving up or down.

Two-story houses show signs of increased popularity

Four builders have come out with two-story houses and report strong demand for them already. One reason is that some novel floor plans are offered. Only two models are split levels. All the rest are ranches, with or without basements.

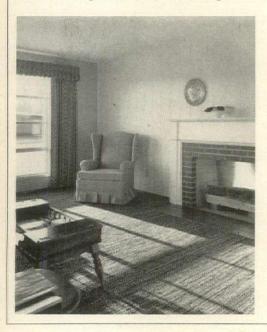
A third of the builders describe their new models as contemporary. Other designs shown include one called French Provincial, one Pacific, two storybook, and 16 conventional or traditional by local standards.

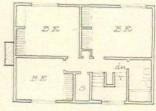
More than half the models have been designed through close collaboration between builders and architects.



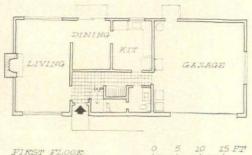
Seattle: Bell & Valdez have a smash hit in a new two-story model with an unusual floor plan. The builders call it Early American, and furnish it to suit, as shown in the photos below of living room (left) and dining room

(right, viewed from kitchen). But the floor plan, elevations, and materials are wholly up to date. The tiled hall runs across the house from living room to kitchen and garage, the window-lighted stairway is in the front, and a sliding-glass door offers indoor-outdoor living at the rear of living room. Exterior has horizontal redwood siding and a wide overhang. Architect John Anderson designed this 1,360 sq ft, \$17,600 model.





SECOND FLOOR

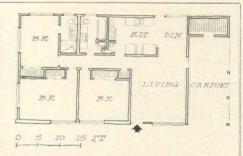






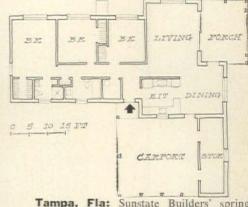
Berea, Ohio: Bob Schmitt's spring model features a new tiled entry that works equally well with the alternative plans for the main living area. Architects Heine, Crider & Williamson designed the 1,408 sq ft, \$24,600 house.



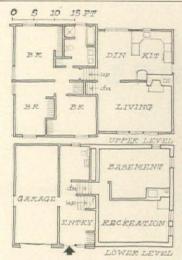


Lubbock, Texas: Jennings & Lewis offer this well-equipped new model at exactly \$10 a sq ft. There are 1,152 sq ft. It sells for \$11,500. Details of Architect Donald Honn's new kitchen cabinet designs will be shown in H&H next month.





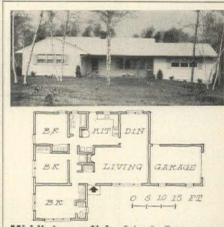
Tampa, Fla: Sunstate Builders' spring models all have heat pumps, and the one shown here has an unusual floor plan in which the utility core runs along the front of the house. This \$19,500 model has 1,284 sq ft of living area.





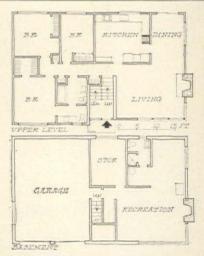
Kalamazoo, Mich: Property & Insurance Exchange has greatly improved on a popular '58 split-level house by a simple shifting of the entry. Last year's model had its front door on the middle level, far from the garage. Now the front door has been moved down

next to the garage and a big entry foyer is provided. Says General Manager Jack DeBoer: "Our buyers no longer must climb a flight of outside steps to a front door leading into the living room. The new plan is more sensible." The 1,750 sq ft model sells for \$19,900.

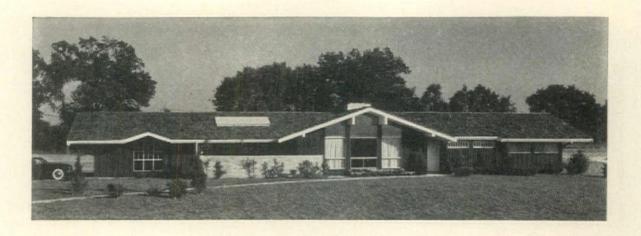


Middletown, N.J.: Jake Lefferts counts on the model shown above to be his best seller this year—as it has been for the last four years. Designed by Architect William Chirgotis, the same house sold for \$19,200 originally. The new model sells for \$22,500, largely because land costs are higher. The three-bedroom, $1\frac{1}{2}$ -bath house has 1,290 sq ft.





Seattle: Albert Balch has brought out a two-story model to fit steep hillside lots. The big 2,155 sq ft house sells for \$29,000, which includes a full complement of built-ins. The interesting plan puts the front entrance midway between the two levels. Architects Cooper & Sawers provide indoor-outdoor living in the rear where the second story is at ground level.



Quality builders use Manufactured Homes



W. K. KERR, Columbus, Ohio

. . . "Home manufacturers offer a tremendous service to the builder as part of the package price. These include processing FHA and VA commitments, land planning, architectural services, promotion and sales aids. These services are invaluable and save the builder time, manpower and money."



ROBERT H. THOMPSON, O. O. Thompson & Son, Cincinnati, Ohio

... "We have built over 1000 manufactured homes and know we can build five times as many units using house packages as we could conventionally using the same crews. Working with a home manufacturer gives us access to financing, engineering and many other services. Our bookkeeping is vastly simplified. One invoice covers most of the material and equipment in the house."



WALLACE HOLLADAY, Grant-Holladay Construction Co., Dayton, Ohio and Lexington, Kentucky

... "Sales can be phenomenal. We sold out a job of 356 houses in eight days with a total advertising cost of less than \$3 per house. We then had the entire job under roof in 100 calendar days. Our total overhead on this job was very small and our profit about four percent better than originally estimated."



WILLIAM JAMES, James Realty Co., Myrtle Beach, S. C.

... "A builder of 50 houses per year can eliminate at least 25% of his headaches by using house packages. This enables him with a small organization to give more time to land acquisition, subdivison development, mortagage financing and sales."



SCOTT E. WELLER, President, Community Homes, Inc., Champaign, III.

... "Experience in building 3,500 homes has convinced me of many advantages in using manufactured homes. By producing more and a better house at a competitive price, my market acceptance as evidenced by sales and satisfied customers has established me as a leading builder-developer in my community."



M. G. DRAKE, Malone, Whiting & Drake, Pensacola, Fla.

... "Our packaged homes are designed and engineered by the best architects and engineers ... people who are ordinarily too expensive for a small builder to employ. The excellent designs make them easy to sell. With the help of our home manufacturer, we're able to carry on a much larger advertising and promotional program than we could do by ourselves."



Under roof in one working day . . . so weather's no problem. Build more homes with less capital . . . save on interest and carrying charges. Deliver finished homes to your customers early!



Keep your crews busy all year by using packaged homes. You'll receive better prices from your subcontractors, too. They don't like "stop-and-go" jobs. Build more homes with less manpower and fewer skilled men!



Market tested, FHA and VA approved plans sell fast. You'll be able to offer more house for the money in your city when you build with house packages! Keep ahead of your competition.

SUPPLY!

HOUSING ANNUAL

OF MANUFACTURED HOMES



BUILDERS:

We've reserved a copy for you of this fabulous 190 page booklet on manufactured homes, with 50 pages of new 1959 models and house plans, data on what companies ship into your state, six pages of inquiry cards, etc.

TO GET YOUR COPY: Clip this ad to your company stationery and mail to Home Manufacturers Association, 1117 Barr Building, Washington 6, D.C.

*Free offer limited to home builders only. \$1 per copy to all others.

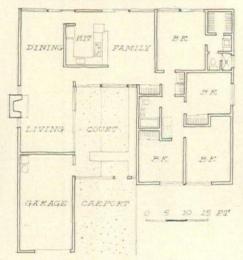




San Jose, Calif: For the first time in several years, Joseph Eichler is offering a carport. This 1,650 sq ft model by Architects Jones & Emmons has a garage and carport at the front, is built U shaped around a patio. This

court area has a plastic screen on the carport side, opens to living room and family room through sliding-glass doors (photo, bottom left). As the plan shows, on either side of a U-shaped kitchen (photo, bottom right) a separate dining area and the family room open to a rear terrace. This well-equipped house sells for \$24,500. Eichler has six models, four with four bedrooms, three designed by Jones & Emmons, three by Anshen & Allen.

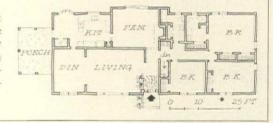




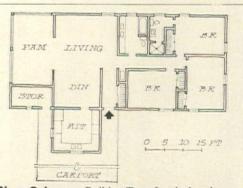




Allendale, N.J.: Beir-Higgins has brought out another big traditional model, this one with 2,100 sq ft spread out 74′ long. New this spring in the \$32,900 model is a much larger family room with fireplace and sliding-glass doors opening onto a rear terrace. Architect Albert D. Rader is the designer.

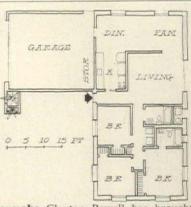






New Orleans: Builder Tom Lattie has introduced 11 models this season in Developer Ernest Norman's Aurora Gardens tract. Most popular model is this air-conditioned house with three bedrooms, two baths, 1,620 sq ft of living area. It is priced at \$25,000.





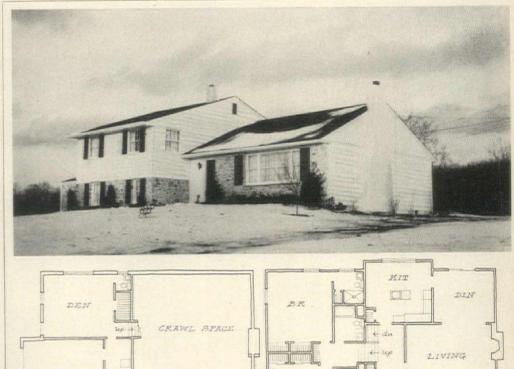
Savannah: Clayton Powell has brought out a 1,260 sq ft house that features a hall laundry, paneled baths, terrazzo floors in baths, kitchen, family room, and the new separate dining area. The \$16,800 model has a simple rectangular living area but gains an interesting front elevation from the forward garage and tall covered brick planter.



Kansas City, Mo: Sturgeon & Taylor credits much of the success of its best selling new model to the 3' overhang supported by ornamental iron columns. Architect John Frederick Granstedt designed this 1,092 sq ft, \$16,975 house.



Boston: Campanelli Bros reports it is offering more open planning and contemporary design in this new model designed by Architect Edward Poskus. The 1,056 sq ft slab house includes nearly all major appliances in its \$15,990 price.



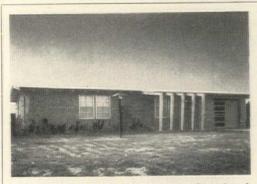
BASEMENT

Paoli, Pa: Alternative plans with either three or four bedrooms are offered this spring by Fox-Bilt Homes in a new split-level model designed by Architect Theodore Brandow. Buy-

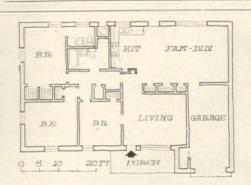
GARAGE

ers also get a large entrance with cathedral ceiling, a big kitchen with spotlighted center island kitchen, a fireplace, two-car garage, and 2,200 sq ft of living area for \$25,950.

UPPER LEVEL 5 10 15 FT



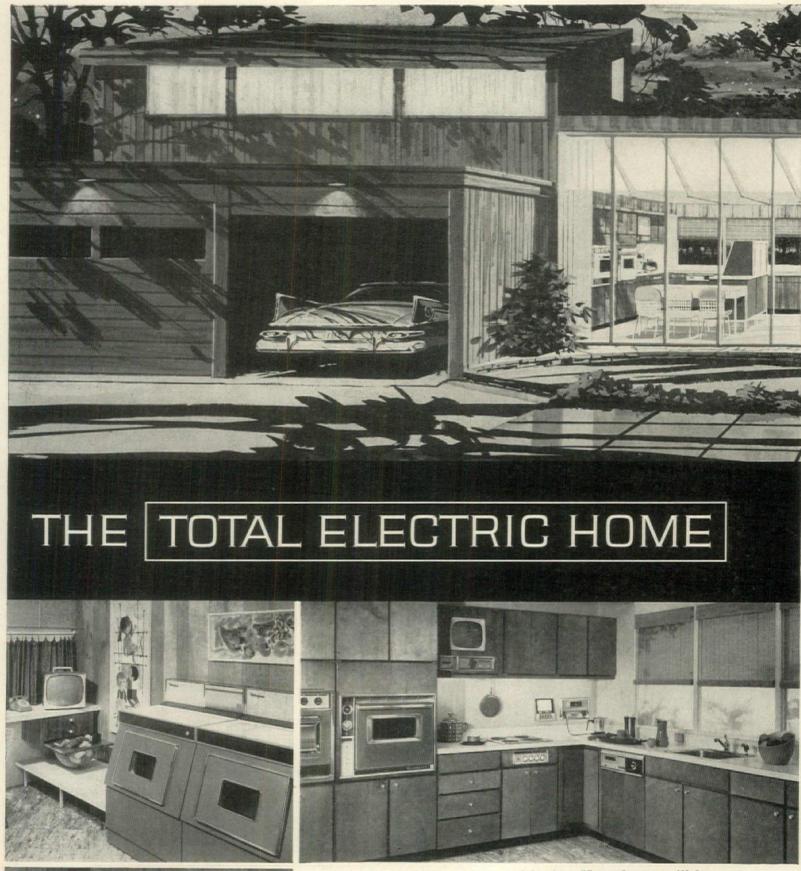
Houston: Raleigh A. Smith Jr has introduced five models this spring, ranging in design, he says, from Old English to the contemporary

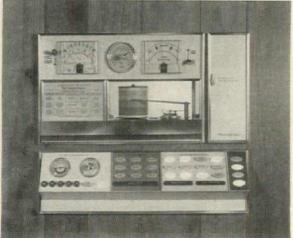


pictured, which so far is his best seller. Buyers particularly like its exposed structural beams, open planning, ample closets. The three-bed-



room, \$14,350 house has 1,400 sq ft of living area (including 250 sq ft in the kitchen-family room area pictured at right).





Total Electric Living as expressed in these Home Centers will be featured in Westinghouse advertising to home buyers.

LAUNDRY CENTER—This new Westinghouse Laundromat actually *thinks* for itself....its program computer chooses exact cycle for each fabric! Dryer shuts itself off the instant clothes are dry. Clothes hampers contain germicidal Odor-Out lamps.

FOOD PREPARATION CENTER—Makes preparing and cleaning up after meals fast and fun. Refrigerator keeps meat fresh 7 days without freezing. Electronic range cooks complete meals in a few minutes.

WEATHER CONTROL CENTER—Contains master switch and thermostat for electric heating and air conditioning. Operates precipitron and germicidal lamps which eliminate dust, pollen and air borne health hazards. Controls lights, de-ices sidewalk, turns on lawn sprinklers. Includes wind gauges, barometer, inside-outside thermometers, and humidity indicator. While Westinghouse does not build a Weather Control Center, we will be glad to furnish suggestions and list of components needed.



WESTINGHOUSE

stimulates new interest in home ownership with a dynamic new program to sell the concept of Total Electric Living

Now, through the concept of the Total Electric Home, Westinghouse sets out to promote electrical living in its most advanced form—homes that rely solely on clean, safe electrical power for the operation of heating, air conditioning and appliances.

Westinghouse will promote this idea aggressively on television, in magazines, and in newspapers. As a result, Westinghouse will stimulate new interest in home ownership and help to bring you more enthu-

siastic buyers who are dissatisfied with their older, outof-date homes.

The Total Electric Home Program will pioneer new ideas in home planning, several examples of which are shown opposite. All the ideas are practical . . . all of the Westinghouse products shown—even Electric Heating—are on the market today. The heart of this home is Electric Heating . . . and in many areas electric

utilities are working with builders to push this great improvement in home comfort.

As the Westinghouse Total Electric Home program gathers speed you will find it profitable to make the homes you build Total Electric.

Total Electric Home Department, Westinghouse Electric Corporation, 3 Gateway Center, Pittsburgh 30, Pa.

Westinghouse TOTAL ELECTRIC HOME

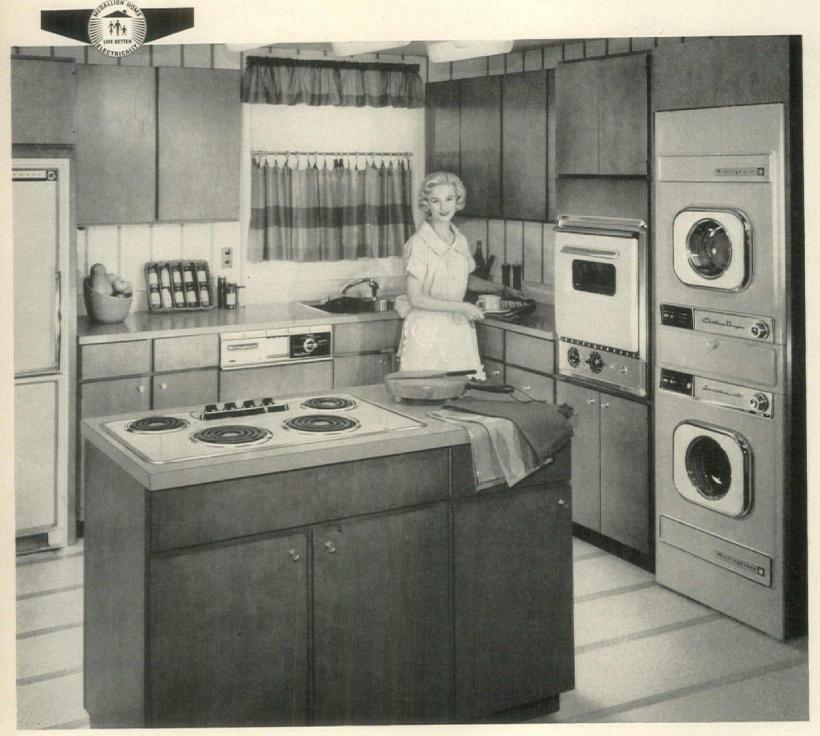
HEATING . COOLING . APPLIANCES



YOU CAN BE SURE ... IF IT'S Westinghouse

WATCH "WESTINGHOUSE LUCILLE BALL-DESI ARNAZ SHOWS" CBS-TV MONDAYS

Westinghouse TOTAL ELECTRIC HOME ... Where Electricity Does Everything!

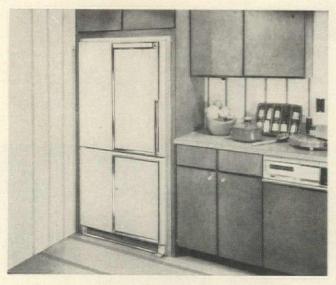


YOU CAN OFFER EXCITING KITCHENS LIKE THIS when you use the all-new line of Westinghouse Built-Ins plus Westinghouse Heirloom Maple Wood Cabinets. The cabinets are designed to match and sized to accommodate all Westinghouse Built-Ins. Also available is a complete line of Westinghouse Steel Cabinets in attractive Confection Colors. For further details on the most extensive line of built-ins on the market today and matching cabinets, go to one source . . . your Westinghouse Distributor. Or write to Westinghouse Electric Corporation, Contract Sales Dept., Major Appliance Division, Mansfield, Ohio.

YOU CAN BE SURE ... IF IT'S Westinghouse

WATCH "WESTINGHOUSE LUCILLE BALL-DESI ARNAZ SHOWS"-CBS-TV MONDAYS

BE CONSISTENT...BUILD QUALITY INTO YOUR KITCHENS WITH WESTINGHOUSE APPLIANCES AND CABINETS



REFRIGERATOR-FREEZER IS TRIM AND TERRIFIC. Trim because it has no coils on back . . . because it needs no extra space for door swing. Concealed hinges permit opening to a full 90° within cabinet width. Terrific is the word for this built-in's exclusive Cold Injector that keeps meat fresh up to 7 days without freezing.



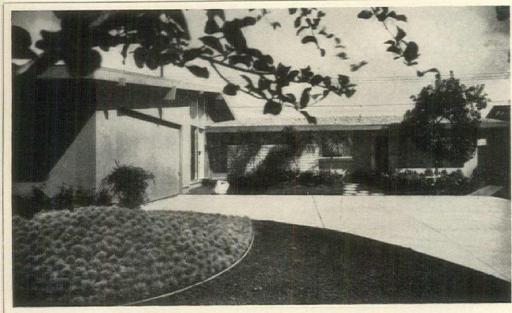
DISHWASHER GUARANTEES 140° HOT WATER. That's the temperature needed to get dishes really clean. Only this new Imperial Roll Out model provides it, regardless of tap water temperature, with its unique Hot Water Booster. Attractive Choose 'N Change front panels are available in 9 colors and finishes. Holds service for 10.

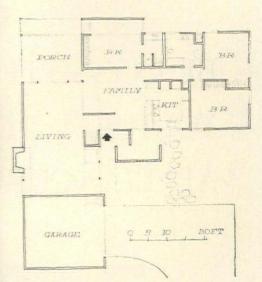


OVEN HAS DRAMATICALLY NEW DESIGN. Controls are ideally located in vertical panel at side... out of heat zone, yet easiest to reach. Available in built-in or stack-on models, it features the Serv-Temp Roast Guard, Built-In Rotisserie and Lift-Off Door. New range platform has remote controls, 1001 heats. Check for availability dates.



PUSH-BUTTON LAUNDRY BUILDS-IN ANYWHERE. Put it in the kitchen, bathroom or hall closet. Matching Clothes Dryer installs on top of Laundromat to save space. 25" wide Space-Mates also build-in undercounter or up in the wall. Together, they wash and dry 18 lbs. of clothes at the same time . . . are completely automatic.

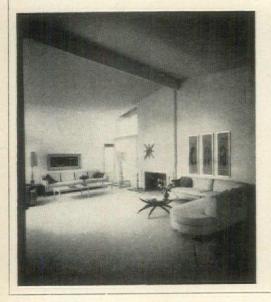




Los Angeles: In sharp contrast with his former storybook designs, Ross E. Cortese has introduced a contemporary production model this spring designed by Architects Chris Choate and Robert G. Jones. The 1,675 sq ft house looks much larger and more luxurious

than its \$20,500 price suggests. Photo below left is a view from the family room of the 28'x16' living room. The dividing wall in center photo below forms an entry at front door, diverts traffic to living room in foreground or kitchen area beyond, and shields family

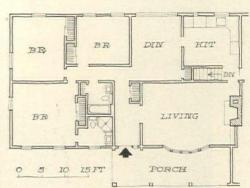
room. Most rooms in the house have sloping and dropped ceilings to add interest and clarify the purpose of different areas. Kitchen photo shows 9'x6' latticed luminous ceiling. Other features: bath laundry, rear porch open to living room, service court formed by wall.





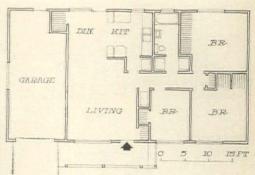






Media, Pa: Seal & Turner has brought out a new model for hillside lots which features a big front porch formed by an enlarged roof over half the house. The extended roof shades living room windows, disguises rectangular shape of the house. There are 1,400 sq ft of living area on the upper floor, plus garage and family room on lower level. Architect George Hay designed this \$25,500 model.





Tacoma, Wash: United Building Co's Herman Sarkowsky is sticking with the same \$12,500 model he brought out last year, a 1,002 sq ft house designed by Architect Donald F. Burr. One well-liked feature: laundry space between the bath and bedroom wall.

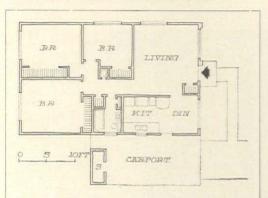


Babylon, Long Island: Paulsen & Risbergs report that their new spring model represents a shift to "contemporary styling, larger bedrooms." The \$11,990 house has 900 sq ft.



Underwood this spring. The 1,833 sq ft house family room or a fourth bedroom.

Jackson, Miss: A traditionally designed has three bedrooms plus a room with a fire-\$21,360 model has been introduced by J. W. place off the kitchen which can be used as a



Odessa, Texas: Bill Beck reports heavy sales on an \$8,850 storybook model this spring. It has 960 sq ft of living area, three bedrooms, ceramic-tiled bath, wall heaters.



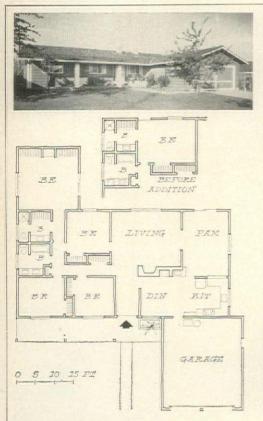
New Orleans: Air conditioning and indoor-outdoor living are the key features of a new Earnest. The house is a Crawford prefab.



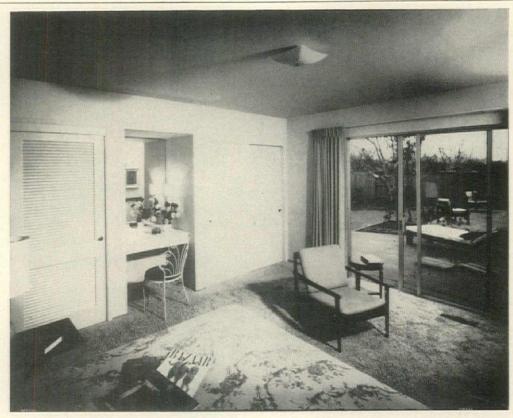




St Louis: Fischer & Frichtel has introduced several new models this spring, and Ed Fischer believes the \$19,450 model (left) will probably "be our best seller." All the new models have handsome front entrances, as the photos show, and all have two well-defined dining locations-the latter now an established need among F&F buyers (H&H, Feb).







a best seller for two years (H&H, Dec '57). The comparison of plans for old and new bedroom wings shows how easily Architect Alexander C. Prentice, Jr made the change. The front elevation (shown, top left) is the same as in '57, and B&K now also offers the

Pacific style front (bottom left). Otherwise, all is as before. Photo below center shows the living room fireplace and louvered doors opening to family room. Below right is the landscaped patio that extends across the back of the house—a feature B&K always offer.

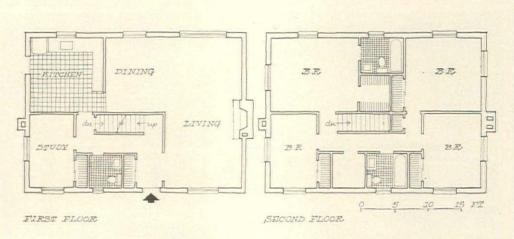






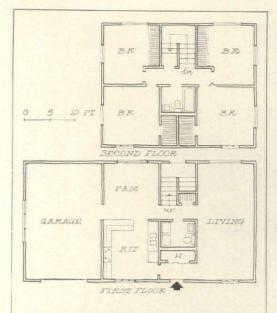


Pittsburgh: Roland Catarinella's most popular model this spring is the same big two-story model which won him an *American*



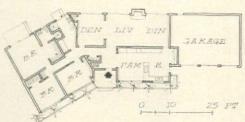
Home citation last year. The brick house has four bedrooms, 1½ baths, and a large cedar closet upstairs, a big L-shaped living-dining

area, half-bath, and kitchen on the ground level, two-car garage on the basement level. The 1,824 sq ft house sells for \$26,950.



Lincoln, Neb: Strauss Bros is offering another two-story house this year, this time with a front kitchen off the entry and stairs in the rear (instead of rear kitchen, stairs in front). New features in the 1,576 sq ft, \$17,950 model include a laundry in the half bath and a family room on the first floor.





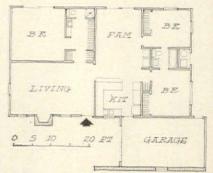
Los Angeles: Builder Willard Woodrow stresses the Pacific style (H&H, April) in most of the 11 new models he has introduced at \$32,000 up. Living areas range from 2,050 to 2,500 sq ft. The V-shaped model shown here is also offered with a contemporary exterior.



Tulsa, Okla: A fourth bedroom is the chief new feature in L. R. Latch's \$22,500 spring model. The storybook design has been popular in Tulsa for some time. This model has 1,620 sq ft of living area, many built-in appliances.





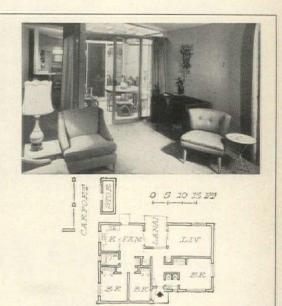


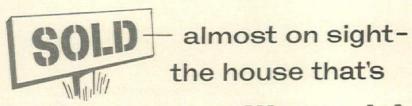
Fort Wayne, Ind: John Worthman has added several features to a model that was one of his best sellers last year. Among them are a laundry behind louvered doors in the family room (at left, lower left photo), a folding door which can close living room from family room, a master bedroom off living room and rear patio, and a two-car garage. The 1,346 sq ft house is offered at \$24,900.



Tucson, Ariz: Fred Busby, president of the Tucson HBA, expects to sell about 300 houses again this year, thanks in part to the reception given his lanai houses. First introduced last fall, the contemporary houses designed by Architect Carl LeMar John have been bought

by more than 40 families this spring, and Busby-Carroll will continue to offer them the rest of the year. Buyers also have liked the separated bedroom areas in these houses, which have a 1,216 sq ft living area (plus a 140 sq ft lanai). They sell for \$13,550. /END





Cooled in Summer... Warmed in Winter

by an ARKLA-SERVEL SUN VALLEY*

All Year® Gas Air-Conditioner!



Advantages for the Buyer:

Today's home buyers appreciate-and demand-year 'round comfort indoors. Show them the advantages of an Arkla-Servel Gas Air-Conditioner: summer and winter, one trouble-free unit. one easy-to-set thermostat provides just the right temperature. Fuel and maintenance bills are lower with Gas. Never any worry over deliveries. And Gasiscleanest.



The moment prospects enter, they can feel the difference. You are offering the best, with one, double-duty Arkla-Servel that heats and cools. And you're giving them low-cost maintenance and long life ... the secrets of economy with Gas. So for better sales, install Gas air-conditioning.

AMERICAN GAS ASSOCIATION

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

*Trademark. Product of Arkla Air Conditioning Corp., Evansville, Ind., & Little Rock, Ark.



Cherry paneling prefinished by Weldwood quick way to say "quality" at low cost

Cherry says quality, in wall paneling as in furniture. What better way to keynote the quality of the homes you build than to panel a room in this highly prized wood—warm, glowing American cherry prefinished by Weldwood®? Yet for all its rich beauty, Weldwood

prefinished cherry V-Plank® like this costs only \$78, retail, for 12′ x 8′ wall. See over 70 types of Weldwood paneling at your Weldwood lumber dealer's or any of our 117 branch showrooms in the U.S. and Canada. Or, write for Weldwood cherry paneling sample.

United States Plywood Corporation

DEPT. HH5-59, 55 W. 44TH ST., NEW YORK 36, N. Y. IN CANADA: WELDWOOD PLYWOOD, LTD.





CALIFORNIA REDWOOD SIDING

is held in high esteem by

architects for its exceptional

resistance to the elements as well

as for its great natural beauty,

here exemplified by the

dramatic shadowlines produced

by the Anzac pattern.

All the wonderful warmth of wood is best expressed in redwood.

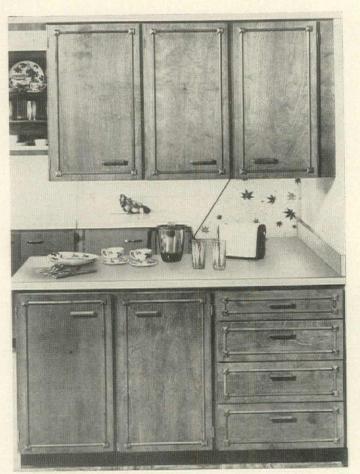


CALIFORNIA REDWOOD ASSOCIATION

576 Sacramento Street San Francisco 11

CERTIFIED KILN DRIED REDWOOD

SEVEN I WELVE



Kitchen Maid cabinets have added a fine molding on door and drawer fronts to create an Italian provincial look. New storage types include bar and bottle storage, six-tray appliance base, condiment and canned goods storage, cutlery and pan storage, Nutone mixer base, complete sewing center. Wood finishes are cinnamon, nutmeg, cherry, birch, and walnut; enamels are pink, white, yellow, green, turquoise, and gray. Standard hardware is brass finished; options are silver, chrome, copper, black, and stained wood.

Kitchen Maid Corp, Andrews, Ind. For details, check No. 3 on coupon, p 418

Here are six new kitchen packages



Debonair bar-kitchen is a compact unit that includes a two-burner range, sink, a 51/2 cu ft refrigerator, snack bar, and storage compartments. All outside surfaces are Formica covered. Refrigerator has two door shelves; freezer holds nine ice-cube trays, makes fresh cubes in an hour. Bar leaf folds back to enclose sink and service shelf. Debonair is available with black satin, walnut, mahogany, or blond finish, with or without range and sink. List price: \$565. Acme National Refrigeration, Astoria, N.Y.

For details, check No. 4 on coupon, p 418



Home soda fountain and bar has three syrup (or liquor) pumps, two fruit compartments, carbonated water arm, running water dipper well, 5-gal ice cream storage. Coldwall refrigeration is powered by a 1/4-hp air-sealed compressor, keeps ice cream at 12F to 14F, cools complete unit. Carbonator makes sparkling water for 2¢ a gallon, 1/8¢ a drink. Fountain-bar is 321/2" wide, 237/8" deep. Service top is stainless steel. Price: \$665.

Everfrost Sales, Inc, Gardena, Calif. For details, check No. 5 on coupon, p 418

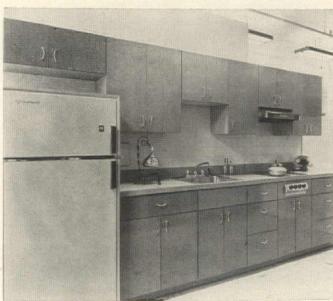


Chambers built-in kitchens are available with gas or electric surface units and ovens, refrigerator-freezers, dishwasherdryers, disposers, ventilating hoods. Ovens come in single and double models in high-fashion finishes, fit standard 24" wall opening. Countertops run from space-saving 21" dropins to 33" wide units. Refrigerator-freezers completely ready to slip in a wall run from a 7 cu ft undercounter model to

a 32 cu ft twin unit. A 19 cu ft model fits a 36" wall space, makes 25 lb of ice cubes. Chambers dishwasher has an interruptable cycle, washes and dries with superheated water and air. Chambers hoods come 30" to 42" wide, in finishes to match appliances.

Chambers Built-Ins, Chicago.

For details, check No. 6 on coupon, p 418



New Maine kitchens combine the strength and dimensional stability of steel, the looks of wood, and the stain resistance of plastic. All frames are reinforced steel structure. All doors, drawers, and exposed vertical surfaces are 5%" Raiboard, a high-pressure melamine laminated to a dense particle board. Both sides of doors and drawers have a maple woodgrain surface that can be cleaned with a damp cloth, is stain and abrasion resistant. Price: "moderate".

Maine Mfg Co, Nashua, N.H.

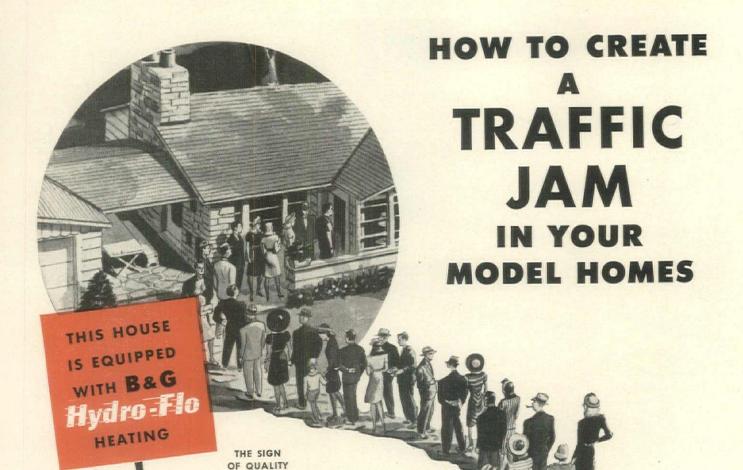
For details, check No. 7 on coupon, p 418



Beauty Queen kitchens' new line is called Fleetwood. Cabinet bodies are made of rust-resistant steel with baked enamel finishes. The fronts are solid-core, flush-front doors with white maple exteriors, birch interiors. Drawers made of one-piece die-drawn steel with wood fronts, roll on nylon wheels in interlocking rails. Hardware is anodized antique copper; cabinet closures are nickel alloy magnets. List price of 21" base cabinet: \$60.

Toledo Desk & Fixture Co, Maumee, Ohio.

For details, check No. 8 on coupon, p 418



To attract today's critical home buyer takes visible extra value...demonstrable extra quality!

A "hydronic" B&G Hydro-Flo Heating System does just that...adds a genuine quality touch...assures the buyer that he is getting more value for his money. It's a matter of record that in thousands of installations, this forced hot water heating system has proved a sales clincher!

No other equipment can offer so much immediate comfort or so many possibilities for more gracious living in the future. The B&G Hydro-Flo System endows a home with all the essentials of good heating...the right quality of heat...operating economy...and long-life of equipment.

It's cleaner heat—doesn't soil walls and draperies. It's quiet heat—no fan hum. If desired, the same boiler that heats the house can be equipped to furnish year 'round hot faucet water. Summer cooling and snow melting equipment can be included—when building or later. And the B&G Hydro-Flo System can be easily zoned—a particularly important advantage in heating split-level homes!

B&G Hydro-Flo Heating really gives you something to talk about!

"HYDRONIC HOMES" SALES PROMOTION FOR BUILDERS

A comprehensive program of ideas and sales helps for utilizing the outstanding and exclusive advantages of hydronic heating. There's no obligation in getting all the facts—write today.





B&G BOOSTER
Key unit in a B&G Hydro-Flo System

The prime requisite of a forced hot water heating pump is quiet operation. In this respect the B&G Booster is completely outstanding...in every detail it is designed to eliminate noise. Over 3,000,000 have been installed to date.

BELL & GOSSETT

COMPANY

Dept. FS-10, Morton Grove, Illinois

Canadian Licensee: S. A. Armstrong, Ltd. 1400 O'Connor Drive, Toronto 16, Ontario the latest pitch in roof design

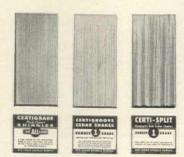
HANDSPLIT RED CEDAR SHAKES

The pitched roof is back. Back in fashion.

Back in force. No gentle slope either . . .

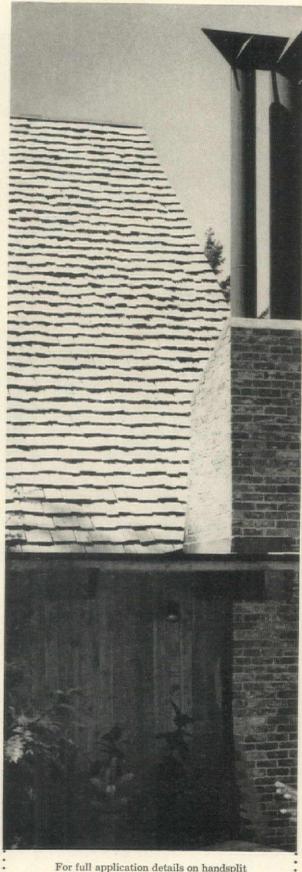
but a really dramatic pitch.

It's one more reason for the popularity of handsplit cedar shakes. Dramatic pitches require dramatic materials of obvious quality. And nothing says quality so quickly, so emphatically, as handsplit cedar. Heavily-textured, natural through and through, shakes of handsplit red cedar are becoming the focal point in more and more new home designs. Because Certi-Split shakes pass the two vital tests for quality: they speed the sale of the house, today, and lengthen its service, tomorrow.



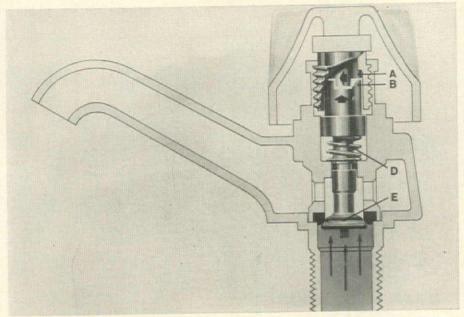
RED CEDAR SHINGLE BUREAU

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



For full application details on handsplit cedar shakes, see the current Sweet's Catalog . . . or send coupon . . .

| Name | | *************************************** | |
|---------|---|---|--|
| Firm | *************************************** | ************** | |
| Address | *************************************** | *************************************** | |
| City | | | |





Drying cabinet for towels, hosiery, etc, can be built into bathroom wall at any warm-air register or register box. Dry-O-Mat is aluminum, with chromeplated brass hardware. Unit makes bathroom neater, dries faster. UL approved.

Dry-O-Mat Co, Minneapolis.

For details, check No. 10 on coupon, p 418

Dripproof faucet seals with the water flow, not against it as standard faucets do. Kel-Win self-seating units work by a straight lift cam action. They will stay open at any degree of flow but once closing is started, the cam closes and seats the valve automatically without knob pressure. Because pressure cannot be exerted on the valve and seat, longer valve life can be expected. Also the quick opening and closing can mean up to 25% savings in hot water, the makers claim.

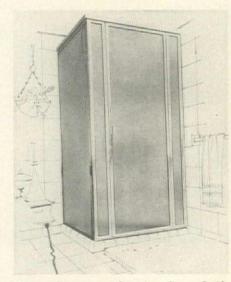
Kel-Win Mfg Co, Richmond, Va. For details, check No. 9 on coupon, p 418



Mengel vanitory is manufactured to the same standards as Mengel's wood kitchen cabinets. The vanitory is available with a blank top or fitted with lavatory and hardware. Ten different combinations of tops and cabinets are stock. Also comes in special platinum finish. Hardware is chrome plated.

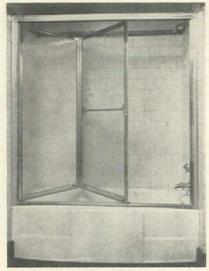
Mengel Co, Union City, Ind. For details, check No. 11 on coupon, p 418

Six new ideas in bathroom fittings



Glass shower enclosures from Gulfspray come with two or three walls for corner or side-wall installation. Either clear or obscure glass is available. Extruded aluminum frame comes in either satin or bright finish. Shower enclosures complement Binswanger's line of glass tub enclosures. About \$175 installed. Binswanger & Co, Houston.

For details, check No. 12 on coupon, p 418



Beauti-Dor enclosures feature full access to the tub and shower without the inconvenience of swinging doors. Doors have fully adjustable jambs to compensate for wall deflection. Both Futura and Beauti-Dor lines come in Ultra-brite or Beauti-brite lifetime hard finish. Price range: \$75-\$140.

Beauti-Dor Inc, Chicago.

For details, check No. 13 on coupon, p 418



Efrolite tub enclosures are made with fiberglass reinforced glazing in which a choice of designs is laminated. Doors glide on nylon bearings in door bottom, guide track has large weep holes. Towel bars are on inside and outside panels. Four models, 4', 4½', 5', 5½', cost \$80 to \$100.

Theodore Efron Mfg Co, Chicago. For details, check No. 14 on coupon, p 418

continued on p 285



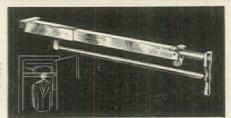
KV gives you more of just what you're looking for!

★ Top Quality ★ Easy Installation ★ Trouble free Performance
 ... and the best known line in the business!

K-V Closet and Kitchen Fixtures

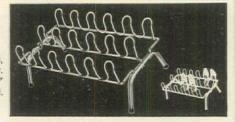
K-V 1 CLOTHING CARRIER

Virtually doubles closet hanging space. Easily installed, a slight pull brings a whole wardrobe into easy reach. Available in 10" to 48" models.



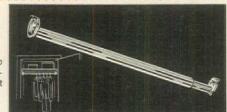
K-V 724 PORTABLE LOOP SHOE STAND

Fits neatly under hanging garments, requires little space on closet floor. Holds nine pairs of shoes. Size 24" wide, 10" high. Easily assembled.



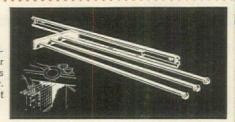
K-V 2 EXTENSION CLOSET ROD

The perfect answer for closets too shallow for the K-V 1 Clothing Carrier. Non-sagging. Five sizes to fit all closets.



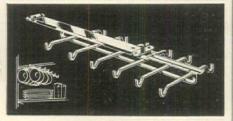
K-V 793 DISAPPEARING TOWEL RACK

3-bar model mounts on wall or cabinet. Towels and garments slip over free end of three chrome bars, slides in and out on ball bearing carrier. Size: 5" wide; 20" long. Bright chrome finish.



K-V 791 DISAPPEARING CUP RACK

Protects cups from chipping or cracking. Holds 12 cups, slides easily in and out. Fastens to underside of shelf, saves shelf space. Size: 11" closed; 18" extended.

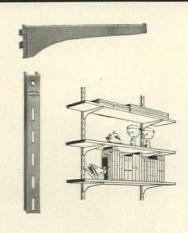


K-V Shelf Standards and Brackets

K-V 80-180 OPEN SHELF HARDWARE

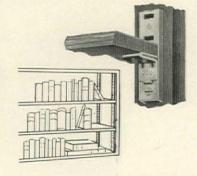
The easy, quick way to add shelves to a wall. Slots in K-V 80 standards allow 1-inch adjustments. Lengths from 18" to 144". Patented friction grip on K-V 180 brackets assures firm, level hold with perfect alignment. Lengths from 4" to 20". Satin anochrome finish.

K-V 80-180 also available in satin brass finish — the modern decorator color so much in demand.



K-V 255-256 BUILT-IN SHELF HARDWARE

Standards can be mounted flush or on surface. Screw holes every 6" on centers. Slots allow ½" adjustments. Lengths from 24" to 144". Supports easily adjusted, fit tight into standard slots. For shelves in cabinets, bookcases, closets, room dividers. Nickel plate and bonderized bronze.



K-V 87-187 HEAVY-DUTY SHELF HARDWARE

Extra heavy-duty standards. Easy to install. Slots allow 2-inch adjustment. Lengths from 36" to 144". Brackets of special cold rolled steel. Recommended for paint, hardware, grocery and hangrod installations. Lengths from 8" to 24". Satin anochrome finish.





FIXTURES

Knape & Vogt
Manufacturing Co.
Grand Rapids, Michigan

K-V Drawer Slides

K-V Folding & Sliding Door Hardware



K-V 233-239

PACKAGE ASSEMBLIES K-V 80-180 and 233-239 standards and brackets

come in easy to display, easy to sell packages. Each

package contains enough

component parts for a complete installation. Easy-to-

follow instructions are illus-

trated on the packages which come packed 12 to a

shipping carton.

DO-IT-YOURSELF

K-V 1300 LIGHTWEIGHT EXTENSION DRAWER SLIDE

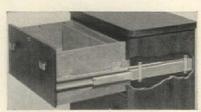
With nylon rollers for noiseless, smooth and effortless operation. Guaranteed to keep drawers from sagging or sticking. Capacity to 50 lbs.

K-V 1400 Ball Bearing Full Extension Drawer Slide Available in sizes 12" to 38". (Not illustrated).



K-V 1600 SELF-CLOSING EXTENSION DRAWER SLIDE

Closes automatically when drawer is within six inches of closing. Drawer easily removed at full extension without removing mounting screws. Easy to install. Recommended load at least 75 lbs.



K-V 1700 EXTRA HEAVY DUTY EXTENSION DRAWER SLIDE

Glides out to full extension, even under loads of more than 100 lbs. Recommended for heavy duty drawers. Frictionless, noiseless, easily installed.

K-V EZY-FOLD FOLDING DOOR HARDWARE

Easy to install. Fits any door of any material, size or weight; simplifies stock problem. Single track or double track models assure sag-free, tight fitting doors. Comes in a complete packaged assembly, with all hardware and easy-to-follow instructions. No special tools needed.



K-V 858 OVERHEAD SLIDING DOOR HARDWARE

With this packaged K-V sliding door assembly, even the most inexperienced homeowner can complete home improvements quickly, easily and professionally. Smooth operation, long life are guaranteed. No special tools or experience required. Package contains all hardware and easy-to-follow instructions.

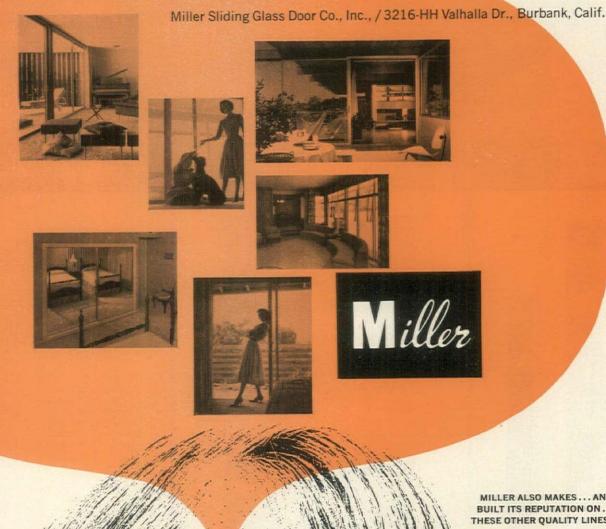


MAY 1959

Now! Miller gives you a new 5/8" dual-glazed dream door!

ANNOUNCING NO. 625 SERIES ALUMINUM SLIDING GLASS DOOR LINE FOR THE BUILDER OF QUALITY CUSTOM AND SPECULATIVE HOMES.

Series 625 makes building sense... because the aluminum tubular box sections permit great design freedom for the custom builder, and the wide range of standard stock sizes offers substantial savings for speculative builders. Series 625 makes selling sense ... because you can economically step up to a quality %" dual glazed sliding glass door which features lustrous Alumilite finish, double-sealed woven wool pile weatherstriping*, and positive "Magic Touch" latching-together with strong national advertising to pre-sell your customers the year 'round. Series 625 makes profit sense ... because Miller engineering, materials and construction mean fewer call-backs and help you keep the profits you originally planned for...because Miller doors are visible proof of quality to prospective owners.



MILLER ALSO MAKES ... AND BUILT ITS REPUTATION ON ... THESE OTHER QUALITY LINES:

Series 1000 aluminum sliding glass doors for interchangeable " dual, 3/4" dual, and 1/4" single glazing. The top line in the in-dustry, ideal for commercial, institutional and residential use.

Series 250 aluminum sliding glass doors. No finer single glazed door for residential, commercial and institutional use.

Miller MirroGlide sliding wardrobe mirror doors. Made of lustrous Alumilited aluminum in gold, clear or black, "Opens up" bedrooms, dens, hallways... makes a handsome room divider.

*Miller exceeds the requirements of the Air and Water Infiltration Tests of the Sliding Glass Door & Window Institute.

Dealers in most principal cities. Write for information. See Sweet's Architectural File 16d/Mi, or Sweet's Light Construction File 5a/Mi. Member of Sliding Glass Door & Window Institute.

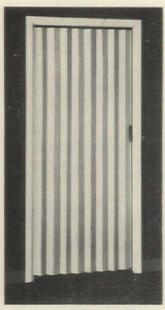
start on p 276





DOOR is set against jamb . . . header slides in place . . .





and snaps tight in frame . . .

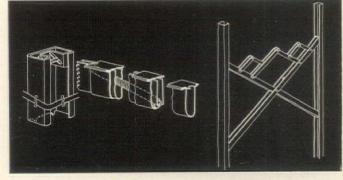
and door is hung.

This door installs in 30 seconds

Columbia-matic doors, designed by Walter Dorwin Teague Assoc, need no fastening devices to hold them in frame. Spring-loaded header snaps into the frame, holds the fixed end of the door tight to the jamb. A special pantograph (below) supports the vinyl fabric panel when extended. When closed, door takes minimal space. Door can be removed or reversed at any time. Retail price: \$34.95.

Columbia Mills, Syracuse, N.Y.

For details, check No. 15 on coupon, p 418



HEADER fits into jamb member of pantograph supported door.

continued on p 289

mps

(MINIMUM PROPERTY STANDARDS)

FEDERAL HOUSING ADMINISTRATION

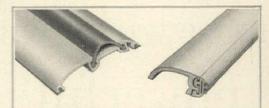
FHA BULLETIN NO. 300, PAGE 191, SECTION 909-4.5

"Doors shall be made
weathertight. A watertight
threshold shall be provided.
Doors shall be weatherstripped
when required to prevent
infiltration of dust or snow."

NAW

FHA MPS REQUIRES ENTRANCE
DOORS TO BE COMPLETELY SEALED!
DURAflex DOOR SEALING SYSTEM
EXCEEDS ALL REQUIREMENTS!
FAST, SIMPLE INSTALLATION —
POSITIVE SEAL*

NAV



plus
VINL-STIP WEATHERSTRIPPING

COMBINE TO MAKE THE FIRST PRACTICAL ONE-PACKAGE DOOR SEALING SYSTEM... FIELD-PROVEN BY OVER 2,000,000 INSTALLATIONS QUALITY COSTS LESS!

- Positive sealing
- Fast, economical installation
- No callbacks due to faulty operation*

For complete information and samples, write to:

THE DURAflex CO., Dept. DSS-100
3500 N.W. 52nd Street • Miami 42, Florida

Name

Company

Position

Address

City.

Zone

State

U.S. Pat. 2,718,677 Can. Pat. 545,851
Other U.S., Can., and Foreign pats. issued and pending

^{*}When installed in accordance with manufacturers' recommendations



Home buyers take an interest in G-E Remote-Control switching as soon as they see it.



Housewives like the G-E Master Selector Switch that floods home quickly with light.

This new G-E book tells you how to turn house wiring into a powerful sales feature

... shows why General Electric Remote-Control Wiring is such a dramatic improvement over ordinary wiring that it helps sell houses

General Electric Remote-Control Wiring is so far ahead of conventional wiring that any home buyer can appreciate the difference right away. The switches are distinctive and attractive — and offer conveniences that you just can't get with conventional wiring.

For instance: You can have any number of convenient switches for the same light or outlet — located at all entrances to a room and in other rooms. You can control many lights, all over the house and yard, from one switch — with just the twist of a dial. And that's only the beginning!

You get a real sales feature — at little more than the price you would pay for conventional wiring.

See the profitable story in this new booklet. Just mail the coupon.

Progress Is Our Most Important Product





General Electric Company Wiring Device Department Providence 7, Rhode Island

Gentlemen

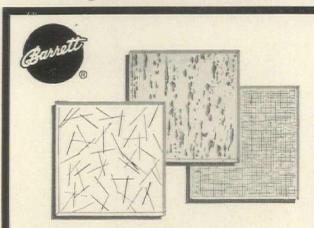
Please send me your booklet explaining the advantages of G-E Remote-Control Wiring for builders.

Name Company Street

BARRETT

FIBREBOARD PRODUCTS

stronger...smoother...more uniform in size



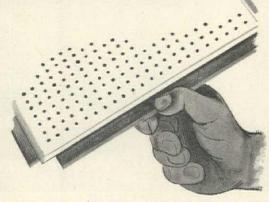
CEILING TILE IN 3 NEW PATTERNS
... Sparkler, Fissure and Tattersall. Decorated in tasteful multi-colors, these new Barretonet Tiles are backed by heavy promotion in The Saturday Evening Post!



EASY TO APPLY...BUILDING BOARD AND PLANK Here's just the thing to finish a basement or attic. Plank is factory-painted in a choice of colors. Nail directly to framing for finished walls.



23% STRONGER... "RIGIDWALL" SHEATHING RIGIDWALL® is the new Barrett Insulating Sheathing that exceeds FHA requirements for application without corner bracing, by 23%. Also exceeds FHA requirements for direct nailing of siding... and by 47%!



STRENGTH THROUGH CHEM-FI PROCESS The CHEM-FI Process is the Barrett method of fibreboard manufacture that makes all these products superior to others. Try holding other ceiling tiles by the flange, as above, and watch them break in your hand. Barrett Insulating Tiles are proved stronger!

† Trade Mark of Allied Chemical Corporation

A Barrett representative can show you how the extra strength of these fibreboard products can mean more sales . . . less wastage . . . and bigger profits for you. And the BARRETT name can help win the confidence of your prospects. Asphalt Shingles and Roll Roofing • Asbestos-Cement Siding Shingles • Rock Wool Insulation • Sheathings and Building Papers • Roof Insulation • Built-Up Roofing Products • Bituminous Coatings and Cements • Translucent Plastic Panels.

BARRETT DIVISION

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





Decorative lighting is the biggest thing in home building today. It dresses up your homes and helps them sell, as proved by successful builders. Let us show you how you can build up the buying appeal of your own homes, at low cost, with MOE Light. Send us your blueprints. We'll put our CIL* experts to work on them...plan and prepare lighting diagrams just for them...give you complete recommendations and details you can turn over to your electrical contractor. Whether your homes are in the \$10,000 or \$65,000 class, you'll get lighting plans to meet your needs—and sell your homes faster!

*Certified Inspiration Lighting



THOMAS INDUSTRIES INC.

LIGHTING FIXTURE DIVISION
Executive Offices: 410 S. Third St., Louisville 2, Ky.

Leaders in Creative Lighting

Above, pull-down can be moved on ceiling track to center over table for dinner parties. Recessed spots add a touch of glamour to table settings.

YOURS FREE

Colorful CIL* booklet showing newest "decorating with light" ideas, plus 52-page Lighting Guide and Catalog.



THOMAS INDUSTRIES INC.

Lighting Fixture Division
410 S. Third St., Louisville 2, Ky., Dept. HH-5
Here are my blueprints. Please send FREE Certified Inspiration
Lighting diagrams and decorating booklets.

| NAME | |
|---------|--|
| | |
| ADDRESS | |

CITY_____ZONE_STATE___

New products

start on p 276

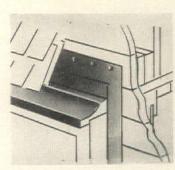


PERFORATED VENTS make up 14% of this aluminum roll soffit. It can also be used in decorative screens. Check No. 16.

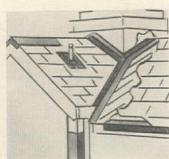
Here is a new line of over 30 metal building products

A complete choice of galvanized shapes heads the new line of metal building products announced by Quaker State Metals. Also in the line: The ventilated 26-gauge aluminum soffit shown above (it comes in 100' rolls, 12", 18", 24", 36" wide); a copper-foil-on-kraft vapor barrier in 1/2, 1, and 2 oz weights, 12", 18", 24", 36" widths; aluminum and galvanized termite shields; galvanized steel valley and flashing in 50' rolls, 4" to 30" wide; lightweight galvanized footer forms; 7"x7%" galvanized wall ties.

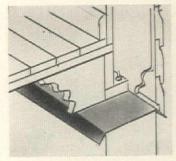
Quaker State Metals, Lancaster, Pa. For details, check numbers on coupon, p 418.



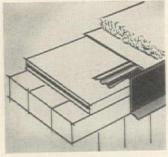
Vapor barrier, check No. 17.



Roll flashing, check No. 18.



Termite shield, check No. 19.



Galvanized shapes, check No. 20.

continued on p 295

NEW LEIGH

DOORS



Here is a completely new concept in folding door design! This bold new Leigh idea replaces the troublesome top track with a fail-proof traverse rod . . . brings you all the space-saving, moneysaving advantages of steel bi-fold doors, yet ends top track troubles forever!

CAN NEVER COME OUT OF ALIGNMENT

Trouble-free operation is assured by the Leigh traverse rod assembly which replaces the top track used on other bi-fold doors. Top guides are connected to the traverse rod by means of Velvet-Glide travelers which completely encircle the rod. Once attached to the travelers, the guides can NOT come loose. But they can float freely up and down in the door panels to compensate for inaccurate openings - keeping the travelers free of strain as they glide along the rod. Thus Leigh Full-Vu doors can never come out of alignment!

The traverse rod assembly also includes the top pivot brackets. These brackets are spring-loaded to exert pressure on the panels for smooth, tight closing action.



Spring-loaded top pivot aps in place

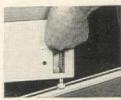
18 MINUTES FOR ONE MAN TO INSTALL

Only six screws are required to mount the entire traverse rod assembly. Factoryassembled pivots and guides are already positioned in panels. Top pivots and bottom guides are spring-loaded - snap easily into place. In controlled laboratory tests, one man, working alone, installed the new Leigh Full-Vu doors in 18 minutes. The two other popular brands tested required 30 and 40 minutes respectively.

Get complete information on these timesaving, money-saving new doors. See your supplier or write to us.



Top guide snap-locks to traveler



Spring-loaded bottom guide snaps into track (or adjusts to fit center aligner)



*Patent Pending

LEIGH BUILDING PRODUCTS

Division of Air Control Products, Inc. 2559 Lee St.

Coopersyille, Michigan

In Canada:

LEIGH METAL PRODUCTS LTD., 72 York St., London, Ontario





ALUMINUM WINDOW

LOOK AT THESE OUTSTANDING FEATURES

... usually found only in much higher-priced windows

- Full 21/8" frame for rigidity.
- Tubular extruded rails for greater strength.
- Heavy metal-back pile weather stripping for tightness,
- Continuous lift rail for convenient raising and lowering of sash.
- Stepped sill for water tightness at this vulnerable point.
- Precision fitting joints.
- Positive lock for security.
- Will not rust, warp or rot...never need painting.
- Easy to install ... no service call-backs.
- Rigid tests by independent laboratory show they meet or exceed requirements of Aluminum Window Manufacturers Association.

Here's the perfect window for your doublehung market. It is a completely new window with many of the high quality features of Cupples finest windows, yet is priced to meet all competition. Automation and volume make this possible.

When you specify Cupples new doublehung windows, you please your customers, add to your profit margin. There are 28 stock sizes. Picture windows come in 27 stock sizes designed for crystal plate or insulated glass.

Write for name of nearest Cupples distributor.



PRODUCTS CORPORATION

2664 South Hanley Road • St. Louis 17, Missouri



Shown above is B.F. Goodrich "Agatine" in Eggshell White, Cerulean Blue and Gold Vinyl feature strip.

Now one tile combines sales-magic of both vinyl and rubber

YOU START THE SALE OFF ON THE RIGHT FOOT with sparkling new B. F. Goodrich "Agatine" underfoot! Home buyers are impressed when you tell them it's both vinyl and rubber (today's two most luxurious flooring surfaces combined in one thrifty tile)!

THEY LIKE ITS RESTFUL RUBBERY SPRINGINESS... and the way it wears and cleans like vinyl! Common spillages can't harm B. F. Goodrich "Agatine." It's so tough, it will actually outlast the house. And, simple maintenance makes it gleam. In 16 dazzling colors that go clear through. 9" x 9" tiles, 80 gage or 1/8" for on or above grade. For more information, write The B. F. Goodrich Company, Flooring Products, Watertown 72, Mass., Dept. HH-5.

B.F. Goodrich Flooring Products

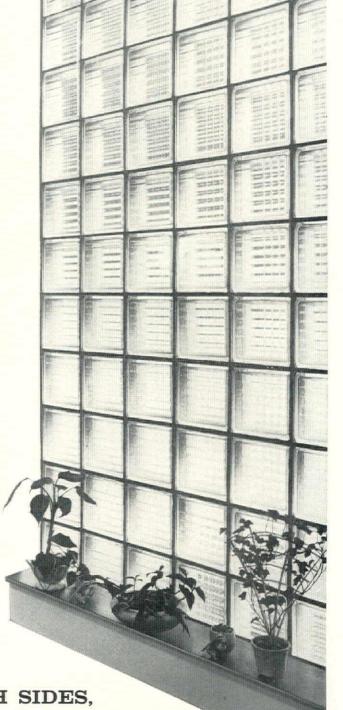


floor tile (made with vinyl)

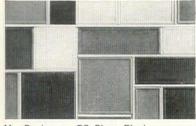








YOU GET A DAYLIGHT WALL,
FINISHED AND DECORATED ON BOTH SIDES,
IN ONE OPERATION WITH NEW PC GLASS BLOCKS



Mr. Designer: PC Glass Blocks are now available in twelve ceramic face colors in 6-inch squares, 8-inch squares, and in the new 4" x 12" rectangular Glass Block.

Here's how to put a quality accent in any house, at moderate cost. PC Glass Block panels require no "roughing-in" costs, no major painting. Your wall is completed inside and out when the Glass Blocks are up.

And you have a real sales lure for the prospect. PC Glass Block panels reflect subtle glamor. Their clean, tailored lines blend with any type of architecture. They bring cheerful daylight in, yet keep glare out. Their insulation equals that of a 12" concrete masonry wall—an important plus in today's trend to air conditioning. And

because Glass Blocks are mortared into panels, there's no rusting, rotting, or painting to worry about

Add it up—smart, attractive appeal, controlled daylight, low heating and cooling costs, no maintenance—and you have a sales talk that makes sense, and helps make sales.

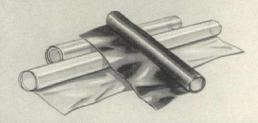
makes sense, and helps make sales.

Send for our booklet on PC Glass Block Panel ideas for every room in the house. Write: Pittsburgh Corning Corporation, Dept. HH-59, One Gateway Center, Pittsburgh 22, Pa. In Canada: 3333 Cavendish Blvd., Montreal, Quebec.

PITTSBURGH

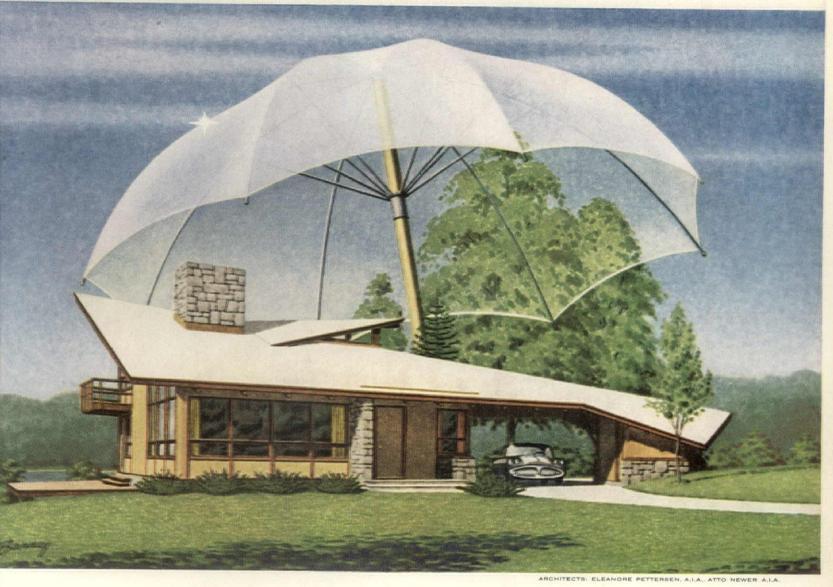


CORNING



LOW-COST MOISTURE-VAPOR CONTROL

that umbrellas the home from the foundation up



SPECIFY

Ger-Pak Virgin Polyethylene

BARRIER FILM

Name your need from attic to below grade. Dampproofing under concrete slabs? Dust-sealing over sub-flooring? Lining crawl spaces? Flashing? For over-all protection!

GER-PAK virgin polyethylene film fills the bill right the first

Only GER-PAK comes in every working size from 10 in. for flashing up to 40 ft. wide. Choice of BLACK, NATURAL, and opaque WHITE. And it's tough, lightweight, easy to handle and, yes,-inexpensive.

Specify versatility unlimited . . . specify GER-PAK film. At your dealer's. FREE samples and informative brochure yours for the writing.

DESIGNED TO MEET THA REQUIREMENTS "SWEET

GER-PAK-the short way to say superior polyethylene film













Virgin Polyethylene Film

GERING PRODUCTS INC., Kenilworth, New Jersey

Concealed Flashing

Material Protection



eal quality costs no more!

ASSURES LONGER WINDOW LIFE IT MAKES HOMES EASIER TO SELL

on to back-up their good name. Write for full information.

In all Peterson Window Corporation products, you will find no compromise with quality. Penguin windows and Daisy doors in the homes you build assure the very best for those in the \$18,000 to \$39,000 price range.

Peterson products begin with well thought out designs. There are many exclusive and patented features. Special attention is given to small details which provide better weather tightness, a quality look and longer life. Penguin windows and Daisy doors reflect the quality feel. They are sturdily built of heavy aluminum extrusions. All finished products receive rigid inspections before shipment. Lastly all Peterson products bear the Peterson name-your guarantee of quality.

Peterson windows and doors assure trouble free performance-make your homes easier to sell. More than that, the quality of Penguin windows and Daisy doors will enhance your reputation as a builder. Get the full story of why Peterson products set the standards by which all aluminum windows and doors are judged. Send us the coupon below.

a quality product of PETERSON WINDOW CORP.

Ferndale 20, Mich. Please send me complete information on the products I've checked below Penguin Windows Daisy Doors Name......Firm..... Address.....State.....

PENGUIN

ALUMINUM ROLLING WINDOWS

High quality windows, in traditional and contemporary styles, for residential and commercial construction. Widths from 2 to 9 feet; vent heights from 2 to 5 feet. With patented adjustable track for outof-square installation, constant pressure weather sealing to prevent air and water leakage. Screen and storm panels are integrated in the design of the window frame. The Penguin locks solidly and firmly in "closed" and two "open" posi-tions and cannot be unlocked from outside in any position, providing Prowler-Proof ventilation. Because the Penguin is built of sturdy aluminum extrusions, it is not dependent on its glass for strength.

DAISY

ALUMINUM SLIDING GLASS DOORS

High quality, heavy-duty doors for residential and commercial construction. Built of sturdy aluminum extrusions, so that their strength is in the frame, not the Daisy doors feature patented adjustable track for out-of-square installa-tion, constant pressure sealing at jamb and meeting stile for water- and air-tight construction, and the screen is placed outside where it belongs. With Prowler-Proof ventilation, the Daisy door locks firmly and solidly in "closed" and three "open" positions and cannot be unlocked from outside. The Daisy door is supplied in widths of from 6 to 20 feet, and in heights of 6 feet 10 inches, and 8 feet.

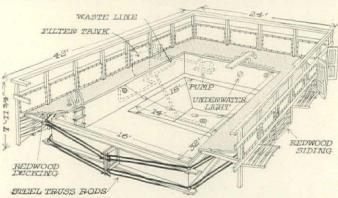




New products

start on p 276





Esther Williams pool needs only a 2½' or 4½' excavation at the diving end; 3' of depth is supported by above ground steel-braced redwood frame. Lining is 20-gauge vinyl; weather cloth is 10-gauge nylon reinforced vinyl; piping is polyethylene. Equipment includes filter system, underwater light, vacuum cleaner and leaf skimmer, stainless steel ladder, fir and fiberglass diving board. Pool areas are 16'x20', or 16'x32', depths 3½', 5½', 7½'. Price: \$2995 up, installed.

International Swiming Pool, White Plains, N.Y. For details, check No. 21 on coupon, p 418

You can build these pools above ground



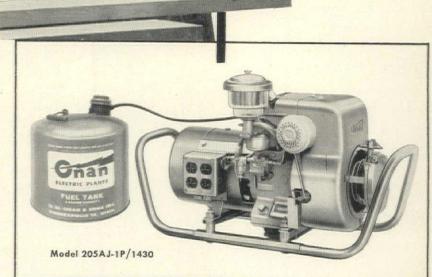
Cabana pool can be used on poor terrain, needs only diving-end excavation. Redwood walls support pool 3' above ground. Vinyl bottom liner rests on composition floor. Fiberglass side walls admit underwater light. Walk around pool is concrete, 3' wide. Cabana 8'x16' is at diving end. Filter and heater go under cabana. Ladder is hinged. Vacuum cleaning system is built in. 16'x32' pool can be built for less than \$1,000 materials cost.

Cabana Pools, Pequannock, N.J. For details, check No. 22 on coupon, p 418

continued on p 299



NEW! Onan portable electric plant with separate 5-gallon fuel tank!



Special 2,500-watt contractor's model combines light weight with dependability

Supplies 2,500-watts A.C. . . . enough for a crew of three men using electric tools . . . yet it weighs only 140 pounds!

New separate fuel tank holds $2\frac{1}{2}$ times as much as regular mounted tank, saves refueling time. Fuel line is quickly detachable. You can move the plant without carrying along heavy fuel.

Ruggedly-built . . . quick starting

Powered by a dependable Onan 4-cycle, single-cylinder, air-cooled engine. Drip-proof, all-climate Onan generator is directly connected making a compact, rigid, smooth-running power package. No belts or couplings to cause trouble. Aluminum carrying frame, 4 plug-in outlet box, recoil starter and separate fuel tank are standard. Choice of 115, 230, or 115/230 voltages.



New lightweight, Diesel Electric Plant

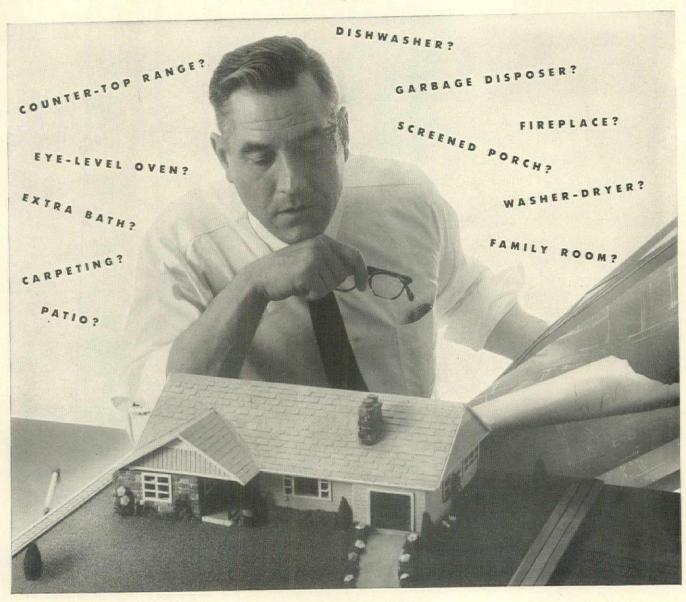
This 3,000-watt Onan Model 3DSL gives you continuous power at lower cost. Powered by a rugged, easy-starting, air-cooled full Diesel, single-cylinder Onan engine. Direct-connected to Onan all-climate generator. Push button starting. Trailer optional.



Onan builds a complete line of electric plants from 500 to 200,000 watts. Call the Onan distributor listed in your phone book or write for information.

D. W. ONAN & SONS INC.





...a Crawford Door gives you the "extra selling edge" you've been looking for

Time was when building a saleable house was largely a matter of pleasing design, quality construction and convenient location at a reasonable price.

You, the builder, competing for today's home buyer's dollar must consider additional features to attract the customer's interest and to provide yourself with that "extra selling edge."

The question is—what can you add that will not raise your selling price too high?

There is one answer you may have overlooked ... feature a sales appealing, handsome, home-enhancing quality garage door. Fact is, you should if the garage faces the street.

A strikingly designed, distinctively styled, perhaps even tastefully "customized" Crawford garage door can materially add to the architectural beauty of your home and its customer appeal—with little additional cost.

Point is, a Crawford door, with its luxury-look, individuality and ease of operation, provides the "extra selling edge" you've been looking for. And if you'd like an additional "tie-breaker" you might consider a Delco-matic garage door operator. Ask your Crawford Distributor about it when you call him.



CRAWFORD DOOR COMPANY

215-20263 HOOVER ROAD . DETROIT 5, MICHIGAN

NOW...YOU CAN TAKE THE COST OUT OF COLOR, END DECORATING DELAY, PROVIDE CUSTOMERS WITH A MATCHLESS SERVICE...WHILE OFFERING THEM A TOP-QUALITY NATIONAL BRAND TILE

3-D"plan for Model Home Builders

Do ars: real savings on tile for your model!

Decoration: free professional color planner service, worth \$650!

Display: handsome units for your sample area for customer self-service!

HERE'S HOW STYLON'S "3-D" PLAN WORKS:

If you keep your model home open for at least 60 days ... and agree to install Stylon tile in all your 1959 houses ... you'll get special arrangements on tile for your model plus color planner and compact, easyto-use sampler displays free!

full-color ads in



House Beautiful

LIVING House & Garden **Better Homes**

... help you build more, sell more, make more! For further details on saving time and at least \$800, mail coupon today. AND HERE'S WHAT GOES WITH IT ...





color planner

for bathrooms, kitchens . . . by Lee Childress - nationally known color planning specialist, consultant to America's leading manufacturers and model home builders. Miss Childress designs a comprehensive planner for you and your customers. Nine basic color schemes, showing several variations for tiled rooms. Covers floor and wall tiles, trim and fixtures. Simplifies selection, speeds sales. Professional advice at its best, at least \$500 worth, free from Stylon!

and, for builders of 100 homes a year...

complete model home color planner. Lee Childress 1959 professional edition . . . easy reference, easeled guide for every room in the house, plus exterior. Contains swatches of your own brand choices in rugs, towels, wall paper, paint, tile, etc., plus suggested furniture layout. Settles the whole color question at once. More professional advice, at least \$150 worth, free from Stylon.

tile displays, sales aids . . . for your sample area. Other items in our Builders' Merchandising Kit include mats, literature, promotional ideas, samples...at least \$60 worth of sales helps, free from Stylon.





| Culon | CERAMIC |
|--------|---------|
| Stylon | TILE |
| | |

| STYLON CORPORATION, DEPT. 94 - MILFORD, MASSACHU | SETTS |
|--|-------|
|--|-------|

| Please send detail | s on "3-D" Model Home | Plan to: Name | | |
|--------------------|---|---------------|-------------------|---------------|
| Street | *************************************** | | | |
| City | | ZoneState | n building hr | omes in 1959. |

NOW-A QUALITY STEEL DOOR FRAME YOU CAN INSTALL IN LESS THAN 5 MINUTES!

kewanee UNIVERSAL

Made Under U.S. Pat. No. 2,835,933 and Canadian Pat. No. 563,915

FOR SWING, SLIDING OR FOLDING DOORS

(INSTALL OVER DRYWALL)

... equal in beauty to the finest wood trim (looks like ranchtrim), plus the durability and labor-saving advantages of steel.

- Jamb, stop and trim formed into a complete frame.
- Packaged ready for installation embossed for hinges and complete with strike plate, dust box and rubber bumpers for silent door operation.
- Made of prime cold rolled steel with baked on enamel prime coat.
- · Sturdy, snug fitting and easy to paint.

INSTALLATION IS EASY . . .



Snap hinge jamb over stud and wallboard. Snap header into opening with hinge jamb. Install strike jamb same as hinge jamb.



Nail bottoms of jambs at strap anchors . . . only 4 nails required (baseboard covers strap anchors).

OTHER KEWANEE STEEL DOOR FRAMES

PLASTERITE: install <u>before</u> plastering "KWIK-FIT": install <u>over</u> drywall



Lock into place by turning screw at top of strike jamb (patented assembly).



200 - HOME - BUILDER FEATURES KEWANEE UNI-VERSAL "KWIK-FIT" STEEL DOOR FRAMES

"The best fitting door frame we've run into," says Wm. Edwards, construction supt. "No cracks, splits or nail holes . . . fits tight against drywall. A really fast installation." (Photos shown were taken at Pacesetter Park, So. Holland, Illinois.)

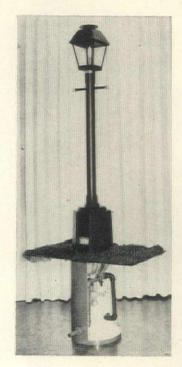
KEWONEE Manufacturing Co.

559 FULLER AVE.

KEWANEE, ILL.

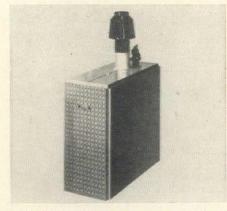
OUR 40th YEAR MAKING QUALITY BUILDING PRODUCTS

start on p 276



Gaslight and meter are combined in one assembly in this new post light developed by the Rochester Gas & Electric Corp. The company's reader can check the meter without going into the house, and the meter is protected from the weather by its underground location. Meter base is attached to a gasketed plate which seals the waterproof housing. In the Rochester area, gas for the lamp costs about \$1.85 a month for 24-hour service if house is heated by gas.

Rochester Gas & Electric Corp, Rochester, N.Y. Check No. 23 on coupon, p 418



Small gas boiler, 13"x26", will heat the average three-bedroom house. Packaged unit uses a cast-iron boiler and "Spreader Flame" burner, has input capacities of 50,000, 70,000, and 90,000 Btu. Steel shell has baked enamel finish. Maker says unit is budget priced for merchant builder market.

Roberts-Gordon Appliance Corp, Buffalo. For details, check No. 24 on coupon, p 418



Outside meter box is made of weatherproof Kralastic, a rubber-resin material made by US Rubber. The meter box is big enough to take a variety of meter-regulator arrangements, can be suface mounted or recessed behind a front panel in an outside wall. Outside mounting allows meter to be read through a plexiglass window whether occupant is at home or not.

Handley-Brown Heater Co, Jackson, Mich. For details, check No. 25 on coupon, p 418

continued on p 301

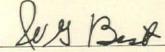


Read
the
"Quality
Guarantee"
that
startled
an
industry!

The BEST Homes

QUALITY GUARANTEE

W. G. Best Homes Co., Effingham, Illinois, guarantees the component parts of all the houses it produces to be of the high quality as advertised. They are produced only of top-grade materials which are guaranteed to meet our rigid high requirements. The proof of home quality and home design lies in the unquestionable proof of satisfied owners. Ask the man who owns one!



W. G. BEST, President

(First advertised in House & Home, April, 1958.)

A personal message to builder-dealers:

We are so firmly convinced that our homes offer the buyer, and consequently the builder, the best value that money can buy that we are backing them up with a QUALITY GUARANTEE. We invite you to visit our modern factory or talk to any of our salesmen to see for yourself the high quality design and flexibility built into all Best homes. Or write, wire or phone George H. Frederking, Vice President and General Manager, and find out how profitable it is to become a W. G. Best Homes builder-dealer.

Meet the BEST Homes "QUALITY GUARANTEE" Suppliers

The Best Homes Quality Guarantee is made possible only because of the high quality of our suppliers' materials. Watch for the June issue of House & Home for the messages of many of these quality suppliers.

W. G. BEST Homes, Effingham, Illinois.



New products

start on p 276



Universal Gold Star ranges come in 30", 36", and 40" sizes, carry new AGA seal. Features include clock controlled oven, pre-set top burners, smokeproof broiling. Some models also have meat thermometers, oven lights, thermostatic griddle, built-in rotisserie.

Cribben & Sexton, Chicago.

For details, check No. 26 on coupon, p 418



Personalized gas range by Caloric has housewife's initials in black letters on a gold background. Caloric ranges carry the new AGA Gold Star. Features include 12,000 Btu top burners, thermostatic top burners, meat thermometer control, clock control for ovens.

Caloric, Jenkintown, Pa.

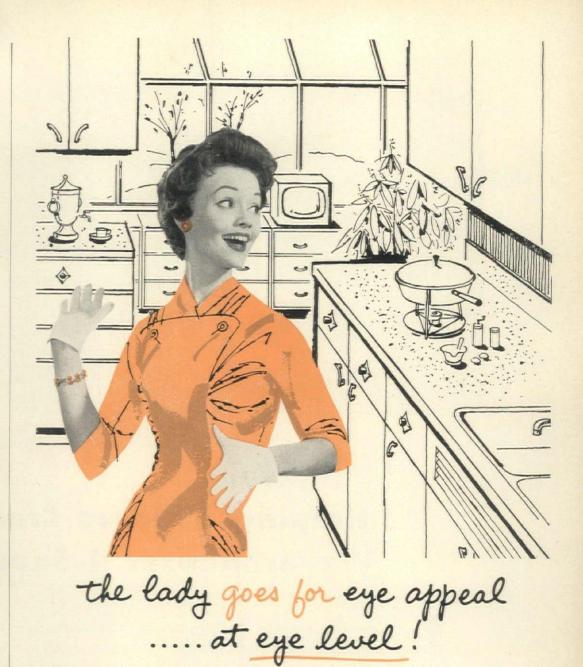
For details, check No. 27 on coupon, p 418



Roper built-ins now include four ovens, ten surface units. Surface units come in two, three, or four burner groups, many with automatic temperature control. Two Roper ovens combine oven and broiler in a single clock-controlled space; two other units have separate broiler-rotisserie compartment.

Geo. D. Roper Corp, Kankakee, Ill. For details, check No. 28 on coupon, p 418

continued on p 306



She's quality-conscious . . . so it's just good sales sense to put extra value where she can see it. And no other feature at the same cost equals beautiful Amerock cabinet hardware for quality appeal. More than likely she will judge the "hidden values" in your house by the same high quality she immediately recognizes in

See your Amerock Hardware Supplier or write Dept. HH-95

Amerock hardware. Be sure to specify Amerock hardware in beautiful "Contem-

porary," "Modern," or "Colonial" designs.





Weyerhaeuser 4-Square quality Nu-Loc siding of Western Red Cedar provides an attractive, weather-tight exterior.

Helping Builders Create Quality Weyerhaeuser 4-Square Lumber

Lumber bearing the well-known Weyerhaeuser 4-Square brand name is helping build quality homes that sell more readily—while helping to save both time and money in the building.

The accurate lengths and square ends of Weyerhaeuser 4-Square Lumber, for example, mean less work for carpenters in trimming and fitting. This, in turn, reduces the amount of material waste.

Scientifically kiln-dried Weyerhaeuser 4-Square Lumber helps builders construct quality homes by assuring greater dimensional stability, which contributes to strong, tight, rigid construction. Kilndrying also increases nail holding power.

Extra care in the grading and handling

of Weyerhaeuser 4-Square Lumber gives extra value in its final use. Correctly graded and identified, each piece meets the requirements for that grade. Careful handling and loading at mills protects the appearance value of 4-Square Lumber.

Homes built with Weyerhaeuser 4-Square Lumber are easier to sell because people have confidence in this brand name. Over thirty years of advertising has made Weyerhaeuser 4-Square a recognized sign of top quality . . . a familiar name that means precision manufacture and dependable performance.

Consumer acceptance of this brand name means that the average home buyer is favorably impressed with the quality



WEYERHAEUSER SALES COMPANY

First National Bank Building . St. Paul 1, Minnesota



Enduring beauty and friendly warmth are imparted to any room with Weyerhaeuser 4-Square wood panelings.

Homes with and Products

of all the other components when he learns that your homes are built with Weyerhaeuser 4-Square Lumber.

One of the most important selling advantages for any home in addition to quality materials is the design. Many builders find helpful planning assistance in the Weyerhaeuser 4-Square Home Plan Books available at the yards of Weyerhaeuser 4-Square Lumber Dealers.

Weyerhaeuser 4-Square Lumber is available in a wide variety of items, grades and species for every construction and budget requirement. See your Weyerhaeuser 4-Square Lumber Dealer.

A COMPLETE LINE FOR **EVERY BUILDING NEED**

Coast Forest Region Species

Douglas Fir West Coast Hemlock Western Red Cedar

Sitka Spruce

Inland Forest Region Species

Idaho White Pine Ponderosa Pine Douglas Fir

Idaho White Fir Inland Red Cedar Engelmann Spruce

Larch

Complete Line of 4-Square Products

Structural timbers, posts, beams and girders Joists, rafters and studs for framing

Boards and plywood for sheathing and sub-flooring Form lumber, roof and floor decking

Bevel and drop siding, rustic, board and batten, and vertical siding

Decorative wall panelings in solid wood and plywood

Flooring, ceiling, and closet lining

Shelving, finish and trim

Casing, base, moulding, jamb sets and sills

Stepping and hand rails

Gutter, facia boards, and soffit lining

Edge-glued finish

End and edge-glued trim and siding

Water-repellent treated siding and lumber

End-matched flooring, siding, decking and sheathing

Weyerhaeuser Quality and Service

All products carrying the Weyerhaeuser 4-Square trademark are scientifically kiln-dried for greater strength, dimensional stability and nail holding power. They are precision manufactured and uniformly graded.

Weyerhaeuser 4-Square lumber and building products are available to builders from Weyerhaeuser 4-Square Retail Lumber Dealers.

4-5QUARE Weyerhaeuser LUMBER AND BUILDING PRODUCTS



Hotpoint Deluxe Automatic Dishwasher with exclusive Double-Deck Washing Action, Model DE-1. Hotpoint Customline® Bi-Level oven with automatic eye-level controls, Model RLG702. Hotpoint Customline surface cooking section with Calrod® Recipe Heat Units, Model RU45.



MORE WOMEN COOK ON RANGES MADE BY HOTPOINT THAN ON ANY OTHER KIND

Hotpoint has made over 5 million electric ranges, far more than any other manufacturer. Such dramatic proof of public preference clearly indicates the salespower Hotpoint appliances add to your homes.

Sales-building public preference like this is the result of over 50 years of product leadership. This leadership stems from the public's trust in the superior quality and outstanding performance found in every Hotpoint appliance.

Remember, Hotpoint appliances are the best investment you can make to sell more homes because . . . when you build in Hotpoint, you build in public preference.

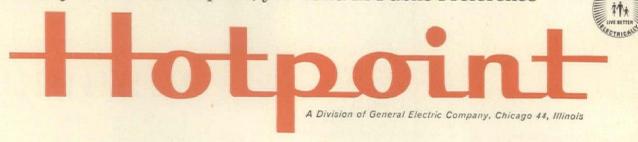
Only Hotpoint offers you

the sales power of dishwashers with Double-Deck Washing Action. This Hotpoint exclusive provides a separate spray for each rack to get every surface of every piece spotlessly clean! And Hotpoint dishwashers offer double washing and rinsing with special second rinse that stops spots, a separate utensil cycle, and easy front connections that slash your installation costs.

Only Hotpoint offers you

Customline surface sections with Calrod® Recipe Heat units that end cooking guesswork at the touch of a button. Hotpoint ovens give more cooking capacity in less cabinet width (only 24 inches) than either of the other two top-selling brands. And Hotpoint offers a variety of Customline ovens and surface cooking sections to fit any kitchen plan and budget.

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

MAY 1959 305



New products

start on p 276



Built-in ironer is included in 1959 Armstrong line. Unit has same 21"x51/4" roller as freestanding models, is thermostat controlled to 480°, draws 1210w on either 110-v or 220-v circuit. Ironer shoe is heavy chrome plate; roller turns at 5 rpm. Cabinet space required is only 10"x10"x27" high, mounting brackets are included with the ironer. Price: about \$75.

Armstrong Prods, Huntington, W. Va. For details, check No. 29 on coupon, p 418



Laundry tray and cabinet from AllianceWare includes 20-gal suds-saver tub, porcelain enamel laundry tray, and baked enamel storage cabinet. Tray and tub are available without the cabinet as a wallhung unit. Brackets are provided for installation on the wall. \$50 for tray and cabinet.

AllianceWare, Alliance, Ohio.
For details, check No. 30 on coupon, p 418



Gas washer-dryer has been added to Easy's 1959 Combomatic line. All five models in the line are 27" wide, feature auto-stop control and three wash cycles, three wash temperatures, two rinse temperatures, two drying settings. All have self-cleaning lint screens. Suggested list price of gas model is \$499.95.

Easy Laundry Appliances, Chicago. For details, check No. 31 on coupon, p 418

continued on p 309

SCOREBOARD SCOREBOARD SCOREBOARD SCOREBOARD SCOREBOARD

1111111111111111

More men in the housing industry now subscribe to House & Home than to any other publication in the field—

11111111111111111

close to 120,000 of them.

As a result,

House & Home is now read by:

the builders of more houses than read any builder magazine; the architects of as many houses as read any architectural magazine; more distributors than read any dealer magazine; more appraisers and lenders than read any mortgage magazine; more realtors than read any realty magazine.

House & Home

housing's only industry magazine



Light for Living





NO BUILDER CAN AFFORD to risk losing money with lighting like this. Not with couples comparing between 15 and 40 homes before buying. In this picture, inadequate lighting has discounted much of the beauty and sales appeal of this bathroom. The couple can hardly see what they'd be getting.

LIGHT FOR LIVING costs less than you think and can often close more sales than expensive wall-to-wall carpeting. Light for Living in this bathroom can sweep an undecided bride right off her feet. When buyers can see they're getting something extra they'll pay something extra. Light for Living enables you to sell your houses at your price—and profit!



FOR MORE INFORMATION send for your copy of General Electric's "Light For Living Facts For Home Builders & Modernizers". Contains practical tips on building more value into homes with lighted valances, cornices, wall brackets, and many other phases of *Light for Living*. Send \$1.00 to General Electric Co., Large Lamp Dept. 49X, Nela Park, Cleveland 12, Ohio.



Progress Is Our Most Important Product





Backed by \$500 warranty bond



\$500

America's only bonded line of home heating and air conditioning

See your Coleman distributor or write:

Today's home buyers look for quality. And you give them *provable* quality in Coleman Polar Prince Air Conditioning.

Quality styling. With its low silhouette, contemporary lines and colors, the Coleman Polar Prince is the newest, finest in remote type installation.

Quality performance. Ranging up to 5-tons capacity, every model delivers full rated capacity—performance that home buyers can feel and appreciate. And it's a dream when it comes to quietness!

Quality construction. New simplicity of internal design increases efficiency — results in cooler operation of electrical components. Simpler to service should attention ever be needed.

Quality weather-proof finish. New miracle finish, Duracron, is actually superior to 1959 automobile finishes in resisting weather and corrosion.

The Coleman Company, Inc., Wichita, Kansas



ALABAMA—The Coleman Company, Inc.
115 South 35th, Birmingham
ARIZONA—The Coleman Company, Inc.
510 West Jackson, Phoenix
ARKANSAS—Gunn Distributing Company, Inc.
1801 East 22nd Street, Little Rock
78 South 4th Street, Fort Smith
CALIFORNIA—The Coleman Company, Inc.
6480 Florilla Street, Los Angeles
1202 Kettner Blvd., San Diego
250 Sylvester Street, Box San Francisco
COLORADO—The Coleman Company, Inc.
2500 Black Street, Deriver
COMMEDICUT—Roskin Distributors, Inc.
2735 Industrial Blvd., Jacksonville
J. D. Johnson Company
16 West Gregory Street, Pensacola
1. W. Phillips & Company
Morgan & Bell Streets, Tampa
GEORGIA—The Coleman Company, Inc.
1022 Marietto Street, NW., Atlanta
ILINOIS—The Coleman Company, Inc.
2201 South Darst Street, Peoria
4930 North River Road, Schiller Park
INDIANA—The Coleman Company, Inc.
1422 South West Street, Indianpolis
IDWA—John F. Colbert Company
319 East 4th Street, Davenport
331 East 4th Street, Davenport
331 East 4th Street, Davenport
332 East 4th Street, Davenport
332 East 4th Street, Davenport
333 East 4th Street, Davenport
334 East 4th Street, Davenport
335 East 4th Street, Davenport
340 East 4th Street, Davenport
351 East 37th Street, Wichita
KENTUCKY—Valley Distributing Company
319 East 4th Street, Fortland
MARYAND—The Coleman Company, Inc.
367 By Company
319 East 4th Street, Fortland
319 East 4th Street, Fortland
319 East 4th Street, Fortland
319 East 4th Street, Mines Coleman Company, Inc.
310 East 4th Street, Kansas City
410 Hollander & Company
310 East 4th Stre

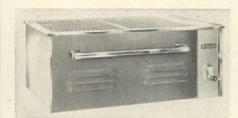
New products

start on p 276



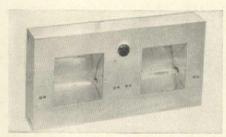
Two-blower range hood is new from Broan Mfg Co. Hood is fully prewired. No cabinet space is taken by blower unit. A washable aluminum filter is mounted on each side of the blower which may have vertical or horizontal discharge. Unit also includes a 100-w light. List price: \$63 up.

Broan Mfg Co, Hartford, Wis. For details, check No. 32 on coupon, p 418



1959 Char-Grill models from Majestic are made for gas or charcoal fuel. Gas models have ceramic brickettes that glow in the gas flame. Charcoal models have heavy boiler-plate fire pans. For frame construction, grills are fully insulated; in masonry, side insulation is left out.

Majestic Co, Huntington, Ind. For details, check No. 33 on coupon, p 418



Food warmer for passthrough will keep meals warm, warm plates, thaw frozen foods, roast frankfurters. Miskella KKF uses two 550-w infra red lamps on 115-w Unit heats an area 12"x20" directly beneath lamps, does not heat adjoining walls. Price, complete: \$34.75.
Miskella Infra-Red Co, Cleveland.

For details, check No. 34 on coupon, p 418



Nautilus No-Duct hood uses activated charcoal to kill cooking odors without venting heat to outdoors. Air from cooktop is pulled through a fine mesh aluminum screen and an activated charcoal filter, then recirculated to the room. The aluminum filter can be washed; the charcoal reactivated by baking in the oven. Prices: \$100-\$156

Major Industries, Inc, Chicago. For details, check No. 35 on coupon, p 418

continued on p 316



the economy framing anchor that DOES ALL ...



Du-Al-Clips for all secondary connections with 2" or thicker lumber... rafters to plate, joist to headers, studs to sill and many others. Du-Al-Clips grip BOTH headers in floor and ceiling framing and BOTH plates in roof anchorage. Du-Al-Clips require no bending . . . one type of anchor with rights and lefts does everything . . . toe nailing, notching, eliminates ledger strips and strap hangers.



TIMBER ENGINEERING COMPANY

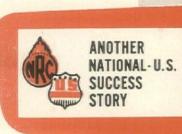
1319 18th Street, N.W., Washington 6, D. C.

Please send Free Du-Al-Clip Design Booklet.

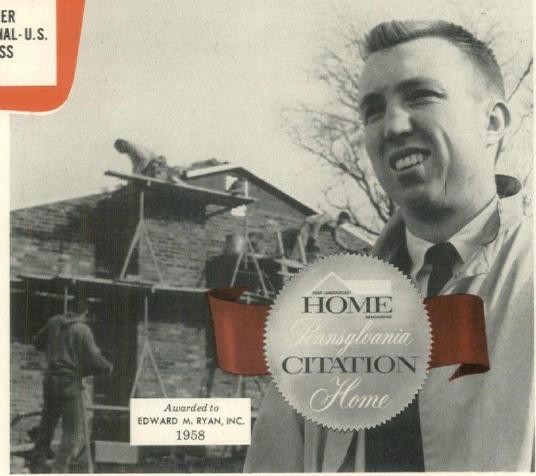
Firm

.State..

HH-593



PROMINENT PITTSBURGH BUILDER **SWITCHES TO HYDRONICS**



Jim Ryan, alert member of the Edward M. Ryan team, the builders of Pennsylvania's 1958 American Home Magazine's "Citation Home".

Edward M. Ryan says it's "Necessary" for Split Levels

Pittsburgh, Pa.—Edward M. Ryan, largest builder of homes in the Pittsburgh area, has adopted a new policy: from now on, his split level homes are going to be heated with hot water systems. Ryan, who started about 460 homes in 1958, anticipates about 10% increase in the number of his starts this year.

"We've tried every method for heating our houses," Mr. Ryan says, "and we've come to the conclusion that it's necessary to use hot water heating in order to keep all levels comfortable.



Contractor W. J. Kumpf hooks up the National-U.S. "11-B" Series cast iron boiler in three-level house built by Edward M. Ryan in Pittsburgh.

Ryan-built homes range upward from \$15,000 in price and Mr. Ryan claims he has no trouble at all in convincing prospects that they should pay a few extra dollars for a quality heating system. Boilers used are the popular "11-B" Series cast iron units made by National-U. S. Radiator Corporation, and heat distribution is done via National-U.S. Art Comfortline Baseboard.



Game room of residence of Edward Moritz is built on concrete slab, stays comfortable with this National-U.S. Art Comfortline Baseboard.

One big factor in Ryan's selection of the "11-B" Series gas-fired boiler for his homes is the complete range of sizes offered by National-U. S. in this model. Each unit comes completely assembled and factory tested, and there is a size to meet every heat loss condition normally found in residences. By standardizing on one model, installation costs are completely predictable. Art Comfortline Baseboard heating was chosen because it is both efficient and attractive, and because Ryan feels that there are advantages in establishing one source and one responsibility for both boiler and dis-



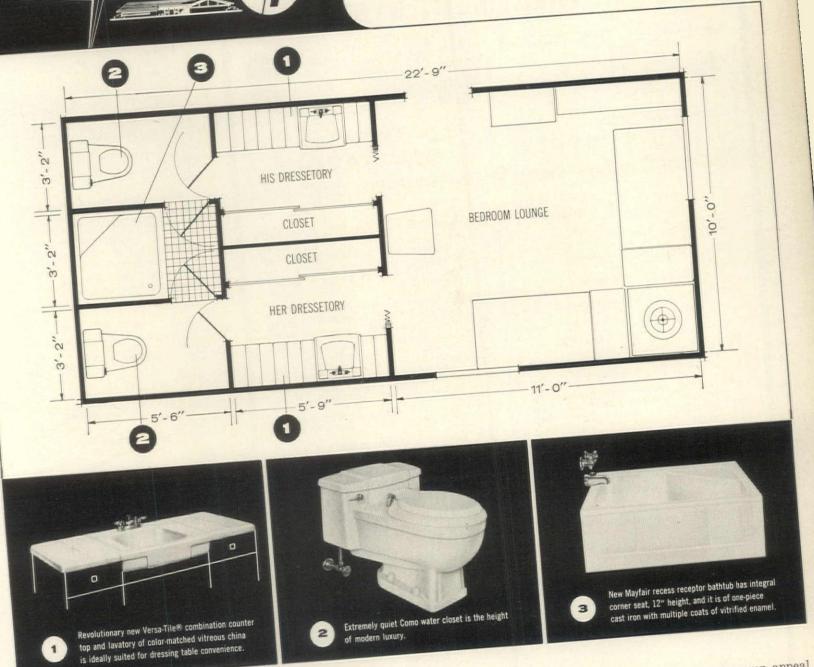
Kumpf shows how the cover of the Art Comfortline Baseboard is extended the length of the wall, even though less radiation than this is needed.

Two booklets explaining hydronic heating and air conditioning to prospective homeowners have been prepared. They're yours for the asking. Find us in your Yellow Pages or write:



HEATING AND AIR CONDITIONING DIVISION





Privazoning is at its best with newest U/R Fixtures for Dressetories

Privazoning, the newest advance in home building sets a new standard of luxury living, especially with Universal-Rundle bathroom fixtures.

This new idea to speed sales is based on years of research to find what people want most . . . need most . . . will buy in their new home. What prospective home buyers wanted was a completely new approach to their "private" area of the home.

Tomorrow's homes will have Privazoning, along with appliance-filled kitchens, airconditioning and many other extras. This exciting new concept of the bathroombedroom area, can have stronger appeal for every home buyer when you install Universal-Rundle bathroom fixtures.

The best and the newest bathroom fixtures are what make U/R the finest in the world, the design leader of the industry for over 58 years.

Builders and architects are invited to write for the new folder on Privazoning, and for the new U/R full-line catalog. They're free. Write to Universal-Rundle Corporation, 557 River Road, New Castle, Pennsylvania



MAKER OF THE WORLD'S FINEST PLUMBING FIXTURES

Plants in Camden, N. J.; Milwaukee, Wisc.; New Castle, Pennsylvania; Redlands, California; Hondo, Texas

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.
- 4 Qualifies for federally insured home
- 5 Increases loan value of homes.
- 6 No unpleasant odors, no clogging, no backup.
- 7 Handles waste from garbage disposers, detergents from automatic washers, ALL modern home appliances.
- 8 New selling feature for countryside homes gives faster turnover at better price.
- 9 Service policy with dealers prevents call backs.
- 10 Operates in all climates.
- 11 Installs fast.
- 12 Models for all home sizes.
- 13 Completely warranted by manufacturer and installer.
- 14 Nationwide sales and service network.

- Builders find that original cost of Cavitator community systems is up to 40% less than for individual septic tanks.
- With community systems, local governments often permit builders to use smaller lots . . . thus more houses share original cost of the system.
- 3 Community systems improve the value of homes (both to owner and lender) . . . make them easier to sell.
- 4 Plants are small . . . can easily be camouflaged to look like a home.
- 5 Factory engineer supervises installation, trains operator, tests performance.

PREFABRICATED PLANTS AVAILABLE FOR SMALLER SUBDIVISIONS

- 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.
- 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

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 for your free copy of "The Homebuilder's Guide to Effective Sewage Disposal."

Yeomans Brothers Co.

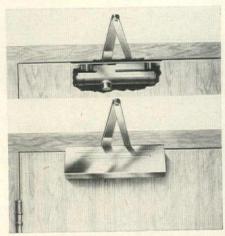
2003-8 N. Ruby St., Melrose Park, III. (Suburb of Chicago)

Name______
Title or Business______

Company_____
Street_____
City_____Zone____State____
No. of Homes Planned______
TG-5805

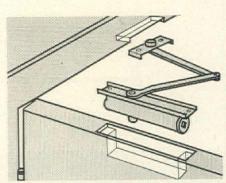
New products

start on p 276



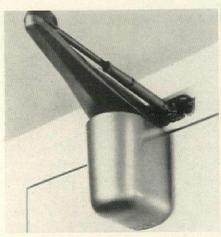
Russwin door closer, the Top Railer, can be concealed completely in a 1¾" door or hidden behind a trim plate in a 1¾" door. Two arm lengths give openings to 180°. Unit has standardized mortise, large expansion chamber, unit oil seal, fully controllable back-check.

Russwin, New Britain, Conn. For details, check No. 36 on coupon, p 418



Corbin door closer, the Hid-n-Rail, can be fully concealed, trim plate concealed, or surface mounted. A single location handles all door swings. Models can be specified for 95° to 180° openings for regular, bracket, or arm hold-open. Finishes are dull bronze, aluminum lacquer, or prime coated.

P&F Corbin, New Britain, Conn. For details, check No. 37 on coupon, p 418



Yale 33 closer is a universal model for doors of either hand and a wide variety of weights, dimensions, and types of service. It has two-speed closing, provision against overwinding, self-lubricating bearings, concealed attaching screws. Concealed hold-open device is optional.

Yale & Towne, White Plains, N.Y. For details, check No. 38 on coupon, p 418

continued on p 320

You can always POINT WITH PRIDE

... to your installation of a

Permaglas

Glass-Lined WATER HEATER

The <u>ONLY</u> glass-lined water heater unconditionally guaranteed for <u>TEN FULL YEARS</u>.

It's a sure sign that you build **QUALITY** into your homes!

If you've ever had to tiptoe around the subject of an off-brand, inadequate water heater, when discussing quality and value with a prospect, you'll know what we mean. It's a grand, good feeling to be able to walk right up to the water heater, pat it on its sleek, enameled side, and say, "Now, this is a PERMAGLAS Glass-Lined Water Heater! It's the only glass-lined water heater unconditionally guaranteed for ten full years. The A. O. Smith Hydrasteel tank must serve you ten full years or you get a brand new water heater. It's the best you can buy . . . and it's typical of the quality and value you'll find all through our house."

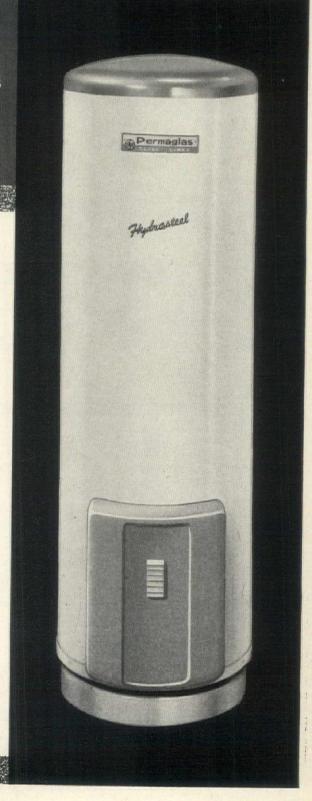
Your prospect will know what you're talking about. Brand demand for PERMAGLAS has been pre-sold to him, by powerful, continuous national advertising. He's on your side, from the moment you mention the best-known name in water heaters... PERMAGLAS.

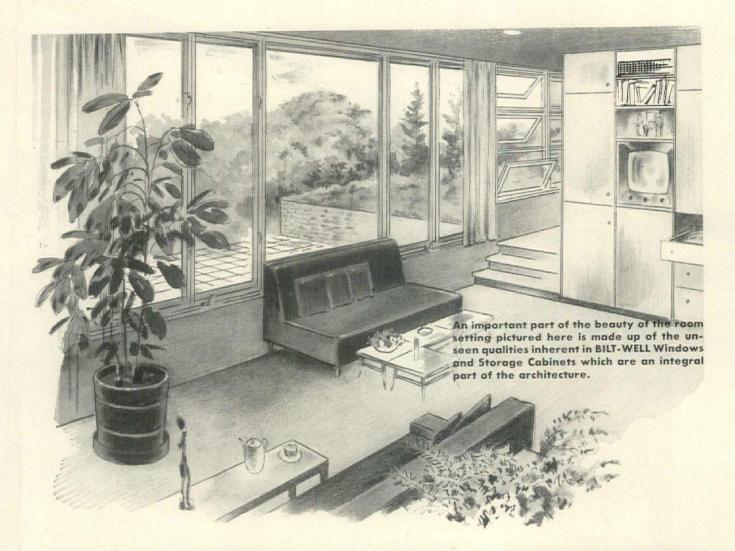
You can get this powerful buyer-acceptance to work for you at a low cost that will be more than offset by increased customer confidence. Get the facts on PERMAGLAS, today! Write or wire, direct, to:



PERMAGLAS DIVISION, KANKAKEE, ILLINOIS

A. O. Smith international S.A., Milwaukee 1, Wis., Licensee in Canada: John Inglis Co., Ltd.





BILT-WELL QUALITY PAYS in \$ and C

Under the new FHA Minimum Property Standards soon going into effect, wood windows *must* conform to U. S. Dept. of Commerce Standards CS190-59 Double-Hung, CS204-59 Awning Window Units, and CS205-59 Casements.

These standards allow air infiltration of .75 cu. ft. per minute per linear ft. of perimeter at 25 miles per hour wind pressure for Double-Hung and .50 cu. ft. per minute per linear ft. of perimeter at 25 miles per hour wind pressure for Awning and Casements.

BILT-WELL units are all much more weathertight than the above standards require.

BILT-WELL Casements test @ .325 cu. ft. per minute per linear ft. of perimeter at 25 miles per hour wind pressure.

BILT-WELL Awnings test @ .379 cu. ft. per minute per linear ft. of perimeter at 25 miles per hour wind pressure.

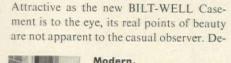
BILT-WELL Double-Hungs test @ .439 cu. ft. per minute per linear ft. of perimeter at 25 miles per hour wind pressure. Appraisers will recognize quality in \$ and \(\xi\$ allowances if they can be shown that quality windows will result in lower maintenance and operating costs.

On a twenty window house BILT-WELL window units can save up to \$45.00 operating cost per year in fuel; that's \$1,350.00 on a 30 year loan. BILT-WELL windows are much more efficient than average windows—using tests the same as those used by the American Society of Heating and Ventilating Engineers.

BILT-WELL units all come from the factory with the American Wood Window Institute and National Woodwork Manufacturers Association Seals of Approval rolled in the head jamb—permanent assurance that the units meet FHA Minimum Property Standards.

Aside from \$ and \(\epsilon \) savings, BILT-WELL window units have patented engineering and design features to assure outstanding appearance and unrivalled ease of operation with complete simplicity of installation.

BILT-WELL Casements



signed into the BILT-WELL Casement are values that add real beauty to any home.



Uncluttered Design

Hinges, fastened to the frame, head jamb and sill, are com pletely concealed. No exposed hardware to rust, corrode or mar the clean, simple-lines of the window, inside or out.



Superior Craftsmanship

All four vital points of the frame are securely fastened together by dovetailed joints to provide maximum strength and rigidity.



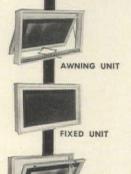
Fuel-saving Double Weatherstripping

Two complete, independent systems of weatherstripping—one near the outside on the sash, the other near the inside on the frame—give the BILT-WELL Casement unexcelled weather-tightness.*



Unitized Construction

Patented unitized frame construction eliminates the need for installing long, cumbersome sills. Each unit has its own sill and comes complete, with all interior stops and extension jambs ap-



BILT-WELL Awning Windows

BILT-WELL Awning Windows are engineered and constructed to protect the reputation of the builder using them. They are so designed that they can be used as awning, fixed or hopper units, singly or in a

variety of pleasing combinations. However you group them, the result is a window wall designed to provide full light and vision plus desired ventilation.



EASY TO CLEAN

Units swing out or in to preferred positions for full access to both sides of glass for easy cleaning.



OF OPERATING MECHANISMS

WIDEST CHOICE







Locking





WEATHERSTRIPPING

Anodized aluminum weatherstripping is rolled in top and bottom of sash and rolled in the sides of the frame of every BILT-WELL Awning Unit. This results in a com-pletely weathertight seal on all four sides to prevent moisture and air infiltration

BILT-WELL Super 7 Removable Window

Fully removable, perfectly counterbalanced, completely weathertight, the BILT-WELL Super 7 is accepted by leading builders as the finest double-hung window on the market.

Constructed with the patented BILT- all conditions.*

WELL jamb liner that expands and contracts with temperature and humidity changes, the BILT-WELL Super 7 maintains its complete weathertightness under



BILT WELL

BILT-WELL Woodwork

BILT-WELL Products are used by such leading builders as LEVITT, BROCKBANK, GERHOLZ and many others.

*Write BILT-WELL for complete project report No. 5820-6 covering THE BILT-WELL LINE: WINDOW UNITS, Double-Hung, Awnfuel-saying tests on windows.

ing, Casement, Basement, Storm and Screen. CABINETS, Kitchen, Multiple-Use, Wardrobe, Storage and Vanity-Lava-tory. DOORS, Exterior, Interior, Screen and Combination.

Manufactured since 1866 by CARADCO, Inc. Dubuque, lowa

A QUALITY PRODUCT FOR TODAY'S QUALITY HOUSE



The new McQuay Package Chimney is the finest. It tests better because it is built better—by McQuay, with more than a third of a century of heating experience—and is easier and faster to install. Compare McQuay quality, compare erection time and costs, compare McQuay advantages. Then you'll see why the new McQuay Package Chimney excels in every way. See your jobber or write McQuay, Inc., 1629 Broadway Street N. E., Minneapolis 13, Minnesota.



Starter Box and Starter Section in one unit for fast erection. Interliner and stainless steel flue supported by exclusive McQuay stainless steel and aluminized steel tension spring spacers. Permits quick drafts and even temperature top to bottom for peak efficiency under steady or intermittent firing.

Check these features against those of any other chimney!

- Stainless steel flue Handles all fuels Light weight Strong and durable Long life Baked on finish Quick installation
- Low installation costs
 Competitively priced
 - Safe U.L. approved



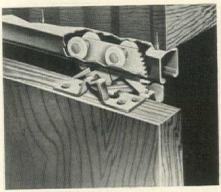
Miguay INC.



AIR CONDITIONING . HEATING . REFRIGERATION

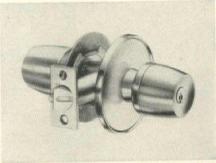
New products

start on p 276



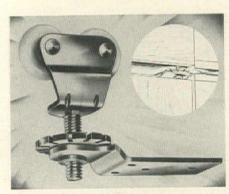
New Kennatrack hanger will support doors to 100 lb but can be adjusted with finger tip pressure or released with a flick of a screw drive. To mount, the hanger plate slips on the hanger, locks in place automatically. Hangers are double-tandem style with nylon wheels and self-lubricating axles. New hangers are available in series 900FA and 350FA for pocket doors, in Series 600FA for by-passing doors.

Kennatrack, Elkhart, Ind. For details, check No. 39 on coupon, p 418



Sargent Magnalock heavy-duty bored lock and latchsets are completely reversible, come in 234" and 5" backsets. Selfadjusting faceplate fits flat or beveled doors. Working parts are brass, bronze, or stainless steel with nylon latchbolt inserts, retractor hub bearings, locking button sleeves, bearing seals. Roses have thread lock device to prevent loosening. Available in 16 styles and six finishes.

Sargent & Co, New Haven, Conn. For details, check No. 40 on coupon, p 418



New Sterling hanger for use on pocket doors has a Micro-Disc adjustment to allow easy plumbing of door. Disc is simply turned with screwdriver to raise or lower door. A Micro-Cam adjuster does the same job on new Sterling bypassing door hangers. A screwdriver-turned cam on the hanger raises or lowers the door.

John Sterling Corp, Richmond, Ill. For details, check No. 41 on coupon, p 418

continued on p 324

BEFORE YOU BUY AND INSTALL AN AIR CONDITIONING SYSTEM

use this practical guide to Quality!

Make
sure
the Air
Conditioning
systems
you install
include
these
Quality and
Performance
features



By installing the Rheemaire condensing unit containing all mechanical parts, outside—operating noise is eliminated. Cooling coils fit compactly on top of furnace. The Rheemaire takes no usable space.



TESTED UNDER ACTUAL OPERATING CONDITIONS

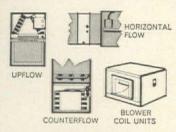
To assure trouble free operation, every Rheemaire unit is given an operating test to assure dependable performance according to rigid specifications. Such important factors as blower speed, compressor operating pressures and power consumption are all recorded.

CERTIFIED TO COMPLY WITH ARI STANDARD 210



CERTIFICATION AP-PLIES ONLY WHEN USED WITH PROPER COMPONENTS AS DESIGNATED BY MANUFACTURER.

To provide the highest possible standards in quality and performance, Rheem is an active participant in the air conditioning certification program administered by the Air Conditioning and Refrigeration Institute. Every Rheemaire unit carries a 5 year warranty.



ADAPTABILITY TO ANY TYPE INSTALLATION

RESIDENTIAL. Rheemaire can be installed anywhere with any type heating system. There are 8 Rheemaire models from 22,000 B.T.U. to 75,000 B.T.U. capacity.

COMMERCIAL. The quiet, efficient Rheemaire air handlers, available in both horizontal and vertical models, offer many versatile commercial applications.





The patented, exclusive Rheemaire condenser provides the operating economy that saves homeowners and store owners up to 40% in operating costs each month. Compare this with the operating costs of other units and you'll buy and install Rheemaire.

QUALITY IS GOOD BUSINESS

Satisfied homeowners mean an end to profit killing call backs and replacement. Quality materials and skilled workmanship mean an end to costly adjustments and repairs. Rheem is known the world over for the performance and quality leadership that assures satisfaction. That's why more and more Rheemaire air conditioning systems are being installed every day by quality conscious builders.





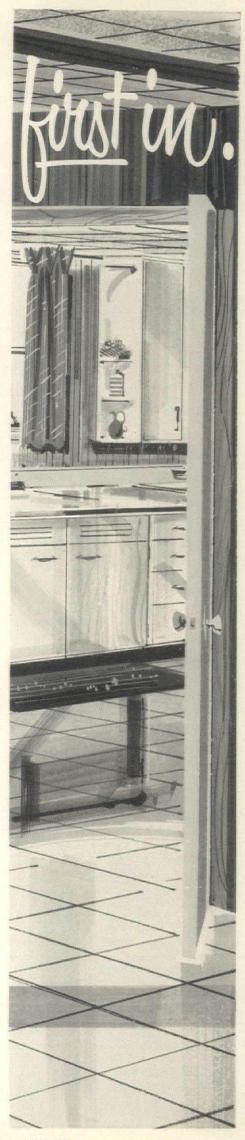
RHEEM AUTO-BALANCE SYSTEM!

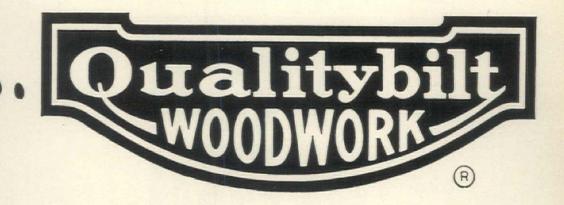
Now it's easy and inexpensive to provide zoned comfort in any style home. Ask your Rheem Heating & Air Conditioning Contractor for a demonstration of this exclusive Rheem development in home comfort.

You can rely on Rheem...the BIG NAME in comfort products for the home

RHEEM MANUFACTURING CO., HOME PRODUCTS DIVISION, DEPT. NA. 7600 S. KEDZIE, CHICAGO, ILL., SOUTH GATE, CALIF., DALLAS, TEXAS, SPARROWS POINT, MD.

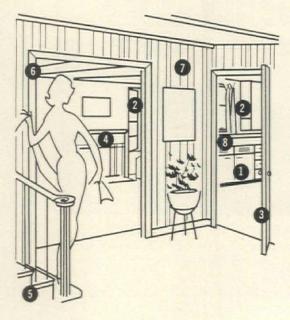






Looking for a sure way to add enduring *quality* to the homes you build? We invite you to investigate the products carrying the well-known "Qualitybilt" trade mark . . . symbol of quality since 1875! Qualitybilt building products cost no more (often times less) to install . . . and in the long run are more economical, for year after year they prove their superiority of craftsmanship and materials by retaining their distinctive "quality" look!

So if your reputation as a "builder of quality homes" is important to you . . . if you want your customers to stay happy for years to come . . . then make sure you specify Qualitybilt products!



- 1 Luxurious Birch Qualitybilt Kitchens are the ultimate in practical beauty and convenience!
- The complete Qualitybilt Window line is the finest available . . . highest quality at a reasonable price!
- 3 Smart, warp-resistant interior and exterior doors . . . flush, panel, and louver construction!
- A trim, eye-catching mantel adds charm and elegance to any fireplace!
- Precision machined, easily assembled stair parts give a really luxurious touch to any quality home!
- 6 Fine Qualitybilt interior trim, uniformly machined to templates, can be accurately mitered and applied!
- 7 Try Qualitybilt Parana wood paneling for that "something extra" touch!
- 8 Every quality home should include FARLITE . . . the very best in high-pressure laminated plastics.

OTHER FINE QUALITYBILT PRODUCTS INCLUDE — NEW 4-Way Windows • Casements • Picture Window Units • Glider Windows • Entrances Frames • Blinds • Folding Doors • Combination Screens and Storm Sash Garage Doors • Mouldings • Louvers • Cabinet Work • Disappearing Stairs

Write for illustrated folders and name of your nearby Qualitybilt distributor!

Since 1875 . . . the finest in Builders Millwork

FARLEY & LOETSCHER MFG. CO.

DUBUQUE, IOWA

New products

start on p 276

Add Beauty INSIDE and OUTSIDE





REUTEN TRU-BOW or TRU-WALL windows add dramatic, graceful exterior lines to any house. They permit unlimited expression of interior decorating ability.

Designs range from extreme fine-lined "Colonial" to the massive ruggedness of "Modern." REUTEN windows are available in over sixty combinations of styles, pane shapes, and vent positions. Some are designed for insulated glass.

Construction details include weathertight, smooth-fitted, "dovetail" joints... WOODLIFE treatment to resist age and insects... interior screens and storm panels on vents... custom quality at assembly line costs.

Additional information in Sweet's Architectural File 17c/Re, Sweet's Light Construction File 6c/Re or write:



TRU-BOW

TRU-WALL

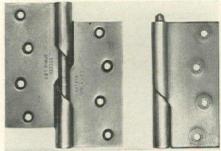
FRED REUTEN INC.



Interchangeable panels on new Morgan M-400 entrance doors let you give buyers a "custom" door. Stock three-panel door is 1¾" thick, 32" or 36" wide, 80" or 84" high. Twelve insert panels can be combined in wide variety of designs. Doors are No. 1 ponderosa pine, water-repellant preservative treated. Price: about \$43.

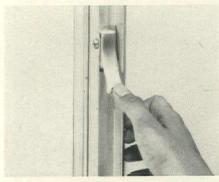
Morgan Co, Oshkosh, Wis.

For details, check No. 42 on coupon, p 418



Spiral lift hinges raise door over rug when opening, lower door to sill in closing, act as lightweight door closer. Hinges are fitted to door just like standard butts, but top of door must be beveled ¼" to allow clearance. Non-removable pin makes the hinge vandal-proof when closed, but door lifts off easily when opened 80°. Price of 3½" hinge, \$1.50 per pair.

Beckhart Hinge, El Monte, Calif. For details, check No. 43 on coupon, p 418



New Rusco window has a spring-tension lock that opens at a finger touch, locks automatically. Series 95 sliding unit rides on a self-lubricating plastic track. Unit can be installed from inside house. Glass panels and screens remove and lock from the inside. 26 standard sizes, 13 colors. Ventable and insulating panels optional. Price: \$16-\$18 for a 3'x3'.

F. C. Russell, Columbiana, Ohio.

For details, check No. 44 on coupon, p 418

continued on p 330



We switched to Wood Windows in our homes in Country Club Hills because we consider them more substantial and more adaptable to our type of architecture. Our customers prefer them, however, because they eliminate frame condensation and they have a general weather-tightness. Furthermore, there is also considerable saving on storm sash installations for Ponderosa Pine window units as against competing materials."

Thank you, Mr. Merrion. As one of the country's leading builders of entire communities-Merrionette Village, Beverly View, Hometown, Marynook, Merrion Square and Lawler Park-Joseph Merrion is well aware of the importance of Ponderosa Pine windows and woodwork in the homes he builds. Your customers, too, will welcome the wonderful livability of Wood Windows.

Because Wood is So Good to Live With

BEST BUILDER'S 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

onderosa Pine woodwork

An Association of Western Pine Producers and Woodwork Manufacturers

MEMBERS-Woodwork Group

MEMBERS—Woodwork Group
Andersen Corporation
Anson & Gilkey Co.
Bitbest Corporation
Caradco, Incorporated
Continental Screen Co.
Curtis Companies, Inc.
Farley & Loetscher Mfg. Co.
Grinnell Sash & Door Co.
Hurd Millwork Corp.
Huttig Mfg. Co.
(Jeas Co. (Wm. Cameron & Co.)
International Paper Co.
—Long Bell Division
Malta Manufacturing Co.
Missoula White Pine Sash Co.
Morgan Company
Philadelphia Screen Mfg. Co.

Rock Island Millwork Co. Semling-Menke Co. Wabash Screen Door Co. Western Pine Mfg. Co. White Pine Sash Co.

MEMBERS-Lumber Group

MEMBERS—Lumber Group
Alexander-Stewart Lumber Co.
The Anaconda Company
Associated Lumber & Box Co.
Blagen Lumber Co.
Blagen Lumber Co.
Blagen Lumber Co.
Cal-ida Lumber Co.
Collins Pine Co.
Crane Mills
Diamond Gardner Corp.
Georgia-Pacific Corporation

Gilchrist Timber Co.
Edward Hines Lumber Company
Industrial Wholesale Lbr. Co.
Kaibab Lumber Co.
Long Lake Lumber Co.
Michigan California Lbr. Co.
J. Neils Lumber Co.
Oregon Lumber Co.
Oregon Lumber Co.
Pickering Lumber Co.
Setzer Forest Products
—Div. of Glenco Forest Products
Raiph L. Smith Lumber Co.
Southwest Lumber Mills, Inc.
Tahoe Forest Products Co.
Tarter, Webster & Johnson, Inc.
Tite Knot Pine Mills

39 South La Salle Street Chicago 3, Illinois

U, S. Plywood Corp.
—California Division
Warm Springs Lumber Company
Western Pine Association
Weyerhaeuser Sales Co.
Winton Lumber Co.

ASSOCIATE MEMBERS

ASSOCIATE MEMBERS
All Metal Weatherstrip Co.
Casement Hardware Co.
Chapman Chemical Co.
W. J. Dennis & Co.
Dorris Lumber & Moulding Co.
Monarch Metal Weatherstrip Corp.
Protection Products Mfg. Co.
Unique Balance Co.
Wood-Treating Chemicals Co.
Zegers, Inc.

Stops WIND! Stops WATER!



The Great New THERMALUME Rolling Glass Door Has Exclusive POSITIVE CONTACT Weatherseal

| FIXED-SLIDER THERMALUME IS MADE IN 2, 3, AND 4 PANEL SERIES | HEIGHTS AND WIDTHS |
|---|--|
| 2 PANELS O X OR X O | Standard heights of 6'9" and 7'11". Widths of 6', 8', 10' and 12'. |
| 3 PANELS O X O | Standard heights of 6'9" and 7'11". Widths of 9', 12', 15' and 18'. |
| 4 PANELS | Standard heights of 6'9" and 7'11". Widths of 12', 16', 20' and 24'. |

ALL THERMALUME UNITS SHIPPED KD

THERMALUME gives you your choice-SINGLE or DUAL Glazing!

Versatile THERMALUME can be glazed with 7/32" heavy sheet, 1/4" polished plate or 5/8" insulated glass. (It may also be glazed with 3/16" crystal, but this is not in keeping with the high quality of ThermaLume.) Vinyl adapters do the trick - no multiple stock to maintain.

PLUS SUCH TOP QUALITY FEATURES AS:

Adjustable Rollers of nylon-tired stainless steel ball bearing type - all rollers

Deep Alumilited Finish in soft, silvery PermaSatin or award-winning amber Champagne finish.

12 Year Guarantee of mechanical perfection! Guarantee also applies to Vue-Lume De Ville (multi-slider for single glazing) and Vue-Lume Del Rio (multi-slider for 1 or 5/8" glazing).



FULL FREIGHT ALLOWED on 8 or More Units

SHOWER DOOR COMPANY OF AMERICA, Dept. HH-559 P. O. Box 4745, Atlanta 2, Georgia

For my files, send me complete specs and prices on THERMALUME Rolling Glass Doors.

Your Name Firm Name

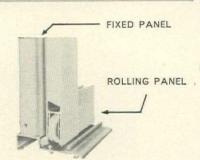
Address_

State City ☐ ARCHITECT ☐ BUILDER ☐ JOBBER

OTHER.

POSITIVE CONTACT AT THE TRACK

Continuous heavy Schlegel wool pile forms snug seal against wind and water. Pile is silicone-treated for endurance. Design of track creates gravity-barrier against penetration.



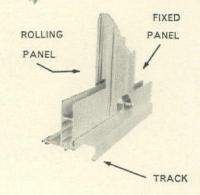
POSITIVE CONTACT AT THE CORNERS

Heavy Schlegel wool pile meets and overlaps at critical points such as upper corner (upper photo) and lower corner (lower photo). Pile is silicone-treated, aluminumbacked.



POSITIVE CONTACT AT THE INTERLOCK

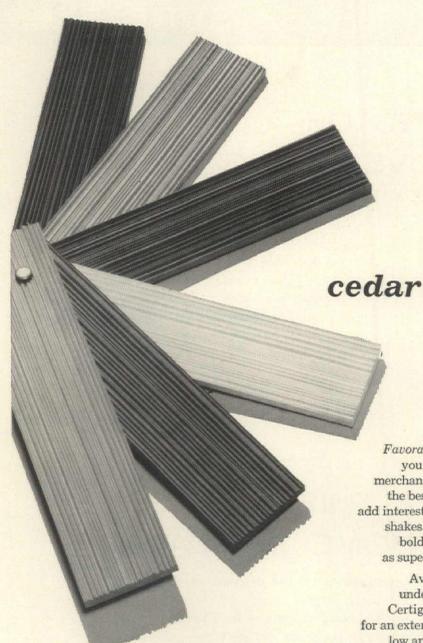
Slender but double-rigid interlock stiles double-lock against continuous vertical heavy pile. Note that fixed interlock forms all-points contact, including corners, with silicone-treated wool pile of moving interlock.





And the harder the wind, the tighter the seal!

THERMAL UME'S better design puts moving panel on outside of fixed panel. Any wind or force against moving panel forces it more snugly into its POSITIVE CONTACT Weatherseal!



cedar fans freshness into home design

Favorable first impressions are assured when you combine fresh design with quality merchandise. Certigroove cedar shakes give you the best of both. The deep-etched striations add interest to a wall and mask joints between shakes. Double-coursing with shakes creates bold shadow accents for home exteriors as well as superior insulation in all kinds of weather.

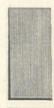
Available in a wide array of colors, applied under controlled factory conditions...

Certigroove cedar shakes answer your need for an exterior wall material with design versatility, low applied cost and enduring good taste.

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____

Firm

City___Zone__State__

YOU GET THESE SURE STEPS

1. THIS KIND OF ADVERTISING SUPPORT



(in magazines like House Beautiful Better Homes and Gardens)

When your model homes boast "bathrooms by Crane," there's a POWERFUL PRE-SELL working in your favor. Your visitors know Crane quality. From their favorite magazines, they know that Crane is preferred over any other plumbing brand—leading by 28% in the latest poll of preference.

Now, how to make the most of it . . .

2. THIS KIND OF MODEL HOME DISPLAYS

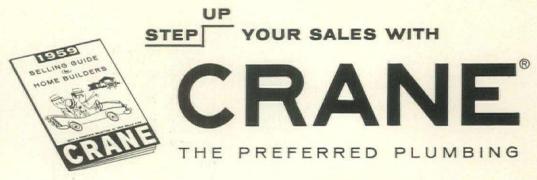
(ask your Crane Representative for proven sales aids)

Here is the way to capitalize on the known preference for Crane—and it costs you not a penny! The promotional materials you see here—guide arrows, site signs, window and product signs—they're all yours for the asking!

Call your Crane Plumbing and Heating Dealer or Crane Representative. Learn how effectively Crane helps you promote the sale of homes that start off with the big advantage of having Crane—the preferred plumbing.

THIS HANDY BOOKLET

tells how to advertise and promote your model homes . . . describes the many sales aids available from Crane. Ask for your copy—today!



CRANE CO., 836 SOUTH MICHIGAN AVENUE. CHICAGO 5, ILL. . VALVES . FITTINGS . PIPE . PLUMBING . HEATING . AIR CONDITIONING

TO SALES WITH CRANE



GUIDE ARROWS—colorful, imprinted. Use all around your model home.



SITE SIGNS—big 26" x 20" weatherproof signs with your name imprinted.



WINDOW SIGNS—bright colors attract attention, set stage for selling.



BATHROOM SIGNS—let people know that you use Crane—the preferred plumbing.



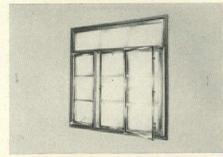
DIAL-ESE DISPLAY—tells "inside story" on high quality built into your home,



PLUMBING BROCHURE—colorful folder tells prospects why you chose Crane.

New products

start on p 276



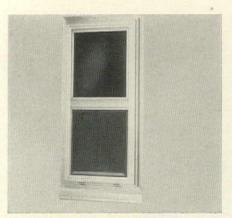
Stainless steel casements have a guaranteed weather-tight closure that eliminates drafts, saves fuel. The joint between the primary and storm windows are sealed with a neoprene gasket and vinyl weatherstrip is used between the glass and main frame. Sash corners are die cast; locks, screws, handles, hinges, and frames are all chrome nickel stainless steel. Price: \$26 for a 2323 window.

Challenger Products, Carnegie, Pa. For details, check No. 45 on coupon, p 418



Storm window splines of Bakelite polyethylene eliminate rattling, leakage, and condensation in new windows made by Permaseal, the maker claims. Self lubricating characteristics of polyethylene also let window slide up and down easily.

Permaseal Mfg, Middlesex, N.J. For details, check No. 46 on coupon, p 418



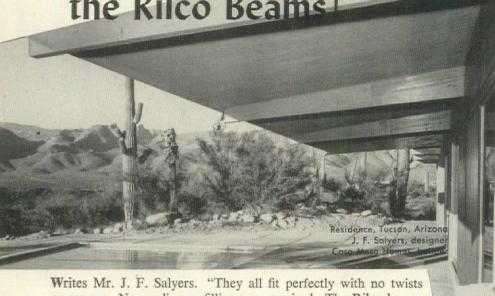
Storm and screen windows by Winter Seal are fully insulated with polyethylene between the inserts to cut metal-to-metal contact. Rigid nylon corners and handles are functional and attractive. All window frames are brazed at the corners for greater strength. All extrusions are made from virgin billets to eliminate surface blemishes.

Winter Seal Corp, Detroit.

For details, check No. 47 on coupon, p 418

continued on p 336

"I Can't Say Enough for the Rilco Beams!"



Writes Mr. J. F. Salyers. "They all fit perfectly with no twists or crowns. No sanding or filling was required. The Rilco beams have all the advantages, plus strength, of wood and none of the disadvantages. The finished appearance is so much better that there is just no comparison.

"We have had plenty of comments about these beams and they are mostly the same: 'They are beautiful.' 'Can you work them in our plan?' "

Striking Rilco laminated members blend well with any architectural style — allow wide latitude of expression with complete design freedom. And Rilco members retain their beauty, require little if any maintenance, increase their warmth with age — resist warping, splitting, cracking.

Laminated members are available in sizes difficult or impossible to obtain in solid construction. And now Rilco stocks standard-size flat beams, assuring prompt delivery with the low price of volume production.

Rilco members and Rilco Deck may be able to help you solve a design problem. For complete information contact your nearest Rilco office.



Rilco laminated wood beams from 30 ft. to 42 ft. long were used. "They all worked PERFECTLY" said the builder.



RILCO LAMINATED PRODUCTS, INC.

W 843 First National Bank Building Saint Paul 1, Minnesota

District offices: Newark, N. J. . Fort Wayne, Ind. . Tacoma, Wash.

FOR \$10,000 HOMES



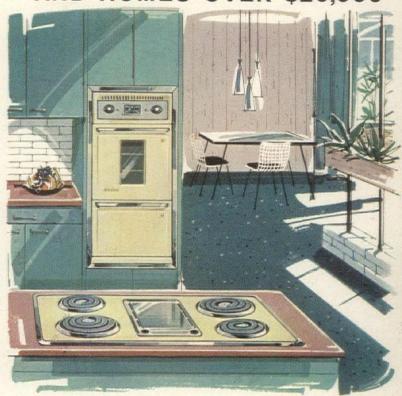
\$14,000 HOMES



\$18,000 HOMES



AND HOMES OVER \$20,000



suburban Built-in Ranges

GAS OR ELECTRIC-BEST VALUE AT EVERY PRICE LEVEL

Regardless of the price homes you build, you can include the sales power of Suburban and offer prospects all 36 of the features most women want in a built-in range. Here's real quality at a price you can't beat! Plus-models available in both gas and electric to fit same size cabinet opening-interchangeable.

Get your value-packed price from your local distributor. Send coupon today!

| Free (| Colo | er Lite | eratu | ral |
|--------|------|---------|-------|-----|

Samuel Stamping and Enameling Company Dept. HH-59 — Chattanooga, Tennessee

Send me complete information on Suburban Built-in Ranges Gas Electric



USEFUL THINGS FOR BUILDERS

Use above, on, or below grade: metallic and translucent effects – Armstrong Sheet Vinyl Corlon

No demonstrating is needed to take full advantage of the sales appeal of Armstrong Vinyl Corlon. Its decorative smartness will build hard-selling beauty into any room. Corlon comes in many designs. One of them—"Futuresq"—has gleaming metallic chips. Another—"Decoresq"—provides a decorative striped effect like tile, yet still gives prospects the easy care of seamless sheet floors. The new Tessera Series in Armstrong Corlon is probably today's most exciting floor. With colored vinyl chips set in translucent vinyl, it has a fascinating three-dimensional effect. And Tessera's embossed surface is unique in vinyl flooring.

Monthly ads for Corlon in top magazines have convinced people of its high style and practicality. Mentioning your Armstrong Corlon floors to prospects—or displaying signs identifying your floors as Armstrong—ties your homes in profitably with the best known name in floors.

Corlon is the only sheet flooring recommended for use on and below grade. The exclusive, alkali-resistant Armstrong Hydrocord Back on many Corlon styles permits this. Here's the data on Corlon:

Recommended uses: Corlon with Hydrocord Back: above, below, on grade; with Armofelt Back: above grade; approximate price per sq. ft. installed: 55–60¢ (Tessera and Futuresq Corlon cost 80–90¢); sizes: 6' wide rolls, up to 90' long; available in: 6 patterns, over 40 colors.

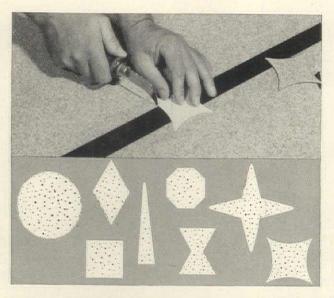


For samples and complete specs, ask the Architectural-Builder Consultant in your Armstrong District Office. Since Armstrong makes all types of resilient floors, he plays no favorites and can give you unbiased advice. He can also set you up with decorating, merchandising, and sales training helps. Or write to Armstrong Cork Company, 306 Sixth Street, Lancaster, Penna.

This family-room-kitchen recently proved to be a strong influence in making people dissatisfied with their present homes. It was seen by millions of families in full-color Armstrong ads in leading magazines. Beyond their effect in creating interest in Vinyl Floors, ads like these, month after month, are helpful to home builders because they get families to think about buying new homes. The floor is Armstrong Terrazzo Corlon 6508 with a custom effect at the edge of the kitchen step created with Armstrong Decorator Inlays which flooring contractors can duplicate inexpensively. (See opposite page.)



TO KNOW ABOUT VINYL FLOORS



NEW FLOORING INLAYS WILL GIVE HOMES CUSTOM DESIGN APPEAL AT LOW COST

These modular inlays and feature strips come in six different colors, are made of vinyl, and can be easily and inexpensively installed with floors of Armstrong Corlon. (Top picture shows you how simple it is for a mechanic to install Armstrong Decorator Inlays.) In tract homes, different designs made with the inlays give individual homes a custom-built look. Your Armstrong Architectural-Builder Consultant or flooring contractor can suggest a number of good ways to use them.





RECOMMENDED BY NAHB: HOME BUILDERS' MANUAL AND A NON-COMMERCIAL SALES TRAINING FILM

These two award-winning aids have been used by many builders in merchandising and selling new homes. The National Association of Home Builders recommends that builders use both of them. The book "How to Sell Homes Faster with Armstrong Floors" provides flooring facts and shows how to make Armstrong floors and the prestige of the Armstrong name work hard for you. In the film, "Chumbley Chipwhistle" entertainingly explains methods for closing sales by matching sales pitches to prospects' special wants and desires. You or your flooring contractor can get both, at no cost, through your Armstrong District Office.





FEATURING ARMSTRONG CORLON ENABLES PHILADELPHIA BUILDER TO MAKE HOMES MORE ATTRACTIVE TO PROSPECTS

English Village is the Laver Brothers Construction Corporation's new 150-home community near Philadelphia. In the \$16,000 and \$17,000 split-levels, asphalt tile is the standard builder offering for kitchens and grade-level recreation rooms. However, Armstrong Sheet Vinyl Corlon was featured in these rooms in the model home. The pictures show the Futuresq pattern in the kitchen and Decoresq with the alkali-

resistant Hydrocord Back in the recreation room. Most buyers have been glad to pay extra for this superior flooring—helping make sure they'd get superior value from their new homes. To have sheet flooring on grade-level concrete was especially pleasing to many. Close cooperation between the builder, the flooring contractor and the Armstrong Architectural-Builder Consultant helped make this quality trade-up possible.



AMERICA'S Tinest WINDOW

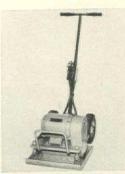
New products

start on p 276



Winkie core drill weighs 45 lb, is 19" high, 21" wide. A 2-cycle 5½-hp gasoline engine provides bit speeds of 2000 rpm. In shallow drilling the unit can recover 8" cores, can recover 15/16" cores down to 200'. Standard core lengths run to 18". Winkie can also drill holes in masonry. Price: \$900.

Bucyrus-Erie, Richmond, Ind. For details, check No. 48 on coupon, p 418



Maginniss compactor may be electric powered to give quieter operation in built-up neighborhoods. Motor is 3 hp, 110/220/440-v, 60 cycle, can give a vibration frequency of 6500 vpm and a compacting force of 4000 lb. Compacting plate is 12"x18". Two dolly wheels allow unit to be moved easily. Price: \$550-\$650.

Maginniss Power Tool, Mansfield, Ohio. For details, check No. 49 on coupon, p 418



Pop-up rivets fasten lightweight metals, plastics, or sheet materials in gutter systems, wall panels, ductwork, etc, in blind or limited access spots. The rivet is a heavy hollow shank which is expanded by a mandrel when it is pulled into or through it, making either a solid seal or a through hole. Rivets cost about 1¢ a piece but installation is very fast and labor savings high.

United Shoe Machinery, Boston.
For details, check No. 50 on coupon, p 418

continued on p 342



For the most beautiful kitchen of them all...

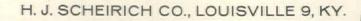
BRONZEGLOW, BIRCH



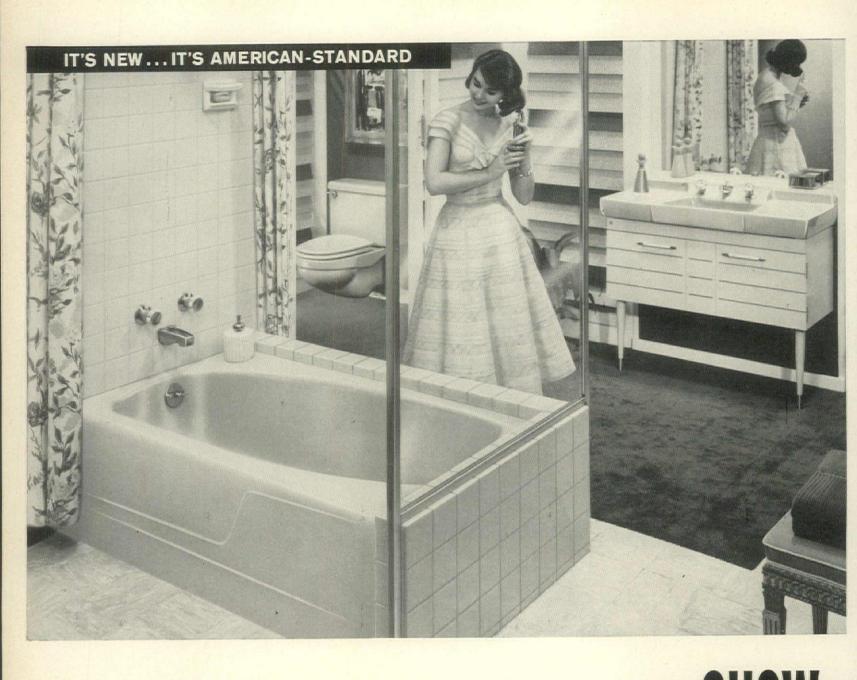
Construction and finish of exceptional quality
Hollow core doors; nylon roller drawer guides
Stocked by 55 distributors east of the Rockies
See telephone book Yellow Pages, or write us



... and beautiful bathrooms, too!







For faster new home sales, SHOW



Add the custom look of quality with this new cabinet-lavatory—the Gracelyn. The bowl and counters are a single piece of smooth, non-staining china in choice of eight colors and white. Plenty of storage space in the wooden cabinet below. Three lengths, two heights, adjustable leveling tips on legs.



Add modern convenience with this new wall-hung toilet—the Norwall. Entirely off the floor, it makes cleaning of fixture and floor simple. Seat and cover snap off for easy cleaning, too. Vitreous china in eight colors and white.





Solid, builder-tested help for the asking. 40 builder representatives and advertising specialists are ready to help you use the Blueprint for Sales Kit with practical ideas on publicity, promotion, advertising, display signs and grand openings; Color Consultant Service with the latest bathroom color schemes; On-Product Easel Cards, Stickers, and Gold Foil Labels, etc.

HOME BUYERS QUALITY AT FIRST GLANCE

Exciting American-Standard bathrooms mean quality, high style to home shoppers

Don't hide the additional dollars you put into a fine home. Prospects want to see for themselves where it's been spent. And bathrooms are one sure place where quality fixtures quickly pay off in traffic-stopping power.

The off-center design of the new American-Standard Contour bathtub lends the luxury look at a competitive price. It's practical and easy-to-clean, too. There's extra room where it's needed. There are two wide ledges—one perfect for toiletries, the other a comfortable seat. Your prospects will be delighted with the Contour. It has the

newest shape in bathtubs in twenty-five years. Made of cast iron with thick enamel coating in six colors and white.

The cabinet-lavatory and wall-hung toilet add additional luxury and value to any house at little extra cost. American-Standard fixtures like these stop prospects, make them talk about your bathrooms . . . buy your houses.

Ask your American-Standard representative for product details and prices (probably lower than you think) and valuable sales help, or write American-Standard, Plumbing and Heating Div., 40 W. 40 St., New York 18, N. Y.

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

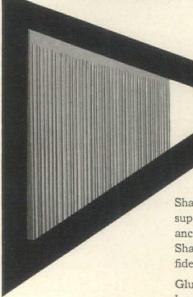




*



* a revolutionary new concept in shake finishes . . . factory applied to all **Shakertown** red cedar **GLUMAC** panels



Shakertown red cedar Shake panels now feature a superior new finish that provides even greater resistance to weathering. Available in twelve magnificent Shakolors, the new finish assures extended color fidelity and reduced maintenance.

Glumac panels are produced with a special backer board for maximum insulation. They have a lower applied cost than any other type of siding. Matching colored nails (supplied with each carton) and Jiffy corners guarantee additional building economies. For complete details, use the convenient coupon below.

from the laboratories of **Shakertown** a superior finish having greater life



Developed after years of laboratory research.



Scientifically applied for coverage and penetration.

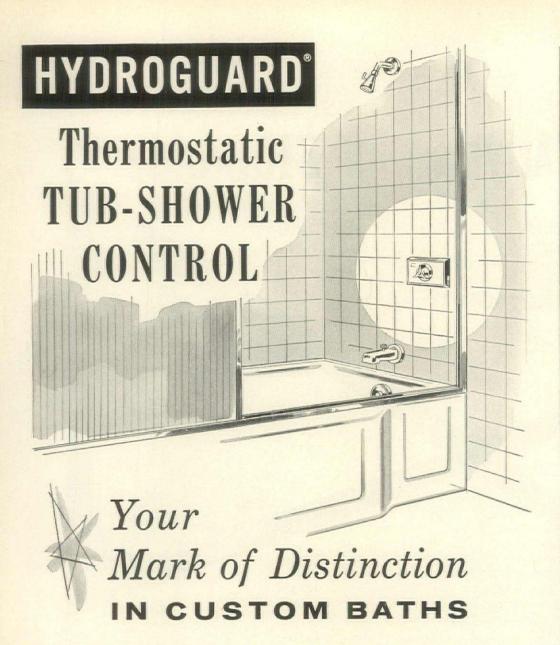


Field tested under all conditions in all climates.

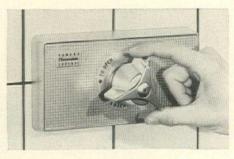


Shakertown

| Shakertown | Department HH59 20310 Kinsman Road Cleveland 22, Ohio | Please send me the Shakertown Color Ideabook. |
|---------------|---|--|
| COMPANYSTREET | | |
| CITY | ZONE | STATE |



A single, smartly styled control sets the Hydroguard tub-shower combination apart from all others. Conveniently located at the entrance side of the tub — and so simple to operate — Hydroguard is the symbol of bathing comfort. A twist of the dial brings the desired water temperature . . .



never too hot, because of the safety limit . . . always the same, because of the thermostatic control. The Hydroguard bath is completely independent of other running water, hot or cold. It never varies from the "just right", relaxing and safe temperature selected by the bather.

When that selective family asks about bath accessories, make sure you tell them about Hydroguard — the safest choice for custom style and comfort. Get complete details. Fill out and mail coupon.

POWERS

SPECIALISTS IN
THERMOSTATIC CONTROL
SINCE 1891

| The Powers Regulator Company Dept. 559, Skokie 20, Illinois |
|---|
| I would like specific information about the Hydroguard Thermostatic Tub-Shower Control. |
| Name |
| Title |
| Address |
| |

New products

start on p 276



Lull high-lift loader will hoist 4000 lb 30' in the air for work with multi-story construction. The unit can be fitted with material buckets, forklifts (above), workman platform, concrete hopper or bucket, etc. Power is a 68-hp, 216 cu in. gasoline engine; speed is 25 mph in sixth gear. Price: \$7847-\$8691.

Lull Engr Co, St Paul.

For details, check No. 51 on coupon, p 418



Everett trencher will attach to many makes of tractor, will dig a 24" trench 60" deep. Standard digging chain has eighteen 12" buckets. Frame has been strengthened at many points. New conveyor is positive acting, reversible, self cleaning, is curved to give higher spoil piles. Price: \$3300-\$4600.

Earth Equipment Corp, Los Angeles. For details, check No. 52 on coupon, p 418



Versa-Lift crane is specially designed for handling prefab components, is mounted on 1½-ton truck or on prefabber's trailer rig as shown here. Boom extends from 8' to 30', will lift 7000 lb at 8', 650 lb at 30', can swing full 360°. Hydraulic pump is driven through a power take-off. Remote controls are available.

Teale & Co, Omaha, Neb.

For details, check No. 53 on coupon, p 418

continued on p 348



AMERICAN Lustragray glass

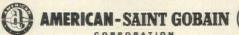
reduces glare and heat without sacrificing vision

Prospective buyers of new homes are quick to see and feel the two kinds of increased comfort produced by American Lustragray in windows and doors. (1) Greater eye comfort is seen by eliminating harsh contrasts in brightness levels. (2) Greater bodily comfort is felt by reducing solar heat. Lustragray's comfort-features plus distinctive appearance make homes more salable.

Consult your phone directory now for your nearest AMERICAN distributor or glazier. You'll find the price is right.

Made by the makers of America's best clear sheet glass

AMERICAN WINDOW GLASS DIVISION



General Offices: FARMERS BANK BUILDING . PITTSBURGH 22, PA.

AMERICAN-SAINT GOBAIN CORPORATION is a merger of the former American Window Glass Company, Pittsburgh, Pa., and the former Blue Ridge Glass Corporation, Kingsport, Tenn. (which was a wholly-owned subsidiary of Saint-Gobain of Paris, France). American Window Glass Division plants are located in Arnold, Jeannette, Ellwood City, Pa.; Okmulgee, Okla. Blue Ridge Glass Division plant is located in Kingsport, Tenn.



Pictured above is a display that has attracted widespread attention wherever it has been exhibited. Both houses, concrete slabs and tanks are identically constructed. The tanks are filled with sand, to represent soil, and water is added. On top of the soil is placed a vapor seal . "PM" under the house on the left and a plastic film under the house on the right. Heat is applied to the tank to accen-

tuate the creation of vapor and the results are very apparent. Notice that the house protected by "PM" (left) is completely dry while the house on the right has become a virtual steam bath. The results are even more amazing when you consider the fact that the plastic film under the house on the right is a monolith without the seams, openings and ruptures that would be present in full-scale construction.

a virtual "steam bath"? ...not if it is protected by *PM!

Moisture migration into the structure from the site is an age old problem . . . a problem that is accentuated in today's modern buildings. Old buildings, constructed without benefit of new materials and better construction methods, permitted excessive moisture to escape. Today's tightly and expertly constructed buildings trap this moisture inside and the problems resulting from excessive moisture soon follow. Dampness, window condensation, paint failures, mildew, rust and rotting wood are all problems that can be eliminated if the structure is isolated from the site, the source of 80% of this moisture.

Fortunately, the building industry has recognized the need to install a vapor barrier . . . unfortunately, it has been guilty of the promiscuous use of permeable materials as vapor barriers. Plastic films and other similar materials would never be used to replace glass in windows because they would not eliminate weather penetration and would easily rupture. These same reasons disqualify these prod-

ucts as vapor barriers. Even more important, a vapor seal is installed permanently at the time of original construction . . . it cannot be replaced at a later date in case of a product failure.

A vapor seal must be impermeable; monolithic without voids, open or lapped seams and strong enough to provide a permanent installation without rupturing under installation foot traffic, trundling of wheelbarrows and pouring of aggregate. Only one product on the market meets all of these necessary qualifications-"Premoulded Membrane" Vapor Seal. To prove this, we sincerely advise and invite your comparison of *PM against all other so-called vapor barrier products on the market. What could be fairer? Also important is the fact that "PM" is actually the most economical vapor seal available when you consider the possible elimination of sand and gravel fill plus the reduced maintenance and redecorating costs realized through the *complete* elimination of moisture migration into the structure.

*PM is a recognized abbreviation for *Premoulded Membrane*, the industry's only TRUE vapor seal!

Write today for complete information . . . request your free copy of "Design Techniques"—a technical manual that provides Architects, Engineers and Builders factual proof of the effectiveness of using impermeable materials in eliminating moisture migration. For a complete set of structural recommendations on the applications and installation of "Premoulded Membrane" request a file of "PM" Tech-Tips.

OTHER SEATIGHT BUILDING PRODUCTS

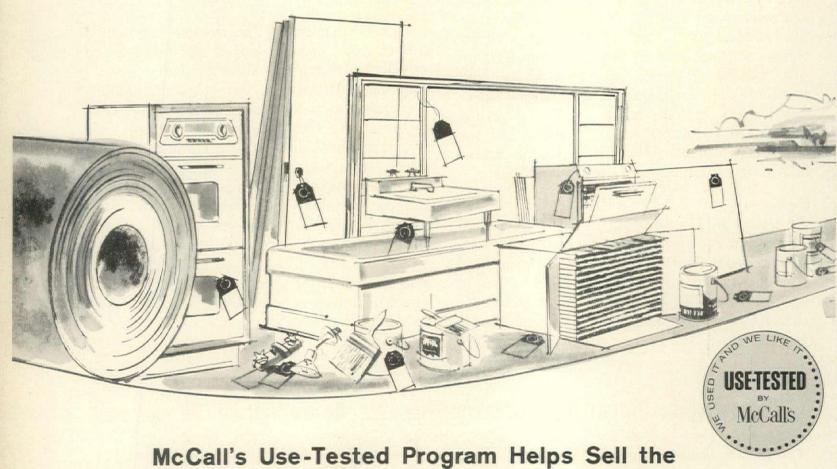
- "CORKTITE" Impermeable Perimeter
 Insulation
- "SEALTIGHT" Polyvinylchloride Waterstops
- "HYDROMAT" Asphalt Liners
- Joint Sealing Compounds
- Roof coatings and cement
- EXPANSION JOINTS of all types including asphalt, fibre, cork and sponge rubber.
- Plaster Board
- Sewer Joint Compounds
- Air Entraining Agents
- Concrete Curing Compounds

W. R. MEADOWS, INC.

10 KIMBALL STREET • ELGIN, ILLINOIS

NOW, FROM McCALL'S ...

Two quality programs to



McCall's Use-Tested Program Helps Sell the Building Materials, Home Furnishings and Equipment

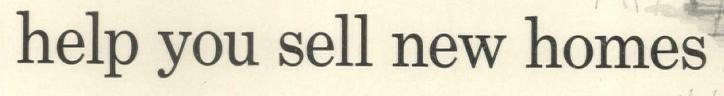
One of the greatest indicators of quality in a product is how it stands up under use. And that's just what McCall's editors and laboratory technicians find out about a product when it is submitted for Use-Testing.

McCall's Use-Tested Tag or Symbol on the materials, home furnishings and equipment in the houses you build signifies to the prospective buyer that the equipment in question has satisfactorily passed laboratory and home-use tests duplicating the actual wear and tear it will get in daily family use. And the fact that

its performance has been endorsed by the editors of McCall's carries great weight, particularly with the woman, who is such an important factor in family buying decisions.

Make sure that the materials, home furnishings and equipment you specify for your homes bear the McCall's Use-Tested symbol of satisfaction. For more information on the Use-Tested program, see your McCall's representative, or write: Dept. HP, McCall's, 230 Park Ave., New York 17, N. Y.

The magazine of Togetherness...circulation





Last year, 35 builders in 20 states built 4,452 individual houses which had earned Congress on Better Living Certification. Total value of these homes: \$66,000,000+.

Last month, builders entered 115 house plans for judging by McCall's Congress on Better Living Panel, consisting of some of the nation's top architects and representatives of women delegates to the Congress on Better Living. Of this total, 46 models satisfied the rigid requirements for certification.

Why this tremendous interest in Congress on Better Living Certification? Because Congress on Better Living Certification gives you, the builder, four distinct

local promotional advantages. It: 1) provides a sound, effective sales promotion and merchandising vehicle; 2) stimulates sales of your own well-designed and wellconstructed houses; 3) imparts the prestige, authority and selling force of McCall's and the Congress on Better Living to your new homes; 4) dramatizes your own efforts to provide your community with the better quality, better design and livability sought by today's home buyers.

For further information on how this stimulating new program can help you sell more homes, write Director, Home Certification Program, McCall's Congress on Better Living, 230 Park Ave., New York 17, N. Y.

now more than 5,300,000 McCall'S

No. 266—Double width size 16' x 7' with Glide-O-Matic SelfOpening, double adjustable brakes, prefitted, prebored door sections. Just one of the many sizes in the Deluxe No. 200 Series—for those who want the best.

BEAUTIFUL STYLES FOR EVERY PURSE



No. 426—Double width, size 16' x 7' with patented Safety Catch, prevents back-and-forth movements when opened. 17 other sizes and styles in the No. 400 Series — priced to sell competitively, but including many exclusive Frantz features.

SMOOTHEST TROUBLE FREE OPERATION

No. 1259—Single width, size 9' x 7'. Other sizes are also available to fit single and double width openings. Here is a low cost door that is a "miracle" of value and a miracle in operation. One of the most featureful in its price line ever designed.



EASIEST OF ALL TO INSTALL

FRANTZ GARAGE DOORS

with the features your customers want most!

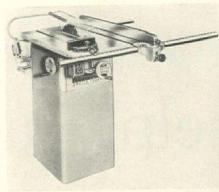
Over 100 designs and sizes in Frantz sectional and one-piece doors, extension spring and torsion spring types...for residential or industrial use... give you the widest selection possible. Open a Frantz Door and you will quickly see its amazingly easy operation. Anyone can install a Frantz Door, too. The instructions are so detailed, the steps so simple. And Lumber Dealers know the high quality of Frantz Construction—zinc-plated hardware, with wood sections styled by master craftmen that are unsurpassed for beauty and lasting satisfaction. National advertising is stepping up the demand for Frantz Doors. Why not get your order in now!

Get these new catalogues at your Lumber Dealer

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

New products

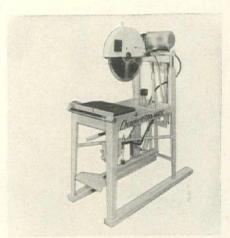
start on p 276



New 10" tilt-arbor saw by Boice-Crane has a full-floating motor drive. Belt tension is constant; vibration and belt wear are reduced to a minimum. An improved ripping gauge and positive clamping give precision cutting. Undercarriage and bearings have been beefed-up to take bigger shock loads and higher power. Price: \$170-\$200, less motor.

Boice-Crane Co, Toledo.

For details, check No. 54 on coupon, p 418



New masonry saw raises and lowers with hydraulic power to give easy precision cutting. The saw will take either 14" or 20" blades, is equipped with a 110/120-v selecter switch, a diamond lock for jam cutting, a 1½ or 2 hp air-cooled motor. Price: \$530 up.

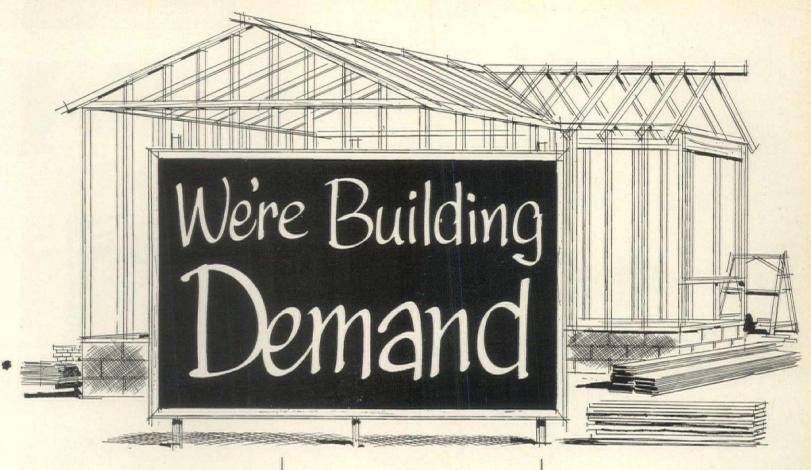
Champion Mfg Co, St Louis. For details, check No. 55 on coupon, p 418

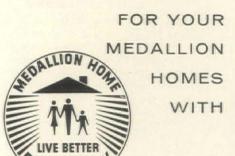


High-pressure air power is supplied by new Campbell-Hausfeld tank unit. Twocylinder compressor has a 2½" bore, 2" stroke, delivers over 4 cfm at 100 psi. Power is either 1-hp electric or 3-hp gasoline motor. 20-gal welded tank comes with 10" wheels or stationary mounts.

Campbell-Hausfeld, Harrison, Ohio. For details, check No. 56 on coupon, p 418

continued on p 350



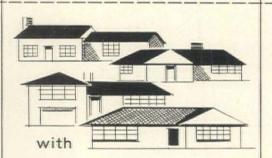








\$100,000 CONSUMER CONTEST



MEDALLION HOMES
AS PRIZES...



BUILDING DEMAND among millions of people for the all-electric living... Medallion Home Idea...

All backed by millions of manufacturer advertising and promotion dollars and your local electric utility who can help you get your share of this profitable market



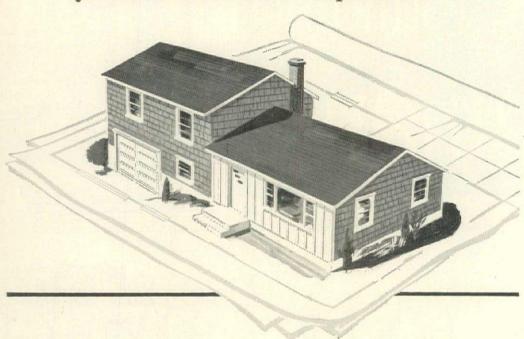
LIVE BETTER...

sponsored by Edison Electric Institute

(the association of investor-owned electric light and power companies)

Ford

Can Sell More Homes for YOU!
... because FORD builds
QUALITY in at the blue-print level!



With Ford QUALITY you can offer more house for the money... a house whose hidden values are as good as the surface values

Here's why . . .

Ford Homes are distinctively designed and precision engineered for maximum livability with minimum maintenance.

Ford builds with famous brand name materials, equipment and components throughout: solid brass hardware, thermopane windows, top quality heating units and electrical fixtures for efficient, trouble-free operation . . . plus modern wiring and outlet installations designed for the appliances and services of today—and tomorrow.

Ford lays the finish flooring, too; applies the drywall, does the wiring, applies the trim . . . all in one package! What's more, Ford QUALITY Homes are ready for decorating 24 hours after delivery. That means lower on-site labor costs for you!

And no question of financing with Ford! Ford QUALITY materials and fixture specifications meet or exceed FHA, VA and conventional mortgage requirements, and are accepted by leading building code authorities.

That adds up, doesn't it?

Get your share of the QUALITY market with the complete Ford QUALITY package!

For full details, wire today on your own letterhead.

IVON R. Ford INC., MC DONOUGH, N. Y.

New products

start on p 276







New tools from B&D include router-plane kits in 1-hp and ¾-hp models (top) to handle any production woodworking. As a router they will bead, groove, rout, flute, cove-cut, or dovetail; as a plane they do mitre-work and angular planing as well as level planing. (Price: \$129.50 & \$146.40). New drills (center) are lower-cost but have ample power. New ½" Special Drill is \$49.95, ¼" drill is only \$16.95. New B&D dustless sander attaches to any vacuum cleaner. Orbital sander delivers 4,300 orbits per minute. Flexible hose 5′ long is standard. Price: \$45.95.

Black & Decker, Towson, Md. For details, check No. 57 for routers, No. 58 for drills, No. 59 for sanders on coupon. p 418

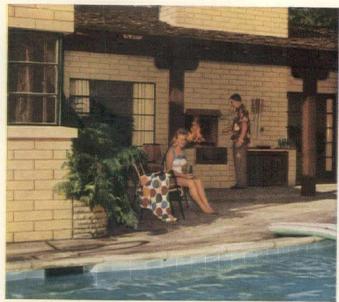


Skil Recipro saw works at two speeds to give faster cuts in metal, wood, plastics, fiberboard, etc. Model 700 serves as hacksaw, keyhole saw, or hand saw. Blade shoe moves to allow greater blade wear; off center blade allows cuts to corner. Unit delivers 3800 or 2500 strokes per minute. Stroke is 17/32". Price, complete with case and eight blades: \$99.50.

Skil Corp, Chicago.

For details, check No. 60 on coupon, p 418

continued on p 356



Smooth-surfaced block painted a modern pastel shade



Living concrete in integrally colored 4"-high split block



Fireplace of concrete slump block has raked joints for interest



Painted, textured units in running bond, a perfect patio background

Beautiful new forms of concrete masonry match America's mood for good design!

Never before has concrete masonry offered such broad home design opportunities or promised such certain client acceptance.

The effects possible with this material in the newest modern forms are almost endless. New colors and textures, new sizes and shapes create a new look in walls—both exterior and interior. There's effective contrast with wood, metal or glass.

Today's concrete masonry expresses warmth, interest...it's truly new-type living concrete! Growing in popularity all over the country, living concrete is

PORTLAND CEMENT ASSOCIATION

Dept. A5-94, 33 W. Grand Ave., Chicago 10, Illinois

A national organization to improve and extend the uses of concrete

proving itself ideal for homes of every architectural style, in every type of neighborhood.

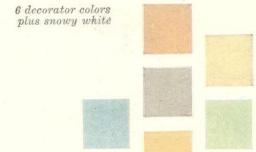
You'll find interesting the colorful booklet "Concrete Masonry Homes for Better Living." It's yours free for the asking. (U.S. and Canada only.)





Eljer presents the new EMBLEM... luxury in the medium price range

The stunning "clean line" look of the new Eljer *Emblem* tells you fast why it takes top honors for quality in its class. Designed by the staff of famed Dave Chapman, this luxurious siphon jet toilet features improved flushing action and greatly simplified installation. Two scientifically located bolt holes insure stability, square foot eases tile floor mounting. Has famous Eljer integral china overflow and ground-in valve seat. Note handsome, easy-to-clean, matching flat covers for bolts.





You're so right with ELJER

Another new Eljer design ... pretested to insure customer enthusiasm

There's no sale like a *sure* sale. That's why Eljer stole a march on the industry and is pretesting its new fixture designs before putting them on the market. With the help of a national research organization, new models are exposed to buyers, builders and plumbing contractors across the country. We are happy to report they are meeting with enthusiastic endorsement.

The new *Emblem*, shown on left page, is a typical salable combination of styling by the staff of designer Dave Chapman and manufacturing know-

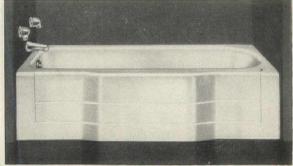
how by Eljer. It incorporates a whole list of new features with industry-accepted developments such as Eljer's integral china overflow and ground-in valve seats.

See these great new *pretested* Eljer fixtures without delay. Check your Eljer plumbing contractor today.



Three Gateway Center, Pittsburgh 22, Pa.





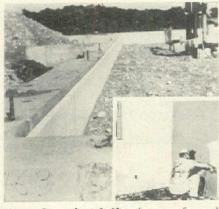
PERFECT COMPANION piece to the new *Emblem* is the *Riviera* enameled iron bath, outstanding in quality, moderate in price.

NEW BLAIR china lavatory also matches *Emblem* toilet. Available in 6 decorator colors, snowy white.



New products

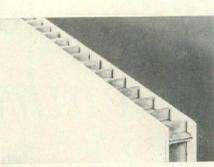
start on p 276



Honeyfoam insulation is a new foamed styrene claimed by its makers to have a lower K factor (.25 at 40F) and come in larger sizes than competing products. Standard scored planks are 2'x8', 1", 1½", and 2" thick. Honeyfoam is light (about 1 lb per cu ft), non-absorptive, moderately strong, and has exceptional bonding strength with plaster.

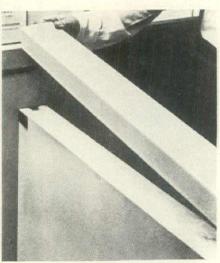
Servicised Products, Chicago.

For details, check No. 61 on coupon, p 418



Honeycomb panel combines plywood and corrugated fiberboard in a lightweight interior partition material. Claimed advantages include low initial cost, very high strength-weight ratio, good insulation properties.

International Paper, New York City. For details, check No. 62 on coupon, p 418



Foam-filled steel panels weigh only 61/2 lb per sq ft but have supported over 250 lb on an 8' span. Foam is Nopcofoam, a foamed-in-place polyurethane. Steel faces are riveted together before foaming, but foam's adhesion supplies rigidity. First panels are 3'x3' and 3'x5', are not loadbearing.

US Steel Homes, Harrisburg, Pa. For details, check No. 63 on coupon, p 418

continued on p 360

Gates System speeds pier-type residential forming



Abnormal soil conditions dictated that "caissons" or piers be used in place of ordinary footings on this Westminster, Colorado, residence. Square piers were first located as specified, then Gates Horizontal Rod Forming System was erected over soffiting placed between the piers. Because of Gates on-the-job versatility, the forms went up as easily as with footings and the small amount of bracing and walering shown was all that was necessary. No panel bracing or stiffeners are ever required with Gates thin-panel forming. The contractor reported results excellent...And, as with forming using conventional footings, total costs were kept low.

Information designed to help you form better at lower cost is available now. See the "yellow pages" for your local dealer, or write direct. No obligation, of course.

Gates & Sons, Inc.



CATALOG 80 S. Galapago, Denver 23, Colo.

Branches in Spokane, Rochester and Lethbridge



See why Flintkote says proudly...

Nobody makes more of the products that make a "quality house"!

GOOD NEWS!

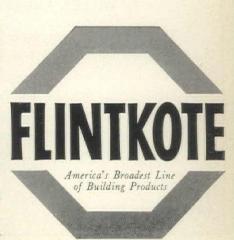
Big space color advertisements showing Flintkote's line of building products are now appearing in Life, Saturday Evening Post and Reader's Digest. Good news for you—whether you're a custom or development builder! This aggressive campaign will help you increase your new home sales—homes built with wonderful Flintkote building products.

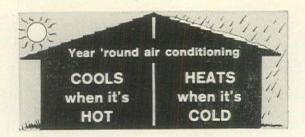
Flintkote building products give you an important plus that is the sign of a "quality house". All are made together to "go together". The result: a perfect blending of style, design and function that gives your new homes a custom look, makes them easier to sell.

The list of names in the Flintkote family of companies is a roll call of quality. There's Flintkote itself for roofing, siding and insulating materials; Tile-Tex for flooring; Atlas Adhesives, Kosmos Portland Cement; U. S. Miracle Lime Products; Insulrock Building Slabs; Van Packer Chimneys; Orangeburg Fibre and Plastic Pipe.

Add another mark of quality to your house by building with Flintkote. You'll like the results.

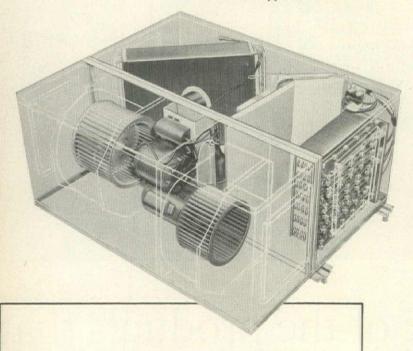
THE FLINTKOTE COMPANY, 30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.





Adaptomatic Heat Pump adds in quantity for \$1,000-\$2,000 more

3 HP Adaptomatic Heat Pump incorporates pressurized condenser air system that permits installation in any interior location in existing house plans. Measures only 44½"x 37½"x 21¾". Completely pre-wired for Heat-Elective supplement.



COLD CLIMATE—WARM CLIMATE— ADAPTOMATICS ARE BEING INSTALLED EVERYWHERE!

The Fedders Adaptomatic is equal to any climate challenge — and recent installations in model home developments prove it! New home buyers are now enjoying year 'round heating and cooling with the Adaptomatic in Chicago, Nashville, Atlanta, Las Vegas, Jacksonville and Lima, Ohio!

Nothing says quality in a home better... or sells homes faster... than year 'round air conditioning, heating and cooling, with a Fedders Adaptomatic Heat Pump Air Conditioner. Right now, this dramatic quality sales feature is sparking home sales in Chicago, Atlanta, Miami, Lima, Ohio — everywhere in the nation.

A Fedders 3 HP Adaptomatic is priced far below any combination of separate cooling and heating equipment available. In fact, it costs you little more than you're spending for heating alone. But it adds \$1000 to \$2000 to the market value of your homes . . . mostly extra builder profits!

Home buyers are happy to pay the extra price, because they find the year 'round comfort services of the Adaptomatic irresistible — air conditioning in summer and the world's cleanest, most modern automatic heating in winter.

Easy, Economical To Install. There's no need to alter blueprints or to make structural changes. The compact, all-in-one Adaptomatic Heat Pump is smaller and lighter, installs faster than flame-fuel heating plants, fits anywhere. It's factory assembled and tested, completely pre-wired when delivered to your building site. All accessories and controls are included.

New Heat-Elective Models, New Flexibility — The Adaptomatic is now offered with a Heat-Elective supplement for extremely cold weather. You choose the exact heating capacity needed, depending on climate, house size and heat loss. Thus you are assured of lowest demand rates

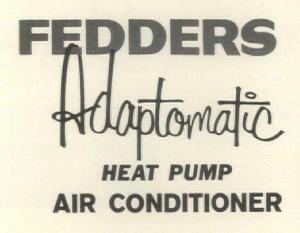
quality to homes, helps sell them

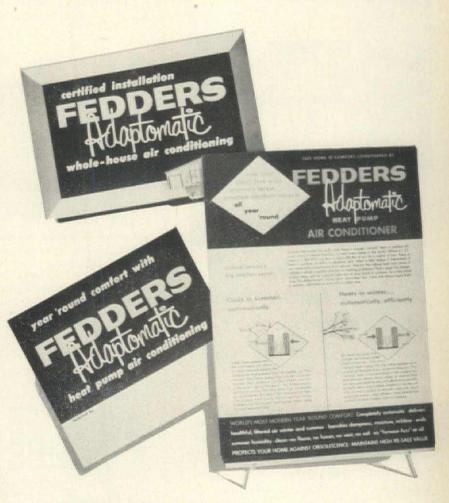
per house... most of it extra profit

from your local utility and keep electrical subcontracting costs to a minimum.

New Merchandising Help. Model home displays, advertising mats, consumer literature and other promotional materials are ready to help you capitalize on the Adaptomatic. In addition, local electric power companies and cooperatives all over the U.S., which have tested and recommended the Fedders Adaptomatic Heat Pump, stand ready to help you promote and merchandise as part of their "Live Better Electrically" Gold Medallion Home Program.

Special Plan For Development Builders. This unusual program lets you test the sales power of the Adaptomatic Heat Pump in model homes at extremely low cost. Call your wholesale distributor or mail the coupon direct to Fedders today.





TO HELP YOU SELL – merchandising materials like these model home display units and site signs are available to you. Also ad mats, consumer literature, point-of-sale materials.

| Fedders Corporation — Dept. HH-59 Maspeth 78, New York | |
|---|--|
| Gentlemen: Please send me, without obligation, complet tion on your Adaptomatic Heat Pump model home pla | |

| FLEASE PRIMI | | | | |
|--------------|-----------------|--|--|--|
| | NAME | | | |
| | STREET ADDRESS. | | | |
| | CITYSTATE | | | |

informa-

Puts the D sign on any home you build



Give Your Customers A Lifetime of Carefree Service At No Greater Cost!

When prospects come to inspect, lead the lady to the NEVAMAR CAREFREE KITCHEN and you're ready for signatures on the dotted line. There's simply no other kitchen like it! It tells a story of carefree living, lifetime beauty and freedom from eternal vigilance. Because NEVAMAR is the surface that defies stains, scars, scratches . . . never needs refinishing. In a choice of exciting patterns—and with every conceivable feature. Write today for complete information.



Every Unit Surfaced Inside and Out With NEVAMAR High-Pressure Laminates

NEVAMAR COREFREE KITCHENS

Div. of National Store Fixture Co., Inc. ODENTON, MARYLAND

New products

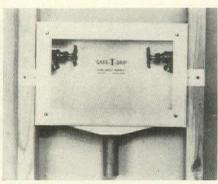
start on p 276



Carlon pipe fitting allows hot-lead joining of plastic and cast-iron sewer pipe. Fitting is solvent welded to plastic pipe. Bell end is packed with oakum and wrapped with asbestos rope before lead is poured around the metal pipe to form permanent connection.

Carlon Products, Aurora, Ohio.

For details, check No. 64 on coupon, p 418



Washing machine connector, called Safe-T-Drip, is a formed metal box for hot and cold water plumbing. One-piece drip pan catches any leaks or overflow, has soldered brass connection to carry excess to house drain system. Safe-T-Drip fits between studs, allows washer to be set closer to wall. List price: \$8.85. Acme Metal Products, Dallas.

For details, check No. 65 on coupon, p 418

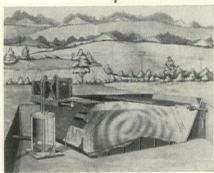


Residential flush-valve system makes tankless wall-hung closets practical for 3/4" piping. Air-loaded booster tank augments line supply to deliver two to six gallons per flush, refills in ten seconds. Flush valve has nylon diaphragm, may be electric or manually operated. Basic unit includes booster tank, flush valve, fittings, access panel, carrier, and wall-hung closet. List price: \$250. Haws-Kramer, San Francisco.

For details, check No. 66 on coupon, p 418

continued on p 364





Smith & Loveless "Oxigest"

. . FACTORY-BUILT QUALITY. ECONOMY AND DEPENDABILITY IN A SEWAGE TREATMENT PLANT

for schools, motels, factories and small sub-divisions

Smith & Loveless offer the low-cost "Oxigest" Sewage Treatment Plant that has been carefully engineered for dependable treatment without requiring a skilled operator. The "Oxigest" is built of the finest materials and will provide a permanent plant with minimum annual mainte-

This complete factory-built unit is available in 27 standard sizes to cover a wide range of applications. It is easily and quickly installed after delivery to the job site on special Smith & Loveless trucks.

By the Makers of America's Finest Factory-Built Sewage Lift Stations



FREE DATA MANUALS

Design notes, selection charts, dimension drawings, specifications and a list of representative installations for the "Oxigest" and lift stations.

NO OBLIGATION - WRITE DEPT. 70

Smith & Loveless. Inc. P. O. Box 8884 Kansas City 15, Missouri

Long-Bell Kitchen Cabinets are available in units to fit any kitchen (in 3" modules) . . . Ready to install or knocked down.

Natural Beauty

with Super Satin Surface Kitchen Cabinets



Long-Bell kitchens help enhance your reputation and your profits

This pleasant kitchen is your "working" salesman long after the sale is made.

The mellow color of natural wood Long-Bell Kitchen Cabinets stays fresh and pleasing for the life of the home. The hearty warmth of L-B rift grain fir and natural birch cabinets fits any decor . . . And, L-B cabinets can be finished and refinished for generations.

IMPORTANT NEWS! The new "Super Microseal" process is now applied to all Long-Bell Kitchen Cabinets (set up or knocked down). This revolutionary process saves you up to 75% of the complete finishing job. Low-cost, Super Satin Surface needs no additional sanding. Sealer coat is not needed on Super Microsealed Surfaces.

Attractive, custom-tailored Long-Bell doors and windows also add to the prestige of your home. You can increase profits even further by specifying L-B Flakewood® paneling . . . the easy-to-install third dimensional panel that slashes labor costs while enriching any room.

WRITE TODAY for free information on L-B Kitchen Cabinets, doors, windows and Flakewood® INTERNATIONAL PAPER COMPANY

Iong Bell

DIVISION

Longview, Washington

YORK HELPS CLAIR-MEL BUILDER SELL 600 NEW HOMES IN 6 MONTHS!



YORK'S Lift-for-Life Builder Kit plus YORK'S complete
line-up of Air Conditioners for Builder use provides
everything you need to up traffic...increase sales...multiply profits!

York's great new builder package includes all the ingredients of success. Builders who feature York in their model homes will be named in a hard-hitting, 2-page, 2-color advertisement in the June issue of House Beautiful.

They'll give their model homes the York Red Carpet treatment—dress them up with outdoor signs, indoor posters, a York "Kiddie Pen" and

other assorted sales clinchers! All this—to back up the most complete line of air conditioning and heating equipment ever available to builders from a single source: York Combination Heating and Cooling Systems...Room Air Conditioners with Reverse-Cycle Heat Pump optional..."Remote" Air Conditioners..."Packaged" Air Conditioners...plus an entirely new line of gas and oil-fired furnaces!

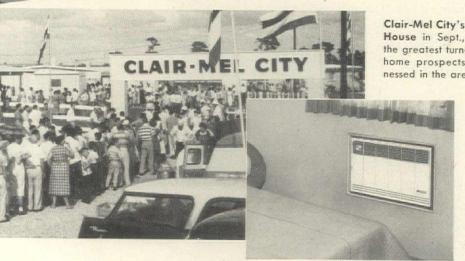
Phenomenal Sales Achieved by Merchandising Whole-House Air Conditioning with YORK Room Units installed thru-the-wall!

"I've been building for 20 years but never heard of a more spectacular success story than ours," says Mel Larsen, Clair-Mel City builder of Tampa, Florida. "When we first hit on the idea of installing York in our new homes at Clair-Mel, we expected sales would move right along, but we certainly didn't anticipate anything like this. During our first Open House week end, more than a third of the adult

population of Tampa came out to see our

models and over 7,000 cars were turned away because of the traffic jam. By the time the Open House was over, we had closed over 284 sales! And, since then our total sales have hit 600!

"The reason for our success is clear. We appealed to the mass market with low-cost, air conditioned homes which we could advertise and merchandise in every way. To me, there is no conceivable way to sell more homes, more quickly!"



Clair-Mel City's first Open House in Sept., 1958 saw the greatest turn-out of new home prospects ever witnessed in the area.

> Typical Clair-Mel installations have York Room Conditioners installed thru-thewall, so that window areas are unobstructed. Because the units are air-cooled, there are no expensive cooling towers or circulating pumps required.



VORK

YORK CORP. SUBSIDIARY OF BORG-WARNER CORP.

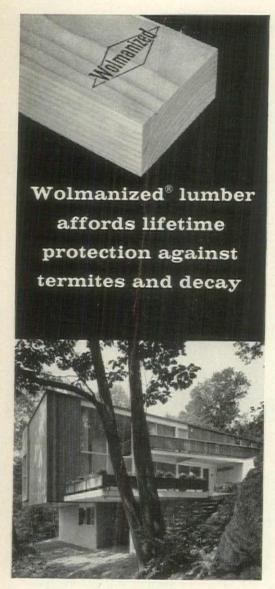


BORG-WARNER

RESEARCH & ENGINEERING

MAKE IT BETTER

Air Conditioning, Heating, Refrigeration and Ice Equipment . Products for Home, Commercial and Industrial Installations



Wolmanized® pressure-treated lumber is a lifetime building material that has built-in chemical protection against termite attack. It's especially good for uses where moisture, nearness to the ground, or masonry contact set up conditions suitable for the growth of decay fungi.

To learn more about clean, odorless, paintable and non-corrosive Wolmanized lumber, send for a 16-page booklet that is yours for the asking. Mail the coupon today.



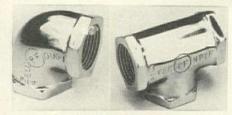
PRESSURE-TREATED HIMRER

| Koppers Co | eservative Department mpany, Inc. s Bldg., Pittsburgh 19, Pa. | W-69 |
|--------------------|---|---------------------------|
| Name_ | Send me the 16-page booklet of Wolmanized pressure-treat | on the uses ed lumber, |
| | | |
| Company | | |
| Company Address | | |



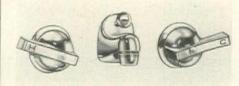
New products

start on p 276



Dryseal threaded NPTF fittings make possible undoped leakproof joints, are now available in all types for pipe sizes from 1/8"-27 to 2"-111/2. Fittings are made of hot-dip galvanized malleable iron, may be brass plated or zinc rustproofed. Price is the same as old-style threaded fittings.

Pipe Fittings, Wellington, Ohio. For details, check No. 67 on coupon, p 418



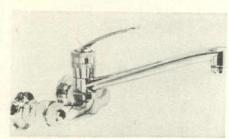
Shelf-back fittings from Borg-Warner have one-piece red brass body, leakproof aeration spout, renewable stem units, naval bronze valve seats. Stem threads are above water seal, away from exposure to mineral deposits. Handles have 12 deep splines to prevent wear and stripping. Fittings are standard on B-w shelf-backs, are also available as replacements.

Ingersoll-Humphryes, Mansfield, Ohio. For details, check No. 68 on coupon, p 418



Lavatory hanger from Gerber is onepiece to simplify roughing-in and mounting. Slotted holes allow precise leveling. Spaced top and bottom holes give positive mounting.

Gerber Plumbing Fixtures, Chicago. For details, check No. 69 on coupon, p 418



Wall-mount single-lever faucet has inlets on 4" adjustable centers for kitchen sinks, can be used in new or replacement service. Model 12 is made of solid brass. bronze, and stainless steel, finished in chrome plate. Spout lengths: 4", 6", 8". 10", 12". Retail price: \$19.45.

Gyro Brass Mfg, Westbury, N.Y. For details, check No. 70 on coupon, p 418

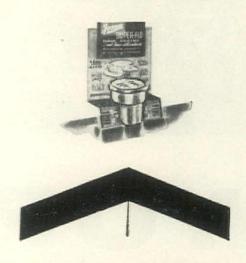
continued on p 368





Every home you build that requires a floor drain can be built for \$10.00 to \$50.00 less. Josam — the world's largest manufacturer of Plumbing Drainage Products — now offers a low cost SUPER-FLO drain for residential purposes — with features that save labor, save materials, save time . . . up to \$50.00 per house.

Patented design also takes off more water in less time . . . provides a more sanitary and attractive installation . . . makes a hit with the housewife! Get the details from your plumbing contractor or from the plumbing supply wholesaler featuring the display shown below-



JOSAM MANUFACTURING COMPANY

Dept. 364 Michigan City, Indiana

The BIG name in Bilt-ins

THERMADOR



THERMADOR Bilt-In Oven features: largest usable oven space . . . models with Easy-View Window. Choice of 9 models in Lifetime Stainless Steel and 9 in any one of 5 decorator colors.

THERMADOR Bilt-In Cooking Top features: Speed-Matic element red hot in 15 seconds . . . Therma-Matic element fully automatic. Griddle and deep-well models available. Choice of 12 Cooking Tops in Lifetime Stainless Steel and 7 models in any one of 5 beautiful colors-

...originator of the Bilt-In Range!

When today's home buyer is *pre-sold* on brand reputation of kitchen appliances, the house is half sold. And today's buyers recognize the quality of THERMADOR Bilt-In Electric Appliances...ovens, cooking tops and refrigerator-freezers. Besides, THERMADOR Bilt-Ins take 45 minutes less time to install (ask any electrical contractor); require least service (ask your serviceman); and the matchless brand reputation of THERMADOR adds quality appeal to every home, budget project or finest custom-built (ask any Thermador owner).

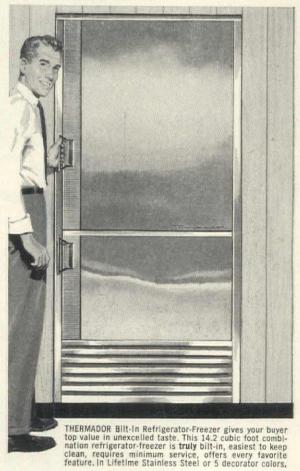


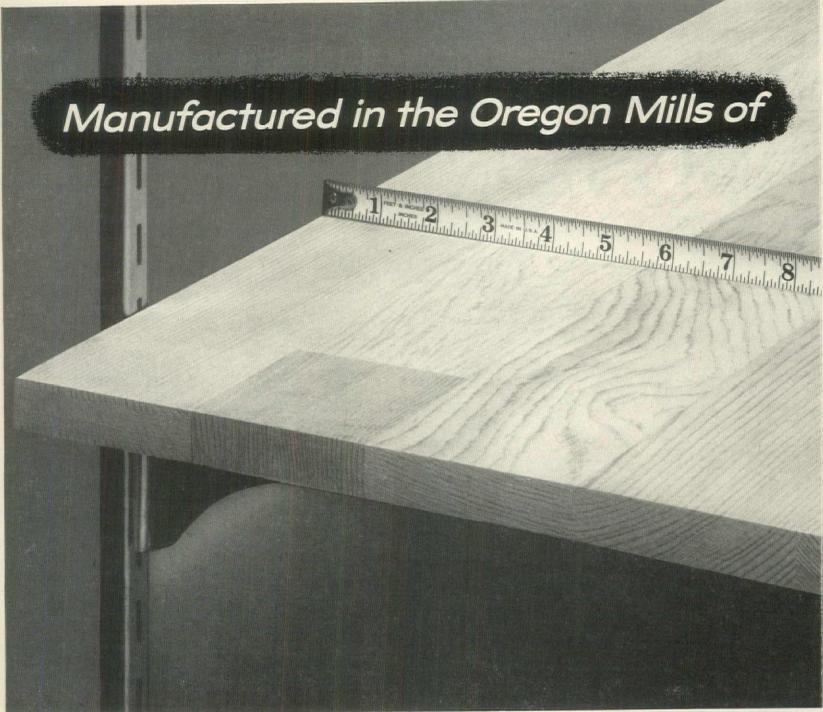
NOW AVAILABLE! THERMADOR BI-Level Bilt-In ELECTRIC OVEN More usable oven space than ever before! Gives perfect

More usable oven space than ever before! Gives perfect baking and broiling in either oven at the same time. Compact, easy-to-install, modern beauty.

| Compact, easy-to | -install, modern | beauty. |
|-------------------|-------------------|--|
| | | |
| THERM | ADOR Elect | rical Manufacturing Co. |
| 5119 Distric | t Boulevard, Dept | or Corporation L. 161 Los Angeles 22, Calif |
| Please send illus | | |
| "Bilt-In" Ra | nges "Bilt-In | ' Refrigerator-Freezers |
| □ architect | □ builder | electrical contractor |
| ☐ wholesaler | ☐ dealer | |
| Name | | |
| Address | | |

County





ONE-PIECE SHELVING

New Wood-Without-Waste costs <u>less</u> installed than comparable grades of plywood or lumber

This is typical of the limitless uses of Hines Wood-Without-Waste, the new precision joined material that gives you what you want in wood—all in one full-sized piece. With Hines new precision joining process, any non-structural lumber need in thickness from 11/16" to 4", width to 54" and length to 24' can be met by Wood-Without-Waste. In shelving, Hines Wood-Without-Waste offers you extra wide, kiln-dried stock at prices below those of ordinary shelving materials. Accurately milled. Machine sanded. Clear

Large orders pre-cut to exact size. If your order is large enough, you can buy your shelving or any other form of Hines Wood-Without-Waste manufactured to your exact specifications! This entirely eliminates material waste and the labor costs of cutting and fitting on the job.

How we make Hines Wood-Without-Waste. In Hines new

edges need no special finishing. Your choice of grades.

Some of the many other applications for Hines Wood-Without-Waste include: soffits, cornices, fascia, platforms, cabinets, counter tops and any interior or exterior use where extra long or extra wide material is an advantage. In less than custom-cut quantities, Hines Wood-Without-Waste gives you substantial savings through large stock sizes which drastically reduce labor for cutting and fitting. And we can assure you there's not a short in a carload.

million dollar plant at Hines, Oregon, special shapers prepare carefully graded lengths of kiln-dried Ponderosa Pine* for joining end to end. A new high strength, waterproof glue is used to secure the joints and—in the wider widths—to bond components edge to edge. Resulting weld defies moisture and is stronger than the wood itself. Write for information today.

(*Special orders can be filled also in Douglas Fir, Larch and White Fir.)



WIDE AS YOU WANT

Colorless, waterproof glue!

- Durable—Hines Wood-Without-Waste is stable because components are individually kiln-dried and reconditioned.
 Combination of precision joining and new extra strong waterproof glue makes joints indestructible in normal use.
- Easy to work—Saw, shape, plane, sand, drill or nail as with ordinary lumber. No special tools required.
- Easy to finish—Machine sanded to provide smoothest possible surface. Finish with any paint, enamel, stain, varnish, shellac, lacquer or sealer.

Available in moldings, too!

Hines Wood-Without-Waste includes all forms of millwork. The same precision joining process is used to make endjoined moldings in lengths up to 24'. Save labor, reduce waste with long lengths.

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.



Send for free booklet today!

HH-5

Edward Hines Lumber Co.

200 S. Michigan Ave., Chicago 4, III.

Please send me information about Hines Wood-Without-Waste.

Name____

Company____

Address

City_____Zone__State___

NOW . . . Two easy steps guaranteed to increase your 1959 profits . . . step one Install National swimming pools beside your model homes to dramatize your subdivision . . . to sell more homes . . . faster . . . step two Sell National swimming pools to buyers of your larger homes for added business profits through your own pool business. ... NATIONAL pools ... made of prestressed concrete for a life-time, trouble-free investment . . . specified by architects and engineers for America's finest country club, hotel, community and residential pools NATIONAL pools ... easily installed by home builders . . . profitable builder franchises offer you special discounts . . . equipment co. Indianapolis, Ind., Florence, Ala., El Monte, Calif. Sales offices in principal cities NATIONAL POOL EQUIPMENT CO., Box 1101, Indianapolis, Indiana Please send information on National Prestressed Pools I am interested in: BUILDING A POOL FRANCHISE DEQUIPMENT FILTERS Name

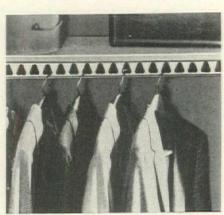
New products

start on p 276



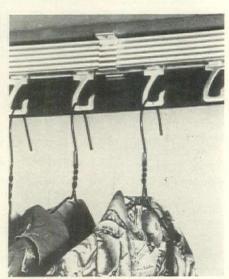
Mirro-Chrome Clos-O-Rod comes in 2½' to 8' lengths, is screwed to wooden shelf bottoms. Integral hangers slide on nylon guides so clothes can be spaced out. Retail price for 30" length: \$1.89.

Mirro-Chrome, Valley Stream, N.Y. For details, check No. 71 on coupon, p 418



Leigh Closet Valet screws to the bottom of a shelf so girder-like construction actually strengthens the shelf. Electroplated steel bar comes 24" or 36" long, can be used singly or in combination to fit any closet. List price for 3' length: 64¢.

Leigh Building, Coopersville, Mich. For details, check No. 72 on coupon, p 418



Magnalum's Closet Bar is an extruded aluminum track in which aluminum hooks slide on nylon glides. The bar can be end supported by aluminum flanges or can be suspended under a shelf by means of brackets. Retail price complete: \$1 per ft.

Magnalum Products, Miami.

For details, check No. 73 on coupon, p 418

continued on p 374

Some 12,000,000 men and women read American Home for ideas on bullding, remodeling, decorating. It devotes more of its editorial to home service than any other major magazine. CURTIS MAGAZINE

Company ___

City _____ Zone ___ State ____ HH

Address __



Never underestimate woman-power where satisfaction with a home is concerned. To provide greater family happiness in the final analysis, discerning building contractors concentrate on modern conveniences that have automatic appeal for the ladies. And they make this possible by insisting on sound economies in the selection of basic materials.

One of these economies is the choice of Republic Steel Pipe for waste lines. The low initial cost of steel pipe provides extra funds that can be diverted to woman-pleasing, family-pleasing features. In addition to its low initial cost, steel pipe is always readily available . . . at prices that are little subject to fluctuation.

Material shortages, with consequent work stop-

pages, are avoided—as are unforeseen price rises, that can cut into profits. Moreover, a single grade of steel meets all requirements, saving inventory costs and eliminating the risk of installing the wrong grade.

Further savings accrue because steel pipe provides excellent workability. Reputable plumbing contractors everywhere know how to make fast, economical installations, good for the life of the building.

These factors, added together, enable you to provide greater buyer-satisfaction at lower cost through Republic Steel Pipe. Get further details now by consulting your Republic Pipe Distributor. Or write Republic Steel Corporation, Dept.HO-7391, 1441 Republic Building, Cleveland 1, Ohio.

REPUBLIC STEEL



World's Widest Range of Standard Steels and Steel Products



For added room space that helps sell houses...bi-fold and sliding doors with STANLEY HARDWARE

Assuring the smooth performance of interior doors designed to add desired roominess, Stanley Hardware will help sell your houses . . . and Stanley's permanent quality will keep home buyers satisfied.

Stanley Bi-fold Hardware makes doors easy to hang, and easy to align for perfect fit after hanging. Adjustable from either side. Ruggedness and dependable operation minimize call backs.

Thousands of maintenance-free installations prove the quality of Stanley's 2800 Line of Sliding Door Hardware. Packaged set uses same track, hangers, floor guides for ¾ ″ and 1¾ ″ doors. Builder always has right size on job. Simple ¾ ″ vertical adjustment with positive lock-in-place feature.

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. E, 49 Lake Street, New Britain, Conn.

Deserving a place in your plans for progress

HARDWARE AUTOMATIC

NTROLS AL

ALUMINUM WINDOWS



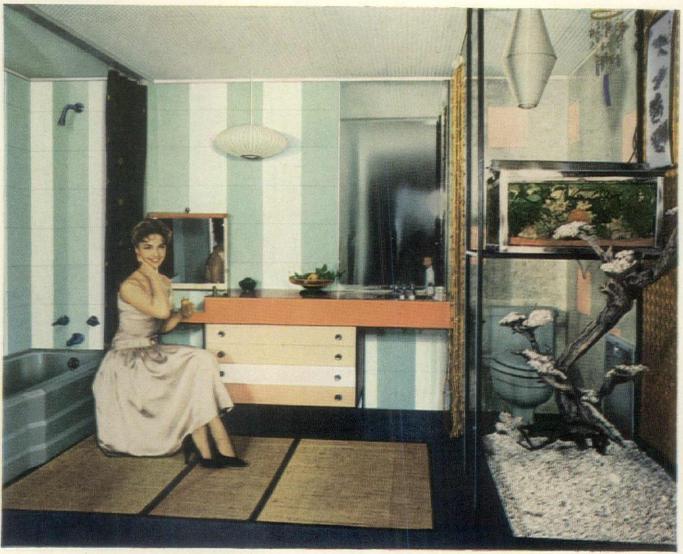
AMERICA BUILDS BETTER AND LIVES BETTER WITH STANLEY



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 brand new product has already won a strong place for itself in American bathrooms and the hearts of home buyers. Installed floor to ceiling in test model homes, prospects actually preferred it 4 to 1 over more costly traditional bathroom materials.

Full color national advertising will soon announce Formica Wall Tile to assure your customers that this is a top quality product with all the color, beauty and long carefree life of regular Formica laminated plastic.

These light, compact, easy to store and handle tiles can be installed floor to ceiling in the average bathroom in one working day by a single workman.

Send for literature with complete information, installation instructions, colors available and suggested designs. (Form 887-A)

Write FORMICA CORPORATION

4613 Spring Grove Ave., Cincinnati 32, Ohio

- ☐ Enduring Beauty
- ☐ High Loan Appraisal
- Pre-tested
- ☐ Fast, Neat Installation
- Low Installed Price
- Use floor to ceiling
- ☐ Exciting Colors
- ☐ Familiar Formica Quality



Product of CYANAMID



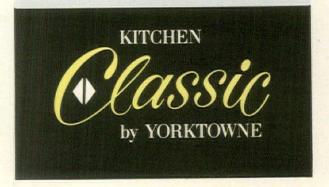
that whet the home-buying appetite!

Classic Yorktowne Cabinets in fascinating new designs and finishes offer today's most appealing advantages

New in design, new in finish, new in luxury appointments, CLASSIC KITCHENS by Yorktowne present an irresistible appeal to today's home buyers. Only Yorktowne Classic Kitchens offer new beveled drawer fronts, raised panel doors and a charming, lifetime rose "champagne" finish. Here also are the finest hardwoods for enduring beauty, an extra drawer in every base cabinet, exclusive warp-free doors, and no exposed hardware... anywhere.

Five-Year Written Guarantee

Built like fine furniture to last a lifetime, Classic Kitchens by Yorktowne are backed by a five-year written guarantee. Available in 150 styles and sizes and stocked by sixty distributors to assure quick delivery. There's much more you should know about this Classic Story . . . including the forceful promotion program. For new illustrated brochure and full details write today to Colonial Products Co., Dallastown, Pennsylvania.





The Image of CF&I offers Clinton Welded Wire Fabric for crack-resistant, long-lasting concrete structures

The CF&I giant stands for the strength and dependability of all the steel products which we make for the construction industry. One of these—CF&I-Clinton Welded Wire Fabric—is used by builders to reinforce concrete with the extra strength of steel.

CF&I-Clinton Welded Wire Fabric minimizes cracking during the setting period. And the steel fabric helps prevent cracking from extreme temperature changes, assuring years of trouble-free maintenance.

CF&I-Clinton Welded Wire Fabric is specified by

architects because it's so easy to use. The flexible mesh unrolls quickly and stays flat . . . it can be shaped quickly on the spot. On your next job, make sure that you strengthen the concrete with CF&I-Clinton Welded Wire Fabric. It's available in a complete range of gages and mesh sizes for patios, garage floors, basements and driveways—in fact any "light construction" concrete structural requirement.

Phone our nearby sales office for cost and fast delivery information.

6756

when they ask...

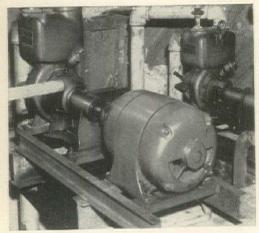
"I it Reinforced"

CLINTON



WELDED WIRE FABRIC
THE COLORADO FUEL AND IRON CORPORATION

In the West: THE COLORADO FUEL AND IRON CORPORATION—Albuquerque • Amarillo • Billings • Boise • Butte • Denver • El Paso • Ft. Worth • Houston • Kansas City • Lincoln Los Angeles • Oakland • Oklahoma City • Phoenix • Portland • Pueblo • Salt Lake City • San Francisco • San Leandro • Seattle • Spokane • Wichita In the East: WICKWIRE SPENCER STEEL DIVISION—Atlanta • Boston • Buffalo • Chicago • Detroit • New Orleans • New York • Philadelphia CF&I OFFICE IN CANADA: Montreal • CANADIAN REPRESENTATIVES AT: Calgary • Edmonton • Vancouver • Winnipeg



Another Florida Developer standardizes on Gorman-Rupp, First unit installed in 1951 and is still in service. Second and third units added since.

FLORIDA DEVELOPERS

SEWAGE COSTS

Gorman-Rupp Sewage Pumps permit lower cost plants, save even more on servicing

Disturbed at sewage treatment plant costs? You may find the answer to considerable savings by including Gorman-Rupp Sewage Pumps.

In installation after installation, in lift stations and sewer treatment plants, these Gorman-Rupp units have shown an amazing ability to cut costs. In a typical instance, less than half the cost of alternate equipment. And the maintenance has been almost nil.

Here, briefly, are some facts about the Gorman-Rupp Sewage Pump: self-priming in lifts up to 15 feet, positive in action, nearly completely non-clogging. Removable end plate provides fast access to impeller and wear plate with just a turn of the wrist. No longer need pump servicing be done in the pit or by raising whole unit by crane. The non-clogging impeller passes spherical solids as follows: 3" pump, 1½" solids; 4" pump, 2" solids; 6" pump, 2½" solids.

Write today for full details. You'll be delighted at the low price and record of performance.

THE GORMAN-RUPP COMPANY

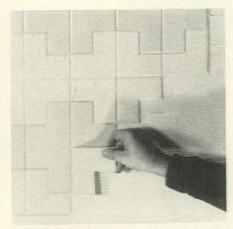
305 Bowman Street

Mansfield, Ohio



New products

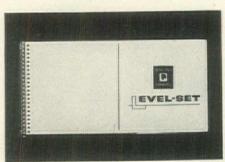
start on p 276



plastic wall tile that is $4\frac{1}{4}$ " on each leg to match standard $4\frac{1}{4}$ " field tile. Tile may be combined with half tile, quarters and triangles. L's are available in 13 colors and in plain, marbled, and granitetone textures. Quarter tile in the same colors and textures is also available. Price premium: 10e a sq ft.

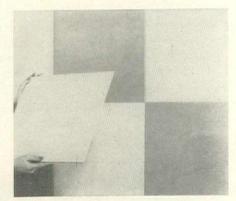
Arterest Plastics Co, Chicago.

For details, check No. 74 on coupon, p 418



Precision ground tile is Romany-Spartan's Level-Set. Ground edges mean each tile is exactly 4½x4½", make it possible for tilesetter to install them 20% faster, company claims. New edges also include a grout lock feature which forms a permanent key and bond when the tile is grouted. Level-Set tile are available in a full range of glazed tile colors, with matching bullnose, coves, and angles, either singly or in 12¾"x25½" Quickset paper-mounted sheets. There is no price increase.

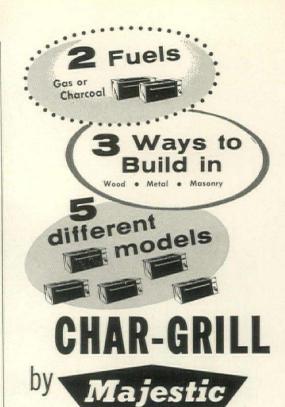
US Ceramic Tile, Canton, Ohio. For details, check No. 75 on coupon, p 418



Marlite panels come in 16" square blocks, as well as 8'x16" planks and Korelock paneling, in two new "companion" colors, beige and sandalwood. Smooth plastic finish will resist heat, moisture, abrasion; should never need refinishing.

Marsh Wall Products, Dover, Ohio. For details, check No. 76 on coupon, p 418

continued on p 378



today's truly versatile line of built-in barbecue grilles



The newest of built-ins for today's top housing market. Ruggedly built and expertly engineered to satisfy critical barbecue enthusiasts. Designed with removable, two-piece chrome grille and convenient front access door. Removable, adjustable fire pan in charcoal models. Ceramic "Char-Roks" in gas models speed cooking with radiant heat and minimize fuel consumption. Char-Grill venthoods in stainless steel, or coppertone or black wrinkle baked-on enamel.

Write Majestic -- or see the nearest Majestic dealer or distributor for details and applications.



413-E Erie Street, Huntington, Indiana

Universal...the quality built-in now in gas or electric!





New styling...new versatility...famous for quality for nearly 4 generations

New Universal built-in gas ranges—only Universal offers such a wide choice of customized arrangements ... 14 new two-burner, four-burner and griddle surface cooking units; five new oven-broiler units. Famous "air-conditioned" oven, smokeproof broiling, "obedient burner" top cooking.

New Universal built-in electric ranges—versatile surface cooking units can be installed for either front or rear control location. Hinged, flip-up "Quick-heat" element design permits easy, fast cleaning of spill-overs. Each element has exclusive "on" indicator. Choose from two double oven, two single oven models.



Now gas and electric units are interchangeable!

Gas and electric ovens and surface cooking units are fully interchangeable . . . all are drop-in units that fit standard cabinets. Available in your choice of five beautiful decorator colors: canary yellow, petal pink, turquoise green or coppertone porcelain and satin-finished chrome.

Advertised in leading national magazines

UNIVERSAL

BUILT-IN GAS AND ELECTRIC RANGES

See your Cribben & Sexton representative or contact Cribben & Sexton Company, 700 N. Sacramento Blvd., Chicago 12, Illinois. Phone VAn Buren 6-4600



Universal Built-in Automatic Dishwashers

Exclusive "Jet-Torque" washing action, stainless steel construction, full-capacity compact design. Washes service for eight, yet requires only 18" of cabinet space. Decorator colors.

Solid sales feature for quality homes...
walls and ceilings of

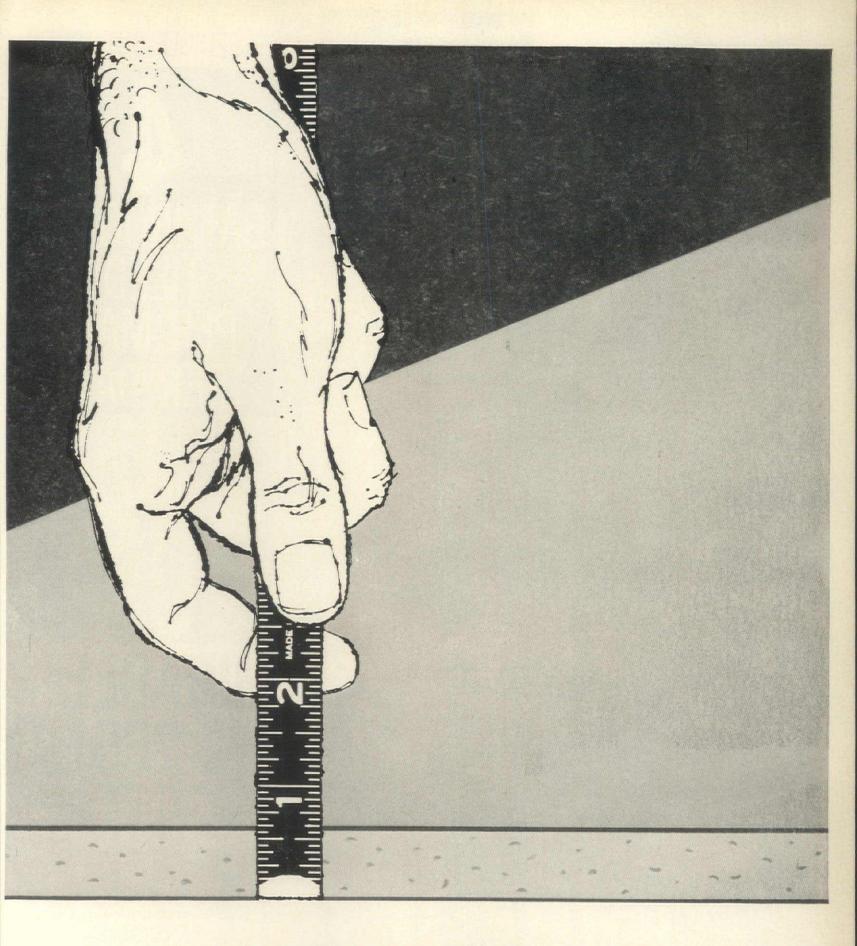
5/8"extra thick SHEETROCK* FIREPROOF GYPSUM WALLBOARD

REGULAR %" SHEETROCK WALLBOARD

For the finest single layer drywall construction! Gives walls and ceilings massive substance, lasting durability, greater bracing strength. This, combined with greatly increased fire protection, reduced sound transmission, and the smooth beauty typical of SHEETROCK Wallboard speaks a mighty solid sales talk for your homes.

%" SHEETROCK FIRECODE WALLBOARD

A full %" thick, with a specially formulated gypsum core that fights fire—longer! It's Underwriters' Laboratories labeled, designed for one-hour fire-rated construction conforming to U/L requirements. Ideal for utility rooms, attached garages, party walls—or in any wall where extra fire protection is deemed desirable.



For complete information on these SHEETROCK Wallboards for better building, see your U.S.G. dealer or representative, or write Dept. HH-91, 300 W. Adams St., Chicago 6, Ill.

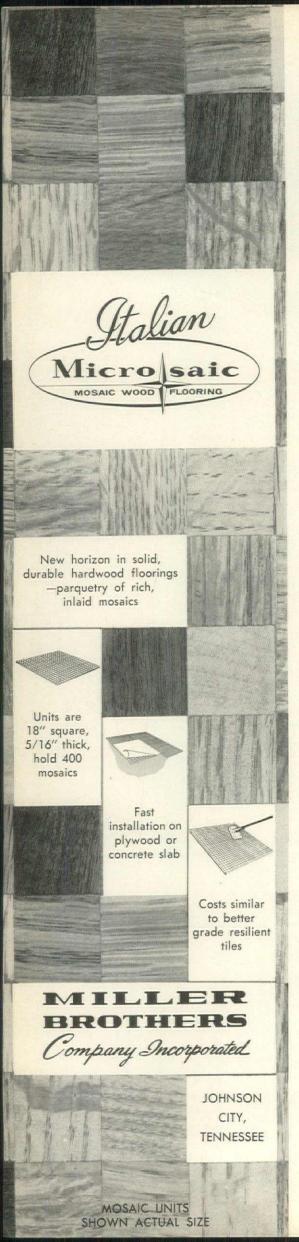


UNITED STATES GYPSUM



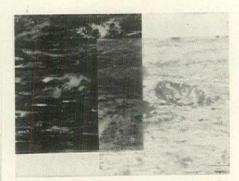
the greatest name in building

*T. M. Reg. U. S. Pat. Off.



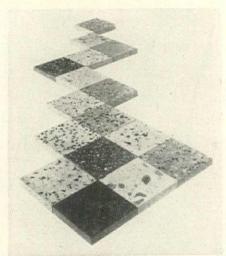
New products

start on p 276



Custom vinyl tile is possible with Amtico's Renaissance Over-Tone. Base tile is a clear marble with white mottling. Color-to-order is laid behind base tile so color shows through. Sample is approved by customer before order is made up. Sizes: 9"x9", 12"x12", 36"x36". Price: \$1.85 a sq ft.

American Biltrite Rubber, Trenton. For details, check No. 77 on coupon, p 418



Precast terrazzo is made by an old Italian process. It is made in 16 designs, 30 basic colors, two sizes (12"x12", 16"x16"). Precasting saves labor since it is not necessary to allow drying and grinding time. May be laid with or without metal stripping. Price: \$1.40 a sq ft.

Haves Corp, New Hyde Park, N.Y.

For details, check No. 78 on coupon, p 418



Gold-veined tile is latest pattern in Matico's Aristoflex vinyl-asbestos line. The tile comes in standard or contract gauge (1/8"), is the only metallic vinyl-asbestos available in these gauges, the maker claims. Four base colors: cedar, ash, birch, and ebony. Cost about 30¢ a sq ft retail.

Mastic Tile Corp, Newburgh, N.Y. For details, check No. 79 on coupon, p 418

continued on p 382

INCREDIBLE BUT TRUE!





MIRACLE

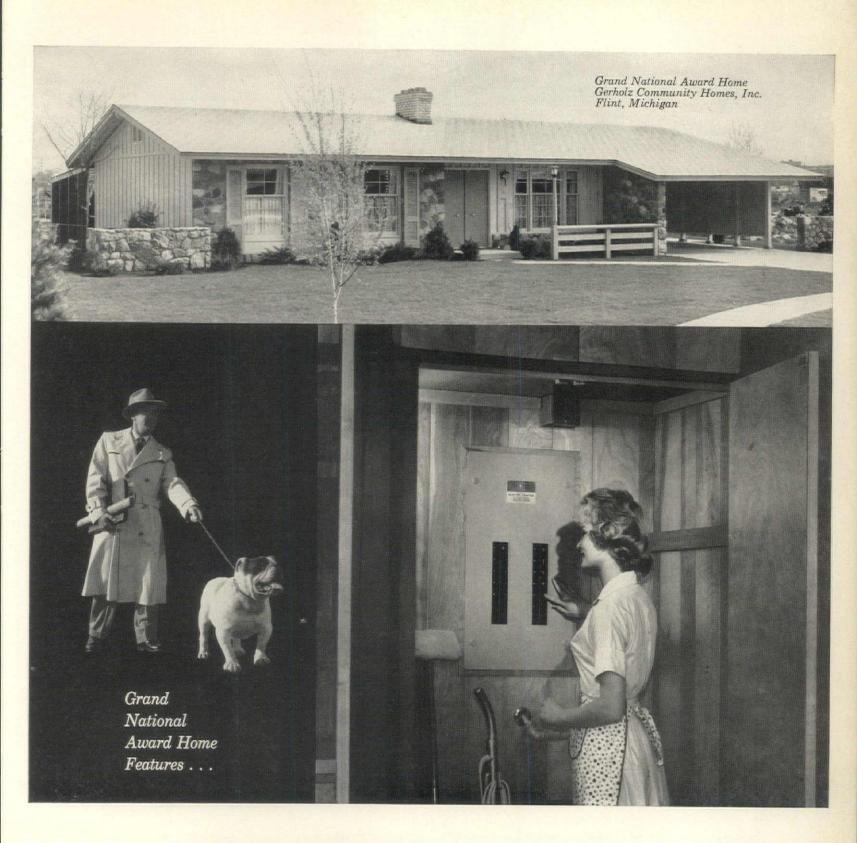
Right now in Levittown, as well as in developments all over the nation, one mechanic is installing tile in four bathrooms in just one day. Certainly it takes a special material to do the job. That's Miracle MA-266. Truly the mechanic's mastic. Made by Miracle Adhesives Corporation, who introduced the '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 CORPORATION

250 Pettit Avenue, Bellmore, L. I., N.Y.



PUSHBUTTON CONVENIENCE ... EXCLUSIVE

WITH PUSHMATIC

Top builders across the country are adding safety, convenience and smartness to their homes with modern Pushmatic Electri-Centers[®].

This up-to-the-minute service entrance equipment can be an important extra sales feature for you, too. Pushmatic guards every electrical circuit in the home, including heavy appliances, and provides capacity for future needs as well. You'll find home owners go for

this extra safety feature . . . and for the exclusive pushbutton convenience that replaces old-fashioned fuse changing. You'll clinch sales with the fact that your homes are equipped for the most

modern, convenient electrical living.

Specify Pushmatic . . . and you specify *proved* performance to complement your finest homes.



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.

"New homes aren't really up-to-date without concealed telephone wiring"

-SAYS BURTON W. DUENKE, CUSTOM BUILDER OF ST. LOUIS, MISSOURI

"Nowadays," says Mr. Duenke, "it's ideas that sell homes. The modern house-hunter is looking for more than a roof over his head and X number of bedrooms and closets. He wants smart, functional design—and proof that the house is planned to meet his future needs. Concealed telephone wiring is the kind of idea he likes."

The Burton W. Duenke Building Company has completed over 1000 homes since 1947. Its current project is Harwood Hills, a gracious community of homes in the \$26,000 to \$40,000 price range, located in suburban St. Louis, to the west. Every one of these modern dwellings features six or seven concealed telephone outlets.

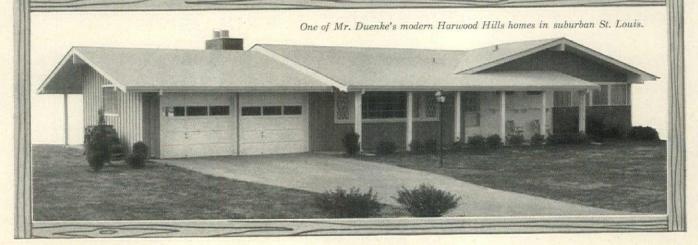
"We don't look on concealed telephone wiring as a luxury item," says Mr. Duenke. "It's a necessity in doing a workmanlike job of building today's home. It provides for the homeowner's future telephone needs, and keeps his home more attractive. What's more, it's a kind of sales feature that costs us very little to offer."



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

BELL TELEPHONE SYSTEM





No trouble calls with PUSHMATIC

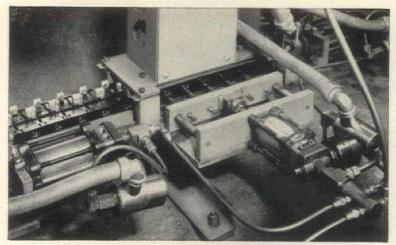
Every breaker is individually performance tested

Browse along our production line and it will be apparent why this circuit breaker has earned the reputation as the safest and most dependable on the market. Following are five of the dozen or more exhaustive checks and quality controls the Pushmatics undergo — over and beyond those required by Underwriters'.

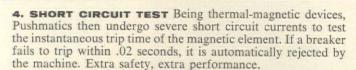


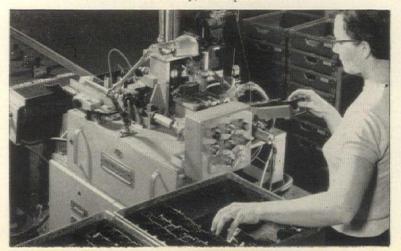
BULLDOG ELECTRIC PRODUCTS DIVISION I-T-E CIRCUIT BREAKER COMPANY BOX 177 • DETROIT 32, MICHIGAN

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



2. MECHANICAL BREAK-IN After assembly every Pushmatic is operated 50 times to make absolutely sure it functions well mechanically. Ten break-ins would be adequate . . . the extra 40 give you that much more assurance that it will never fail in manual or automatic operation.







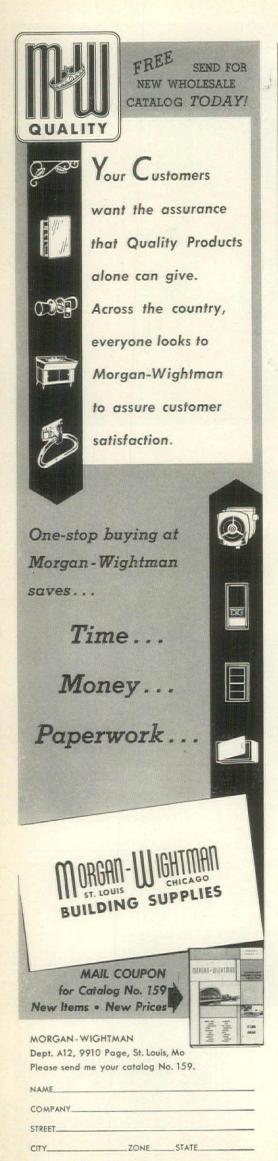
1. CALIBRATION In a dust-free room, where temperature is maintained at a constant 75°, operators calibrate every Pushmatic bi-metal assembly on a special optical viewer. Each bi-metal "latch" is adjusted to a dimensional accuracy of 1/1000 of an inch. Prior to this, the bi-metal had been heat-treated in an inert atmosphere to relieve stresses, "normalize" the metal.



3. CALIBRATION UNDER LOAD Brought back to its "set" temperature, each breaker is checked at 200% of rated current, and again at the equivalent of 125% of rating. Check Boards are accurate to 1/10 of a second. Samples from each production run are also tested at 100% of rating.

periodic endurance tests on BullDog Pushmatics[®]. The requirement — 10,000 operations, 6000 under load and 4000 with no load. But BullDog constantly checks out the breakers at 50,000 or more operations. End trouble calls. Use Pushmatic!





New products

start on p 276



Hondura wall covering is a vinyl fabric that simulates the sheen and grain of mahogany. Vicrtex is a durable wall covering, fade resistant, frayproof, resistant to most stains. It wipes clean with a damp cloth. Retail price: \$7.56 a yd.

L.E. Carpenter, New York City. For details, check No. 80 on coupon, p 418



Tessara is a new pattern in the Guard coordinated system of architectural wall coverings. It is a medium weight vinyl and comes in white, yellow, pink, bronze, celadon, aqua, blue, copper, buff, and gold. Retail price: about \$3.84 a yd.

Columbus Coated Fabrics, Columbus,

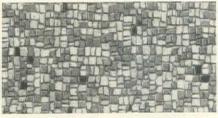
For details, check No. 81 on coupon, p 418



Spatio is a new Koroseal design. The wall covering offers a variety of textures and light reflectances in a single sheet to vary with room lighting. It comes in 18 colors. Price: about 25¢ a sq ft.

B. F. Goodrich, Akron.

For details, check No. 82 on coupon, p 418



Mosaic pattern in sheet vinyl is one of several new floorings from Sandura. It comes in various shades of beige and gray with multi-color accents. Pebbletone and sparkle patterns are also available in Crown Vinyl.

Sandura Co, Philadelphia.

For details, check No. 83 on coupon, p 418

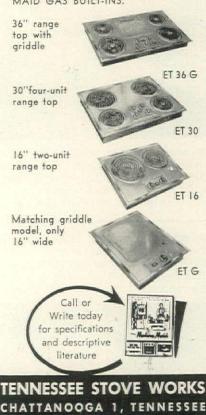


YOUR ELECTRIC BUILT-IN LINE DOESN'T HAVE A POPULAR PRICED DOUBLE OVEN MODEL THEN

ELECTRIC OVENS



MODERN MAID is also the only line with a complete assortment of Super-Thin Range Tops that allow drawer space underneath and are completely interchangeable with the MODERN MAID GAS BUILT-INS.



Superior Electric Ltd.

Pembroke, Ontario



HERE'S WHERE PELLA DOORS GET THEIR "LIVE

See that spring hinge? It's made of special alloy steel. Concealed within the wood panels, springs like this give PELLA WOOD FOLDING DOORS their famous "live action." They're one of the reasons even the largest PELLA door units operate with so little effort and nest so compactly.

Patented PELLA steel spring hinging controls even spacing of the panel folds. It is designed and tested to maintain its original tension over many years of hard service.

As another measure of long-lasting durability,

PELLA WOOD FOLDING DOORS feature solid wood "Lamicor" construction, which prevents warping. Available in any width and in heights up to 12' 1", PELLA DOORS arrive factory-assembled, complete with all hardware to save installation time.

Let the "live action" and honest beauty of PELLA WOOD FOLDING DOORS show prospects that you have added a genuine Mark of Quality to the homes you build and sell. For nearest PELLA distributor, see the classified telephone directory . . . or mail coupon.



6 FINE WOOD VENEERS

American Walnut White Ash Philippine Mahogany Birch Oak Pine

| ROLSCR | EEN (| COMP | ANY, Dept. | KB-3 | 2, Pella | lowa |
|-------------------|-------|------|------------|------|----------|------|
| Please FOLDING | send | free | literature | on | PELLA | WOOD |

- MAIL COUPON TODAY -

| NAME | | |
|---------|---|---|
| FIRM | ROTO TO THE ROTO THE | |
| ADDRESS | TO GARAGE | 2 |

Dedication to Quality

makes House Beautiful the No.1 Sales Medium in the Home Field

CARRIED MORE LINES OF ADVERTISING IN 1958 THAN ANY OTHER HOME MAGAZINE

In 1958, House Beautiful again leads all national consumer magazines in Household Furnishings advertising for the 15th straight year; Furniture advertising for the 15th straight year; Carpet, Pads & Rugs advertising for the 15th straight year; Mail Order advertising for the 16th straight year; China, Glass & Pottery advertising for the 13th straight year; Musical Instruments for the 4th straight year. In 1958, House Beautiful Magazine led all National Consumer Magazines in total pages of Heating and Air Conditioning advertising. (Except business magazines)

CIRCULATION LEADERSHIP:

First in Circulation Among All Quality Home Magazines.

Over 730,000* Pace Setter families. More than 5 readers per copy, a total audience of over 3½-million readers. Both husband and wife read House Beautiful in 69.5% of the homes. In single-copy sales, a valuable measurement of editorial vitality, House Beautiful delivers 42.7% of its total circulation on the newsstand... the largest percentage, by far, of any home magazine.

EDITORIAL LEADERSHIP:

Publishes More Pages of Combined Building Editorial and Home Furnishings Than Any Other National Consumer Magazine.

HOUSE BEAUTIFUL serves readers by showing them the best available in today's living. It educates them to demand more of the best they can afford, to be dissatisfied with less. You'll find your best prospects among families who every month study House BEAUTIFUL's pages, eagerly searching for new ideas,

new ways and new products to better their home and better their living.

TOP QUALITY MARKET:

Average Income: \$15,715. Median Income: \$11,940. 9 out of 10 Subscribers Have Incomes of \$5,000 or More

| 8.09 |
|------|
| 15.5 |
| 17.3 |
| 23.6 |
| 18.0 |
| 17.6 |
| |

Reader homes reflect Pace Setter leadership. Home ownership: 82%. Median value: \$26,299. Auto ownership: 94% (with half owning 2 or more cars).

TOP TRADE INFLUENCE:

House Beautiful sells both sides of the counter. By documentation, House Beautiful enjoys the biggest trade circulation of any national consumer magazine; over 21,000 firms in the building trades alone.

TOP HOME BUYING MARKET:

The House Beautiful Home Buying Market is 21/2-Times as Active as the U.S. Average.

On the average one in eight House Beautiful subscriber families purchases a home every year, compared with one in twenty U. S. families.

They Buy New Homes.

Of the owned homes, one in eight is less than two years old. Over 30% of the homes occupied by House Beautiful families are custom built for them. An additional 21% were purchased directly from builders' models.

They Are Established Home-Owners.

Of all House Beautiful home-owners, 54% have

owned one prior to their present home. (U. S. average of previous home-ownership is 30%.)

TOP INITIAL-PURCHASE APPLIANCE MARKET:

HOUSE BEAUTIFUL Families Want the Newest, Time- and Work-Saving Appliances.

One out of every eight subscriber homes has central air-conditioning and one in six has built-in wall ovens. One in every three have food waste disposers and dish washers. Two out of every five House Beautiful families own clothes dryers.

MERCHANDISING THAT MOVES MERCHANDISE:

House Beautiful merchandising aids link your Product and House Beautiful, Stimulate Interest and Confidence Among Consumers and Dealers.

For example, House Beautiful's authoritative Pace Setter News...an 8-page newspaper serving the building industry and read by 10,000 builders, contractors, and architects every other month.

LEADERSHIP WHERE IT COUNTS:

HOUSE BEAUTIFUL earns this outstanding leadership in the home field by its dedication to quality and by delivering the best, most productive market for advertisers.

Over 730,000 Pace Setter families * Average Income: \$15,715 60,000 Trade Subscribers

This is why House Beautiful is the leader in its field by practically every measurement of magazine performance.

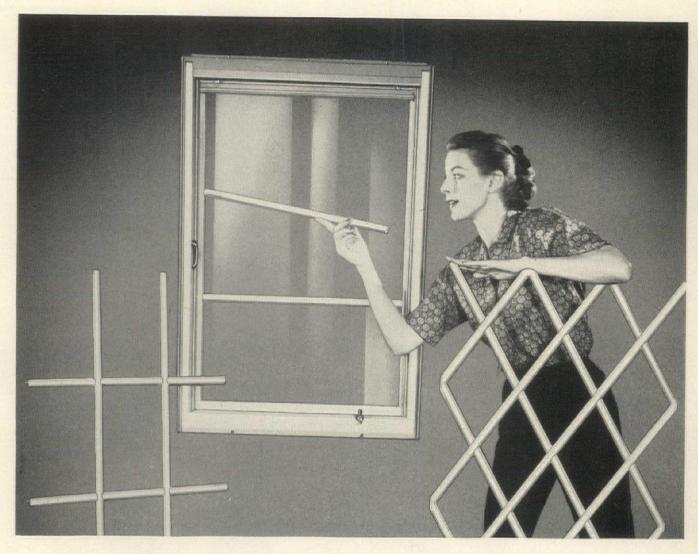
Sells Both Sides of the Counter

er House Beautiful

A HEARST KEY MAGAZINE, 572 MADISON AVENUE, NEW YORK, N. Y.

*ABC Publisher's Statement 12/31/58 736,362

SOURCE: P. I. B. 1958 House Beautiful Reader Characteristic Study conducted by Bennett-Chaikin, Inc.



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

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.





| | PANY, Dept. KB-26, PE illustrated facts ab | |
|--------|---|-----|
| NAME . | | |
| FIRM | | No. |

-- SEND COUPON TODAY --

WOOD WINDOWS

ADDRESS

CITY & ZONI

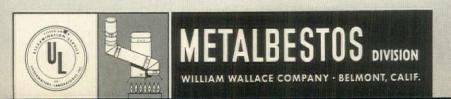
Your Reputation's In Safe Hands! Why do quality builders select Metalbestos gas vent pipe from draft

Why do quality builders select Metalbestos gas vent pipe from draft hood to top? Because they know their quality reputations can suffer if the vent choice is left entirely up to their heating contractors. With Metalbestos, their homes are permanently free from polluted, stale air and condensation damage.

When Metalbestos, the original double-wall gas vent, is installed according to the scientifically recognized Metalbestos "Safety System" Tables, display the Metalbestos "Safety Seal." It stands for your freedom from customer complaints caused by "after-the-sale" venting failures.

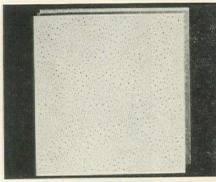
Discover how the new Metalbestos "Safety System" lowers installation costs . . . simplifies installation problems. Write Dept.

STOCKED BY PRINCIPAL DISTRIBUTORS IN MAJOR CITIES.



New products

start on p 276



Nu-Wood acoustical tile is a perforated fiberboard type with random holes of various sizes to act as sound traps. Constellation pattern (above) comes in 12"x12" tiles, is prepainted with a flameresistant paint with high reflectance but low glare. Tiles go up with staples, clips, or adhesives.

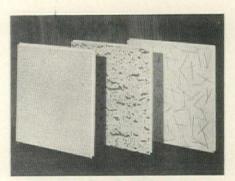
Wood Conversion Co, St Paul.

For details, check No. 84 on coupon, p 418



Double-size tile is 12"x24", center scored to give the look of two 12" tiles. Wood fiber tile is random drilled with three hole sizes. Calendered finish is smooth, washable, gives good light reflection without glare. Extended t&g edges allow hidden nailing or stapling.

Simpson Logging, Shelton, Wash. For details, check No. 85 on coupon, p 418



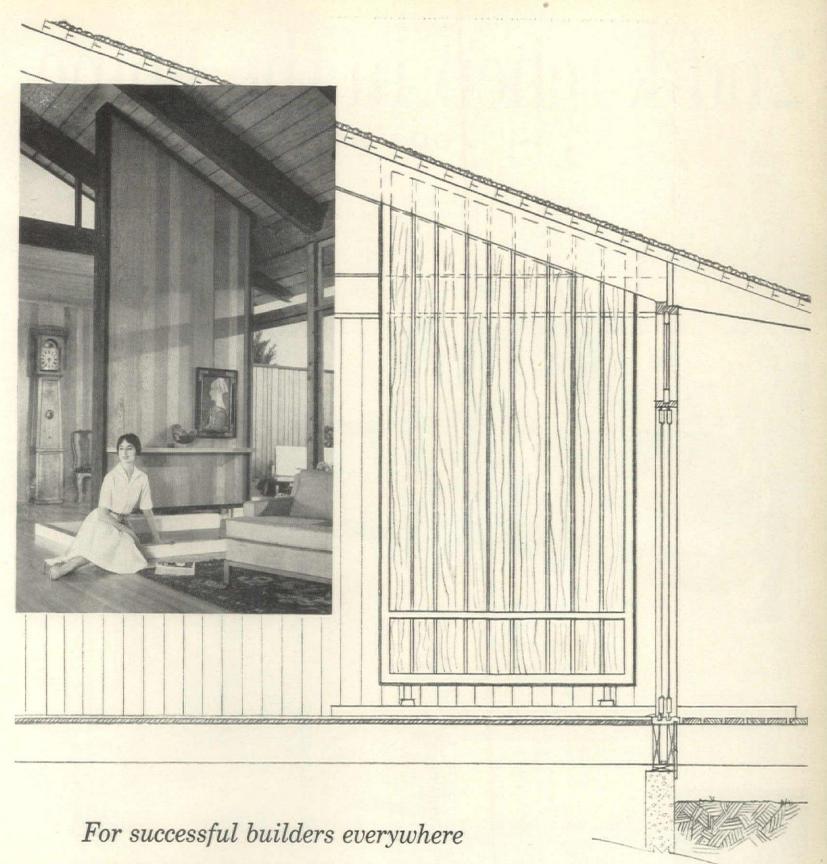
New ceiling tiles from Barrett are decorative fiberboard. Three designs (left to right) are traditional Tattersall, travertine-like Fissure, and Sparkler. Tiles have t&g edges, are prepainted with a durable, flame-resistant, washable finish.

Barrett, New York City.

For details, check No. 86 on coupon, p 418

continued on p 392

HOUSE & HOME



WOOD'S beauty sells houses on sight

Prospective home-buyers instantly recognize and respond to the natural beauty of wood . . . the incomparable warmth and elegance it brings to any house you build. Wood's eye-appeal adds salesappeal indoors and out . . . from floor to ceiling, from foundation to roof. In homes large or small, modern or traditional, beauty stands high on the

list of wood's contributions to livability unlimited.

Extremely versatile, workable, durable as well

... wood enables you to build, in any price bracket,
a more beautiful home for the money. Because this
is a difference home-buyers can see, you will sell
more houses and make more dollars per house when

you build with wood!

For more information on better homes of wood, write to: NATIONAL LUMBER MANUFACTURERS ASSOCIATION Wood Information Center, 1319 18th St., N.W., Washington 6, D.C.

nlma
Live, Work, Build Better with Wood

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.



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.



DWYER "400" A full buffet kitchen in a smartly styled piece of furniture. Contains big refrigerator, freezer, rangetop, and sink (optional), with plenty of storage space. Roll-out utensil drawer and towel rack. Top lifts at touch of a finger, automatic light illuminates countertop. Key lock. Available in blonde or mahogany color.

For 30 years, America's leading manufacturer of compact kitchens. V GG

WVEr PRODUCTS CORPORATION
Dept. J-1505 Michigan City, Indiana

Gentlemen: Please send complete information on:

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

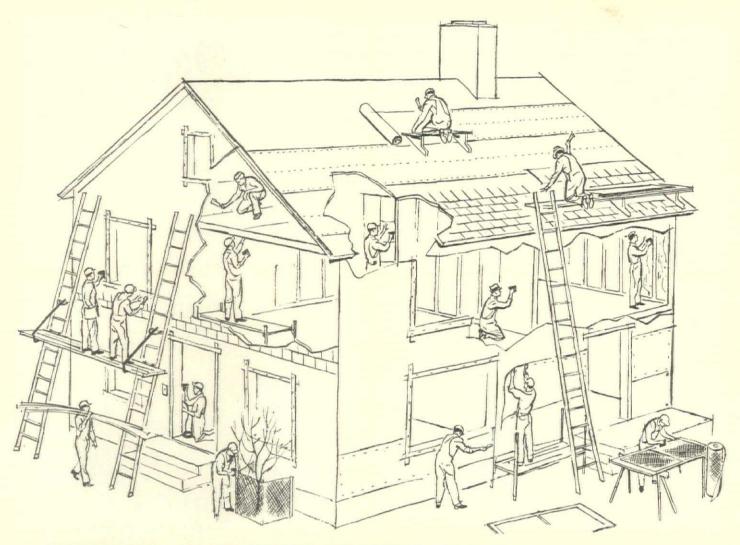
MY NAME

COMPANY NAME

ADDRESS

CITY, STATE

Also send information on full line of conventional compact kitchens.



THIS IS A HOUSE THAT'S BOSTITCH-BUILT

You save time and slash costs on every one of these jobs when you switch to Bostitch

- ☐ Installing vapor barriers
 ☐ Installing batt insulation
 ☐ Installing foil insulation
 ☐ Installing low-voltage wiring
 ☐ Installing screening
 ☐ Erecting protective fences for new lawns and shrubs
 ☐ Installing weeden and served.
- ☐ Installing wooden undercourse
- shingles
- Applying Cornerite
- Applying felt and waterproof paper to exterior walls
- ☐ Installing flashing paper ☐ Laying underfelt for roofing
- Applying asphalt shingles
 Applying metal lath to studding
- Applying metal discs for built-up
- tar and gravel roofs Applying paper for installing

- blown-type rock wool

 Making light framing

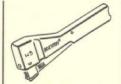
 Installing metal duct work

Build it better and faster for less with these Bostitch tools



T5 Tacker

Powerful springdriven tacker drives staples in five leg lengths—from 5/32" to 9/16". Fastens neatly in tight, hardto-work places.



H5 Stapling Hammer

For fast, light work. Drives low-cost staples of .025" steel wire with 3/16", 1/4" or 5/16" leg lengths. Holds strip of 157 staples.



H2B Stapling Hammer

A medium-weight hammer—holds 160 staples, drives one with every swing. Three models for staples with leg lengths—¼" to ½".



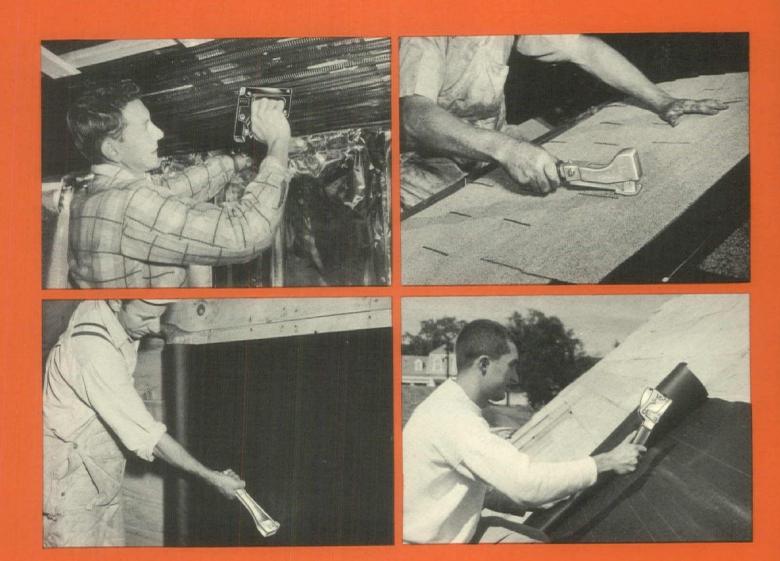
H4 Stapling Hammer

Rugged heavy-duty hammer drives 3/4" galvanized staple. Powerfully built for long wear. Pre-cisely balanced to cut fatigue.

See these Bostitch tools at your building supply dealer. Start using them on your next start—and you'll never go back to old-fashioned methods.

Fasten it better and faster with





Start using Bostitch tools on your next start and you'll finish faster with more profit

Wherever you use a conventional hammer when a Bostitch tacker or stapling hammer could be used, you lose money and time.

Rugged Bostitch tools speed work on hundreds of building jobs. The time you save means jobs completed sooner at more profit.

The savings in time and costs you can make with Bostitch on an average house amount to a lot. Why let old-fashioned methods slow you down, squeeze your profits?

MAKE THIS TEST ON YOUR NEXT START

Equip your crew with Bostitch tools before your

next start. They'll be able to use them expertly right away. They'll like them, too, because stapling is less work than hammering. Then watch how things go.

Bostitch tackers and hammers call for only a small investment and you start getting your money back right away. As a matter of fact, you can rent Bostitch tools for a trial without any capital investment. Ask your regular Bostitch dealer.

Make this no-risk test and prove to yourself that you'll finish faster with more profit.

Fasten it better and faster with





This simple Circuit Breaker Demonstration will help you sell homes!

There's nothing complicated about it. The demonstration equipment (which we furnish) is light and compact. You can set it up on a moment's notice. There's nothing technical or involved about the demonstration itself. Yet, in a couple of minutes, it dramatizes a very important "plus" value you are providing in your homes.

Today's home buyers are "housepower"conscious. Electrical equipment and appliances now are being provided and promoted as an integral part of the home. It takes adequate wiring to provide for these "built-in" electrical features and others that will be added later on.

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

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

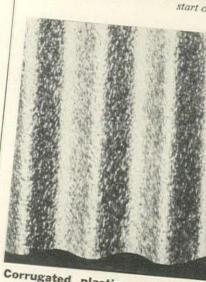
You put a proven selling feature to work for you when you install QO—finest breaker ever built!

A COMPLETE PACKAGE SquareD has a"packaged"plan (which includes the demonstration equipment shown above) that helps sell homes. If you're interested, clip this panel, attach it to your letterhead and mail it to S. C. Hunt, Square D Company, 6060 Rivard Street, Detroit 11, Michigan.



SQUARE TI COMPANY

New products

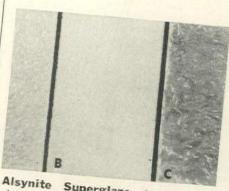


embossed surface to give sparkle to lig reflections. Resolite DeCor panels come 18 colors, transmit a uniform glare-fre

Alsynite Superglaze (center panel above) resists weathering and wear better than ordinary styrene or acrylic panels while offering better light stability, the makers claim. New coating overcomes variations in base materials, resin, and ultraviolet absorbers that cause variations. Alsynite, San Diego.

For details, check No. 88 on coupon, p 418

Corrugated plastic panel has no light. Corrugations are 2½" wide; pane are 26" and 34" wide in 8', 10', and 12 lengths. Retail price is 60¢ a sq ft.







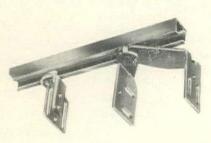
Italian marble tiles are 3/8" thick in three sizes—2"x6", 23/4"x81/4", 4"x12"; and in three patterns-herringbone, brick, and basket. Salirma marble tile comes in 24 color tones of green, rose, brown, grey, black, and white. The tile is cut and polished in Massa Carrara, Italy.

Furstenberg & Co, New York City. For details, check No. 89 on coupon, p 418



HAR-VEY Hardware is Guaranteed to be Your Best Buy

... and you can prove it to yourself by making your own comparison test backed up by a "double-yourmoney-back" guarantee. Simply pick out a test home . . . install Har-Vey, and if it is not the smoothest, quietest sliding door hardware you've used in that price range—you get double your money back. Remember . . . doors are one of the few things a prospective home buyer can try before he buys . . . hang your doors with Har. Vey and let them feel the difference in a Quality Home.



HAR . VEY "B" LINE ... unexcelled for Slide-A-Fold installations

Write for free detailed folder...

AIA BULLETIN . . . covers complete line of sliding door hardware, folding door hardware, pocket door frame and accessories.

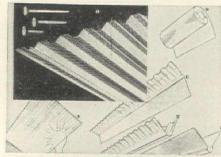
BULLETIN H-17 . . . covers details on "B" line Slide-A-Fold Hardware plus 9 other Slide-A-Fold arrangements.



@1959 By

AMERICAN SCREEN PRODUCTS COMPANY GENERAL OFFICES: 61 EAST NORTH AVENUE . NORTHLAKE, ILLINOIS

New products



Aluminum roofing accessories to match Diamond-Rib building sheet have been added by Kaiser Aluminum. Now available are ridge roll, formed ridge cap, endwall flashing, green-tinted translucent panels, and coil flashing in 50' rolls to 48" wide. Diamond-Rib sheets are 6' to 16' long.

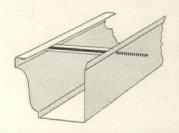
Kaiser Aluminum, Chicago. For details, check No. 90 on coupon, p 418



Double Dome skylight combines a polyester outer dome for strength and an acrylic inner dome for light diffusion. Dead-air space between provides insulation, cuts condensation. Integral flashing is simply nailed to the roof deck. Price: \$21 up.

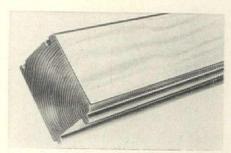
Plasteco, Inc, Houston.

For details, check No. 91 on coupon, p 418



New gutter spikes by W. H. Maze are designed for hanging aluminum and galvanized box gutters. The new nail has a steel core double dipped in molten zinc. Tip end has 3" of ring threads; points are diamond shaped; heads are flat and checkered. Spikes come 7" or 8" long.

W. H. Maze Co, Peru, III.
For details, check No. 92 on coupon, p 418

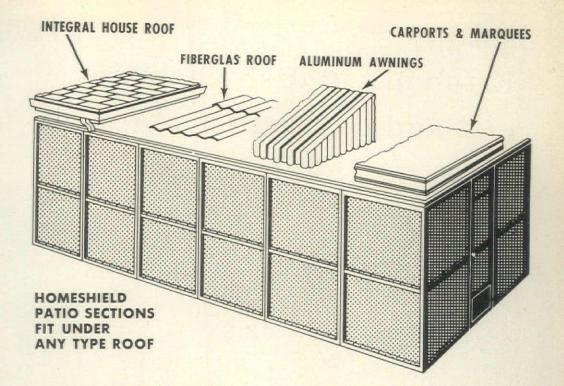


New wood roof deck called ClearPanel has a western red cedar body with a clear birch or oak facing which is glue bonded to 3"x6" or 4"x6" double t&g boards. Unit deck can span up to 16' without additional support.

Unit Structures, Peshtigo, Wis.

For details, check No. 93 on coupon, p 418

Publications on p 398



THE BIG PROBLEM in home building... more living space

A HOMESHIELD PATIO ENCLOSURE IS THE ANSWER

free beauty of the Homeshield Patio enclosure is your answer to the "indoor-outdoor living" trend and will be the greatest home salesman you could have. Homeshield Patio Screen enclosures gracefully adapt themselves to any type of architectural design and fit under any style of roof. Top Quality, rigidized roll formed sections are skillfully engineered to utilize aluminum's light weight strength. Only Homeshield sections are so sturdy you can use big 5 and

For full details and/or name of Homeshield Distributor nearest you, write to...

AMERICAN SCREEN PRODUCTS CO.

6 foot wide panels.

61 East North Ave. Northlake, III.

Makers of famous Har-Vey Hardware for sliding and folding doors

SCREENS

HAR-VEY

@1959 By

AMERICAN SCREEN PRODUCTS COMPANY
GENERAL OFFICES: 61 EAST NORTH AVENUE • NORTHLAKE, ILLINOIS



New home kitchens must have eye appeal—but eye appeal without convenience will not satisfy customers. There is no convenience like a built-in KitchenAid dishwasher, which combines beauty with real convenience.

Homemakers like the way a KitchenAid dishwasher provides extra time—and maintains kitchen neatness. The big, blue revolving wash arm power-washes dishes cleaner and flowing, sanitized hot air dries them brighter automatically. Pattern loading is never necessary.

And KitchenAid gives the builder another big advantage—after installation, the need for service is a rarity. Think of what it means to a reputation for quality homes with convenient kitchens that really work!

KitchenAid built-in models, with a choice of pump or gravity drains, offer easiest installation with all connections readily accessible from the front. An important part of this ease-in-installation is due to 24" width and the exclusive adjustable-height feature of KitchenAid. A choice of finish provides complete compatibility to any design.

Sell KitchenAid quality!

Write The Hobart Manufacturing Co., KitchenAid Home Dishwasher Division, Department KHH, Troy, Ohio.

KitchenAid.

the builders' dishwasher

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

Quick to install

fast selling

AllianceVare

bathroom fixtures...





make complete bathroom installation faster, easier, more profitable than ever!

He's so right! He knows he's selling and working with quality products... AllianceWare porcelain-on-steel bathtubs plus complementing porcelain-on-steel and vitreous china lavatories and water closets. And because AllianceWare tubs are so simple to install, complete quality bathrooms are ready for use in jig time!

There's an Alliance Vare bathtub for every requirement.



DADDY-LONGLEGS
The man who rides tall in the tub needs leg room . . AllianceWare design means more bathing area, thanks to deeper, straighter draw.



BROTHER-IN-LAW
Squeeze in an extra
bathroom for the guest
who came to dinner and
stayed. AllianceWare
double apron tub permits two baths in the
space of one!



M-M-M-MOMMY!
No one deserves
AllianceWare more than
she . . so permanently
smooth and beautiful
. . easy to clean, acid
and stain resistant.



BARE-A-TONE
Save that note! — bank note that is! The pocket-book choir always sings praises of Alliance-Ware's low, low prices.



DEAD-END KIDS Saturday night used to be fight night until their own 42" long tub put them into the splash of things . . . good for Rover, too!



GRANDMA BRITTLE
A lady can fall down
and break her harrumpty-rumpt unless
she's stepping into an
AllianceWare tub with
slip-proof bottom,





McKee Overdoors are backed by over 30 years of proven product performance!



Write for Bulletin C-10 or call the McKee Distributor in your area.

Some McKee Distributorships are available with package of factory training for sales, installation, and service. Ask about your local area.

McKEE DOOR COMPANY

85 HANKES AVE . AURORA I, ILLINOIS

Most practical sink for today's kitchen!

DISPOSO-WELL*



There's good reason why sales of the new Lyoncraft Disposo-Well are surging way ahead of the crowd. No other sink better meets your prospects' needs. That's because Disposo-Well, only sink designed just for disposer units, has moved the disposer drain to the upper corner, out of the way. The result is more unbroken work space in the sink, on the counter, and in the cabinet.

Homemakers also welcome the Redi-Rim* construction . . . rim and sink a single, sanitary unit. And it's so easy to install. Naturally, only quality, chrome-nickel stainless is used in Disposo-Well.

For sinks with real "sell-ability," install the new Lyoncraft Disposo-Well, available in double and single bowl models.

*T.M. and patents applied for

Be sure to ask about the Lyoncraft Traffic Builder Promotion



OPTIONAL: Maple Cutting Board fits into recessed ledge. After preparing food on board, waste is shoved directly into disposer.

World's largest fabricator of chrome-nickel stainless



LYONCRAFT STAINLESS PRODUCTS
DIVISION OF LYON INCORPORATED

13881 W. Chicago Boulevard Detroit 28, Michigan

Lyoncraft

AUTOMOBILE WHEEL COVERS . PRESTIGE TABLEWARE . KITCHEN SINKS . HOUSEWARES



Four new guides for using ceramic tile

Romany Spartan's 1959 catalog has four pages of color chips showing the company's full palette. It describes each line of wall tile, floor tile, heavyduty tile, window stools, bath accessories, natural clay, porcelain, glazed and conductive ceramic mosaics. Typical mosaics are shown in color, all sizes and types are drawn in outline for specifications.

The company's tile Portfolio contains nine sheets of ideas for using various types of tile. Also included, a

full list of Romany Spartan distributors.

A third booklet tells the story of RS ceramic-tile-faced insulating panels. Design data and details are shown, engineering data given, sample specs written out.

Ceratile decorated tile is shown in a fourth booklet. Twenty-seven patterns are presented in detail and in installations. The brochure also includes suggested specifications.

US Ceramic Tile Co, Canton, Ohio. Check No. 100 to No. 103 on coupon, p 418

Electric heat controls

White-Rodgers' full line of controls is shown in a new 4-page, 4-color brochure called *Elegance in electric heat thermostats*. Specs and pictures of the seven units are given; w-R operating, installation, and wiring features are shown in drawings. These controls fit radiant panel, cable, or baseboard systems as well as convection systems.

White-Rodgers Co, St Louis.

For copy, check No. 105 on coupon, p 418

How to control noise

Fiberglas frames its advice in a new 30-page booklet titled Fiberglas noise control products, a comprehensive analysis of the company's line. Included are what you should expect in an acoustical product, application data and specifications, concepts of noise control, descriptions of products.

Owens Corning, Toledo.

For copy, check No. 106 on coupon, p 418

Detail sheets from Reynolds

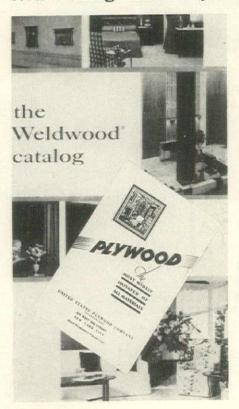
Two sets of full-scale details of Reynolds' aluminum products are now available from the company's Architects' Service. First of these is a set of drawings of the Series 500 commercial projected windows. The stiff board folders give size information, specifications, and an index to the translucent slip sheets.

For copy, check No. 107 on coupon, p 418

Also new from Reynolds' Architects' Service: slip-sheet details of the new Economy Wall System 101.

Reynolds Metals, Richmond, Va. For copy, check No. 108 on coupon, p 418

New catalog shows expanded plywood line



US Plywood has just brought out a complete revision of its full-line catalog. The first catalog published by USP (on the right) listed only plywood in 14 native woods (and mahogany), in sheets 24", 30", or 36" wide, 48", 60", 72", or 84" long. The new catalog lists nearly 200 products, among them: paneling, ranging from inexpensive Samara to Brazilian rosewood, in all degrees of finish; architectural panels; doors in stock and special lines; movable partitions; flexible wall coverings; construction, industrial, and packaging plywoods; Weldwood sidings. plain or overlaid; marine plywoods; Novoply particle boards; hardboard: metal and porcelain faced panels; Glasweld (see H&H Apr, p 220), a new stonelike wall panel; chalkboards; tackboards; Micarta; and adhesives and finishes to use with all the wood products. The catalog also contains a guide to the woods used, a paneling price guide, 4-color illustrations of some of the more popular panelings. 38 pages.

US Plywood, New York City.

For copy, check No. 104 on coupon, p 418

Two new Weyerhaeuser releases

A new 4-sheet folder describes Versabord, a particle board underlayment from the Silvatek Products Div. Also recommended for use in countertops. For copy, check No. 109 on coupon, p 418

Eight pages of suggestions of where to use hardboard make up a second new Weyerhaeuser release. Over 65 ideas for home, garage, or farm construction are included. The final two pages tell how to work the material.

Weyerhaeuser Timber Co, Tacoma. For copy, check No. 110 on coupon, p 418

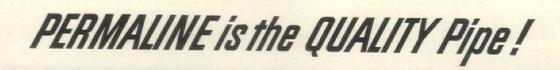
Onan "Power talks" series

This series of booklets tells the technical facts of power generation in easy-to-understand terms. Pamphlets are pocket size, two to six pages, cover static excitation, hours of operation, engine fuels, motor loads. M series will have special interest for your technicians.

D.W. Onan & Sons, Minneapolis.

For copy check No. 111 on coupon, p 418

continued on p 401



Save Installation Time

Use L'M 10-Foot Lengths

For better sewers and drains...

With 10-ft. rather than 5-ft. or 8-ft. pipe you can eliminate 20% to 50% of the joints on a job. That's money in your pocket.

L-M Permaline is the *ONLY* bituminous fibre pipe available in all sizes—2-, 3-, 4-, 5-, 6-, and 8-inch diameters in 5-, 8-, and 10-ft. lengths. Most complete line of fittings in the industry.

L-M Permaline is a high-quality product. It's tough, strong, durable. Yet it is light and easy to handle. Tapered couplings make leak-proof, flexible joints. No cement, no calking. Just drive it on!

Get the ORIGINAL long-length fibre pipe, L-M Permaline—for better sewers and drains, land drainage, house-to-sewer lines, septic tanks, foundation and downspout drains, etc. Ask your plumber, building supply dealer, or plumbing wholesaler. Or mail the coupon.

391-R

For information, mail the coupon

Permaline

Bituminous Fibre Pipe

LINE MATERIAL INDUSTRIES McGraw-Edison Company



LINE MATERIAL INDUSTRIES,
Milwaukee 1, Wisconsin

BSN49 HH-59

Please send me, free, complete information on Permaline Fibre Pipe.

dame_____

| Company | |
|---------|--|
| | |
| Address | |

Please check: Plumbing Contractor Builder

☐ Wholesaler ☐ Architect Other____

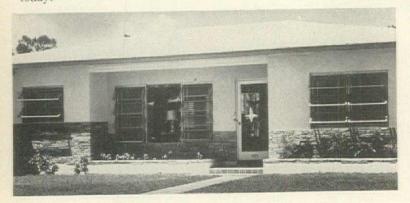
391

Most Prize Winning Homes Have Aluminum Windows



... VAMPCO and VAMPCO TRU-SEAL WINDOWS offer the widest choice at modest cost!

The growing trend to Aluminum Windows in modern home construction is well attested by the fact that the majority of Prize Winning Homes of the last few years have been constructed with Aluminum Windows of one type or another. Many of them have had VAMPCO and VAMPCO TRU-SEAL Awning Windows similar to those illustrated in this advertisement. Architects and builders naturally turn to VAMPCO and VAMPCO TRU-SEAL Awning Windows because they offer the greatest versatility of any American Aluminum Windows manufactured today! Panel windows with project-in and project-out ventilators . . . awning windows, casement, casement combination, picture windows, picture windows with casement or awning type flankers, window wall, glass block, basement, utility and custom designed windows are all available in the famous VAMPCO Aluminum Window Line. Made of the finest quality tempered aluminum extrusions, their trim, narrow, polished lines lend any home an air of spaciousness and up-to-the-minute design. Better lighting and ventilation, lower installation and upkeep costs, beauty and lifelong durability are but a few of the many advantages they offer. Why not get the whole story? Mail in the coupon below today!



VALLEY METAL PRODUCTS CO.





SUBSIDIARY OF

MUELLER BRASS CO. PORT HURON, MICHIGAN

A NAME THAT MEANS THE VERY FINEST IN LIFELONG ALUMINUM WINDOWS

| M | AMPGO |
|-------------|---|
| | |
| in Your Cur | See Complete File rent Sweet's Catalog |

WALLEY METAL PROPILCTS COMPANY

PLAINWELL, MICHIGAN

VALLEY METAL PRODUCTS COMPANY Dept. HH-59, PLAINWELL, MICH.

Send Residential Window Catalog.

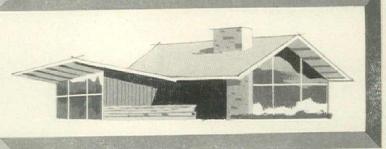
- Send 60-page Industrial-Institutional Window Catalog.
- Send Curtain Wall Catalog.
- Send Entrance-Door Catalog.

NAME

COMPANY

ADDRESSZONE ... STATE

sell more homes with Living pictures!





Realiste

3-DIMENSIONAL PHOTOGRAPHY

Detail—dramatic impact—undivided attention! The color and power of Realist Stereo 3-D photography puts your sales story right in your customer's hands with unmatched effect . . . the only kind of photography to give you such lifelike realism. You can end tedious "chauffeuring jobs" from site to site . . . tell and sell in the comfort of your own office or customer's home—yet sustain interest throughout!

Realist Stereo helps you show the "hidden values" of every home—the details of construction, texture, color and design that turn "eyers" into buyers. Realist Stereo shows home exteriors and interiors at their best...brings floor plans to life... gives you a permanent, flexible sales tool of proved impact!

Get the full story on how Realist Stereo can help you sell with living pictures! Mail the coupon below—today!

Realist THE CO

THE COMPLETE STEREO SYSTEM!



The complete 3-D selling kit is yours exclusively from Realist—including camera, wide-angle lens, viewer, slide and viewer cases, slide processing and duplicating, inexpensive stereo mailing pieces, and many more!

REALIST® STEREO CAMERA -f:3.5 LENS. \$129.00

Division of the David White Instrument Company 2051 North 19th Street, Milwaukee 5, Wisconsin

| Realist, Inc. |
|-------------------|
| 2051 N. 19th St. |
| Milwaukee 5, Wis. |
| |

Please send me a copy of your free booklet, "Sell more homes with living pictures."

arrang protestor

Address_

City

Zone___State____

Publications

start on p 398

How to get ahead-electronically

The new Synchro-Tape typewriter opens new ways to run your business, according to an 8-page brochure titled How can you improve your company's competive position? published by Remington Rand. The booklet tells how you can get better customer service, faster collections, more accurate records, clearer forecasts, better coordination by programming your work on this automated typewriter. Of particular interest to medium-sized businesses.

Remington Rand, New York City For copy, check No. 112 on coupon, p 418

"Aluminum in architecture"

This is the title of Kaiser's latest monograph. It talks of design considerations and limitations, the properties of architectural alloys, how to match finishes, various forms and uses for extrusions. etc. Ready reference tables discuss the alloys in terms of their uses: sectional drawings show them in various applica-

Kaiser Aluminum, Chicago. For copy, check No. 113 on coupon, p 418

All about built-up roofing

Certain-teed has just brought out a 56page book with complete information on their full line. Specifications are presented in four series: asphalt felt; Certaglas; tarred felt; mineral surface. Each series meets the needs for various slopes, deck types, climates, codes, etc. All specs are bondable.

Certain-teed Prods, Ardmore, Pa. For copy, check No. 114 on coupon, p 418

What is tempered glass?

A new brochure from Virginia Glass Products tells the story of Tempar-Glas. a heat-treated glass five to eight times as strong as ordinary glass. The booklet describes the characteristics, writes specifications, and suggests uses for the product. Size and performance information is also included.

Virginia Glass, Martinsville, Va. For copy, check No. 115 on coupon, p 418

How to lay Transite pipe

Johns-Manville has a new brochure to show you why their Transite sewer pipe is easy and advantageous to lay. The 8-page pamphlet shows how the new Ring-Tite coupler joins the sections, how the pipe adapts to job needs, how fittings simplify installations. Charts show which adaptors join which pipes.

Johns-Manville, New York City. For copy, check No. 116 on coupon, p 418

How to apply Formica

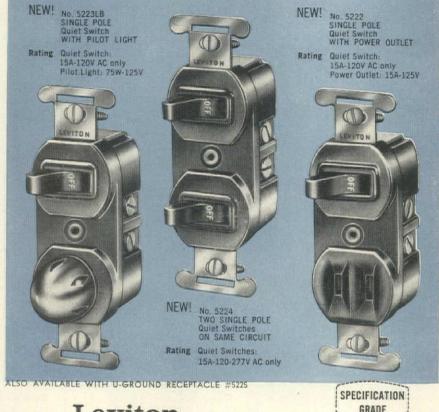
This 12-page booklet tells the best way to install laminated plastics on-the-job. In picture and text, it shows what tools are needed, how to handle adhesives, what designs to use, how to edge-band countertops, how to install wainscoting, how to cut, trim, and fit. Throughout are tips and techniques for handling the material.

Formica Corp, Cincinnati.

For copy, check No. 117 on coupon, p 418

continued on p 405

ENTIRELY



Leviton

is First with QUIET

SWITCHES

in the combination

> duplex line

YOUR BEST JOBS ARE DONE WITH



BROOKLYN 22, New York Chicago • Los Angeles Leviton (Canada) Limited, Montreal THE 3 MOST VERSATILE COMBINATION UNITS YOU'VE BEEN WAITING FOR! New Leviton Quiet Switches are mechanical switches, precision-balanced with heavy special silver contacts, magnetic arc-snuffing action. The movement is so quiet you can hardly feel it!

AND YOU GET ALL THESE FEATURES TOO!

- POWER OUTLET has bronze double-wiping contacts for longer life and pressure grip.
- PILOT LIGHT takes standard S-6 candelabra lamp that's easily removable. Nickel-plated protective hood over lamp.
- · RUGGED CONSTRUCTION! Base molded of brown phenolic ... covers of either brown phenolic or ivory thermosetting plastic. And heavy gauge rust-proofed underslung steel strap is riveted through cover and body to form a permanent assembly.
- EASY TO INSTALL! Large head No. 8 terminal screws have deep milled slots for easy wiring. Accommodate up to No. 10 conductors. Wiring diagram furnished with unit. Wide plaster ears on strap make wall alignment easier.
- · ECONOMY! Save installation costs-no extra box and wall plate necessary. Save wall space, too-single gang wall plate replaces double gang.

WRITE FOR FULL DETAILS TODAY!

Listed by Underwriters' Laboratories, Inc.

For your wire needs, contact our subsidiary AMERICAN INSULATED WIRE CORP.



It's how we sell...
as well as what we sell

that makes CRESTLINE so profitable for You!

CRESTLINE MILLWORK is sold direct to dealers—eliminating middleman costs! That means lower prices to builders and better home value to owners. And, because Crestline windows and doors are architectural quality throughout, mortgage men and realtors look with favor on homes built with Crestline. Homes are easier to build, easier to sell with Crestline Millwork.

THE CRESTLINE

COMPANY • 100 Thomas St., Wausau, Wisconsin, Dept. 5H (formerly The Silcrest Company

Windows: Slideby, Double-Hung, Stacking, Casement + Doors + Frames



Identify your new homes as "BRYANT-Equipped for Year 'Round Comfort"—it's the proved way to faster sales! And Bryant dependability keeps home owners satisfied—keeps you from being a trouble-shooter! Bryant dealers, backed by nearby distributors, adjust each unit to peak efficiency . . . stock a full line of parts . . . give prompt, expert service.

ONLY BRYANT OFFERS ALL FROM ONE SOURCE:

FURNACES for all types of fuel ... compact, economical, beautifully designed and finished.

BOILERS for hot water, steam or radiant heat in wide range of capacities for residential use.

AIR CONDITIONERS of all types . . . gas or electric, self-contained, remote, combined heating and cooling.

WATER HEATERS completely sealed-in-glass, all joints deep-welded with liquid glass fused at high temperature.

SUBURBAN LINE for Tract Builders.

COMMAND-AIRE LINE for New Custom Homes and Remodeling.

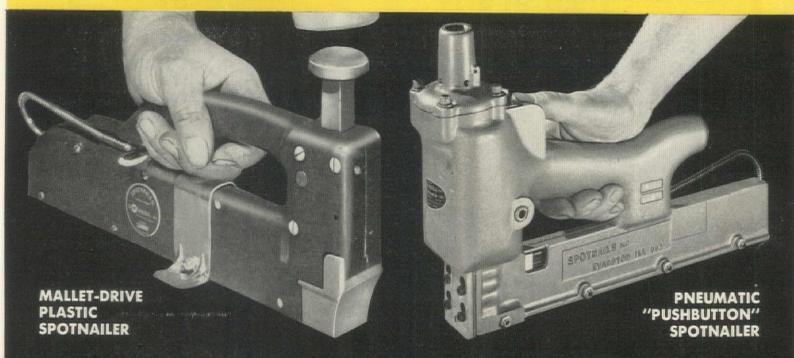
COMPLETE SET OF SELLING TOOLS FOR BUILDER



Years Ahead in Year 'Round COMFORT!

BRYANT MANUFACTURING COMPANY, Indianapolis, Ind.
In Canada: Bryant Manufacturing Ltd., Toronto

SPOTNAILS MEET F. H. A. STANDARDS



Here is a new experience! 2 men carry material to point of use. One man "Spotnails" the pieces in place so fast 2 men can't keep up. Spotnailers drive fasteners up to two inches long—3 per second—without operator fatigue. You can set up an on-the-spot production line on every job.

NOW.

Increase Production and Reduce Net Costs with Heavy Duty Galvanized Spotstaples

BOOKLET
GIVES
NEW
F.H.A.
STANDARDS



Free Copy













SPOTNAILS

EVANSTON, II



Combine the quality features of Trade-Wind Space Saver Hoods and the result is GREATER COMFORT for the customer.

This new line of Trade-Wind Ventilating Hoods gives the customer:

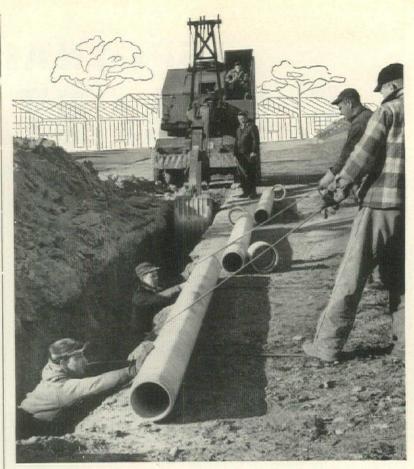
- Quiet, powerful ventilation that tops everything on the market.
- . . . Cabinet space entirely free for storage.
- A new style trend in hood design which is highlighted by the custom look of Trade-Wind craftsmanship.

All this means greater comfort and satisfaction for the user.



7755 PARAMOUNT PLACE, DEPT. HH

PICO RIVERA, CALIFORNIA



Check the profit advantages in Transite mains for your next development!



The familiar Ring-Tite® Coupling speeds and simplifies assembly of Transite Pipe.

- √ Higher appraisals
- √ Greater unit profit
- V Faster, easier selling

Sweeping the nation's building industry is a new and profitable trend—builder-installed water and sewer mains for new developments!

Few innovations have offered builders so much practical help in increasing profits and reducing selling time.

Take your next development, for example. With its own water and sewer mains—you'll have higher appraisals . . . greater profit on every home you build. You'll sell faster, too, because buyers are eager to pay the nominal premium for this lifetime convenience.

With all these advantages—Transite® Pipe is easy to install. Light-weight in long, 13' lengths—Transite handles easily above and below ground . . . with special equipment needed only in the largest sizes. And the familiar Ring-Tite Coupling assembles quickly, surely . . . giving a tight seal to every coupling in the line.

Learn about the profit opportunities in water and sewer mains for your homes. Call in your Johns-Manville representative. Meanwhile, let us send you illustrated brochures TR-160A, TR-165A and "What you need to know about Sewage." Write Johns-Manville, Box 14HH, New York 16, N. Y. In Canada, Port Credit, Ontario.

For the extra economy of an all Transite Sewer system, specify Transite Building Sewer Pipe for house to sewer connections

Transite Pipe meets Federal, A.W.W.A. and A.S.T.M. specifications



JOHNS-MANVILLE



Publications

start on p 398

New directions in insulaton

Here is Alfol's case for reflective insulation in sidewalls as an answer to the problems of year-round air conditioning, high inside humidities, electric heating, etc. The booklet explains how these factors will affect future building and specifies types of insulation to cut construction costs in meeting them.

Reflectal Corp, Chicago.

For copy, check No. 118 on coupon, p 418

Insulating with Fiberglas

This 8-page brochure describes the products, performance, and application of glass fiber insulation. Charts show types, widths, thicknesses, packaging of standard products; thermal values of types and thicknesses in particular applications, methods of using the types.

Owens-Corning Fiberglas, Toledo.

For copy, check No. 119 on coupon, p 418

Small sewage treatment plants

A new booklet from Chicago Pump tells how their small sewage plants work. These plants are built to serve 20 to 5,000 people, offer nuisance- and odor-free operation where municipal systems do not exist. The booklet explains the system, shows typical installations for 20 to 1,000 persons.

Chicago Pump Co, Chicago. For copy, check No. 120 on coupon, p 418

Your guide to quality

That's Kohler's title for its new 20-page brochure on how to choose plumbing fittings and fixtures. The booklet includes photos and detail drawings of bathrooms, washrooms, and kitchens. Leading Kohler fixtures and fittings are illustrated and described.

Kohler Co, Kohler, Wis.

For copy, check No. 121 on coupon, p 418

Catalogs

Sargent door closers

A 40-page, 2-color section on door closers has been added to Sargent's general catalog. Featured are the new rectangular style units but also included is all material on standard closers: information on how to select and specify, technical details, illustrated descriptions.

Sargent & Co, New Haven.

For copy, check No. 122 on coupon, p 418

New grinder catalogs

Chicago wheel has two new catalogs of grinders and accessories. One 12-page booklet covers Handee and Hi-Power units and the wheels, saws, brushes, cutters, drum sanders and bands available.

For copy, check No. 123 on coupon, p 418

A second 12-page catalog covers a complete range of sizes, shapes, types, and prices of Chicago grinding wheels, including vitrified, resinoid, and rubber bonds in cut-off, straight, recessed, and platemounted types. Also important are wheels for portable metal and cement grinding, notching, plastic grooving.

Chicago Wheel & Mfg Co, Chicago. For copy, check No. 124 on coupon, p 418

continued on p 409

Give your Homes beautiful contemporary Wood Finishes in just







COLOR TONES

Prepare the surface.

Apply REZ COLOR-TONES for tone on all exterior surfaces. REZITE for clear finish coat on siding.

REZ Color-Toned sealers are the easiest, most economical, most richly beautiful finishes for siding, garages, carports, fences, garden furniture, etc. Just two coats seal and color, and the wood is protected against weather, sunlight, changing humidity, rain, sleet, snow! REZ Color-Toned sealed wood retains its natural grain pattern...and your siding color can be maintained with long satisfaction merely by applying a single refresher coat. REZ will not peel, chip, crack or blister.

REZ COLOR-TONES can also give your interior wood literally dozens of soft, distinctive tones. The natural color of the wood itself will "shade" whatever color you apply. 13 basic colors to choose from, all of which can be "intermixed" for intermediate tones.

See your REZ "Sweet's Catalog" INSERT

For name of your nearest dealer, consult the YELLOW PAGES of your telephone directory or contact the leading paint distributor in your town.

THE PERSON NAMED IN COLUMN 2 IN COLUMN 2



SEND TODAY FOR THIS FREE 26 PAGE BOOKLET!

Here you'll find comprehensive information about the many uses of REZ Wood-Tone finishes. Also includes 13 color swatches of REZ Color-Tones.

REZ WOOD-TONES, INC.

Dept. 12, P. O. Box 142, Springdale, Pennsylvania

COVERAGE

EXTERIOR APPLICATION



RZ-32



The Famous CASE "Kitten Quiet" Non-Overflow (safety feature) One-Piece* Water Closet is produced in 49 decorator colors plus sparkling black and white.

Why it never disturbs your peace of mind

It's non-overflow, and you can hardly hear it flush! Over a million now in use.

It's the famous Case Non-Overflow One-Piece* Water Closet with the whispering flush. Low in height, with exclusive Case Body Contour Seat for correct posture. Choose from 49 decorator colors plus sparkling black and white. * PATENTED

MANUFACTURING CORPORATION 247 Delaware Ave., Buffalo 2, N. Y

Please send me free complete information on the famous Case Non-Overflow One-Piece* Water Closet and other Case quality bathroom fixtures.

ADDRESS -ZONE_

In model homes everywhere the swing's to ...



Styled in pure plated Antique Copper, Silver Satin Chrome and Copperlux.

Chambers SINCE 1910 ... the most honored name in America's finest kitchens!

 Every homemaker knows Chambers quality, a byword in gourmet cooking equipment since 1910. Now here is the finest achievement of Chambers craftsmen-a complete kitchen "package" of appliances for budget or custom kitchens. No mismatches, no mis-fits, no "off" colors . . . with one call to order, one call for service!

You owe yourself the pleasure of discovering how Chambers quality can give every kitchen that distinctive "custom look" ... without the custom price! Only Chambers offers so many combinations (with gas and electric ranges and ovens) to fit your plans exactly. Mail coupon today for complete specifications and name of nearest Chambers distributor.

A Complete Package For Every Kitchen ...

- ranges and ovens (gas and electric)
- dishwashers, disposers
- refrigerator-freezers
- ventilating hoods

| _ | | | | |
|---|--|--|-----------|--|
| | Dept. HH-59, 2012 | UILT-INS, INC. N. Harlem, Chicago | 35, | III. |
| | Please rush comple of the new Chamber | te specifications and n s Built-ins marked belo | ame w: | of nearest distributor |
| | Specifications onGas RangesDishwashers | ALL Equipment ☐ Electric Ranges ☐ Disposers | | Refrigerator-Freezers Ventilating Hoods |
| | NAME | | ****** | *************************************** |
| | ADDRESS | | | *************************************** |
| | CITY | Z | ONE | STATE |





10-Man Hours to Set-Up Foundation with SYMONS LO-WALL FORMS

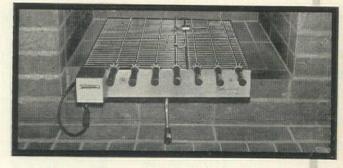
At its new housing development, Contractors and Builders, Inc. uses Symons Lo-Wall Forms and three specialized crews to keep job moving. One three-man crew erects, two or three men pour and two men strip. It takes 10 man-hours for form erection, 1½ man-hours for pouring, and only three man-hours to strip and move the forms. Foundations vary from 33 x 49 feet to 29 x 57 feet.

| * | ymons | CLAMP | AND | MFG. | CO |
|-----------|----------------------|---------------|--------|-------------|------|
| 4277 Div | ersey Avenue | ., Dept. E-9, | Chicag | o 39, Illin | nois |
| | erature; not interes | | | | |
| | | | | | |
| Send lite | erature, prices and | have salesman | call. | | |
| | erature, prices and | have salesman | call, | | |
| | erature, prices and | have salesman | call. | | |
| Name | rature, prices and | have salesman | call, | | |

shishkebabs * spit cooks * broils simultaneously or separately!

SOUTHERN HOST

biggest barbecue value on the market



Designed especially for kitchen, family room or lanai. Mat black or bronze enamel. Brass-plated or stainless steel face plate and motor housing.

Six 24" skewers One 24" spit shaft Two Grills covering 24" x 25" area. SH-424—Fits masonry opening: front elevation—left to right 261/2" front to back 241/2" top to bottom 6"

Dealer inquiries invited

BURR—SOUTHERN Division STATE STEEL INDUSTRIES, INC.

2060 S. Los Angeles St.

Anaheim, Calif.

AS LOW AS PER ZONE...

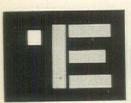
GIVES YOUR HOMES THE STRONG
MERCHANDISING ADVANTAGE OF EDWARDS
PROVEN ZONE-CONTROL HEATING SYSTEM.

- Edwards Zone-Control Heating
 System costs as low as \$25.00*

 per zone more than non-zone
 systems. *(average installation)
- Zoned heat gives you a strong merchandising advantage...helps you sell homes faster.
- A complete installation package can be installed in just 1 day by 2 men.
- Edwards Zone-Control Heating System, proven through thousands of installations, can give you up to 6 zones, yet uses only one pump, due to Edwards' positive-action motorized valve system.
- Complete package weighs under 400 lbs.
- 20 year guarantee.
- Brings quality zone-control baseboard heating prices within reach of lower priced development housings as well as custom built homes.

Write, wire or phone for complete information and brochures.





DWARDS

ENGINEERING CORPORATION

312 Alexander Ave., Pompton Plains, N. J. Telephone: TEmple 5-2808

Detto BALL FAUCET

ovailable in new "DISPENSER" * models
for hand cream or detergents

ONLY
ONE
MOVING
PART

*all dispenser models are available with
spray or dishwashing handle attachments.

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.

Delta FAUCET CORPORATION GREENSBURG, INDIANA

House in San Francisco. Architect: Pietro Belluschi, Cambridge, Mass.



Cabot's Colorful Stains
assure Trouble-Free Protection

Cabot's RANCH HOUSE HUES® at ½ the cost of paint

- Will not crack, peel or blister
- · Easy to apply and maintain. No brush marks
- No priming no thinning no sanding no scraping
- · Penetrate deeply, actually dyeing the wood
- Can be painted or stained over later if desired

SEND FOR
FREE!
COLOR
CARD

SAMUEL CABOT INC.

530 Oliver Bldg., Boston 10, Mass.

Please send color card on Cabot's Ranch House Hues

Publications

start on p 398

Plastic color chart

A full palette of colors and patterns in Nevamar high-pressure laminates has just been issued. Patterns include a wide range of wood grains, marbles, pearls, glitters, linen weaves, solids, and prints. Specifications for Nevamar are also given.

National Plastic, Odenton, Md.

For copy, check No. 125 on coupon, p 418

16 pages of kitchens

Kitchen Maid has revised its full-color Kitchen sketchbook to show the features of the 1959 line. Many color and design combinations, sketches of new Italian provincial styling, and standard Shadow-line styling are illustrated.

Kitchen Maid Corp, Andrews, Ind. For copy, check No. 126 on coupon, p 418

Structural glass products

This new catalog for the light construction industry covers several patterns in rolled, figured, and wired glass. Pattern specifications and light distribution charts are included, as are installation details and suggestions for decorative structural use.

Mississippi Glass Co, St Louis. For copy, check No. 127 on coupon, p 418

Tile-Tex flooring products

All flooring products made by Flintkote are shown in a new 16-page catalog. The floorings are shown in color and pattern, with a guide table to help in selection. Adhesives, waxes, cleaners, underlayments are also outlined.

Flintkote, New York City.

For copy, check No. 128 on coupon, p 418

Case plumbing fixtures

Every fixture in the Case 1959 line is described in a new 28-page catalog. The inside cover holds 49 color chips to show the variety the vitreous china fixtures come in. Four new products are featured: No. 1100 one-piece closet, No. 3000 wall-hung closet, No. 300 and No. 350 lavatories.

Case Mfg Corp, Buffalo.

For copy, check No. 129 on coupon, p 418

Metal gas vents

Van-Packer's complete system of metal flues for gas heating appliances is described in a new 16-page catalog. The booklet describes characteristics and construction, shows typical installations, lists nine pages of specifications for round and oval pipe and fittings.

Van-Packer Co, Chicago Hgts, Ill. For copy, check No. 130 on coupon, p 418

Berns vent equipment

Catalog sheets describing six range hoods, plus one oven hood, are new from Berns Air King. The 8-page pamphlet also shows installation details for the various types. A second catalog from Berns shows various models of bathroom heaters, combination units, wall heaters, ventilating fans, and exhaust fans.

Berns Air King, Chicago.

For copy, check No. 131 on coupon, p 418

continued on p 413



"And-our dream house is being comfort protected with * REFLECT O'RAY"

No question about it—dream homes quickly become realities in these days of modern thinking and living. Alert builders provide the best in home insulation with the least dollar expenditure, by using materials faced with REFLECT-O-RAY. Millions of tiny, polished aluminum flakes, permanently bonded to tough, durable backing paper reflect summer's

hot sun and winter's furnace heat to make indoor living a comfortable pleasure, regardless of outside temperatures. REFLECT-O-RAY is also a natural "Breather" sheet. It prevents condensation build-up without losing any of its reflective properties. For year 'round comfort everybody can afford, ask for and use insulations faced with REFLECT-O-RAY.

*REFLECTIVE "BREATHER" SHEET FACING

FOR INSULATION BLANKETS AND BATTS UTILIZING ON THESE AND OTHER FAMOUS BRAND INSULATIONS:

REFLECT-O-RAY is a tough, durable













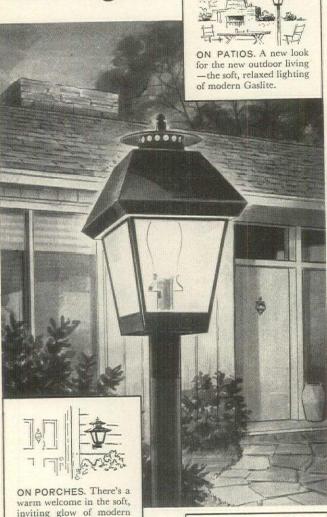


Aluminum Pigmented product of

THE APPLETON COATED PAPER COMPANY
APPLETON, WISCONSIN

New sign of Gracious Livingnew appeal to home buyers

Modern Outdoor Gas Lights



Practical for builder! Modern Gas lights, like all modern Gas appliances, cost less to buy and install. You can put them anywhere, with post or wall bracket mounting. And the wide choice of styles blends with traditional or modern house design.

Gaslite at the front door

Appealing to buyer! Modern Gas lights have a special appeal nothing else equals. With its soft, flattering glow-never harsh, never glaring-modern outdoor Gas lighting adds beauty to each home, enhances the overall desirability of an entire housing project. AMERICAN GAS ASSOCIATION



ALONG DRIVEWAYS. Your entire project takes on special charm with modern Gaslite. Safe lighting, always dependable.



Free booklet! Write Arkla Air Conditioning Corp., Gaslite Sales Div., Little Rock, Ark., for full information on new "Doorman 400" that gives manually controlled entrance light, and 4 other models.

ONLY GAS

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

Cut installation time in half! IMMEDIATE DELIVERY

COMPLETE PRE-ASSEMBLED

Includes aluminum jamb cover, steel flocked spring balances, spring covers.
COVERS RIVETED PERMANENTLY.

One piece for each side of double hung window! Just fasten the sash and the job is done. Installation time is half! Speeds window production, too! Increases profits! Complete range of sizes for all frame openings!

> Gives silent dependable operation plus tightest possible seal. Check with us today for prices.

> > SEND FOR THIS FREE CATALOG

CENTRAL METAL STRIP CO.

SASH BALANCE

4343 N. WESTERN AVENUE . CHICAGO 18, ILLINOIS . JU niper 8-8036

GOOD HOUSEKEEPING Magazine selects this Kingsberry Home



Read the full-color feature in the June issue of Good Housekeeping magazine. This is just one more reason why builders in the Southeast are going Kingsberry.

To find out how you can get a profitable Kingsberry franchise for your territory, write to:

KINGSBERRY HOMES, Ft. Payne, Alabama a division of Lumber Fabricators, Inc. A PIONEER OF THE MANUFACTURED HOME INDUSTRY

BRIXMENT MORTAR

Is Waterproofed— More Impermeable



Prepare two slabs of mortar, one with Brixment and one with ordinary cement-and-lime mortar. After mortars have hardened, seal a lamp chimney to each of the mortar slabs, and fill with water.



After 24 hours, note how much water has gone into and through the ordinary cement-and-lime mortar, and how little water has gone into or through the Brixment mortar.

High impermeability is desirable in mortar because: (1) It helps prevent the mortar from becoming saturated, thereby helps protect it from damage caused by freezing and thawing. (2) It helps prevent efflorescence by checking the passage of water and keeping it from percolating down through the wall. (3) It helps prevent the absorption of moisture up from the foundation and into the wall.

Brixment is highly impermeable. It contains an effective air-entraining, water-repelling agent. Even under pres-

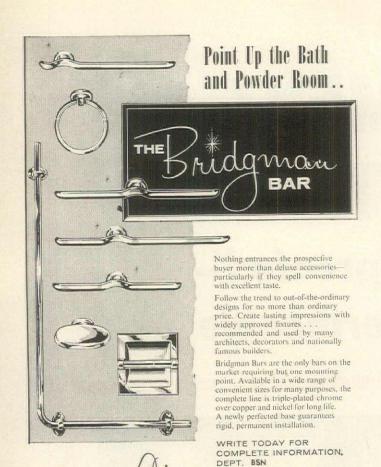
sure, water will not readily penetrate Brixment mortar.

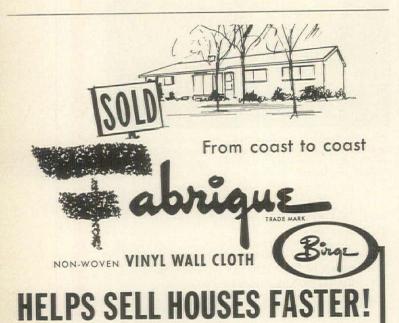
Brixment easily meets the special requirements of the Federal Specifications for water-repelling masonry cements.

High impermeability 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





BRIDGMAN

MICHIGAN

"Elegance in Chrome"

Here are some reasons why:

GENERAL

Fabrique has the magic of vinyl without high cost. It's ideal over dry-wall construction. It's distinctive, in famous Birge colors and designs. Fabrique has quality and *shows* it (a valuable house-selling feature).

Buyers and prospects know Fabrique through national advertising and publicity on TV, on radio, in newspapers. When they see it in *your* houses, they'll be more likely to buy. Write for full information.



THE BIRGE COMPANY, INC., DEPT. HH5, BUFFALO 1, N. Y.

meet the "MASTER BUILDER"



We call this new convertible the "MASTER BUILDER" because it is designed for the builder who wants big instrument performance—at a moderate price. Added brawn, without excess weight, combines with rotating center (as in engineers' levels) to assure accuracy for any construction challenge.

Its 3-ft. short focus enables you to work in cramped quarters. Its 22-power telescope will sharply define individual graduations on a rod at greater distances. It gives you unrivaled performance even in poor light. Horizontal circle and vertical arc with double verniers read to 5 min.

Whether you're leveling a foundation, setting forms or plumbing a column, you'll find the "MASTER BUILDER" a profitable time saver. Write for details.

C. L. BERGER & SONS, INC., 37H Williams St., Boston 19, Mass.



Engineering & Surveying Instruments... Since 1871



designer and financing agencies.

Free Literature and Technical Data:

Klise Manufacturing Company

52 Cottage Grove, S. W.

Grand Rapids 2, Michigan

• For Industry

Daylight where

Specify Solardomes

e For Schools

• For Home

you want it!

Publications

start on p 398

Engineering field equipment

Warren-Knight offers 28 pages of transits, levels, compasses, leveling rods, range poles, field books, plumb bobs, targets, measuring tapes, spring-joint rules, survey markers, altimeters, accessories, etc. This is part I of the complete Warren-Knight catalog.

Warren-Knight, Philadelphia.

For copy, check No. 132 on coupon, p 418

Moe Light's full line

Lighting fixtures of all kinds-pulldowns, clusters, pendants, reel and chain-hung, chandeliers, brackets, ceiling, recessed, valance, cornice, cove, kitchen, bathroom, accent, outdoor-are shown in a new 52age full-color catalog from Thomas Industries' Moe division. The catalog also contains many ideas for using the lights in the company's Certified Inspiration Lighting program.

Thomas Industries, Louisville.

For copy, check No. 133 on coupon, p 418

Non-ferrous hand railings

Architects will find use for Julius Blum Co's Stock components for the fabrication & assembly of non-ferrous hand railings. The 24-page booklet covers Colorail plastics, Carlstadt system components, handrail moldings in aluminum, bronze, and stainless steel, brackets, fittings, bars and shapes to fit, etc.

Julius Blum Co. Carlstadt, N.J.

For copy, check No. 134 on coupon, p 418

Adhesives for building

Sealers and adhesives for the building industry are listed in a 4-page, 2-color brochure from 3M. Adhesives described handle contact cementing, resilient and ceramic tile, wood block flooring, cove bases and carpet tack strips, insulation, etc. Sealers include drum and ribbon types for various jobs.

Minnesota Mining & Mfg, St Paul.

For copy, check No. 135 on coupon, p 418

Circuit breakers and entries

Federal Pacific has a new 32-page catalog of electrical service equipment: various lines of breakers and enclosures, panelboards, fusible service entries, switches, etc. Booklet gives wiring diagrams, prices, features, dimensions, ratings, installation procedures. Page size is 81/2"x11", folds to pocket size, is punched for ring-binder filing.

Federal Pacific Electric, Newark.

For copy, check No. 136 on coupon, p 418

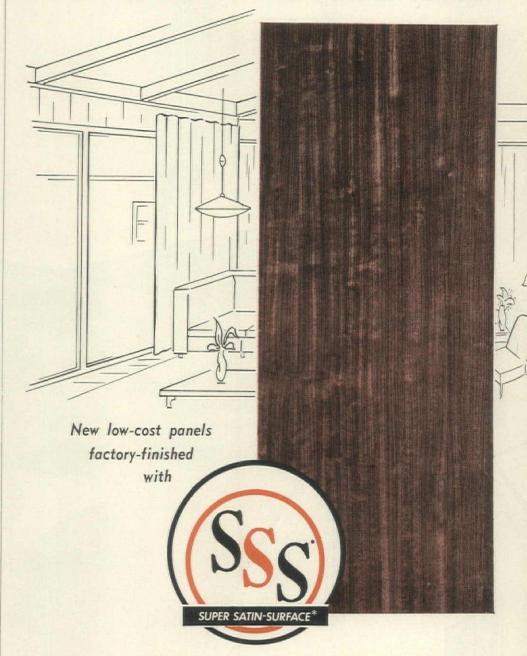
Aluminum mill products

Full specifications on the many alloys and forms of aluminum produced by Reynolds Metals are listed in a new 18-page publication. Included are: alloy and temper designations, fatigue and shearing strengths. Specifications cover foil, sheet, plate, wire, rod, bar, tubing, pipe, extruded and struc-

Reynolds Metals, Richmond, Va.

For copy, check No. 137 on coupon, p 418

Satin Smooth



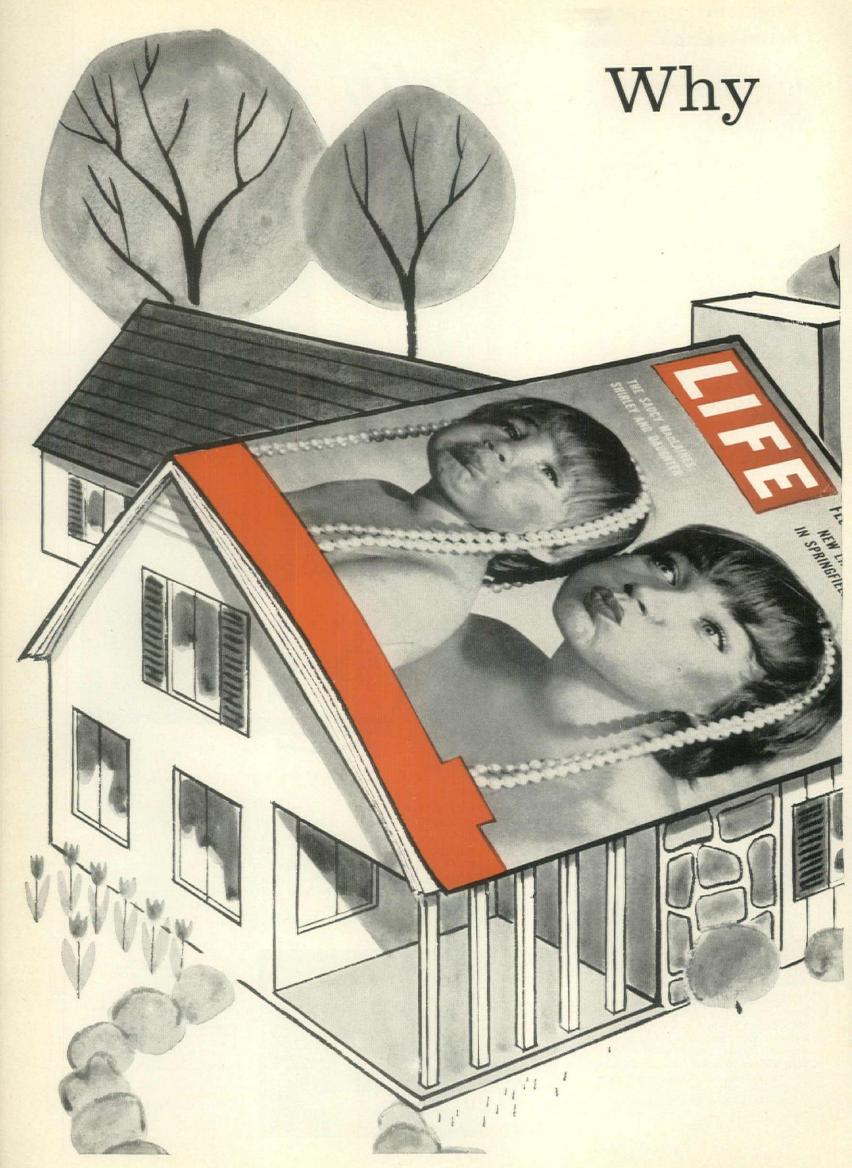
Save 75% in Finishing Costs

No more priming, filling or sanding-no time-consuming applications of first and second coats! Panels finished with Super Satin Surface have a brilliant, satiny surface sealed in the wood . . . permanently. Simply install—buff and wax—and the job is done. If varnish, lacquer or stain is desired, it takes but one coat, Panels finished with SSS cost little more than ordinary plywood—yet they do so much to increase the beauty and sales appeal of every home. Choose from 30 selected hardwood species-imported and domestic-each with patented SSS finish. Send for a free sample today.

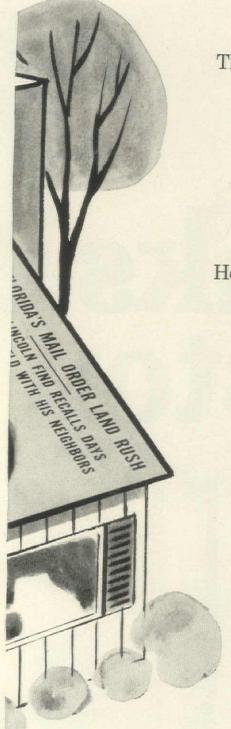
HAROLD R. JO P. O. Box 252 EUGENE, OREGON "Super Satin Surface" and "Triple S" or "SSS" are registered trademarks of General Plywood Corp. — their use is licensed on products having a super-sealed or Super Microscoled Surface that satisfies the quality standards of the trademark owner.

Please send me:
() Free sample of wood with SSS finish.
() Full information about the 30 imported and domestic hardwood panelings available from Harold R. Jones, Inc.
() Name of nearest dealer

Address



LIFE's quality can mean sales for you



There's a special quality to LIFE's readers.

They're eagerly aware of the world and of products that make for better living. An average issue of LIFE reaches 31% of all U. S. households. And these households spend more than the average on their homes—37% of all the dollars spent on home improvement.

The products they see advertised in LIFE have a special quality, too. These brands are the cream of American manufacturing . . . backed by the reputation of their nationally famous makers. People know the "Advertised-in-LIFE" sign is a sign of quality.

How can you use LIFE's quality to help sell your homes?

Follow the example of winners in the Brand Names Foundation Home Builder Classification. Three of the top five merchant builders—all aggressive merchandisers—used the "Advertised-in-LIFE" merchandising program in selling. You'll recognize the names:

First place, Willard Woodrow of Bellflower, Calif.; Miami, Fla.; Waldorf, Md. Certificate of Distinction winners: Brock Construction Co. of San Diego; Reed Homes, Inc. of Burlington, Conn.

Make sure that you build and furnish your homes with LIFE-advertised brand names. Publicize the fact in your local advertising and model homes by tieing in with the "Advertised-in-LIFE" model home program.

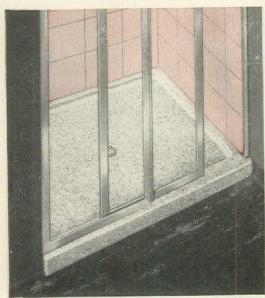
You'll find the quality of LIFE carries over to your homes and helps build a quality image. Whether prospects are old residents or new in town, they recognize the quality of LIFE-advertised products.

To find out more about selling with "Advertised-in-LIFE," write for the informative booklet "Selling with 'Advertised-in-LIFE' in the Model Home." It lists the many products you're interested in that are advertised in LIFE and gives you many valuable selling hints. Just fill in the coupon and send to LIFE.

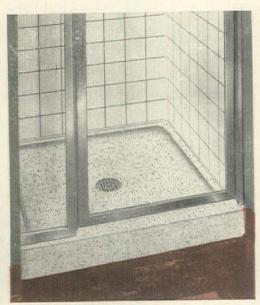
| LIFE | David Burnes Building Products Merchandising Mgr. 9 Rockefeller Plaza, N. Y. 20, N. Y. |
|------------------|--|
| Send me "Selling | with 'Advertised-in-LIFE' in the Model Home." |
| Name | The transfer in the first in th |
| | |
| Name | |

stop leaks stop

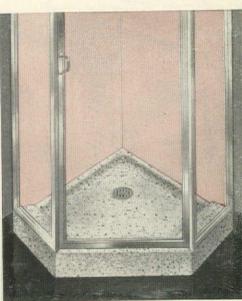
3 Basic Models let you Customize every job-



RECTANGULAR—New FIAT floor in the latest, most popular shower shape. Provides more elbow room and a more luxurious appearance—helps sell homes! Measures 48" x 32".



SQUARE—Modern built-in beauty at a modest price. FIAT Pre-cast Shower Floors insure fast, foolproof, economical installation... and no call backs.



corner—Here's the economical way to turn a 1½ bathroom house into a 2 bathroom house! Now you can build a full bathroom in the space formerly needed for a powder room.

Since 1922 . . . First in Showers

Packaged Showers . Doors . Floors . Toilet Room Partitions



FIAT PRE-CAST SHOWER FLOORS INSTALL IN MINUTES INSTEAD OF HOURS-ARE LEAK-PROOF FOR A LIFETIME!

Leak-proof Fiat Floors are quick-to-install—they simply slide into place leaving only a single drain connection for the plumber when he's connecting shower supply lines. Fiat Floors won't crack; are permanently leak-proof—even if building settles; saving you costly time consuming callbacks. And Fiat Floors have the good looks of quality that sells on sight. FIAT Pre-cast Shower Floors are recommended for 100% customer satisfaction by leading plumbing contractors. Distributed by leading plumbing wholesalers. Send coupon today for facts and figures on FIAT—the shower floor that gives you more!



FIAT METAL MANUFACTURING COMPANY

FIVE COMPLETE PLANTS: Long Island City 1, New York; Franklin Park, Illinois; Los Angeles 63, California; Albany, Georgia; Orillia, Ontario, Canada



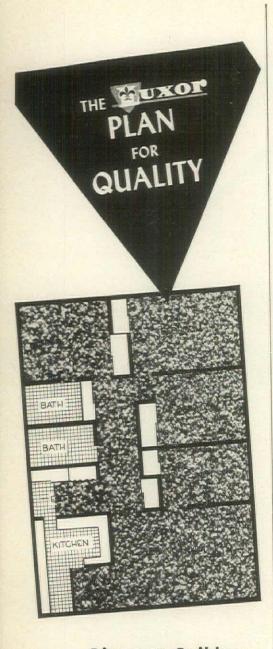
FIAT METAL MANUFACTURING COMPANY 9300 Belmont Ave., Franklin Park, Illinois Please send me your

Pre Cast Shower Floor folder.

NAME_____TITLE___

ADDRESS____

CITY____ZONE___STATE___



... Direct-to-Builder

Foam-Cushioned Carpeting

No feature spells quality to the home buyer as quickly as fine carpeting. No feature spells profit to the builder as surely as Luxor carpeting.

Luxor's unique direct-to-builder carpeting program offers the progressive builder the finest in carpeting at an almost irresistible price.

For example: Builder cost for Luxor, foam-cushion, deep-pile viscose carpeting is as low as 36¢ per sq. ft. Simple arithmetic proves that Luxor is very competitive to hardwood and resilient flooring.

Luxor carpeting is available in a full range of colors, styles and materials. The 3/6" latex foam cushion is an integral part of all Luxor carpeting, insuring long wear and unequalled appeal to the home buyer. Write today for the full story.



17 S. CHERRY ST., AKRON 8, OHIO

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:

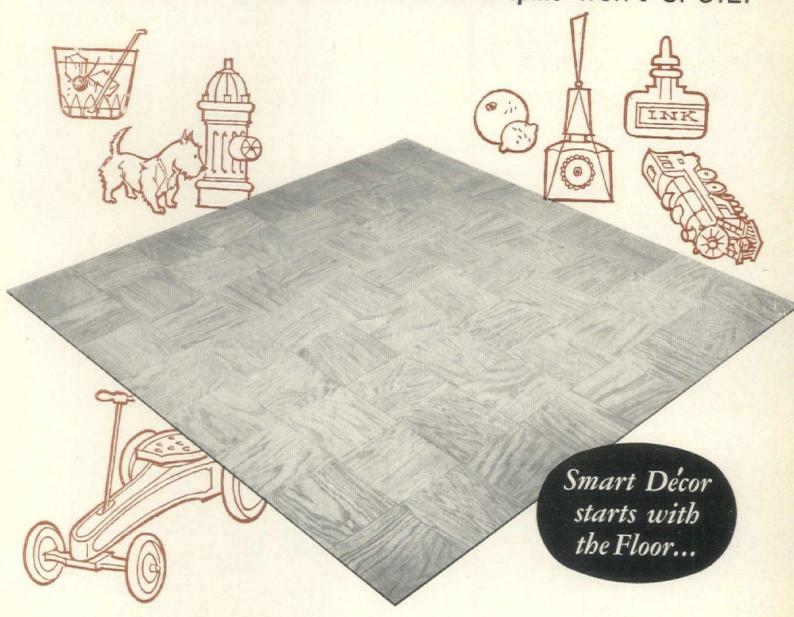
House & Home

Room 1021A, 9 Rockefeller Plaza, New York 20, N.Y.

| NEW PRODUCTS . May | 67. ☐ Dryseal pipe fittings 68. ☐ Borg-Warner shelfback fittings |
|--|---|
| | 69. Gerber lavatory hanger |
| 1. Ador's new Idor model 2. Carrier climate center | 70. ☐ Gyro wall-mount faucet 71. ☐ Mirro-Chrome closet rod |
| 3. Kitchen Maid cabinets | 72. Leigh closet rod |
| 4. Acme Debonair bar-kitchen 5. Everfrost home soda fountain | 73. Magnalum's closet rod 74. Arterest Designer tile |
| 6. Chambers built-in kitchens | 75. Romany Spartan Level-Set tile |
| 7. Maine wood & steel kitchens 8. Beauty Queen Fleetwood kitchens | 76. ☐ Marlite wall panels 77. ☐ Amtico custom tile |
| 8. Beauty Queen Fleetwood Kitchens 9. Kelwin dripproof faucet | 78. Haves precast terrazzo |
| 10. Dry-O-Mat cabinet 11. Mengel vanitory | 79. Matico gold-veined tile 80. Hondura wall covering |
| 12. Gulfspray shower enclosure | 81. Tessara wall covering |
| 13. Beauti-Dor enclosures 14. Efrolite tub enclosure | 82. ☐ Spatio wall covering 83. ☐ Sandura wall covering |
| 15. Columbia-matic door | 84. Nu-Wood acoustical tile |
| 16. ☐ Quaker State roll soffit 17. ☐ Quaker State flashing | 85. ☐ Simpson double tile 86. ☐ Barrett ceiling tile |
| 18. Quaker State roll valley | 87. Resolite corrugated panel 88. Alsynite Superglaze panel |
| 19. Quaker State termite shields 20. Quaker State galvanized shapes | 88. Alsynite Superglaze panel 89. Italian marble tile |
| 21. Esther Williams swimming pool | 90. Kaiser roofing accessories |
| 22. Cabana swimming pool 23. Rochester gas lamp & meter | 91. Plasteco skylight 92. Maze gutter spikes |
| 24. Roberts-Gordon furnace | 93. Unit Structures roof deck |
| 25. Handley-Brown meter box 26. Universal gas ranges | DUDUICATIONS |
| 27. Caloric gas ranges | PUBLICATIONS |
| 28. Roper built-in ranges 29. Armstrong ironer | 100. Romany Spartan catalog |
| 29. Armstrong froner 30. AllianceWare laundry tray | 101. Romany Spartan Portfolio |
| 31. Easy gas washer-dryer | 102. ☐ RS tile-faced panels 103. ☐ Ceratile booklet |
| 32. Broan range hood 33. Char-Grill barbecue | 104. US Plywood's new catalog |
| 34. Miskella food warmer | 105. ☐ White-Rodgers heat controls 106. ☐ How to control noise |
| 35. Nautilus No-Duct hood 36. Russwin door closer | 107. Reynolds window detail sheets |
| 37. Corbin door closer | 108. Reynolds wall detail sheets 109. Weyerhaeuser underlayment news |
| 38. Tale door closer 39. Kennatrack door hangers | 110. Weyerhaeuser hardboard uses |
| 40. Sargent Magnalock | 111. ☐ Onan power talks 112. ☐ How to get ahead—electronically |
| 41. Sterling door hangers 42. Morgan panel doors | |
| 43. Beckhart spiral hinge | 113. Aluminum in architecture 114. All about built-up roofing |
| 44. Rusco sliding window 45. Challenger steel casements | 115. ☐ What is tempered glass? 116. ☐ How to lay Transite pipe |
| 46. Permaseal storm window | 117. How to apply Formica |
| 47. Winter Seal storm window | 118. ☐ New directions in insulation 119. ☐ Insulating with Fiberglas |
| 48. Winkie core drill 49. Maginniss compactor | 120. Small sewage plants |
| 50 Popun rivets | 120. Small sewage plants 121. Kohler's guide to quality 122. Sargent door closers |
| 51. Lull high-lift loader 52. Everett trencher | 123. Chicago riandee grinders |
| 53. Versa-Lift crane 54. Boice-Crane tilt-arbor saw | 124. ☐ Chicago grinding wheels 125. ☐ Nevamar plastic laminates |
| 55. Champion masonry saw | 126. Kitchen Maid kitchens |
| 56. ☐ Campbell-Hausfeld spray units | 127. Mississippi structural glass 128. Tile-Tex flooring |
| 57. Black & Decker router-plane 58. Black & Decker 'W' drill | 129. Case plumbing fixtures |
| 59. Black & Decker dustless sander | 130. Van Packer gas vents |
| 60. Skil Recipro saw 61. Honeyfoam insulation | 131. Berns range hoods 132. Warren-Knight field equipment |
| 62. International Paper panel | 133. Moe light fixtures |
| 63. US Steel Homes panel 64. Carlon sewer pipe fitting | 134. Blum hand railings 135. 3M adhesives |
| 65. Acme washer connector | 136. Federal Pacific circuit breakers |
| 66. Haws-Kramer flush valve | 137. Reynolds mill products |
| | |
| NAME | |
| | FIRM |
| | |
| KIND OF BUSINESS | |
| STREET | |
| CITY | STATE |
| IMPORTANT: | |
| House & Home's servicing of this cou | pon expires Aug, 1959. In addressing direct inquiries |
| | the issue in which you saw the product or publication. |
| | |
| I wish to enter a subscription to House | e & Home for 1 year, \$6 \(\to \) 2 years, \$8 \(\to \) US and possessions and Canada only |
| | Posterior and Contract of the |
| □ New □ Renewal | Signature |
| | |



Hardwood Floors that scuffs and spills won't SPOIL!*



And Wood-Mosaic Laminated Block Floors cost no more than ordinary floors

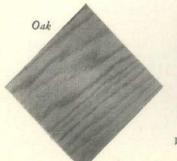
* "DIAMOND LUSTRE" Finish: A Wood-Mosaic Exclusive

for HER-beautiful block hardwood floors that stay beautiful and are easy to care for-always a point of pride. Available in unlimited patterns and combinations of woods.

for HIM-a luxury floor at less cost than an ordinary floor with a finish that provides 3 to 4 times greater wear resistance than regular lacquer finishes.

for YOU-a super sales advantage at no extra cost. Each Wood-Mosaic Block is prefinished at the factory and has Surefit tongued-and-grooved construction for fast, easy, economical installation.

Send for literature to Wood-Mosaic Corporation, Dept. B, Louisville 9, Kentucky





Wood~Mosaic

BLOCK FLOORS







The only Laminated Hardwood Block Floors available in four different woods.

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: | |
|----------------------|--|------------------------------|--|
| Page: 56, 57 | Airtemp Division (Chrysler Corp.) | 84, 85 | Ford Motor Co. |
| 395 | Alliance Ware, Inc. | 350 371 | Ford, Inc., Ivon R. Formica Corp., The |
| 287 | Allied Chemical Corp. (Barrett Div.) Alsco, Inc. | 348 | Frantz Mfg. Co. |
| 228E-H | Aluminum Company of America | 5 | Frigidaire Division (General Motors Corp.) |
| 34 1B | American Air Filter Co. American Brass Co. | 356 | Gates & Sons, Inc. |
| 270, 410 | American Gas Association | 412 | General Chrome |
| 271 | American Hardware Corp., The (P. & F. Corbin | 2, 122, 123, 249-254, 307 | General Electric Co. |
| 368 | American Home Magazine Corp., The | 281, 304, 305 | General Flectric Co. (Hotpoint Div.) |
| 50 | American Motor Corp. (Kelvinator Div.) | 286 112, 113 | General Electric Co. (Wiring Device Dept.) General Motors Corp. (Delco Appliance Div.) |
| 39 392, 393 | American Olean Tile Co. American Screen Products Co. | 5 | General Motors Corp. (Frigidaire Div.) |
| 54 | American-Standard Corp. (Air Conditioning Div.) | 228 98 | General Tire & Rubber Co., The (Bolta-Floor Div.) Geneva Modern Kitchens |
| 338, 339 | American-Standard Corp. (Plumbing & Heating Div.) | 24 | Georgia-Pacific Corp. |
| 28, 29 | American-Standard Corp. (Youngstown Kitchens | 12 293 | Gerber Plumbing Fixtures Corp. Gering Products, Inc. |
| 380 | American Telephone & Telegraph Co. | 291 | Goodrich Co., B. F. |
| 343 | American Window Glass Div. (American Saint- Gobain Corp.) | 374 | Gorman-Rupp Co. |
| 301 | Amerock Corp. | 26 | Hall Mack Co. |
| 108, 109 409 | Andersen Corp. Appleton Coated Paper Co., The | 236 78 | Harrischfeger Homes, Inc. Harris Manufacturing Company |
| 334, 335 | Armstrong Cork Co. | 366, 367 | Hines Lumber Co. |
| 107 | Barclite Corp. of America | 394 | Hobart Manufacturing Co., The Home Comfort Mfg. Co. |
| 287 | Barrett Division (Allied Chemical Corp.) | 258, 259 | Home Manufacturers Assn. |
| 278 412 | Bell & Gossett Co. Berger & Sons, Inc., C. L. | 281, 304, 305 | Hotpoint Co. (Division of General Electric Co.) Hough Co., The Frank G. |
| 233 | Berry Door Corp. | 106 384 | HOUSE BEAUTIFUL MAGAZINE |
| 25 300 | Besser Co. Best Homes, W. G. | 306, 421 14 | House & Home Hunter Div. (Robbins & Myers, Inc.) |
| 111 | Bestwall Gypsum Co. | 14 | |
| 412 | Bird & Son, Inc. Birge Co., The | 115 | Insular Lumber Sales Corp. Insulite Division (Minnesota & Ontario Paper Co.) |
| 389, 390 | Bostitch, Inc. | 76, 77 | International Harvester Co. |
| 16 228D | Briggs Manufacturing Co. Broan Mfg. Co., Inc. | 361 | International Paper Co. (Long-Bell Division) |
| 351 | Bruce Co., E. L. | 119-121, 404 | Johns-Manville Corp. |
| 402 379, 381 | Bryant Electric Co. Bulldog Electric Products Co. | 413 | Jones, Inc., Harold R. |
| 407 | Burr Southern Corp. of California | 364 | Josam Mfg. Co. |
| 408 | Cabot, Inc., Samuel | 50 | Kelvinator Division (American Motor Corp.) |
| 275 Cover III | Caloric Appliance Corp. | 42 298 | Kentile, Inc. Kewanee Mfg. Co. |
| 318, 319 | CARADCO, Inc. | 44, 45 | Keystone Steel & Wire Company |
| 72, 73 406 | Carrier Corp. Case Manufacturing Corp. | 282, 283 | Klise Mfg. Co. Knape & Vogt Manufacturing Company |
| 104, 105 | Celotex Corp., The | 299 | Knoll-Drake Products, Inc. Koppers Co., Inc. (Wood Preserving Co.) |
| 410 406 | Central Metal Strip Co. Chambers Built-Ins, Inc. | 364 | Kwikset Sales & Service Co. |
| 23 | Chase Brass & Copper Co. | 000 | Leigh Building Products Division (Air Control |
| 56, 57 308, 309 | Chrysler Corp. (Airtemp Div.) Coleman Co., Inc., The | 289 | Products, Inc.) |
| 372 373 | Colonial Products Co. | 241-244 | Lennox Industries Inc. Leviton Manufacturing Co. |
| 271 | Colorado Fuel & Iron Corp. Corbin Division, P. & F. (<i>The American Hardware</i> | 401 116, 117 | Libbey-Owens-Ford Glass Company |
| | Corp.) | 414-415 | Life |
| 328, 329 296 | Crawford Door Co. | 399 361 | Line Material Corp. Long-Bell Division (International Paper Co.) |
| 402 | Crestline Co., The | 411 | Louisville Cement Co. |
| 375 79-82 | Cribben & Sexton Co. Crossett Lumber Co. | 410 418 | Lumber Fabricators, Inc. Luxor Carpet Co. |
| 290 88, 89 | Cupples Products Corp. | 397 | Lyon, Inc. |
| 17-22 | Curtis Companies, Inc. (Fashion Wood Kitchens | 228B | Magic Chef |
| | Div.) | 374 | Majestic Co., Inc., The |
| 422 | Daryl Products Corp. | 128, 129 346, 347 | Masonite Corp. McCall Corp. |
| 400 112, 113 | David White Instrument Co. Delco Appliance Division (General Motors Corp.) | 396 | McKee Door Co. |
| 408 | Delta Div. (Fasco Screw Products Co.) | 320 344, 345 | McQuay, Inc. Meadows, Inc., W. R. |
| 407 285 | Ductless Hood Co., Inc., The Duraflex Co. | 378 | Miller Brothers Co., Inc. |
| 388 | Dwyer Products Corp. | 284 6, 7 | Miller Sliding Glass Door Co., Inc. Minneapolis-Honeywell Regulator Co. |
| 230 | Easy Laundry Appliances (Div. Murray Corp. of | 76, 77 | Minnesota & Ontario Paper Co. (Insulite Division) |
| | America) | 378 288 | Miracle Adhesives Corp. Moe Light Division (Thomas Industries, Inc.) |
| 349 408 | Edison Electric Institute Edwards Engineering Corp. | 382 | Morgan-Wightman Supply Co. |
| 356 | Efron Manufacturing Co., Theodore | 230 | Murray Corp. of America (Easy Laundry Appliances Div.) |
| 354, 355 | | 354, 355 | Murray Corp. of America (Eljer Div.) |
| 322, 323 226 | Farley & Loetscher Manufacturing Co. Fasco Industries, Inc. | 229 | Mutschler Bros. Co. |
| 17-22 | Fashion Wood Kitchens (Div. of Curtis Companies) | 30 | |
| 358, 359 416, 417 | Fedders Corp. | 92, 93 Cover IV | |
| 336 | Fleet of America, Inc. | 237 | National Lock Co. |
| 357 332 | | 387 245 | |
| 332 | onansoce steel corp. | 243 | ranonal manaculing Co. |



QUALITY

sells magazines too

That's why building product manufacturers budget much more to advertise in House & Home than in any other magazine in the housing field.

That's why House & Home has the largest circulation of any business magazine in any industry.

That's why House & Home is read each month by:

the builders of more houses than read any builder magazine the architects of as many houses as read any architectural magazine more distributors than read any building supply magazine more appraisers and lenders than read any mortgage magazine more realtors than read any realty magazine

And that's why advertising in House & Home produces the best quality response of any magazine in the field:

says this Milwaukee agency executive:

"Our client has experienced such outstanding success with its first House & Home campaign that his plant is now working day and night, six days a week, to keep pace with orders . . . Over 1,100 rated inquiries from House & Home readers, credit checked by our client, have come in and a substantial portion have been converted into customers."

says this manufacturer of air-conditioning:

"The couponed ads we ran in House & Home this year far outpulled the same ads in other magazines where they appeared—and the inquiries from House & Home are still coming in."

says this Texas agency executive:

"I was astounded at receiving 1,500 inquiries from the full-page ad in the March issue of House & Home. At least 25 of these were telegrams and about six were long-distance telephone calls." says this manufacturer of disposal plants:

"Results have been excellent from our advertisements in House & Home. They have outpulled ads in 24 other magazines."

says this West Coast agency executive:

"House & Home deserves a great deal of credit for the excellent growth our client has enjoyed.

1) our client's sales have increased seven fold;

 the company has outgrown, consecutively, three different plants, and begun construction of the largest plant in the industry;

3) distribution was expanded from three regional distributors to 80 covering all 48 states."

says this manufacturer of folding doors:

"House & Home pulled more inquiries from architects than the insert in the architectural magazine . . . and the cost per inquiry from House & Home was also lower than in any of the five leading trade magazines."

House & Home

the only industry magazine of housing

published by Time Inc Time-Life Building, New York 20, N.Y.





FIRM NAME _____

By the manufacturers of Patio-Magic, Aluminum Sliding Glass Doors

ADVERTISERS INDEX CONT

| Page: 36, 37 368 310 360 340 306 Cover II, 1, 1A | National Oak Flooring Manufacturers Assn. National Pool Equipment Co. National-U. S. Radiator Corp. Nevamar Carefree Kitchens New Castle Products, Inc. Nichols Wire & Aluminum Co. Nutone, Inc. |
|--|---|
| 228A 295 10 96, 97 64, 65 | Olin Mathieson Chemical Corp. (Metals Div.) Onan & Sons, Inc., D. W. Orangeburg Manufacturing Co., Inc. Overhead Door Corp. Owens Corning Fiberglas Corp. |
| 35 294 292 52, 53 99-102 325 353 342 294 | Pacific Lumber Co., The Peterson Window Corp. Pittsburgh-Corning Corp. Pittsburgh Plate Glass Co. Plywall Products Co., Inc. Ponderosa Pine Woodwork Portland Cement Association Powers Regulator Co., The Preway, Inc. |
| 279. 327 68, 69, 369 311-314 324 405 321 130 330 14 237 48. 49 383. 385 38 27 | Red Cedar Shingle Bureau Republic Steel Corp. Republic Steel Kitchens Reuten, Inc., Fred Rez Wood-Tones, Inc. Rheem Manufacturing Company Richmond Plumbing Fixture Division (Rheem Mfg. Co.) Rilco Laminated Products, Inc. Robbins & Myers, Inc. (Hunter Div.) Rodale Mfg. Co. Roddis Plywood Corp. Rolscreen Co. Romar Filter Corp. R. O. W. Sales Co. Ruberoid Co., The |
| 333 247 110 341 337 31 231 326 59-62 317 360 403 391 370 297 407 | Spotnails, Inc. Square D Company Stanley Works (The Hardware Div.) Stylon Corp. |
| 234, 235 382 124, 125 365 288 309 404 | Tennessee Stove Works Textron Metals Co. Thermador Electrical Manufacturing Co. Thomas Industries, Inc. (Moe Light Division) Timber Engineering Co. |
| 376, 377 273 315 126 | United States Gypsum Co. United States Plywood Corp. Universal-Rundle Corp. Uvalde Rock Asphalt Co. |
| 32, 33 | Van-Packer Co. Virden Co., John C. |
| 388 127 228 333 11 262-26 302, 302 40, 4 23 24 24 24 35 7 | Washington Steel Products, Inc. Waste King Corp. Weiser Co. Western Red Cedar Lumber Assn. Westinghouse Electric Corp. Weyerhaeuser Sales Co. Whirlpool Corp. Wiegand Co., Edwin L. Willamette National Lumber Co. Willamette Valley Lumber Co. Winter Seal Corp. Wood Conversion Co. Wood Mosaic Co Wood Preserving Division (Koppers Co., Inc.) |
| 362, 36 28, 2 | 3 York Corp. |



REVCO, CABINETS BY WHITEHALL, BUILT-IN GAS RANGES BY CALORIC.

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.

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.

Designed for "home automation" . . . Caloric built-in

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

NATIONAL HOMES' PRICES ARE FIRM FOR '59

If you are sick of having the profit squeezed out of your business, National's firm price guarantee is an important reason to see us about a franchise now!

National Homes guarantees its prices to its builder-dealers. The prices we quote you now are firm to January 1, 1960. As a big volume buyer we have already contracted for every item that goes into every National Home to be produced this year. Our material prices are guaranteed to us. We pass that guarantee on to you. This year—and every year.



The Nation's Largest Producer of Quality Homes

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

