AMERICA'S BIGGEST INDUSTRY

7:

FEBRUARY 1960 SIX DOLLARS A YEAR-ONE DOLLAR & C

GOOD IDEAS FILE: fireplaces, screens, entrances, and storage units

How to avoid today's common mistakes in house elevations "We need a new kind of industry teamwork to sell the new mass market" The New England tradition and Royal Barry Wills

EWS BEGINS ON PAGE 49 / NEW WAYS TO BUILD BETTER, PAGE 151 / COMPLETE CONTENTS, PAGE 95

Add a new selling spark – Ultima^e Linoleum with vinyl!



Now, Congoleum - Nairn creates new seamless glamour, inlaid linoleum with flashing metallics (plus vinyl magic).

Add something new and exciting – that's how you sell homes faster! For instance: Congoleum-Nairn's Ultima, an entirely new inlaid linoleum (the SEAMLESS type of flooring everybody knows) with vinyl ...plus sparkling, locked-in metallics...a smoother, glossier finish... and lovelier decorator colors. There's a real talking point! See all the popular Ultima colors and learn everything Congoleum-Nairn offers to help you sell—in their *complete* Builder's Program.

ALL PATTERNS ACTUAL SIZE. To the left 1803, upper right 1804, lower right 1805. SPECIFICATIONS: By the yard, 6 feet wide. May be used on above-grade floors of wood, concrete or ceramic tile, with or without radiant heating.



@ 1960, CONGOLEUM-NAIRN INC., KEARNY, N. J.



CRISP, ULTRA-MODERN STYLING . . QUIET, POWERFUL AIR DELIVERY



The New Jet-Look with New Jet-Power!

NUTONE offers America's Newest Exhaust Fans . . completely redesigned for beauty and luxury . . engineered for power and performance! Changed in every way . . except the price is still the same.

Eight new models for WALL and CEILING . . Pull-Chain or Automatic . . Horizontal or Vertical Discharge. All NuTone Exhaust Fans meet or exceed the Minimum Property Standards of FHA (MPS).

FREE ... DELUXE CATALOGS IN BINDER ... SEE NEXT PAGE -













NUTONE'S NEW Bathroom Ceiling Heaters

FOR CHILLY MORNINGS . . . OR IN-BETWEEN SEASONS

QUICK Bathroom HEAT When You Need It Most!

NEW slim-line styling that hugs the ceiling! Your choice of surface mounted Radiant type with an air-cooled housing . . or the exclusive Heat-A-Ventlite which combines a Circulating Heater, Exhaust Fan, plus bright Ceiling Light.

All NuTone Heaters have armored elements . . for longer life and trouble-free performance.

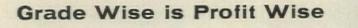
FREE DELUXE CATALOGS IN BINDER Write to . . NUTONE, Inc., Dept. HH-2 Cincinnati 27, Ohio



NEW Model #9090 HEAT-A-VENTLITE







SAVE....with "utility"

For framing quality and economy, there's no greater bargain than "Utility" grade-stamped West Coast lumber. "Utility" meets FHA standards for One-and-Two-Living Units in many framing and sheathing applications. (See FHA Bulletin No. 300 for spans and other application data.)

Discover the many home construction economies made possible by wise use of "Utility" grade West Coast framing lumber. You'll agree it adds up to important profits.

CHECK THESE USES for "Utility" grade West Coast

Lumber (In accordance with FHA Minimum Property Standards):

RAFTERS FOR LIGHT ROOFING (Roof slope over 3 in 12)

mun 4 ms. per	sq. n. in placel	
West Coast Hemlock		
Spacing	Maximum Span	
16" o.c.	9'-8"	
16" o.c.	14'-4"	
16″ o.c.	19'-8"	
	West Co Spacing 16″ o.c. 16″ o.c.	

FLAT ROOF JOISTS supporting finished ceiling (Roof slope 3 in 12 or less)

2x6	16″ o.c.	7'-8"
2x8	16" o.c.	11'-6"
2×10	16" o.c.	15'-8"
2×12	16″ o.c.	18'-2"

CEILING JOISTS (no attic storage)

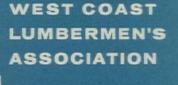
	2x6	16" o.c.	11'-8"	
	2x8	16" o.c.)	17'-6"	
FLOOR JOISTS			30 lb. live load*	40 lb. live load
	2x6	16″ o.c.	7'-2"	6'-4"
	2x8	16" o.c.	10'-8"	9'-6"
	2x10	16" o.c.	14'-8"	13'-0"
	2x12	16″ o.c.	17'-0"	15'-4"
	*sleeping	rooms only	tother than slee	eping rooms

BOARDS. Ample strength and satisfactory coverage make "Utility" boards a primary material for sub-floors, wall sheathing and solid roof boarding in permanent construction. This grade is widely used for light concrete forms.

FULL INFORMATION

Just off the press. Detailed information on the way Utility grade West Coast framing lumber can serve you economically. Write us for your copy today!





1410 S. W. Morrison Street, Portland 5, Oregon

FEBRUARY 1960

HOUSE & HOME February 1960 Volume 17, Number 2, Published monthly by TIME INC., 9 Rockefeller Plaza, New York 20, N. Y. This issue is published in a National and Western edition. Second-class postage paid at New York, N. Y. and at additional mailing offices. Subscription price \$6.00 a year.

NEW from **NORTON**[®]

A Rack-and-Pinion Door Closer Styled and Priced for Your Homes!

"Com-A-Door"

The Com-A-Door offers a new standard of quality for control of residential doors. Norton, the world's largest exclusive manufacturer of door closers, has styled and priced the Com-A-Door for residential wood or metal combination screen and storm or jalousie doors.

It incorporates the same rack-and-pinion hydraulic mechanism that has made Norton Closers the quality standard in commercial, hospital and school buildings. The mechanism is enclosed in an aluminum body and is sealed in oil, thereby reducing wear and eliminating maintenance.

The Com-A-Door is easiest to install. Universal design permits both outdoor and between-door installation on either right- or left-hand doors. A single accessible regulating screw controls a wide range of closing speeds.

Let the Com-A-Door strengthen your reputation for quality home building. Get complete information now. Contact your builders hardware distributor or write for Manual CC; no obligation.

City & Zone_



_		1001
	NORTON DOOR CLOSERS Dept. HH-20, Berrien Springs, Michigan	
	Please send Manual CC on Norton's new Com-A-Door.	
	Builder Architect Other	
	Name	2 23
	Title	
	Company	
	Address	

State



"What's behind the new name...?"





"Because it's the best..."

The Waste King/Universal GARBAGE DISPOSER is the one home-buyers look for in the homes you build. It's the only disposer with 30% faster Liquifying Action and 95% quieter Magic Sound Barrier. It's the most advertised and most accepted disposer name, with a long history of trouble-free performance. That's why nearly 2 million families own a Waste King/Universal Disposer... more than any other make.

1



"Washes dishes better than I can..."

The new Waste King/Universal BUILT-IN DISHWASHER is now a new home necessity. Besides bringing new prestige to your homes, it washes dishes better than she can! New vertical revolving double-arm sprayer now whirls the wash-rinse water to each top and bottom basket. Other features: Magi-Matic Cycle Selector; exclusive self-cleaning Filter System; true random loading; and an unlimited number of cabinet-matching front panels.



"AND IT'S ALL NEW" This new model available for delivery approximately May 1960

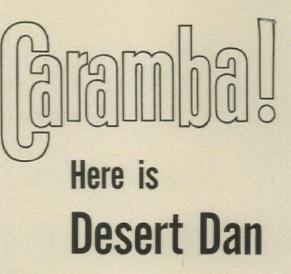
"all new..."

The name is new. The two names - Waste King and Universal have been leading specialists in the appliance industry for a long time. Now these two quality manufacturers are united into a new brand name. To the new home buyer, this means a kitchen equipped with the finest appliances. To you, it means much more ... It means a single source for a complete line of famous disposers, built-in dishwashers and ovens and ranges ... sold across the nation ... backed by 434 service agencies and a full staff of consumer relations experts . . . promoted by advertising in almost every magazine home buyers read. It means product, marketing and operational research facilities constantly working to bring you technically superior products at competitive prices. It means that, as of January 1, 1960, there's a new and aggressive appliance manufacturer on the scene a manufacturer with two proud histories and a promising future. We hope you'll share this future with us.



WASTE KING CORPORATION · LOS ANGELES 58, CALIFORNIA FINER PRODUCTS FOR THE HOME...FOR RESTAURANTS AND INSTITUTIONS...FOR INDUSTRY...FOR DEFENSE.

FOOD WASTE DISPOSERS - BUILT-IN DISHWASHERS BUILT-IN OVENS & RANGES - PORTABLE DISHWASHERS FREE-STANDING RANGES - COMMERCIAL COOKING EQUIPMENT TECHNICAL PRODUCTS FOR DEFENSE AND INDUSTRY INCINERATORS - COMMERCIAL FOOD WASTE DISPOSERS



He is the new symbol for DURE-THENE® polyethylene film, the waterproof membrane that keeps new home basements desert-dry for life. Desert Dan is a built-in salesman. He will be promoted to millions of new home buyers in mass-circulation magazines like *The Saturday Evening Post*, *Newsweek*, *House Beautiful's Building Manual* and many others, so your customers will know Desert Dan. Make sure he is in your model home and display the handsome Desert Dan certificate that is available from your dealer.

> When installed properly under and around foundations, DURETHENE

provides a peri moisture barrier

FHA-approved DURETHENE is best for all new home foundations. It is lightweight— 1000 square feet weigh less than 20 lbs. It is easy to install, so labor costs are low. Call-backs are eliminated. It is chemically inert, thus assuring basements lifetime protection against damaging moisture. DURETHENE comes in convenient widths up to 40 ft., 100 ft. long, black or clear. Install it under slabs and around foundation walls (right) for a permanently dry basement. Use it for flashing, crawl space, closing-in material, for cement curing and in walls, too. Be sure to display Desert Dan and tell your customers about DURETHENE protection. Ask for your colorful certificate the next time you see your DURETHENE dealer. DURETHENE protection is a good sign of a quality-built home. For the name of your nearest DURETHENE dealer, write Koppers Company, Inc., Durethene Plant, 7001 W. 60th Street, Chicago 38, Ill.

HIS HOME IS



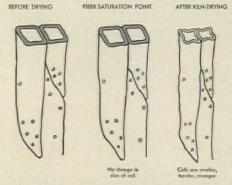


The Weyerhaeuser 4-SQUARE trademark is your assurance of scientifically KILN-DRIED lumber

Kiln-drving adds strength to lumber by reducing the natural moisture content of wood* to pre-selected levels. Lumber for framing is kiln-dried to 19% moisture content, finish lumber is kiln-dried to a 12% moisture content. These moisture levels are in contrast to a tree's natural fiber saturation point of about 25% moisture content, and actual moisture content of 115% or more, according to species, locale, etc. The principles of kilndrying are to reduce moisture content below this natural 25% fiber saturation point so that the wood cells and fibers will shrink and become more compact (with the result that the lumber becomes more stable) . . . and to remove the moisture evenly from each piece of lumber so that the center is as dry as the surface. In order to do this, both heat and live steam are used in the kiln-drving ovens. *Note: Moisture content is the weight

of water contained in wood expressed as a percentage of the weight of the oven-dry wood. Weyerhaeuser 4-Square kiln-dried framing lumber is dried to an average moisture content of 19%, well below the 25% fiber saturation point. Finish lumber is kiln-dried to an average of 12%.

The illustration below shows how wood cells change as water is removed.

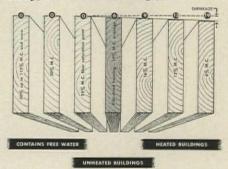


Kiln-drying not only reduces the natural moisture content of lumber: it also makes lumber less absorbent, less subject to changes in humidity. And as the "patterning" of the cells and fibers becomes more stable, lumber will grip and hold nails better. Pound for pound kiln-dried lumber is one of the strongest materials available to the builder!

Kiln-drying minimizes the effects of humidity

One of the characteristics of wood is that it shrinks or swells in proportion to the amount of moisture it contains. Scientifically controlled kiln-drying brings all framing, and all finish lumber to predetermined moisture levels. The result is that all framing members in a home built of kiln-dried lumber will shrink or swell equally with changes in humidity. The same is true of all finish lumber in a house. The result is that each piece of lumber works like a component part with every other piece. The house built of kiln-dried lumber offers exceptional resistance to the changes due to humidity variance, and thus to such problems as windows or doors that stick... cracked ceilings (generally caused by uneven shrinkage of floor joists) . . . popped nails, and the like.

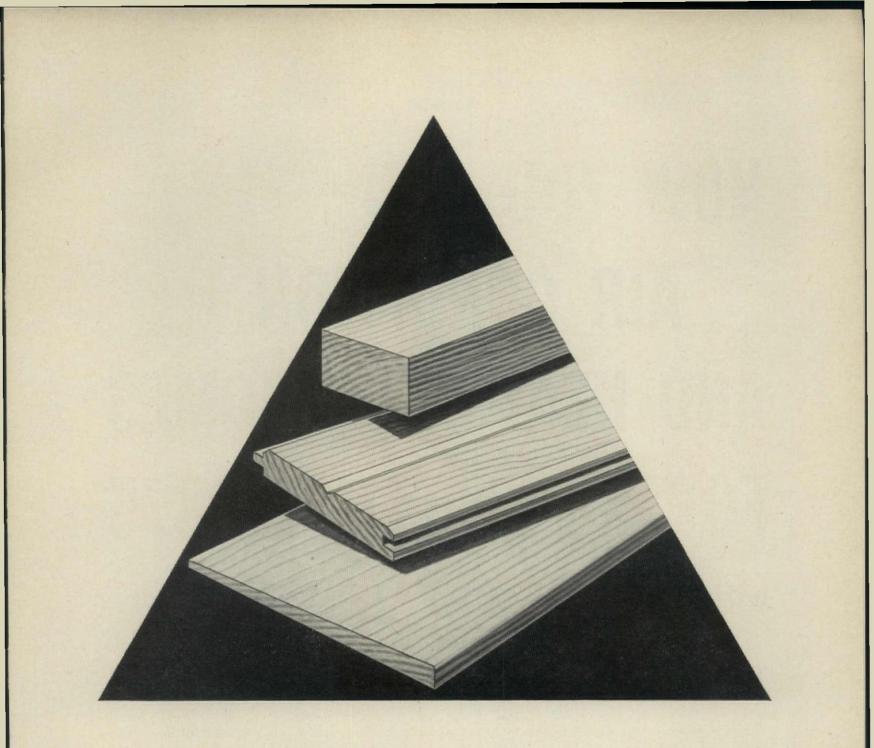
The following chart shows the relation of shrinkage to the moisture content of wood. Several facts should be noted. (1) Shrinkage starts only after free water is gone-at about 25% moisture content. (2) The Western softwoods shrink in width and depth, not in length. (3) Moisture content of lumber in use is governed by temperature and relative humidity. This varies according to locality, use within buildings, and so on.



Weyerhaeuser adds these extra advantages to scientific kiln-drying:

- 1. Manufactured to size and cut to accurate length *after* kiln-drying.
- 2. Ends cut "4-Square" to give each piece a full load-bearing surface.
- 3. Edges eased for safer, easier handling.
- 4. Surfacing after kiln-drying to assure full dimension.
- 5. Accurate grading and correct identification after kiln-drying. (Kiln-drying tends to bring out otherwise hidden defects, and this step culls out pieces containing such defects.)
- Trademarked and grade stamped to assure your receiving exactly what you ordered.

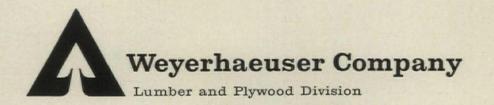
Weyerhaeuser 4-Square kiln-dried lumber is available in 11 species in finish, board, and dimension lumber—and in a variety of manufactured lumber products. For additional information, write: Weyerhaeuser Company, Lumber and Plywood Division, First National Bank Building, St. Paul 1, Minnesota.



KILN-DRIED stands for quality that can save you money!

More and more builders have found that prospective buyers actively check the products the builder uses and demand that the builder "stand behind" his homes. When you build with Weyerhaeuser 4-Square Kiln-dried Lumber, you gain a valuable sales feature: America's best known name in lumber—that has earned national consumer acceptance. You will also be working with a first quality material that is easy to handle, saw, and fit . . . that is lightweight, non-bulky, and strong . . . that is highly stable and resistant to dimensional change. This can save you the high cost and inconvenience of many "call-backs".

The opposite page explains some of the other advantages of building with kiln-dried lumber —and some of the extra advantages you get with Weyerhaeuser 4-Square kiln-dried framing lumber, sheathing, siding, roof sheathing, sub-flooring, mouldings, and paneling. See your Weyerhaeuser 4-Square Lumber Dealer for estimates and further information.



NOW YOU CAN AIR CONDITION AND HEAT YOUR HOMES FOR AS LITTLE AS \$875 with the amazing Carrier Thermo-Center!

Here's a way to sell your new homes fully air conditioned at little more than the price of a heating system alone. It's the exclusive Carrier Thermo-Center-a unique method of combining a forced warm air heating unit with a selfcontained summer air conditioner to provide low-cost, twelve-month central air conditioning. It can be used with substantial savings in ranch, split level or multi-story homes.

Study the diagrams on the opposite page. Notice that the key to this system is the prefabricated Thermo-Center wall sleeve and

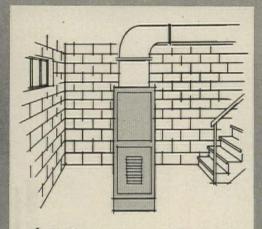
transition assembly which provides a simple, through-the-wall mounting for the air conditioner and controls the airflow between the heating and cooling units. The result is a costcutting installation technique for you and superior air conditioning your prospects want and can afford.

You can't afford to overlook this big sales plus in your new homes. Get the full facts about the Thermo-Center from your Carrier Dealer. He's listed in the Yellow Pages. Or write Carrier Corporation, Syracuse 1, New York.

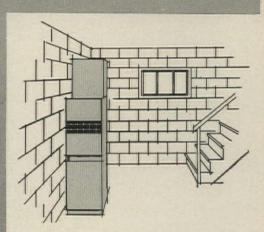
MULTI-STORY HOMES SPLIT LEVEL HOMES RANCH HOMES

Any type of home can be a Carrier Thermo-Center home

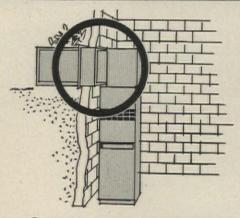
The ABC's of the Carrier Thermo-Center Concept



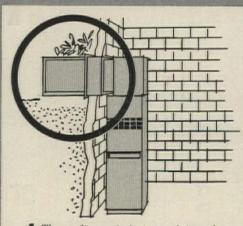
1 The first step is to put aside outdated notions of where a heating unit can be located. Planting the furnace in the middle of the basement was good enough years ago when people were satisfied simply with heating their homes.



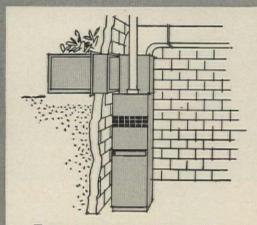
2 In the Thermo-Center, the unit is moved to an outside wall. There's no change in the amount of ductwork required, nor is the system operation affected in any way. Heating units can be upflow, downflow or horizontal; gas or oil.



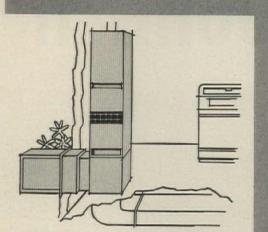
3 Next, the prefabricated sleeve and transition assembly is built into the wall and joined to the furnace plenum and ductwork. The sleeve and transition assembly can be applied to any type of wall construction — frame, brick or concrete.



4 The cooling unit is inserted into the sleeve, anchor brackets attached, seams caulked and electrical connections made. There are no refrigerant lines, no plumbing, no specialized on-the-job construction, no installation delays.



5 The Thermo-Center can be applied to any type of home – ranch, split level or multi-story. In a house with a basement, for example, the cooling unit is connected to a plenum set on top of an upflow Carrier Winter Weathermaker.



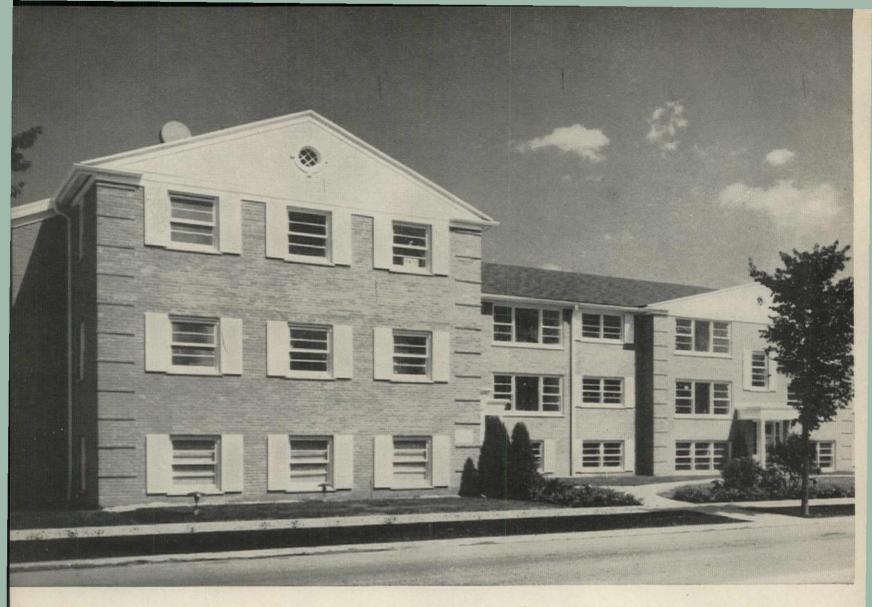
6 In a house built on a slab, the transition is joined to a Thermo-Center downflow plenum which supports the Winter Weathermaker. The plenum directs air from the heating and cooling units into the duct system.

You save hundreds of dollars per home

- 1 No water supply or drain piping is required
- 2 No refrigerant lines are needed
- **3** Ductwork and wiring are simplified
- 4 No specialized on-the-job construction is necessary
- 5 Installation time and labor are greatly reduced
- 6 Less than 5 square feet of floor area is required

MORE PROOF OF BETTER AIR CONDITIONING FOR EVERYBODY





Chicago builders get greater crack resistance at no extra cost with the

KEYMESH · KEYCORNER ·

Lasting beauty and low maintenance are built into the new Williamsburg Apartments located in Chicago, Illinois. That's because greater plaster-crack resistance is assured by reinforcing the lath and plaster walls.

Valenti Builders, Inc., Chicago, found it cost no more to get this extra reinforcing quality. By specifying Keymesh, Keycorner and Keystrip galvanized reinforcing lath, the builders got top quality reinforcement with greater resistance to cracks and fire.

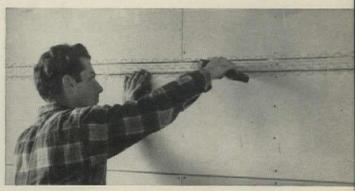
Tiled bathrooms in the Chicago project have lasting beauty with KEYMESH reinforcement. The portland cement plaster reinforced with Keymesh provides a strong, maintenancefree base for the tile. You'll find Keymesh makes any gypsum lath and plaster wall stronger and more crack resistant.

Keymesh rolls out flat and laps without bulging . . . forms easily and cuts quickly. The open mesh permits rapid troweling and assures a full, even thickness of plaster. Keymesh, Keycorner and Keystrip are galvanized against rust.





KEYSTRIP is a new addition to the Keystone line of plaster reinforcement. Here, this flat strip reinforcement is stapled over joints where narrow strips of gypsum lath are used. This use of Keystrip adds strength where needed.



KEYSTRIP can be used as a reinforcement for plaster in a space too narrow for strips of gypsum lath. A full bond of Keystrip to the plaster is assured. Keystrip also adds strength to points of stress above doors and windows.



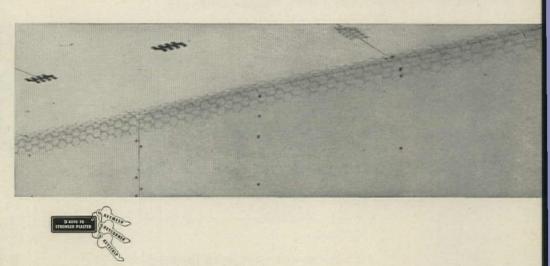
three keys to stronger plaster

KEYSTRIP GALVANIZED REINFORCING LATH

Inside plaster corners reinforced with KEYCORNER lath have almost twice as much resistance to cracking as corners reinforced with other materials. Recent tests and actual use confirm this feature.

The men working on the Williamsburg Apartments, as on other jobs, found the preformed, 4foot lengths of Keycorner easy to handle. Keycorner goes into place quickly and can be nailed or stapled. The open mesh design makes it easy to plaster over and assures a complete bond.

Get quality wall construction with lath and plaster at low cost by specifying the three keys Keymesh, Keycorner and Keystrip. Send for more complete information and results of recent tests conducted by leading laboratories. Write Keystone Steel & Wire Company, Peoria 7, Illinois.



KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

Keycorner · Keymesh · Keystrip · Keywall · Keydeck · Welded Wire Fabric



SIMPLE STEPS:

 Slide detach shoe up the hardware linkage





3. Remove sash from retaining channel

nation.



Removable Awning Windows

Exclusive BILT-WELL quick hinge release makes sash removable from inside without tools

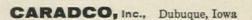
New removable BILT-WELL Awning Windows simplify original installation for the builder and maintenance for the homeowner.

Look for these other BILT-WELL features:

- 1 Brass or nylon bearings at all moving joints.
- 2 Hinge is fully concealed making unit prowler-proof.
- 3 Choice of operators—rigid bar, jointed bar, lever or gear.
- 4 Easily removed wood bead (patented) for simple reglazing.
- 5 New goldtone finish on all metal hardware.
- 6 Surpasses F.H.A. minimum property requirements.

ment, Basement. CABINETS, Kitchen, Multipleuse, Wardrobe, Storage, Vanity-Lavatory. DOORS, Exterior, Interior, Screen and Combi-

The BILT-WELL Line of Building Woodwork— WINDOW UNITS, Double-hung, Awning, Case-



There's more to offer with

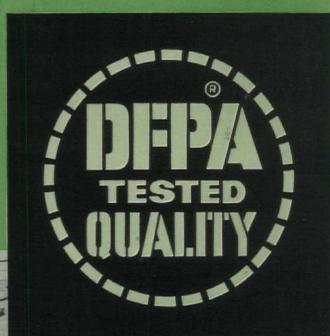


by Caradco

Another nine-page report from **Douglas Fir Plywood Association**

ways to build more house for the money with

DFPA-QUALITY TRADEMARKED FIR PLYWOO D



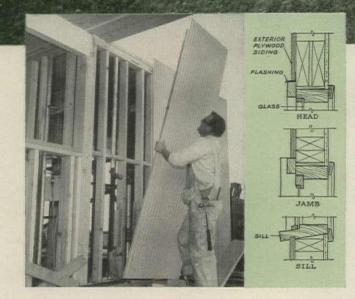
22 WAYS TO BUILD

MORE HOUSE

FOR

THE MONEY

Why spend time and Exterior plywood



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



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

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

money on siding <u>and</u> sheathing? does <u>both</u> jobs in one step

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

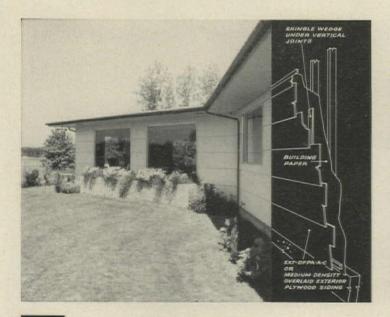


Panel-and-batten wall on Eugene, Ore. home was simply built with standard ³/₈" Exterior fir plywood nailed to studs with battens at joints, and stained. With weathering, plywood checks and acquires a pleasantly textured surface. One-step wall method meant low cost: \$8.75 psf. For the smoothest siding,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



2

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





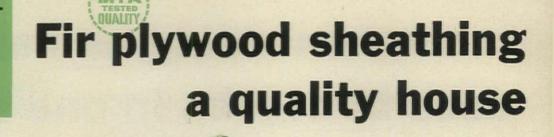
Lapped plywood siding makes a rigid wall without sheathing. On this Olympia, Wash. home, 16"-wide courses were nailed to studs, with wedges at joints. Plywood may be regular or, as used here by designer-builder Charles Sten, overlaid for a premium paint job. It may be ripped, or purchased precut (beveled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



2

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

FOR THE MONEY



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

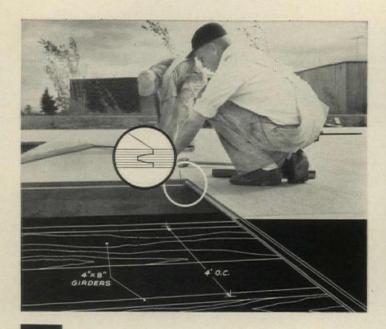
A switch to fir plywood roof decking from car decking cut labor costs 15% for a volume builder in northern California. He uses tongue-and-groove $\frac{3}{4}$ " A-D Interior plywood with the "A" face down. Ceilings are given a planked effect by V-grooving the plywood 12" o.c. Instead of building soffits,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



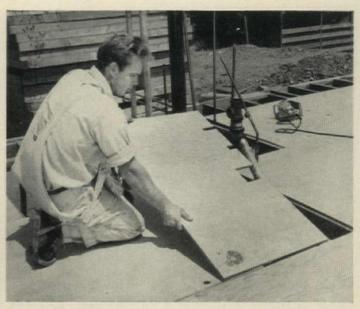
Exposed plywood-and-beam ceilings are popular with home buyers. For more information about fir plywood sheathing and subfloors, write Douglas Fir Plywood Association, Tacoma 2, Washington.

6

and subflooring help you build at lower in-place cost



New tongue-and-groove 2 \cdot 4 \cdot 1^{\circ} plywood cut labor 37% for Tacoma, Washington builder R. H. Wegner. The 1¹/₈" subflooring-underlayment is now available with t&g edges to eliminate blocking. Two men can lay 1,000 square feet in four hours, handling 60% fewer pieces than with conventional joist construction.



8

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



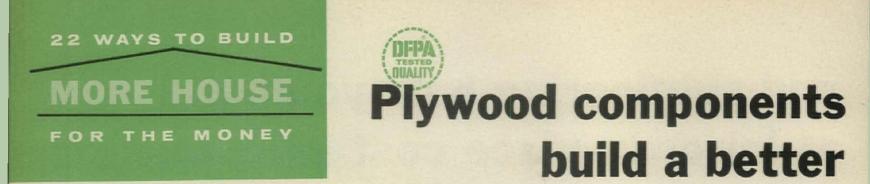


Tilt-up fir plywood walls mean savings of \$525 per house for Smith & Kline Construction Co., Castro Valley, Calif. They fabricate entire 40-ft. second-story walls, then tilt them up into place. This eliminates the time and cost of erecting scaffolding, and plywood's structural strength makes bracing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

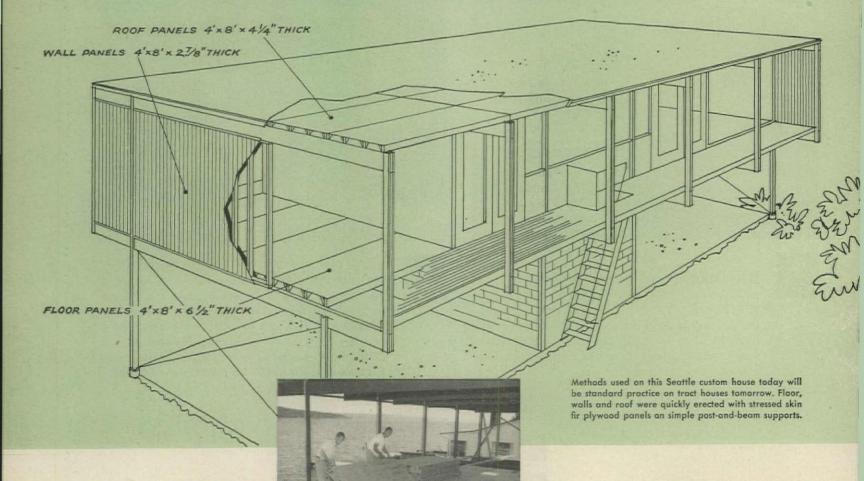


Mechanized handling of fir plywood roof sheathing helps cut roof construction costs. H. M. Gorelick of Long Island uses a mobile crane welded to a war surplus vehicle to lift sling loads of plywood, ceiling joists, and roof framing. Shapland Homes, Champaign, Ill., gets plywood to secondstory roofs with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

Look for the DFPA-quality trademark on all plywood you buy



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

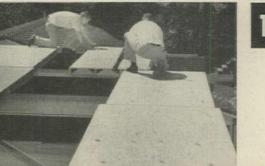






Wall components, also plywood panels, took 17 man-hours to install. Outer skins served as siding; inner skins, paneling. Plywood was of two types: vertically grooved Texture One-Eleven®, which was stained; or mediumdensity overlaid, smoothly painted. and stiffeners. Plywood type and lumber dimensions varied with application. Panelbild Systems of Lynnwood, Wash. was fabricator and installer.

Floor panels took only 7½ manhours to install. All components were 4x8 fir plywood "sandwiches" containing insulation and with lumber framing



13

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

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

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

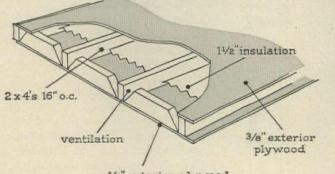


This unusual folded plate roof brought crowds to Wedgwood Homes' model house in Portland, Ore. Its quick erection was as remarkable as its looks. Five men-put up posts, beams, and prefabricated roof panels in five hours. A comparable conventional roof would take 12 man-days. Roofs like this, made of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





Cutaway shows construction of stressed skin roof panel at left



1/4" exterior plywood

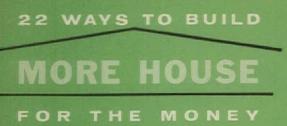


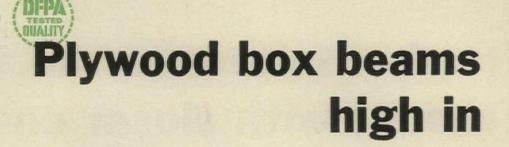
Flat panels can also be used on roofs of more conventional design, like this slightly pitched one in Denver. Builder Robert Harlan used 2×8 -foot sandwich-type fir plywood panels for a 2,560-sq. ft. roof. The doubleduty panels were strong, yet light enough for workmen to handle easily. Top and bottom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



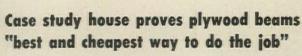
Vaulted roofs like the one on the Redi-Gas building in Parkland, Wash. are being adopted by more and more builders for home construction. Components were fourfoot-wide arched stressed skin panels of Exterior fir plywood with paper honeycomb core. Lightweight, easily handled, each spans 16 feet. Component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

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





2"× 4" FLANGE



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



2"× 4" STIFFENER

3/8" PLYWOOD WEB

18

19

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

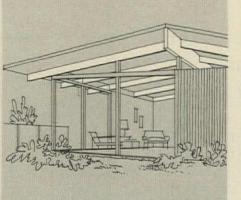
Door lintels of these small aircraft hangars in Tacoma, Wash. are peaked fir plywood box beams. Strong, economical beams span 40 ft. and support 375 lbs. per lin. ft. Other logical applications for similar beams: garages, marinas and warehouses.

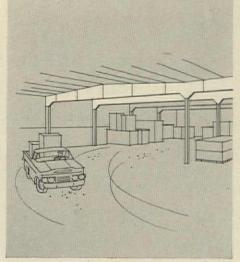
17

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

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







20

Plywood box beams for garage door openings are low-cost and good-looking. Because of plywood's high strength-weight ratio, they are easy to handle, yet amply stiff for long spans. 21

Ridge beams and exposed ceiling beams of fir plywood are smooth and attractive. Longspan beams make sense in home building because they permit maximum design freedom. This warehouse illustrates use of low-cost, strong plywood beams to create a 40' x 80' clear area free of supporting posts or walls. Four peaked beams, spaced 20 ft. o.c., span 40 ft.

INSIST ON DFPA GRADE-TRADEMARKED FIR PLYWOOD

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

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

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DOUGLAS FIR PLYWOOD ASSOCIATION TACOMA 2, WASHINGTON

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

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

A message of significance for: builders who want to cut **"HIDDEN" INSULATION COSTS**

Today's ALFOL Blanket cuts more than just installation cost

ALFOL reflective, aluminum foil insulation starts lowering your "hidden" costs the first time you use it.

Less labor to handle...less space to store. ALFOL takes only 1/20 the hauling and storage space required for bulk-type blankets. You can deliver ALFOL insulation for an entire house in your car...haul a project load of insulation in a truck. ALFOL weighs only 1/12 as much as bulk-type blankets. One man can carry 500 to 1000 sq. ft. at a time.

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Top these "hidden" cost reductions with the unsurpassed year 'round heating and cooling and condensation control efficiency which ALFOL Blankets give your houses and you have a building bonus worth investigating.



Easy to handle...

... Fast to install

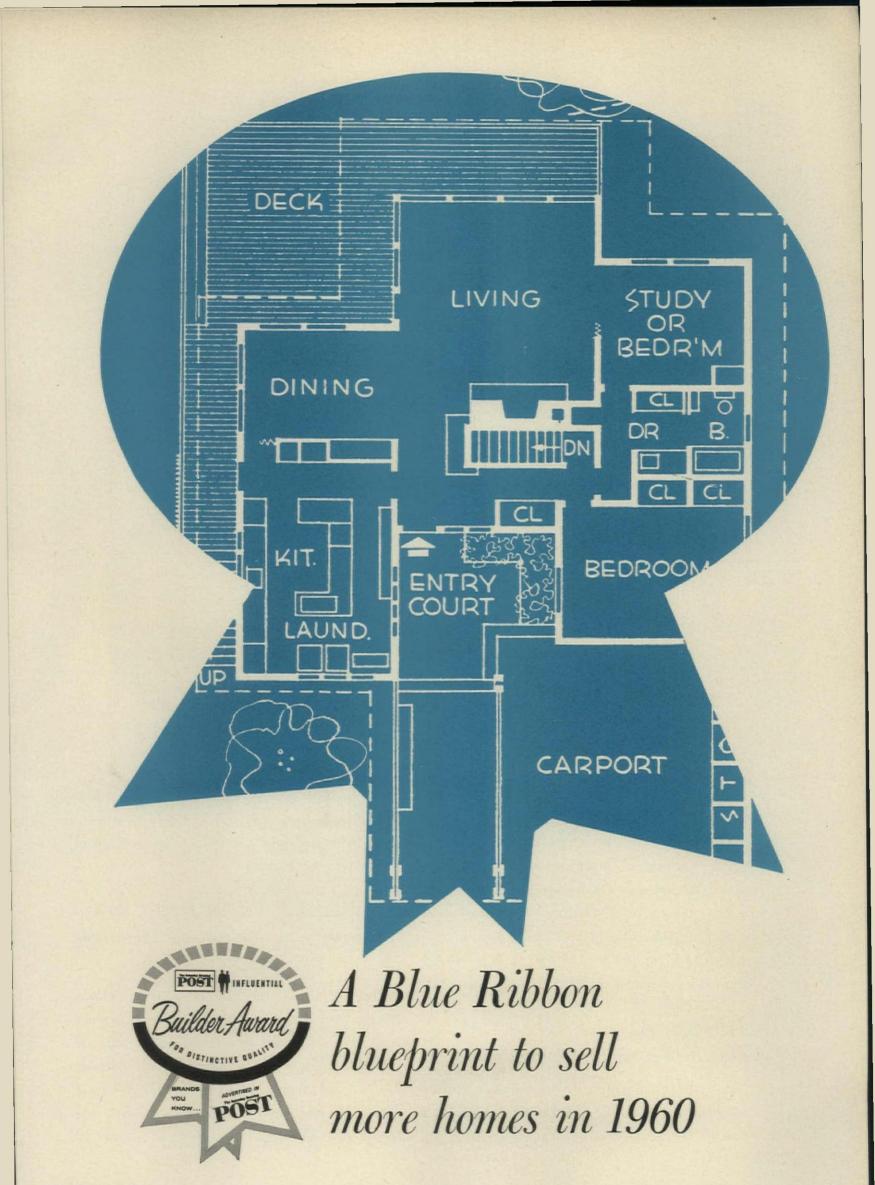


 Cut or tear ALFOL
 After stapling one flange, pull blanket
 Staple free flange...

 1 blanket to full panel length.
 2 flange, pull blanket to expand.
 3 then seal across plates and the job is done.

SEND NOW for free cost study: "How modern insulation cuts hidden costs"

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REFLECTAL [®] E	Borg-Warner





Blue Ribbon Home plan helped the average builder sell

Here's a plan for increased sales that's as easy to follow as a blueprint.

It is a major new-home promotion, a builderproven promotion, designed to bring the best new-home prospects in town right through your door — pre-sold on all the distinctive features that make your houses the most desirable in your area. It's easy and profitable to participate in the Post's Blue Ribbon Home Award program for 1960:

The Post can make 1960 a Blue Ribbon year for builders.

Don't take our word for it. Ask builders all over America who profited by the 1959 Post Blue Ribbon Home Award. Actual sales figures from 81 builders show how the Post helped sell \$215,000,000 worth of Blue Ribbon homes last year...an average of \$2,650,000 per builder.

The Post Blue Ribbon Homes Award will make your home the most desirable in your community.

When you display the Post Blue Ribbon Home Award, you tell customers that your houses are built with nationally advertised products home buyers already know – and want. 255 famous brands are advertised in the Post each year – everything from light fixtures to foundation materials. It's a good list to specify from ... a great

in homes last year!

list to sell with! And your Post Blue Ribbon Kit includes display material that spotlights all the confidence-building brands you use.

Your company name will be featured in the Post.

Late this spring, a full-page, Post-paid advertisement will urge millions of Post readers everywhere that now is the time to buy a new home. This ad will show how quality building materials give buyers a better investment. It will direct Post readers to Blue Ribbon Home builders for the best value. And your name, listed in this ad, can be the big name in your community.

This same issue will have ad after ad on the

famous building products you'll be featuring with display material in your model homes.

Post readers will see this advertising more than 29 million times. And these Post readers are in the market for new homes — young, big families with the highest average income among general-weekly-magazine readers. They're *your* best prospects.

Interested? Just turn the page for details on how you can put the Post's Blue Ribbon Home Award promotion to work today. It's as simple as sending us your name ...

Yes ...

I want full information on how I can qualify for the Post's Blue Ribbon Home Award program.

I want to know how my firm name can be featured in the Post's Spring new-home promotion.

I understand that I will be offered a complete promotion kit, containing the home merchandising aids I will need to sell more homes in 1960 – advertising, display and merchandising material and brand-name identification.

Bui	ADVER THE Saturday Evening
	THIS COUPON TO JACK PONTIUS
s, aterials Market Manager,	Please send my Post Blue Ribbon Home Award information to:
autrates marnet managery	Your name

Jack Pontius, Building Materials Market Manager, The Saturday Evening Post, Independence Square, Philadelphia 5, Penna.

Zone_____State_____

Your firm name_

City-

ame_____



NORTH AMERICAN HOMES' RESEARCH and ENGINEERING TEAMS CREATE 1960's





THE '60 FAIRMEADOW



THE '60 BRENTHAVEN









THE '60 HIGHLAND SHORE



THE '60 PALM SPRINGS

FAMED SCHOLZ DESIGNS! THE MOST APPEALING IN AMERICA! NOW WITH ...

\$7 TO \$8 PER SQ. FT. BUILD OUT COST! WITH INDUSTRY'S MOST COMPLETE FABRICATION!

NO EXTERIOR PAINTING! LIFETIME MAINTENANCE-FREE FINISH!

ALL FORMICA-FACED KITCHEN CABINETS! AMERICA'S MOST BEAUTIFUL KITCHEN AT ANY PRICE!

MOSAIC CERAMIC TILE BATH AT A COST LESS THAN PLASTIC!

LIFETIME PREFINISHED INTERIOR TRIM AND WALNUT GRAIN DOORS!

SEE DETAILS ON NEXT TWO PAGES

LIFETIME EXTERIOR!

plastic coatings over <u>conventional</u> materials . . . no exterior painting . . . no interior trim painting!

9

10

One-piece gable overhang unit, prefinished lifetime lucite plastic coating. Nailing time: 2 Men-10 Minutes.

5



NORTH AMERICAN HOMES

EOR

1960's

One-piece Scholz vented gable panel (patent applied for). Prefinished in lifetime lucite plastic coating. Erection time: 2 Men-20 Minutes.



14

White lifetime plastic coated aluminum colonial type window. Preglazed in white vinyl. Preset in panel with screen in place. Snap on aluminum trim.

15

13



4

Full length interior partitions with automatic locaters eliminate layout time—dry wall backup studs in place. Erection time 1000 ft. house: 4 Men—60 Minutes.

4

8



Fewer larger exterior panels JM asbestos board over insulating sheathing. Prefinished in lifetime acrylic plastic coating complete with preapplied top plates and prefinished battens and trim. Erection time 1000 ft. house: 4 Men-60 Minutes.

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Housing's paradox: statistics show it is climbing . . .

The pace of winter building is confounding prophets of a plunge in housing.

December private starts hit an annual rate of 1.3 million, higher than November. The figure was revealed only nine days after Democrats introduced legislation to stave off "a threatened slump" by pumping another \$1 billion of subsidized mortgage money into the Federal Natl Mortgage Assn (see p 56). Armed with the December statistics (see p 81), HHFAdministrator Norman Mason snorted: "The sharp upturn indicates there is no need for emergency legislation to stimulate home building."

... But mortgage men, builders agree all signs point down

Will starts nosedive later this year? The danger signals are still subtle, but they grow a little more ominous. Mortgage men, who are not cry babies, report sales are poor or worse in ten of the 16 cities HOUSE & HOME checks monthly. Only six call the new-house market good or improving. Savings bank mortgage buying is still shackled by the deposits the banks lost when the Treasury, hogtied by Congressional refusal to lift the $4\frac{1}{4}$ % interest ceiling on long-term government bonds, brought out its celebrated Magic 5 short-term bonds last fall. Says a prominent East Coast banker: "The swing to investment in short-term money is hurting the housing business."

What makes the housing future hard to read is that nobody really knows what the time lag is between decisions to build and actual starts. Starts get counted (more or less). Decisions don't. Few are surprised that the annual rate of private starts has crept up every month from November though January—at the very time when organized builders have been calling crisis conferences to warn federal officialdom of an impending downturn.

Prices: look for a 3-5% boost in steel items

Settlement of the steel strike hasn't affected prices of building supplies yet, but nobody argues seriously that it won't. Bet is that steel producers will boost prices item by item, company by company, mostly around December when full impact of the 39-41¢ package hits. Some users report "over-the-book" prices already in force. But they concede this may be from pressure to recoup inventories since the strike ended. When the hikes come, how much will they be? Nobody knows, but some of housing's producers are predicting 3-5%.

What's ahead in integration: one expert's view

Downtown urban renewal is going to speed up dispersal of Negroes to the suburbs. So will the trend toward turning community problems over to more and more federal and state agencies.

These are the opinions of one of the nation's top population experts, Dr. Philip M. Hauser, University of Chicago sociologist. Commenting on the ruckus in suburban Deerfield over a proposed interracial tract (*Jan. News*), Hauser said last month: "Three or four decides ago it was said the foreign-born could not live in the suburbs. But they do. Now they say it about Negroes. They'll be there, too, and it probably won't take as long." All-white suburbs are bound to fall, Hauser predicts (as have such race relations experts as Dr. Frank Horne). But Hauser foresees two residential patterns emerging: "There will be increasing integration and three also will be islands of Negroes, similar to present-day nationality groups. Receiving and assimilating newcomers such as Negroes and Puerto Ricans will become as much a suburban problem as a city problem."

How does government planning fit into the picture? Says Hauser: "As population growth increases, you can look forward to more federal, state, and local agencies taking over community problems. This will cause greater integration, whether you like it or not." (For other news of housing integration, see p 64.)

WASHINGTON INSIDE: The House bill to expand VA direct loans by tapping the Nat'l Service Life Insurance Fund faces Senate opposition. The measure, sponsored by Rep Olin Teague (D, Tex.), chairman of the House veterans committee, would raise money for direct lending two ways: 1) it would let VA issue up to \$5 billion a year of 10- to 30year debentures at an interest rate of not less than $4\frac{1}{2}$ %; 2) it would let some of the insurance reserves be invested directly in mortgages. Loans would be limited to \$17,500. The bill would also extend the VA program for World War 2 veterans from its July 25 expiration to Feb 1, 1965.

S&Ls expect to persuade Congress to pigeonhole President Eisenhower's budget request to boost FSLIC insurance premiums from 1/12 to V_8 of 1% of share capital plus borrowings . . . FHA and VA have both rejected a plea from NAHB to count mortgage discounts as an item of construction cost in fixing valuations; both said the law won't let them.

CLOSEUP:

FHA's Zimmerman: man in motion

A young Kansas lawyer is tuning up an old agency. Latest changes: new trade-in rules, crackdown on co-ops, easier setup for new prefab models.

By Gurney Breckenfeld

Shortly after he took office as FHA commissioner a year ago, Julian H. Zimmerman lunched with one of Washington's veteran housing experts, a man whose acquaintance with FHA goes back to its birth.

The expert came away raving. "He has guts and intelligence," he told friends. "He grasps problems quickly. He's not afraid to reach conclusions at variance with



his own staff. I think he is more likely than some other FHA commissioners to make his weight felt. Other FHA commissioners moved, but gently. Zimmerman will probably hurry."

A year later, that forecast looks sounder than when it was uttered. Zimmerman, a 43-year-old Kansas lawyer with almost no housing background, is showing the housing world that he is an administrator of independent judgment plus nerve enough to

tread on sensitive toes—if he must—to do his job as he thinks it should be done. He is hurrying to carry out a long list of changes he feels will help FHA run more efficiently, do a better job of raising US housing standards. To the casual onlooker, some of these may look like minor technical tinkering. But in an agency as big and influential as FHA, a little tinkering can have a profound effect on all new US housing, not just the 25% of it FHA insures. At mid-month, FHA was ready to:

Walter Bennett

• Start a new processing plan to make it easier to introduce new prefab models.

Prefabbers have been complaining that field offices often disagree as to whether new models comply with FHA minimum property standards on such items as room sizes, arrangement, and storage space. One manufacturer who shipped into seven different FHA jurisdictions won an OK from five; two insisted his storage space was inadequate and told him to revise plans. So FHA has decided to review and approve standard plans for prefabbers in Washington. It won't, however, go into every element of the finished house. Items like heating and wiring will continue to be handled locally. This is fine with prefabbers; their dealers generally install such items locally, anyway. And Washington FHA will continue to issue structural engineering bulletins approving items like enclosed panels or newtype roof trusses. The new plan was worked out with Inland Homes as the guinea pig. FHA men say at least 13 more prefabbers are ready to use the system right away.

• Stop builders from selling Sec 213 co-op homes for only 1% down.

Zimmerman concedes FHA made a mistake last fall by letting this happen. How did it happen? Under the old law governing salestype co-ops where the mortgage could be 95%, FHA required 3% down payment (or equity) and 2% working capital. When the 1959 Housing Act raised the maximum loan ratio to 97%, FHA dropped 2% from the equity. Now, FHA won't drop the workingcapital requirement; it will just insist the down payment be at least 3%. But if there are no insured advances during construction, the working-capital rule doesn't apply.

FHA will also drop its requirement that a builder of sales-type co-ops must have 51% of prospective buyers signed up in advance. But it will insist that sales co-ops have at least some community facilities from now on —a swimming pool, meeting hall, a play-groups, for instance. And buyers will be required to maintain these facilities in co-operative ownership for at least a year.



FHA COMMISSIONER served as staff director to Kansas Gov Arn before he got into housing in April '57 as asst general counsel of HHFA.

• Issue regulations broadening use of the new trade-in tools in the 1959 Housing Act beyond original proponents of the idea figured would be possible.

The law gives the housing industry a key to unlock the trade-up market. It authorizes FHA to let builders or realtors have the same loan-to-value ratio as owner-occupants under Sec 203 and 220-provided 15% of the mortgage is held in escrow to reduce the loan if the property is not sold in 18 months. FHA has decided to let it be used three ways: 1. For deals between buyer and sellerwhich is all original sponsors of the change had in mind-the realtor or builder-buyer takes the house over as a trade-in and gets a new FHA mortgage on the same high loanto-value ratio as an owner-occupant. He puts 15% of the loan in escrow (a rule designed to prevent windfalls). If the house re-sells within 18 months, the new buyer takes over the mortgage at the maximum loan-to-value ratio-so avoiding closing costs again. This is the big saving the law was designed to yield. 2. A builder starting to build a new house can use the plan, too. He may apply for the maximum loan available to owner-occupants

(provided FHA will give builders firm commitments in the area), put 15% in escrow. When he sells the finished house, the buyer takes over the mortgage from the builder who may absorb the closing costs he already paid. Closing cost avoidance (sometimes \$300) is the only advantage to the builder; he is already restricted by other rules to a commitment of 85% of what owner-occupants can get. This new deal has been designated by FHA as its new escrow commitment.

3. A home owner involved in a genuine trade situation (like a man who must move suddenly to another city) can use the deal. Up to now, FHA refinancing has been limited to 70% loans. The new plan lets a homeowner who must trade get up to 85% of what an owner-occupant gets, if he puts up 15% in escrow. Thus the moving-owner can stretch his selling time to 18 months, avoid dumping his house too cheap. Meantime, he can rent. 4. Third parties (normally realtors) can use the deal under newly devised safeguards intended to prevent windfalls and speculation in used homes. Windfalls will be stymied by a rule that if a realtor buys the house for its owner for less than the maximum allowable mortgage to a non owner-occupant, he must put the difference in escrow until the property is re-sold. Here is how it would work in a hypothetical case outlined by Zimmerman: "take a house valued at \$10,000. The maximum mortgage for an owner-occupant would be \$9,700; for a non owner-occupant it would be \$8,250. Say a realtor bought the house for \$8,000. He is eligible for a \$9,700 insured loan on the property, but he must 1) put 15% in escrow as the law provides and 2) since his acquisition cost was less than that, he must also escrow the difference, \$250 more. FHA never lets anybody have a loan higher than acquisition cost. If the house is sold for \$10,000 within 18 months, the realtor gets \$1,700 on the deal. If it isn't sold in 18 months, he must use the escrowed amount to cut his mortgage."

This provision, worked out with NAREB trade-in experts, was necessary because in a normal trade-in deal, a realty broker executes a contract with an owner to sell a house at its market value with the usual commission. But contracts generally provide a guaranteed price (under FHA appraised value) if the house doesn't sell. Without the extra escrow provision, a broker would be faced with double closing costs because he would get a mortgage for less than an ultimate buyer would need.

In sidestepping this problem, FHA also acted to prevent realty sharpies from using the trade-in mechanism to buy up used homes on speculation. The agency will require a certification, signed by the house seller, that he is selling his house to obtain equity to buy another one.

FHA delayed issuing the trade-in regulations for four months to confer with realtors, builders, lenders, and Fanny May officials on ways to make the plan work easily for all elements of the industry. In the end, says Commissioner Zimmerman, "I think everybody came away happy."

Not far behind these definite decisions are even bigger ones which top FHAides were shaping up in mid-January. It was possible any or all of them would be changed or killed entirely, but chances were most of these orders will soon go out to the field:

1. Homes built with materials that cut maintenance costs will entitle their buyers to qualify with lower incomes!

The basis for this nudge toward better quality in housing is that, for instance, if a buyer will have a smaller heating bill because of extra insulation, he needs less income to carry the combined cost of the mortgage and operating the house. What may kick up a storm among materials' makers is FHA's tentative decision to classify aluminum siding as cheaper to maintain than wood because it will need less painting. As word of this seeped around, wood interests began a technical publicity campaign to discredit aluminum claims to cheap maintenance.

2. Field officers will get more leeway in appraising the credit risk of home buyers.

This is aimed chiefly at cutting processing time under Sec 203. As it is now, field offices rate the house, neighborhood and borrowers' credit on a mathematical basis. FHA is shooting at modifications to put less stress on numerical ratings, let field offices lean more on the lender's judgment of borrower's credit.

One of Zimmerman's most significant changes is a victory only half-won. So far, he has persuaded the Budget Bureau and the President to remove FHA from the financial straitjacket that gives it chronic backlogs of unprocessed applications. Specifically:

Congress has been asked to give FHA power to spend up to 15% above its appropriated budget if its business picks up.

This authority would come into play only if FHA's workload turns out to exceed the basis of original budget estimates. "Our financial austerity basis," says Zimmerman, "affects the quality of our work. Inspections are sometimes inadequate when the staff is overburdened. This means people pay for service we don't give them."

Congress has turned down such proposals before, but Zimmerman is hopeful he can win this time. If he does, both the industry and the public should benefit.

What has Zimmerman accomplished in his first year?

Some items are well known, like extending the Certified Agency Program to the entire US and requiring (starting April 1) more rigid grade-marking of lumber. Some are less known, like the new system for cost determination he worked out with Asst Commissioner Beverly Mason. Some are just starting to show results, like the staff task forces to revamp Secs 203 and 207, and the advisory committee of two directors from each of FHA's six zones, or his intensive indoctrination of zone commissioners so they can stamp out nonconformity in the field.

On top of this, Zimmerman set what may stand as a travel record for FHA commissioners: 85,000 mi. He did it primarily to take part in 38 of the 65 parties across the nation celebrating FHA's 25th birthday (H&H, June). He also managed to find time to visit 50 of FHA's 75 insuring offices and seven of its 49 servicing and valuation stations.

All this getting around will have more than ceremonial uses, Zimmerman expects. He is counting on the personal contact he has developed with his scattered empire to help him get new ideas across faster.

Relaxing one recent Saturday afternoon in the living room of his exurban home in the Virginia woods outside Washington Zimmerman reflected on the results of his first year running a \$1 billion agency that employs some 6,000 people, spends about \$50 million a year.

"The best thing personally," he mused "is that I've come to appreciate what tough jobs these are—and come to a basis on which I think I can do the job properly. I get the impression that too many government-agency heads start out to assure their longevity in office by placating every possible critic and mending every fence. This takes a lot of time away from running the shop. Besides, too often decisions are made by carefully weighing every influence and pressure and choosing the course that will make the water less hot. As far as I'm concerned, that's wrong."

Zimmerman has shown the industry he doesn't operate that way. His baptism of fire came almost as soon as he took office. Home builders demanded he postpone the July 1, 1959 effective date of the new minimum property standards FHA had struggled three years to produce. Zimmerman stuck by his deadline, even though builders went over his head to Congress. The climax came when a California delegation descended on Capitol Hill, persuaded California congressmen to call top FHA staffers down to defend the MPSs.

"The builders wept crocodile-sized tears," says Zimmerman. "They screamed, they cried, they moaned. But none of their fears have been realized."

Looking back, he is happier than ever that he stuck to the deadline. "It was a kind of test. If I'd acceeded to the pressure, I'd never have been able to run this shop," he says. "You know, every segment of housing is powerfully represented in Washington now except the consumer. FHA and I are about the only representatives he has."

H&H staff



COMMISSIONER'S HOME, 18 mi west of Washington, is this graceful 100-year-old colonial house surrounded by 15 wooded acres at Peacock station. Zimmerman and his wife, Reba, like the place so much they have offered to buy it (but the owner won't sell). Despite his affection for the property, Zimmerman insists he would never insure an FHA mortgage on it because "it is too old."

Zimmerman won't cut down payments as the 1959 Housing Act permits.

Builders have been pressuring him to do this, too, ever since Eisenhower signed the law last September. Last month, he was still saying no. "As long as the trend is up [it hac been since October] and private starts are running over 1.2 million a year, I have no business doing it," he explains. "Starts are off because of tight money. Cutting down payments wouldn't significantly effect starts now."

But FHA may agree to cut its $\frac{1}{2}$ % insurance premium.

For years, FHA has resisted this suggestion on the ground it would jeopardize the profitability of its operations, even though insurance reserves—swollen to \$757 million after nearly 26 years—look big enough—in Zimmerman's words—"to meet any emergency that might reasonably be expected."

With this in mind, Rep Albert M. Rains (D, Ala), chairman of the House housing subcommittee, has introduced a bill to slice FHA's premium to 1/4 % for an experimental year. Zimmerman bridles at the idea. "This isn't the kind of action that can be taken by the seat of the pants. It needs scientific and actuarial study. That's not something Congress can do. And what could happen in a year that's relevant to actuarial problems?" But Zimmerman agrees FHA might cut its premium, if Congress merely lowers the present 1/2 % legal minimum, leaving agency discretion to set the actual amount. Zimmerman doesn't say so, but Washington experts figure the agency might try a premium of 0.4%-a 20% rate cut-for Sec 203 only. FHA has no plans to cut the premium on other programs.

FHA expects to need no more insuring authority this year.

This news—probably reported here for the first time—may bring cries of outrage from some congressional quarters. When Congress gave the agency \$8 billion more insuring authority in the 1959 law and also forbade it to stretch out its opertions via agreements to insure (ATIs), it did so in expectation that FHA would run out of gas before the end of 1960. The idea behind this is to let legislators hold continuance of FHA—which almost everybody approves—as a trading point for fresh shots-in-the-arm for costly and controversial programs the Administration would like to cut back, if not kill entirely. As Albert Rains once confided: "We don't want to run public housing naked."

Zimmerman has been speaking up more bluntly than most FHA chiefs against such maneuvers. Politically-oriented himself (he was the Administration's most effective man on Capitol Hill while he was HHFA general counsel before taking over FHA) Zimmerman has no fear of political controversy. "Every year," he told the Kansas City Real Estate Board in a recent talk, "Congress insists on wrapping FHA's mortgage insurance authorization into omnibus legislation which usually becomes a catch-all for many . . . unreasonable proposals. This serves only to hold FHA as hostage to get legislation signed into law which the President otherwise opposes." Privately, he adds: "If they can sell this tactic to the country, all right. But I doubt it."

His get-acquainted travels over, Zimmerman plans to stick closer to his desk. "Changes get done faster," he says, "when I stay in Washington to prod my staff. Besides, we've bitten off enough to chew on."

NEWS continued on p 52

MORTGAGE MARKET:

Trading slows as builders spurn deep discounts; rates edge up

The mortgage market is amidst winter doldrums. Originations and secondary market sales have fallen off because: 1) builders don't like the prices they can get for FHA or VA loans, 2) the supply of loans coming on the market is shrinking as builders shelve plans, and 3) the bulge of cheap new homes financed by the \$1 billion of recession-time Fanny May subsidized mortgages is ending.

Not only today's price of mortgage money, but the uncertainty of tomorrow's, is holding down builder plans, mortgage men chorus. VA loans are down to 90 on



the West Coast, FHAs to 94. And that's for immediate delivery. New England savings banks report offers at 901/2 and 941/2—"a little over the New York market." The thin supply of loans is little worry to most lenders: there are too many juicy alternative investments in short-term loans, where rates are propped up by Congress' persistent refusal to lift the lid on long-term government bond interest.

More and more investors want immediate delivery; fewer and fewer are willing to give future commitments for more than six months. And builders now often spurn what standbys are offered—at 88-92, for instance, in Los Angeles.

Biggest cloud on housing's future is in the 12 states with 6% usury laws.

Conventional interest rates are touching the 6% legal lid even in money-rich spots like New York City. So lenders are cold-shouldering one-family homes, turning to $6\frac{1}{2}$ % loans on apartments (lending to corporations is often exempt from usury limits). In some states, the laws designed to protect consumers may thus protect them right out of housing—with catastrophic results for builders, realtors, etc.

A topsy-turvy buying pattern is developing-but nobody seems to want to venture how long it will last.

On the West Coast, Metropolitan Life was propping up prices in mid-January by gobbling up FHA minimum downs at a fat 96^{1/2}. In Oklahoma, Prudential was buying 92-96 packages of four FHAs to one VA, and the Met was paying 97 (with ³/₄ servicing). The Philadelphia Savings Fund Society continued to buy locally at 99, both immediates and futures. But most savings banks, still hurting from the Magic 5s, were only sporadic buyers. This is about as expected. They may be back in the market in about two more months.

Fanny May, the government secondary market that the Administration has let become the primary market, will grow even more so now that it has upped the maximum FHA or VA loan it will buy from \$15,000 to \$20,000.

The Administration originally urged the boost in the loan ceiling, but postponed putting it into effect when Congress enacted it last year. Reason: officials feared this would funnel so many more loans to Fanny May the agency would be forced to float debentures just when the Treasury was squeezing through its heavy fall re-financing. Main effect of the move is to let mortgage men unload hard-to-sell paper. Some of the biggest estimate newly eligible loans constitute 10 or 15% of their volume. To this extent, the Fanny May takes pressure off the mortgage market, at least temporarily. And it is one of the very few ways the Administration could do so without jeopardizing the budget balance so vital to fighting inflation.

Note that Fanny May purchasing rules will let it buy VA no-downs only up to \$16,500, despite the \$20,000 ceiling. The agency will buy a VA mortgage over \$12,500 only if the unguaranteed portion is 55% or less of the sales price of the house; and VA guarantees only the first \$7,500 of each loan.

It goes against their economic philosophy for many mortgage men to be shipping everything they can to FNMA. But they do it. "We're all depending on FNMA to subsidize us," says Vice President Jack Yates of Jacksonville's Stockton, Whatley & Davin. And some experts predict FNMA now will be forced to borrow heavily in the short-term market and so siphon off construction-loan money (which is already tight in the biggest source: New York City).

S&Ls in many cities jacked up interest paid shareholders on Jan 1, another signal that S&Ls are going to compete just as hard as ever for savings.

Most California S&Ls went from $4\frac{1}{4}$ to $4\frac{1}{2}\%$ after the Mark Taper empire set the pattern. Says the president of a Fresno S&L: "The considerations for going up were more gamesmanship than economics. The government forced our hand somewhat with the Magic 5s. It may not have made economic sense to go up because it will be poor public relations when we come down. But we had no choice after Los Angeles and San Francisco moved. Once an outlying area could lag behind the metropolitan area, but now savers are too sophisticated."

MARKET BRIEFS

Interest-labeling bill

Sen Paul Douglas (D, III.) is drafting a bill to strip the "camouflage" from installment buying and show the public clearly the true cost of such easy credit.

The measure would require sellers to state separately, in dollars and cents, the cost of the item being purchased and the amount being charged for credit. It would also require a statement of the credit cost in terms of simple interest per annum. The bill covers mortgages, would require discounts and fees to be set forth as part of the interest cost. It would hit small loans and time purchase plans for consumer durables hardest.

"True annual rates running as high as 30% to 40%," says Douglas, are concealed "in terms of rates which are seemingly modest because they are stated as monthly rather than annual rates." Furthermore, says the senator, they are also disguised in the form of "fees, discounts, charges and the like." He complains that a buyer often would have to be a lawyer and accountant to unravel the cost of buying on time from involved small-print language where it is hidden.

Cal-Vet loans upped-to 4%

California's state veterans board has again performed a fiscal maneuver to excite storms of envy in the hearts of private lenders. It has raised the interest rate on Cal-Vet home and farm loans, including some 100,000 now outstanding, from $3\frac{1}{2}\%$ to 4% to keep the loan program on a self-supporting basis.

The hike was dictated by costs of selling tax-exempt state bonds to raise loan funds for the program. It will not raise veterans' payments, but will extend the number to be made. On a \$15,000 loan, 20 monthly payments, totaling \$1,600, are added. Under the program, veterans make a 5% downpayment and the state buys the property, selling it to the veteran on an instalment contract. Maximum term is 40 years, but in practice it is held to 20. A flexible clause in the contract allows varying the rate for existing as well as new loans to keep the program in the black. Last hike, from 3% to 31/2%, was Dec 1, 1957. It was the first in 11 years, and it too was because of bond market conditions. Since 1921, when the Cal-Vet program was established, rates have varied from 5% in '21 to a low of 3% in '46. The program is so popular that it is chronically out of funds.

Tennessee dodges FHA usury

Tennessee seems to have escaped-at least for the moment-from a mortgage famine.

Lenders were shunning the state because 1) not only is it one of the 12 with a 6% usury law but also 2) it was feared FHA's $\frac{1}{2}\%$ insurance premium might be construed as interest and thus nullify all FHA 5³/₄% (plus $\frac{1}{2}\%$ insurance) mortgages there.

At mid-month, a state court ruled that the premium does not constitute interest. Interest, held Chancellor Charles A. Rond, is "determined not by what the borrower pays but what the lender receives." The court also held that FHA's 1% prepayment penalty is "a necessary and reasonable expense (which) cannot be classified as interest." The "friendly suit" was brought by Silver Homes and two wouldbe buyers to force the mortgage house of Marx & Bensdorf to issue an \$11,900 FHA loan.

Until the ruling, Tennessee faced possible loss of some \$25 million a year of mortgage money. So sharp had curtailment of funds been since the question arose in September that FHA applications had dropped to a third of normal and, for the first time, the Memphis office was processing them the day they were received.

Through a quirk in Tennessee law which allows them 21/2 % service charges over the 6% ceiling, S&Ls had continued to land right through the crisis.

But Tennessee's troubles may be only beginning: some out-of-state conventional lenders are pulling out of the Tennessee market because they can find ample outlets for their money elsewhere at better yields.

In Maryland, where there is also a 6% ceiling, Attorney General C. Ferdinand Sybert has ruled that insurance premiums are okay, but service charges (applicable to FHA loans under \$8,000) are not. The reason: We have been informed of no service rendered by the mortgagee to the mortgagor for which this charge could be justified." The penalty in Maryland: loss of interest over the legal rate.

What builders should do

Should builders line up all their 1960 financing now?

Mortgage men differ, but many more counsel builders to play the market than to get covered, even though prices are still falling. "In '58, builders who rode the market did well," remembers Vice President M.F. Haight of American Mortgage & Investment, Oklahoma City. "In August we had loans at 99." But Los Angeles' Bob Morgan of The Colwell Co counsels: "If builders are going to take money at any price (instead of not building), now's the time to do it because things'll get worse before they get better." C. A. Bacon of Denver goes down the middle: "You're in a crap game there, just kind of betting." Advises Don McGregor of Houston's T.J. Bettes: "Wait. It may get worse. If so, don't build."

California sets S&L probe

California's state S&L division has signed Stanford Research Institute to a \$40,000 contract to investigate S&L operations in the state where are biggest. Among other items, the institute will study interest rates on both loans and deposits, fees & discounts, holding companies and brokerage fees paid for out-ofstate deposits. A report is due in six months.

\$60 million more for direct VAs

The White House has released \$60 million in direct loan funds to VA so that it can continue the long-standing caprice that makes veterans' equal rights to home loans even more equal for those living in remote rural areas.

The program provides loans to vets who can prove that three local lenders refused them a VA mortgage at whatever the politically-frozen interest rate may be at the moment. It is supposed to be confined to areas where a shortage of VA mortgage funds exists. Nearly every area in the country except major metropolitan centers now fits the rule.

Veterans living in them can therefore obtain discount-free direct loans at 51/4 % up to \$13,500 while their brethren in the city cannot. The \$60 million is part of \$100 million authorized for the direct-loans in the 1959 Housing Act. Since GI direct loans were born in 1950, some \$1.2 billion has gone NEWS continued on p 56 into direct loans.

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to House & Home the week ending Jan. 15, '60.

FHA	53/4s (See	c 203)) (b)		1		VA 5	45				and the second se	ntional ans	
FNMA Scdry Mkt ×y	Minimum E 30 year	Down*	uction Onl 10% or m 20-25 year Immed	ore down	Existing = Min Down 25 year Immed	City	FNMA Scdry Mkt xy	No down 30 year	lew Const	ruction On 5% or mo 20-25 yea Immed	ore down	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Construction loans * Interest + fee
96	96-97 9	95-97	97	97	95-96 1/2	Atlanta	92	91 b	91 b	91 b	91 b	6-61/4	6-7	6-61/2 + 21/2
97	par-101m g	oar-101m	par-101m	par-101m	par-101m	Boston local	93	98-99	98-99	98-99	98-99	5 1/2	51/2-6	5 1/2-6
-	941/2-951/2 9	94 1/2	8	8	94 1/2-95 1/2	out-of-st.	-	901/2-91 1/2	91 1/2	90 1/2-91 1/2	91 1/2	-	-	
96	95-96 ^b 9	95-96 ^b	97-98ь	96-97 ^b	97-98	Chicago	92	90-91 b	90-91 b	92 ^b	91-92 ^b	6-61/4	6-61/2	$6-6\frac{1}{2}+1\frac{1}{2}-2$
96	96-97 9	5-96	961/2-97	951/2-96	96-97	Cleveland	92	91		92	8	6-61/2	6-61/2	$6\frac{1}{2} + 1 - 1\frac{1}{2}$
951/2	95-971/2 9	41/2-97	96-98	96-97 1/2	95-971/2	Denver	911/2	92-94 ^b	92-93 b	92-94 ^b	92-94 ^b	5 ³ / ₄ -6 ¹ / ₄	6-6 3/4	$6\frac{1}{2} + 1 - 2\frac{1}{2}$
951/2	961/2-97 9	061/2	97-971/2	97	88-93 bn	Detroit	91 1/2	92-921/2	92	921/2-93	921/2-93	6¼	61/4	$6\frac{1}{2} + 1\frac{1}{2}$
96	95-951/2 9	153/2	96-97	96-97	95	Houston	92	91-921/2	в	n	.6	6-61/2 °	6-61/2	7 + 2
96	921/2-94 9	021/2-94	96	96	93-94	Jacksonville	92	90-91	в	a	8	6	61/2	61/2 + 11/2
951/2	94 9	94	96 ^{bf}	96 bf	96bg	Los Angeles	911/2	90	A	a	8	6-6½	61/2-71/2	6 + 1½ e
961/2	961/2 9	6	97	97	961/2	Newark	921/2	a	ä	B	a	6	6	6 + 11/2-2
97	97b 9	7ъ	97ь	97ь	97ъ	New York	93	93 ^b	93 b	93 ^b	93 ^b	6 ^b	6 ^b	6 +2 ^b
951/2	95-96 9	4-95 ^b	97-971/2		95-96 i	Okla. City	91 1/2	911/2-92b	90 b	911/2-92b	.8	6-61/2	61/4-61/2	$6\frac{1}{2} + 1 - 2$
961/2	97-971/2 9	17-971/2	97-971/2	97-971/2	97-971/2	Philadelphia	921/2	n	а -	A	.8	5 3/4-6	5 3/4-6	6 + 1-2
951/2	94-9612 k	94-96½ k	94-961/2	94-961/2	94.d	San. Fran.	91 1/2	901⁄2-91	a	8	a	614-61/2	6.6-71/2	61/2+11/2-21/2 b
96	94-98 9	94-97	94-98	94-97	94-97	St. Louis	92	A	16	. 6		534-61/2	5%7.1	61/2 + 1-21/2
961/2	96b 9	96 b	97b	97b	96-97b	Wash., D.C.	921/2	91 b	91 b	92 b	92 ^b	6 b	6ъ	6 + 1½-2b

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

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks, Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wolbach, vice pres, Draper & Kramer, Inc; Cleveland, David O'Neill, vice pres, Wolbach, viee pres, Draper & Kramer, Inc: Cleveland, David O'Neill, vice pres, Jay F. Zook Inc; Denver, C. A. Bacon, vice pres, Mortgage Investment Co: Detroit, Stanley M. Earp, pres, Citizens Mortgage Corp; Houston, Donald McGregor, exec vice pres, T. J. Bettes Co; Jacksonville, John W. Yates, vice pres, Stockton, Whatley, Davin & Co: Los Angeles, Robert E. Morgan, exec vice pres, The Colwell Co; Newark, William F. Haas, vice pres, Franklin Capital Corp; New York, John Halperin pres, J. Halperin & Co; Oklahoma City, M. F. Haight, first vice pres, American Mortgage & Investment Co; Philadelphia, Robert S. Irving, exec vice pres, W. A. Clarke Mortgage Co; St Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington, D.C., Hector Hollister, exec vice pres, Frederick W. Berens, Inc. Immediate covers loans for delivery up to 3 months; future covers loans for

delivery in 3 to 12 months. Quotations refer to prices in metropolitan areas; discounts may run slightly

higher in surrounding 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 activity, c—commercial banks do very little mortrage lending in Texas, d—FNMA eligible; 2 points less if ineligible. e—S&Ls charging 7% plus 4 to 5 point fees. f—5% loans are at $95\frac{1}{2}$, g—10% down only; most going to FNMA, h—S&Ls charging to 8% plus 3 to 4 points, j—for better quality loans only. k—top price from life companies only. m—some at $5\frac{1}{2}$, some at $5\frac{3}{4}$. n—some companies refuse to deal at such big discounts, w—six months construction loans unless otherwise noted. x—FNMA pays $\frac{1}{2}$ point more for loans with 10% or more down, y—FNMA net price after $\frac{1}{2}$ point purchase and marketing fee plus 2% stock purchase figured at sale for 50ϕ on the \$1. z—on houses more than 30-years old of average quality in a good neighborhood.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 53/45

Immediates 94-951/2

Futures: 931/2-95

#

VA 51/45

Prices for out-of-state loans, as reported the week ending Jan. 15, by Thomas P. Coogan, president, Housing Securities Inc.

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

FHA 53/4 spot loans (On homes of varying age and condition) Immediates: 91-93

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

FNMA STOCK

B

A:

			Month's	Month's
	Dec 10	Jan 14	low	high
id	553/4	551/2	531/4	553/4
sked	573/4	571/2	551/4	573/4

Quotations supplied by C. F. Childs & Co.

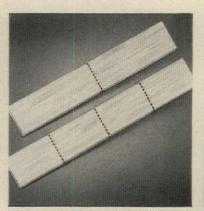
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Company		
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City	ZoneState	2410

HOUSING POLICY:

Congress gets bill to give housing another \$1 billion of subsidized loans

The first big housing fight of the 1960 Congressional session apparently will be over Democrats' plans to pump another \$1 billion of Treasury money into the mortgage market—at subsidized prices—to finance cheap new homes.

This is the same formula for bolstering housing that sailed through Congress and the White House with hardly a murmur two years ago when the nation was at the bottom of the 1958 recession. But the nation's economy is booming this year, and mortgage money is scarce instead of easing, as it was in '58.

If the measure gets through Congress—which is doubtful—it faces what experts figure is a sure Presidential veto.

The bill is the handiwork of Rep Albert Rains (D, Ala.), chairman of the House housing subcommittee, an old foe of interest rates charged by private lenders and a veteran



supporter of costly government - financed programs like public housing, 50-year loans for community facilities at 3½% and Fanny May special assistance mortgage buying.*

Rains says his "emergency" bill is "designed to halt a threatened slump" in housing — a slump the Administration denies has arrived. (When the Census Bur-

eau reported December starts reached an annual private rate of 1,310,000, HHFAdministrator Norman Mason declared: "The sharp upturn in December, continuing the November improvement, surely indicates there is no need for emergency legislation to stimulate home building.") For Rains, the tune is familiar. Back in October '58—just before housing took off toward its nine-year peak in 1959 —Rains was predicting a "serious decline" in housing in the spring unless the US pumped more support into the mortgage market.

The Rains bill would do these things:

• Authorize another \$1 billion for FNMA to buy at par FHA and VA mortgages up to \$13,500 (just like 1958's controversial Program 10). Builder spokesmen figure the last \$1 billion credit injection produced some 70,000 homes.* This time, Rains would give FNMA power to make the ceiling \$14,500 in high-cost areas. So it would probably yield a few less units.

• Force FNMA to pay par again for all special assistance mortgages (eg FHA Secs 220, 221, 222, housing for disaster, aged, Guam and Alaska, and all FHA and VA mortgages under \$13,500). Current special assistance price: 971/2 on 534 % one-family loans.

• Force FHA to cut its insurance premium from $\frac{1}{2}$ to $\frac{1}{4}$ % for a trial year. (For FHA's views on how unsound this is, see p 51.)

• Order FNMA to make stabilization of the mortgage market one of its main aims, apparently by paying higher prices.

• Order FNMA to exercise less judgment about what FHA and VA mortgages it buys —a business sense that has helped make the agency enormously profitable to the US Treasury. Specifically, FNMA would be forced to buy all FHAs and VAs offered if title to the property is good, the loan not in default. FNMA's power to limit the eligible age of mortgages would be undisturbed; currently the agency will buy nothing over four months old.

* Many economists consider this inflationary.

• Prohibit FNMA from selling or swapping any mortgages it holds for a year after enactment of the bill—a maneuver aimed at stopping the exchanging of mortgages for government bonds to cut the national debt. • Cut from 2% to 1% the amount of FNMA stock which mortgage originators must buy to sell FNMA a mortgage under its regular secondary market operation. The cut would be for one year.

• Cut maximum fees and charges FNMA may impose under its subsidized special support programs for a year. The agency now collects $1\frac{1}{2}$ % of the mortgage principal, half of it at the time of commitment. Rains would shave this to 1% with only a quarter at commitment time.

• Require originating mortgages to report discounts, fees, and charges on each loan to FHA or VA.

BEWARE FEDERAL AID, EISENHOWER WARNS

President Eisenhower made no mention of housing in his state-of-the-union message. But he got in another warning against using big federal spending (eg, urban renewal) to solve urban problems. Said he:

"We are witnessing explosive growth in metropolitan areas. By 1975 the metropolitan areas of the United States will occupy twice the territory they do today. The roster of urban problems with which they must cope is staggering. They involve water supply, cleaning the air, adjusting local tax systems, providing for essential educational, cultural, and social services, and destroying those conditions which breed delinquency and crime.

tions which breed delinquency and crime. "In meeting these, we must, if we value our historic freedoms, keep within the traditional framework of our federal system with powers divided between the national and state governments. The uniqueness of this system may confound the casual observer, but it has worked effectively for nearly 200 years.

"I do not doubt that our urban and other perplexing problems can be solved in the traditional American method. In doing so we must realize that nothing is really solved; indeed, ruinous tendencies are set in motion by yielding to the deceptive bait of the 'easy' federal tax dollar."

• Set up a new \$50 million special assistance fund to buy FHA 203 (i) loans on new homes—a move aimed at negating the ½% extra service fee FHA permits on loans up to \$8,000. Rains' bill would prohibit the ½% fee on loans bought by FNMA, which would mean the government would get all business.

How Win Riefler, father of FHA, views today's housing problems

Economist Winfield William Riefler, after 11 years of cultivating quiet anonymity, is free to speak up publicly on housing policy and the government's role in it.

The reason: Riefler-the man who originally conceived the idea of FHA mutual mortgage insurance-has retired (at 62)

House exclusive

-nas refired (at 62) from a lifetime of government service which was capped by more than a decade as assistant to the chairman of the F e d e r a l Reserve Board.

Relaxing in the hush of a parlor at Washing-

ton's Sheraton-Carlton Hotel, Riefler expounded his views for an hour and a half last month—expounded in his quiet, unemotional way that is illuminated and punctuated by a smile that seems to grow broader as what he says grows graver.

The worst features of US involvement in housing today, as Win Riefler sees them, are these:

1. Down payments on FHA and VA loans have been cut too far. "Progressively lowering down payments during a boom is not how to stabilize the economy."

2. This, plus the stretch-out of mortgage amortization to 30 years and even 40 years, is contributing to what may become a chronic shortage of mortgage money. "There is a bigger demand for mortgage money now because

we are selling homes to people who don't have money-people with promise but without substance."

3. Rolling hundreds of changes—big and little—into an annual omnibus housing law is so absurd it is "almost criminal." "How can Congressmen know what they're voting for." Needed: a recasting of federal housing law into much more general language. Then let it stand.

Win Riefler shies away from pinpointing how far he thinks downpayments should be raised, how much amortization should be telescoped. "These are delicate balances," he noted. "I wouldn't cut back to the 1936 terms.* But in view of the size of housing demand, you ought to stop the deterioration of terms, perhaps get back closer to 25 years. But you should move cautiously and firmly until you find mortgage money is plentiful —and not too expensive."

Riefler, whose advice has helped guide the Fed's control of the nation's money, has some doubts about how the much-predicted housing boom of the 60s is going to be financed, unless the easy credit binge is throttled back. Where will the money come from? "People have to save it, somehow," he says. "We should get more of it from people who buy houses. It would be awful if the fabulous 60s fell on their face because there wasn't enough money to finance it. If we have creeping inflation we won't have enough money."

*80%, 20 years for FHA 203b.

Riefler agrees with pundits who fear that if mortgage money isn't forthcoming at prices matching the expectations of Congress, legislators may try to legislate mortgage money via Fanny May or some other setup. "It can't be done," he warns. "Perhaps the trouble is that Congress doesn't see where mortgage money comes from; it's not vivid that somebody has to save."

As for the current outcry over falling housing starts, Riefler regards it as ridiculous. "They complain," he smiles, "as starts go down after \$1 billion of Fanny May money runs out" (the \$1 billion of anti-recession subsidized mortgages for FHA and VA loans under \$13,500, voted in April 1958 and snapped up by builders by September).

On balance, Win Riefler says he has "no feeling real inflation is coming." Why? "The American people are intelligent. They'll murder the politicians (who vote for inflationary measures) once they are aroused."

Riefler conceived the idea of FHA mortgage insurance on request. He recalls: "In the spring of 1931, the (private) mortgage guaranty companies began to fold. So there developed a freeze-up of the first mortgage market all over the country. Bankers were afraid to lend. I remember one tale of a man who couldn't get a 30% mortgage renewed.' By 1933, millions were jobless. More and

more mortgages were being foreclosed. New

house building fell to its 20th century low. Demand for federal intervention grew. In December, President Roosevelt named a fourman committee to propose solutions. The

committee borrowed

Riefler, then a research

to work on the prob-

"Talking to my econ-

omist friends," Riefler

recalls, "I found general

agreement that what

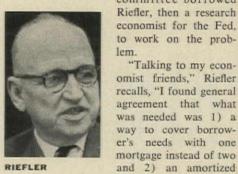
was needed was 1) a

way to cover borrow-

er's needs with one

mortgage instead of two

loan. The exact pattern



RIFFLER

of mutual mortgage insurance came to me in the night.'

Riefler had lately been exposed by chance to a thorough indoctrination in how mutual insurance worked, and where the risk lies, One of his Fed associates was looking into what kind of life insurance he should buy "and I got to arguing with him about it."

Says Riefler: "We had to come up with something that would be fair to the buyer and not overcharge him, but also something that must never fail and which would be so sound it would never cost the Treasury a cent. Once

been timid and halting. Mortgage insurance

at best had made a modest contribution by

helping merchant builders operating on a

larger scale. The government has trod lightly in using the substantial leverage of its pro-

grams for greater progress in removing costly

restrictive practices, which are often ossified

in building codes. Instead of direct attack,

the programs offer a compensatory device.

They have sought to soften the impact of

high costs by reducing downpayments and

outlays for debt service. But the postwar

injection of easier credit may have actually

intensified the increase of construction costs

and house prices. An industry thriving on

easy terms may have lacked the discipline

and incentive to innovate, strive for techno-

logical advance and develop better marketing

Federal (and local) programs have muffed

big chances to raise housing standards, im-

prove the industry's efficiency. Instead, they

"lull us into apathy" about the real prob-

Consider the nation's efforts to get rid of

slums. Clearly, 100 years of urbanization

shows that the realty market mechanism plus

local codes will not get worn-out housing

scrapped. Why? "Removal of dwellings is de-

termined mainly by forces external to the housing market." In other words, junk hous-

ing gets torn down when somebody needs the

site for something else. But the trouble is

the sites people want to re-use aren't often

where the blighted homes stand. Worse, "in-

adequate local codes or their lax, timid, and often downright corrupt enforcement have

added to this difficulty. We have been fairly

techniques.'

lems.

I got the idea of the mutual feature, FHA all fell into place fast.

"When we put through FHA we were trying to find an outlet for money. German refugee money was flowing to the US. We had a stagnant economy. Factories were not even using their amortization allowances. There were no foreign loans. The big job was to find an outlet for savings."

Today, as Riefler sees it, "the problem is absolutely the reverse on every front. We have a net flow of capital abroad, an expanding population, industry anxious to expand and plowing back depreciation plus additional borrowings. So if people don't save, we're not going to be able to build houses.

Even so, he still considers FHA a very workable tool for helping house the nation. But he hopes for at least two improvements. "The trade-in house is the most important thing for the private industry now. And I'd like to see new housing built for a higherincome class. You'd get more and better housing for the country that way. Now, the fact that it's so hard to sell an existing house slows the market up. It's the weakest part of our housing picture."

In retirement, says Riefler, he has no plans to become a consultant, write a book, or take another job. He does plan to move away from Washington "to some place where winters are warmer."

Why US housing aid fails to get at housing's real ills

Federal housing programs, born of a depression and designed for an economy which no longer exists, "are in urgent need of a bold, imaginative and searching reappraisal."

So far, by scattering our efforts "in response to special pressures" and without clearly focussed aims "we are in danger of meeting no objective really well."

This plea comes from one of housing's deep-think specialists, Dr. Leo Grebler, 59, Berlin-born professor of real estate and urban

land economics at UCLA and former adviser to the White House Council of Economic Advisers. Grebler's views were presented to the American Economic Assn in Washington in late December, but went almost wholly unreported by the press. Grebler, who two

years ago warned Con-

gress that it was hurting



GREBLER

housing by too much tinkering with laws (Jan '58, News), has now expanded his doubts and misgivings into one of the most comprehensive (but mercifully brief) analyses in years of what's wrong with government housing aid. His main points:

Federal programs "have done next to nothing to attack the high cost of housing."

Housing's high first-cost, Grebler notes, is probably one reason why US housing outlays shrank from 24% of total consumption in 1909 to 14% in 1946. How costly is residential building? Between 1915 and 1957, it soared 394%, according to the Boeckh index. BLS' wholesale price index rose only 160%, its consumer price index only 177% in the same time.

The government's puny moves to do something about this, as analyzed by Grebler:

"Steps toward technological research have

successful in driving the unsafe jalopy off our highways, but concerted and continuous efforts to cast out unsafe dwellings have been rare."

Urban renewal and public housing are making only "some progress" at eliminating slums because the US (and localities) still do not use tax policies, police powers, or even market forces to speed up the job.

Tenements are left profitable because "faulty assessment practices" ignore their real net income, and so undertax them. And because "dwelling standards are inseparable from environmental standards," the market itself cannot promote big capital outlays to improve old property in a sea of neglected houses, in an area with too few community facilities, or along a traffic artery. Urban renewal's "workable program" for

slum prevention is supposed to nudge cities into taking sterner measures with the powers they have. "There has been altogether too much pussyfooting in using this device* . . . A much more forceful 'quid pro quo' policy seems necessary. Federal assistance should be denied or scaled down substantially if the local government failed to give tangible evidence of continuous, effective and cumulative action."

As it is, "federal grants and loans for urban renewal have been allowed to divert the energy of local governments from local action to efforts to obtain their share of federal assistance.

What should cities be doing instead? One possibility: levy surcharges on slum owners for fire protection "and perhaps other public services clearly associated with conditions of continued on p 60

* Admits one highly placed US official: "The 'workable program' has become nothing more than an educational device." Its original aim was to channel renewal aid only to cities that make a real effort themselves.

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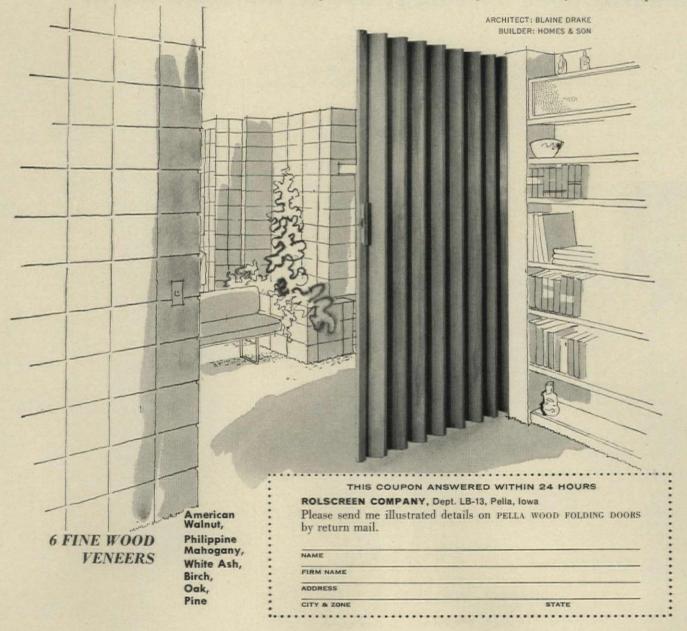




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their property." Another: amend state laws to let localities condemn just illegal, low-value improvements instead of both land and improvements. This would be much cheaper. And it would "force owners more effectively" to re-build junk housing or sell the site to somebody who would.

Without such use of tax weapons, stiffer enforcement, and more profit-incentives, the nation faces "the unpleasant prospect that urban surgery at immensely growing public expense will still be needed for 30 or 50 years."

Federal mortgage aids-the Home Loan Bank Board, FHA insurance, and Fanny -"have been used half-heartedly" to Mayproduce "better institutional arrangements."

The HLBB has improved liquidity of S&Ls. FHA, VA, and Fanny May have improved the marketability of residential mortgages. "But the mere existence of these programs has also lulled us into apathy on the much-needed reform of state laws which inhibit the interregional flow of mortgage funds or make mortgage loans unnecessarily costly or risky. The marketability of conventional loans is still severely limited. Regional and local differences in effective mortgage interest rates seem to be still far greater than is justified by loan origination and servicing costs, given equal risks. The Voluntary Home Mortgage Credit Program is only a token measure to improve borrowers' access to lending facilities in remote areas and small towns where imperfect competition in the mortgage market is most pronounced." Thus again, federal programs "offer largely compensatory devices" instead of attacking the root of the problem.

Public housing-"embattled, monolithic, institutional"-has "been found wanting not only by many communities but even by a large number of actual and potential beneficiaries.

Needed: much more experimentation with alternatives. What are they? Subsidies to families instead of projects, use of existing or short-term minimum housing, more social services for problem families, or subsidies to let families buy cheap one-family homes. Moreover, "we have yet to define what groups of the population subsidized housing should serve on a high-level economy, as distinguished from the days when the slogan 'onethird of the nation ill-fed, ill-clothed, and illhoused' carried greater conviction."

Incessant stimulation of housing can seriously affect overall economic stability and worse-help drive up construction costs and land prices.

"Gains in national welfare from more effective stabilization policies will exceed the gains that can be obtained from uninterrupted efforts to maximize housing goals." Why? Short-run credit restraints on housing are likely to make potentital buyers defer, not abandon, their plans. "Few homes are bought on impulse."

HOUSING MARKET:

Bill Levitt joins housing's rush to the stock market

Big Builder Bill Levitt is seeking public investment in his enterprises. In the first public offering of Levitt & Sons stock, he plans to sell 600,000 shares-a \$6 million deal at the expected price of \$10 per share. And in so doing, he has had to give outsiders their first clear look into the operations of America's best-known and perhaps biggest building company.

A personal holding by Levitt (not the company), the stock will represent about 20% of Levitt & Sons' 2.9 million outstand-



LEVITT

ing shares. But it involves only about 25% of Levitt's own holdings. He is left still firmly in control with a 60.8% majority.

Levitt is mum about the purpose of the sale pending approval by the Securities & Exchange Commission. But the prospectus declares he will abandon his onesite-at-a-time policy in favor of building and

selling at three sites of once: the present N. J. development, a 2,200 acre site in Prince Georges County, Md., and a second New Jersey development in the New Brunswick area, planned for spring.

Among other items disclosed are Levitt & Sons unit sales and dollar volume (but not starts) each year since '50:

Yeara	homes	sold (by location) Dol	lar volume
1950		Levittown, N. Y.	34.3
1951		Levittown, N.Y.	47.3
1952		Levittown, N.Y.	23.3
1953		Levittown, Pa.	36.4
1954	4,691	Levittown, Pa.	48.8
	1,392	Levittown, N. Y.°	
1955	2,475	Levittown, Pa.	28.6
1956		Levittown, Pa.	35.6
1957	1.553	Levittown, Pa.	19.2
1958		Levittown, Pa.	18.4
1959		Levittown, Pa.	28.6
	896	Levittown, N. J.	
0	had a		

mos ended

Nov. 30' 59 1,168 Levittown, N. J.

ended Feb 28 or 29. sales of "houses, land & buildings" to nearest hundred thousand. constructed prior to 1949, originally for rental.

Of the total 33,730 houses sold in the tenyear, nine-month period, 90% were sold for less than \$15,000, the balance between \$17,500 and \$21,000. The prospectus says that between 1946 and 1950 the company built "over 20,000" homes in Long Island. The company lists assets of \$24.5 million, liabilities of \$9.9 million, and earned surplus of \$11.3 million. It has never paid a dividend. Earnings in the seven months ended Sept. 30, 1959 were \$529,512 or 18¢ per share.

Levitt's salary as president and director is shown at \$105,000. Other officers and their pay: Julius Silver, vice president, treasurer, and director, \$41,600; Ira G. Goldman, vice president, general counsel, and director, \$31,200; Nelson C. Kamuf, vice president and director, \$39,125.

Among other Levitt interests, the prospectus lists:

• Resources Development Corp, which buys water & sewage facilities built in Levittown, N. J. at \$150/house from the company, which spends \$600/house on them.

· Potomac Corp, a partnership with William Levitt Jr, which paid \$100,000 for 21 parcels in Levittown, N. J. suitable for filling stations that cost the company \$39,885.

• Universal Supply Corp, a 1,000-share, \$100,-000 corporation that owns Levittown (N. J.) Plaza shopping center. It is to be merged with the company in a 100:1 stock exchange, after the public stock sale.

• The Bank of Levittown (N. J.) of which he s majority stockholder.
\$698,000 worth of Lower Bucks County

Sewer Authority Bonds, bought from the company for \$449,816, although they cost \$564,986. • Grizzly Park Corp, owner of two parcels of land in Long Island bought for \$400,000, with a \$300,000 mortgage to the company, later raised \$100,000 by a reappraisal of the land.

Of the 1.7 million shares Levitt retains, 1.1 million are pledged on two debts totaling \$2.6 million, with an agreement that if he defaults, the stock will be bought by the company. He also has life interest in 293,234 shares with remainder interest in William Jr and "another member of the family." The prospectus says there are three stockholders, but lists only Levitt.

Levitt, 52, started in business with his father, Abraham, and brother, Alfred, in 1929, building custom houses in the New York City area. In 1934, the Levitts built their first development, 200 houses at Manhasset, Long Island, produced 2,000 more in the next seven years, cut their teeth on massproduction in a 1,600-house World War 2 development near Norfolk, Va. After the war, Levitt perfected the mass techniques to become the first of the gaint tract builders.

Other recent issues planned as announced for public sale:

• American Land Co (Charles L. Gleaves, president), which controls the celebrated international real estate sales company, Previews Inc, will complete acquisition of Previews stock with part of a proposed issue of 300,000 shares \$15 par Class A, 310,480 shares common. But the bulk of funds realized will go to carry on land development work of several companies inte-grated with Previews when American was organized last June.

• Estate, Inc (Bernard Passman, president) will to cash in on America's big boom in water sports by developing 600 lots on a 338-acre site near Rockville, Md, and only 17 mi from Washington, adding manmade lakes and boating facilities. To do so, it hopes to sell 200,000 shares of Class A common at \$5 a share.

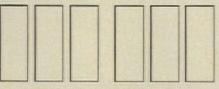
• Phillips Developments, Inc (M. Penn Phillips, board chairman) will with typical Phillips flair, use part of a proposed 400,000 share issue of common to acquire through three subsidiaries, no less than 26 building, development and management companies operating in and around Hesperia, Salton, and Riverside, Calif. Rest of the money will be used to finance Phillips' the sprawling activities in land development, home building, hotels in the booming Mojave Desert.
Garden Land Co Ltd (Joseph W. Drown, president), which counts 2,500 acres in the Brentwood area near Los Angeles among its holdings, will spend \$400,000 to develop 50 lots there, plus \$100,000 for 20 multiple dwelling lots in the Pacific Palisades, and some 38 lots for \$150,000 at Yorba Linda. To do so, it wants to issue 150,000 shares of common at \$6.25/ share. NEWS continued on page 64



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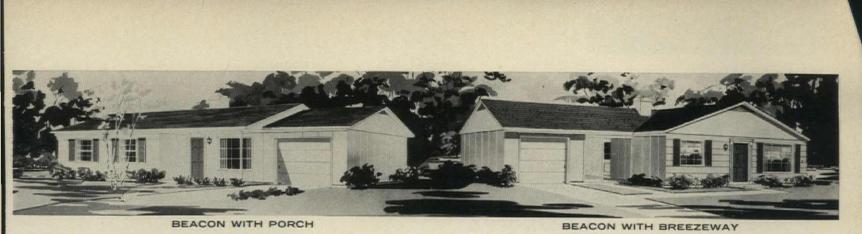
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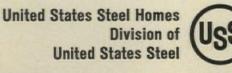
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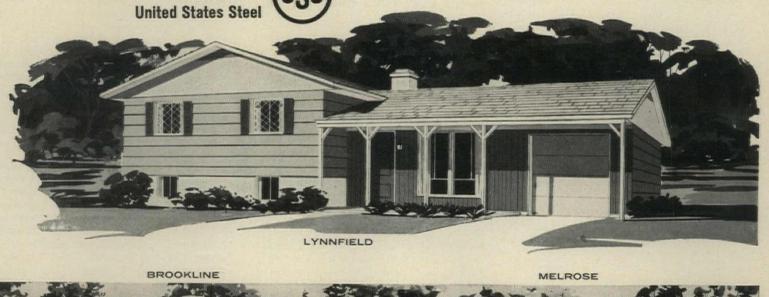
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SEGREGATION:

Record year for state anti-bias laws

State legislators across the US set an all-time record in 1959 by passing five laws forbidding race bias in housing. So doing, they spotlighted a trend that is gaining momentum much faster than most people in housing have realized. Even faster pickup is expected this year. Last year's crop of legislation:

California bars racial discrimination in all publicly-assisted dwellings (including FHA & VA) in multiple groups of three or more, detached houses in groups of five or more.

Colorado covers all housing transactions except owner-occupied units.

Connecticut extends existing law to all housing owned or controlled in blocks of five contiguous units.

Oregon requires anyone in the business of selling or leasing real property to refrain from discrimination on pain of losing his license (exception: the owner himself).

Massachusetts covers all multiples, developments of ten or more houses.

Campaigns for similar bills were waged in ten other legislatures last year, and more are expected this year. Among them the most notable may be New York's 1960 Metcalf-Baker Bill, which goes further than any other so far on the books, including New York City's famed Sharkey-Brown-Isaacs law.

As written, the measure would prohibit discrimination in all housing except one- or two-family units occupied by the owner. It would also ban discrimination by realestate brokers, salesmen, mortgage companies, banks and other lenders. Brokers would be in violation if they refused to show any listed property even if the owner could legally refuse to sell. New York City's two-year-old law only bans discrimination in multiple dwellings and developments of ten or more houses (like Massachusetts', which was modeled on it.)

Other states where bills which lost last year probably will arise again: Kansas, Maryland, Michigan, Minnesota, New Mexico, Ohio, Pennsylvania, and Rhode Island.

PEOPLE:

Davern named acting PHA boss

Lawrence Davern, a 20-year veteran of the Public Housing Administration, has stepped up from PHA general counsel to acting commissioner in the wake of Commissioner Charles P. Slusser's departure (Jan, News).

Davern, 54, was born in Louisville, won both a batchelor's and law degree at the



DAVERN

ney with the US Housing Authority, a predecessor of PHA. His appointment is generally regarded as a

University of Louisville,

practiced law there until

1931. He served two

years as magistrate in

Jefferson County, Ky.,

then returned to private

practice. In 1939 he be-

came an associate attor-

stopgap. The Administration needed somebody to testify before congressional commit-

tees while it finds a permanent successor to Slusser. In picking Davern, the Administration passed over Deputy PHA Commissioner John D. Currie, longtime associate of Slusser's.

At mid month, the capital grapevine buzzed with talk that the PHA job might go to Ernest J. Bohn, director of the Cleveland Metropolitan Housing Authority and chairman of the Cleveland Planning Commission. The Cleveland Press carried a story predicting that Bohn "will step into the \$20,000-ayear post soon."

To these reports, Bohn would say only: "No comment"-a rare sidestep for a man who almost always answers queries with an unequivocal yes or no.

Some insiders figured Bohn would be foolish to accept the job even if pressed to take it. At 60, he is undisputed and never challenged boss of his own housing empire in Cleveland, a former city councilman, a director of the Second Federal S&L, highly respected and able to get just about anything he wants from anybody in his city.

OFFICIALS: Howard J. Wharton, since 1956 public works planning director of the Community Facilities Administration, has been handed the newly-created \$14,190-a-year job of assistant commissioner for redevelopment to URA Commissioner David Walker. In government service since 1935, Wharton has specialized in federal-local relationships in housing, urban renewal, and community facilities. In 1953 he was appointed area supervisor for New England and the Middle Atlantic States for URA; in 1955-56 was URA's regional director for Middle Atlantic.

John G. Vaughan, former director of development for the Chicago Housing Authority, has been named executive secretary of Cincinnati's Better Housing League, the city's citizen promotion group for urban renewal. He succeeds D. Reid Ross, who is now vice president of Hamilton Co., which plans lowcost housing in Puerto Rico.

Ex-FHA Boss Walter Greene takes N.Y. state housing job

New York's Limited Profit Housing Mortgage Corp has hired former FHA Commissioner Walter L. Greene as executive director.

The corporation was organized in August to enlist \$200 million of private capital to participate 2-1 with state funds in financing \$300 million worth of limited-profit housing projects for middle-income families. But so far it has less than a third of the required amount, may be supplanted by a State Housing Finance Agency outlined by Gov Nelson Rockefeller last summer.

Rockefeller has raised his sights on the amount needed for middle-income housing. He told the legislature in his annual message that he now hopes to tap private capital for \$500 million. The plan, like others elsewhere, uses the state's power to issue tax-free bonds to provide funds for housing at a lower interest rate (and therefore lower rentals for the lucky few who get it).

In one of the clearest signs to date that Burnham Kelly's predicted "snap-over" in housing technology is approaching, Big Builder John Long of Phoenix is planning to be the first to mass-produce plastic foam wall panels for use in his own houses. The Martin Sweets Co of Louisville is building a 1,800-lb machine to manufacture the 4'x8' panels of polyurethane foam, and says that Long should be able to turn out as many as 960 a day.

Initially, Long expects to use the process to make interior partitions only, but later hopes to make exterior panels too, in a search for both speed and economy.

The machine operates by injecting two plastic chemicals into a "container" of plywood or other suitable material which will serve as the exterior surface of the panel. When the two mix, they foam into a rapidlyhardening core that adheres to the "container," providing insulation and rigidity. The manufacturer (whose machines are now being used for insulating and stiffening wall panels for refrigerators, trucks, cabinets, and other products) says tests show interior walls can be foamed to a thickness of only 11/2" and still have structural strength of a 4" studwall with plaster on both sides.

LENDERS: Mortgage Banker George H. Dovenmuehle has stepped up to board chairman of Dovenmuehle Inc, Chicago, big mortgage banking outfit (\$150 million portfolio, \$76 million of "work in progress" on Jan 1). His successor: Theodore H. Buenger, also new president of the Chicago Mortgage Bankers Assn. William C. Prather has been named general counsel of the US Savings & Loan League, Chicago, succeeding Harold Russell, who retired last fall.

BUILDERS: NAHB locals and state chapters picked these new presidents: Chicago, Ralph Finitzo; Philadelphia, Solomon Bronstein; Miami, Gene S. Fisher; Texas, Harold F. Smith of Dallas; Houston, J. S. (Mickey) Norman; New Orleans, Ernest B. Norman Jr.; Denver, Gilbert S. (Gib) Egan. Richard J. McBreen has been named executive vice president of the San Mateo, Calif. chapter, succeeding Harry E. Smith, who retired (Nov. News).

Harry G. Stewart, former executive director of the Building Contractors Assn, Los Angeles, (1952-59), has been named sales manager of the builder-subdivision department of Land Title Insurance Co.

Joseph L. Eichler, who was one of the first builders to prove genuinely contemporary design could sell in modest-priced tracts. continued on page 67

has been named the first winner of a joint NAHB-AIA award to "encourage builder and architect teamwork in designing and building better homes and communities." Sharing the honor: Architects Anshen & Allen of San Francisco, Jones & Emmons of Los Angeles.

A year ago, Eichler quit the San Francisco NAHB chapter (Aug '58, News) in protest against its stand opposing laws barring racial bias in housing. But he quietly joined the neighboring Santa Clara County chapter seven months later.

PRODUCERS: R. W. Mayer has stepped up to president of Timber Structures, Port-land, Ore., replacing J. L. Groat, who becomes vice chairman; A. H. Kiehl has been elected president of Textron Metals Co, Pottsville, Pa., succeeding J. C. Montgomery, who retired; Lewis C. Laderer is new president of Wells Aluminum Corp. North Liberty, Ind., succeeding Cloyd D. Nickison, who resigned; Frank B. Jewett Jr is new president of Vitro Corp of America, New York, succeeding J. Carlton Ward Jr. now board chairman: N. J. MacDonald, president of Thomas & Betts Co, Elizabeth, N. J., has been elected president of the Nat'l Electrical Manufacturers Assn.

MANUFACTURERS INSTITUTES: Harry C. Gurney, general sales manager, Janitrol Heating & Air Conditioning, Columbus, Ohio, is new president of the Nat'l Warm Air Heating & Air Conditioning Assn. Morris C. Hoven, general sales manager, roofing and siding, Certain-teed Products Corp. Ardmore, Pa., is new president of the Insulating Siding Assn. Randall M. Dubois, president of Freyssinet Co, New York, is new president of the Prestressed Concrete Institute (which has moved from Boca Raton, Fla. to Chicago). W. E. Griffee has moved up to acting secretary-manager of Western Pine Assn. Portland. Ore., succeeding S. V. Fullaway Jr., who retired.

Crane gets new president as Evans-overhaul widens

Wesley A. Songer, 41, former executive vice president of American Safety Razor Corp who was brought into Chicago's Crane Corp by Thomas S. Evans after his helm-taking coup last spring (June News, et seq) has been boosted from executive v-p of Crane to the presidency. Acting president since resignation of Neele E. Stearns last April was L. H. T. Clegg, who remains as president of Crane, Ltd, Montreal. Pittsburgh Industrialist Evans continues his maneuvers to revamp Crane. Items:

• The company paid off the last \$10 million of \$23 million short-term bank loans taken last year to retire outstanding debentures.

• It sued Briggs Mfg Co of Warren, Mich., big plumbing fixtures and fittings maker, for a list of stockholders, charging that it effectively holds more stock (136,000 shares or 13%) than the Briggs management and wants to buy more.

• It announced agreement to purchase National-US Radiator Corp's nine US manufacturing plants in a variety of lines, and other operating assets, for \$15 million.

• It announced agreement to take over The Swartwout Co of Cleveland, leading manufacturers of electronic control equipment

Observers now talk down the chance of an open break (often predicted) between Evans and his leading teammate in the Crane coup, Attorney Alfons J. Landa. Landa has been reducing his holdings in Crane, and Evans' position, even if there were a fight, is strong-with a 300% net gain in earnings in his first nine months, and quarterly dividends doubled to 40¢ mainly through drastic surgery to lop off unprofitable wholesale outlets and factory operations.

DIED: J. Rupert Mason, 73, past president ('52) of the International Federation for Land Value Taxation and Free Trade, and veteran proponent of the Henry George philosophy of land taxation, Nov 18 in San Francisco; Thomas F. Wallace, 88, past president ('30-'31) of the National Assn of Mutual Savings Banks, and former president ('29-'39) and board chairman ('39-'52) of Farmers &

CANADA:

Builders fret over money pinch

Where to get enough mortgage money to build the 125,000 houses government forecasters predict for 1960 is the No. 1 problem in Canadian builders' minds. It drew a record crowd of 750 to the Nat'l House Builders' Assn convention in Toronto, only to hear Builder (and former mortgage man) Ron K. Fraser of Hamilton warn: "The problem is more serious than statistics suggest."

Interest on NHA mortgages was raised from 6 to 634 % shortly before Christmas. Since then, builders have been fidgeting for lenders to show how much money to expect this year. The answer, according to a preconvention survey of lenders: nothing from the banks (who financed some 15,000 starts in 1959; 28,000 in 1958) and about the same as last year from life insurance companies (who are Canada's biggest mortgage lenders). Result, said the survey: "Builders face the toughest battle for mortgage money ever fought in Canada. [Last year's dip to 140,000 starts] will look like a slight pinch compared to the struggle expected in the next year.'

Investment man Elliot Yarmon, president of Tankoos-Yarmon Ltd, Toronto-based international realty investment firm, offered one answer to the problem in one of the most

talked-about speeches at

groping

Bachrach



YARMON

gage financing." But if Yarmon's diagnosis was keen, his prescription struck critical onlookers as much like giving an alcoholic a drink to cure his hangover. He proposed a credit subsidy through government-backed bonds, "to pump realistically-priced (i e cheaper) money into your industry through good times and bad."

The bonds should yield an investor 6%, says Yarmon ("a very competitive rate in the present market"), produce mortgages at 61/2 to 634 %. Within five years, he thinks, "\$1 billion could be produced this way." His argument: "This would provide a highly attractive possibility for small investors earning

Mechanics Savings Bank of Minneapolis,

Nov 28 in Minneapolis; George A. Boehm,

85, practicing architect in New York State for a half-century and former president of the Westchester County AIA Chapter, Dec 16

in Mt. Kisco; Alva A. Horsfeldt, 53, Pacific

Northwest regional vice-president of NAREB.

Dec 24 in Portland, Ore. of a heart attack;

Frank R. Weddington, 58, president of Wm.

Cameron & Co, Waco, and longtime Texas

lumberman, of a heart attack Dec 25 while

hunting in Trinity County, Tex.; George F. Watrous, 63, president of Watrous-McClory

Inc, one of Sacramento's largest realty firms,

and two-time Sacramento city councilman,

Dec 26 in Sacramento of a heart attack

after a hunting trip; Gabriel B. Roth, 66,

AIA, residential and apartment architect in

Philadelphia, Jan 5; William Adams Delano.

85, FAIA, who climaxed a 67-year career

that included designing homes for some of

the world's richest men (and brought him

AIA's Gold Medal in '53) by renovating The

White House, Jan 12 in New York City,

3, 4 or 5% in banks and trust companies." "The problem is not going to be solved by any gimmick," retorted Toronto Economist J. V. Poapst. "It's simple to state but not easy to find a solution." Poapst, former CMHC chief economist, is an exponent of a flexible NHA rate "to free builders from government-controlled fluctuation." He urges builders to show the government they "can't take on the fixed costs of labor-saving devices which could cut building costs because they could not afford to carry idle machinery when times are slow."

A wry dig at the money shortage sparked the successful presidential campaign of Campbell C. Holmes, 51 of Toronto, who circu-



HOLMES

lated among the builders with a basket of apples from his 20,000acre orchard and the precept that "every house builder should be ready to diversify so you can eat even if you don't build one house." Holmes, a commerce graduate of the University of Toronto, himself built no houses in 1959. Why? "I figured the market looked kind

of soft." Instead he sold developed lots, built two leaseback factories and a carwash. He was backed by NHBA's Toronto local, of which he is past president.

There are some soft spots in new house sales (the worst: Vancouver, Hamilton, some parts of Toronto). But most builders called the market good-provided you have the right house in the right location. "As far as I can find out there is no more than a ten-day inventory in most areas," says Past President Les Wade of Calgary.

NEWS continued on page 70

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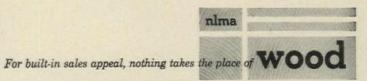
Like more and more homeowners, the family building this modern ranch home specified traditional joist construction with sub-flooring, to provide the comfort and beauty of hardwood floors. John Sutton, architect. Fister Construction, builder.

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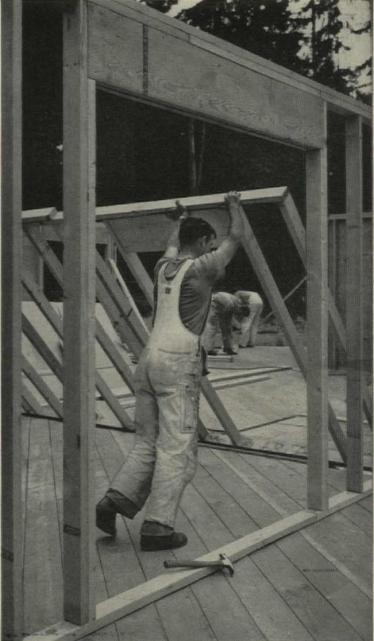
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URBAN RENEWAL:

Cleveland spurns federal aid, finds neighborhoods clamor for rehabilitation

What can make a blighted neighborhood bloom again-without federal subsidy?

Cleveland's answer: salesmanship. The city is discovering new tricks that have more neighborhoods clamoring for rehabilitation programs than it has experts to show them how to do it. "Our biggest problem is holding back to keep it from getting out of hand," says James T. Yeilding, commissioner of slum clearance & blight control.

Cleveland's rehabilitation efforts got under way in 1957. But the very first two projects taught officials that picking an area for rehabilitation and then telling residents about it, wouldn't work.

"They resented being told what to do with their homes . . . resisted the city's efforts . . . and proved again that no public measure can be effective unless the people want it," says James Price, administrator of the conservation and rehabilitation program. Now, Cleveland is using this approach: 1) persuade people to want rehabilitation first and 2) combine execution with planning in keeping with the dictum of Chicago's slum fighter, Julian Levi: "In this kind of renewal you have a live patient; the longer you keep him on the operating table, the worse he gets."

Since November, this new approach has been started in three neighborhoods involving 6,200 structures, and 17 other neighborhoods have asked for it, are waiting their turn.

It's not that the money isn't available— Mayor Anthony Celebrezze has budgeted \$1.4 million for more staff for five years—but the right kind of people are hard to find.

Each area must ultimately have seven staffers: a professional coordinator, a financial adviser, a construction adviser, an organization counselor, a planner, a general field representative, and a clerk. They excite public interest, then guide the public in their fixup efforts while keeping suede shoe boys at bay.

Bypass federal red tape

First step in Cleveland's salesmanship is to require any neighborhood that wants the program to ask for it— through any "representative neighborhood organization." Success of the West Side Monroe demonstration project, the city's second, started these coming in, and the ball is still rolling.

So far, Cleveland has elected not to seek federal aid for any rehabilitation projects. The reason: to qualify for federal funds, the city has to do only a part of the investigation it feels is really necessary to know what a neighborhood needs. And local officials don't like the federal nitpicking over plans. So Cleveland makes intensive inspections, mobilizes community support, before it tries to complete a plan to fix a blighted neighborhood. Yeilding believes this gets a program into the doing stage as much as a year sooner than if federal procedures were followed. And, he says, "if later we find we do want federal aid [to finance public improvements that are too expensive for the city alone], we can always apply for it."

But Cleveland avoids public improvements until it is sure the neighborhood is ready & willing to help itself. "Too often cities try to bribe neighborhoods with public facilities," says Yeilding. "And that gets them so interested in complaining about the streets, garbage removal, street lighting and so on that they forget about their homes. It's the reward, not the incentive." Residents are first encouraged to do a "self-survey" of their homes and neighborhoods to determine need. After this is complete, they are urged to invite a visit from a "housing expert"—really a city inspector—who can tell them what needs to be done to bring their property to code minimums.

"We find after they convince themselves with the self-survey, we get 100% request for the expert's visit," says Yeilding.

Cleveland has worked out an appraisal method for fixup that makes all buildings but real basket cases feasible for financing, Yeilding says. The key is that the city has persuaded FHA and lenders that enforcement in conservation-rehabilitation areas will be stiff enough to force all buildings up to code minimums.

Usually, says Yeilding, appraisers take present value of a building as if no fixup would be required, often find that the cost of fixup exceeds the increase in value shown by an estimate of the rehabilitated value of the building.

In Cleveland, appraisers first estimate rehabilitated value of a building *in a rehabilitated area*, then *deduct* the cost of repairs to find the present value, because it is assumed that the repairs will have to be made or the building abandoned to the city.

Yeilding is trying to sell this appraisal method to FHA in Washington, for use everywhere.

Big stick where needed

Cleveland forces owner-fixup of rental property by hardboiled enforcement. It also uses this tool to ease the problems of ignorant contract buyers (often found in Negro neighborhoods) who have paid too much for their house, so cannot repair it and meet their installments. The trick here is to prosecute code violations against the seller—who is still the owner of record (and thus liable under Cleveland's laws)—unless he will rewrite the contract sale at a lower price.

And while it might not work quite so smoothly in urban areas with less owner-occupancy, the Cleveland system has one big plus: it produces, says Yeilding, equal or better results in Negro areas as in white.

More promises for NY's slums

The harder New York fusses about slums and blight, the faster it seems to slip backward and the worse the problems get.

Among latest developments is a buckledown TV speech by Mayor Robert Wagner calling housing the city's No. 1 problem, promising a nine-point program to make an even harder try at solving it.

To those with sharp ears and memories, the speech sounded curiously familiar. Reason: just under a year ago, Wagner announced a "massive assault" on slums, (*News, Mar et seq*) only to have new scandals erupt in the scandal-sated Building Dept and Slum Clearance Committee, the "assault" piddled out into a cross-fire of charges, investigations and reports.

Among new nostrums offered by Wagner this time: 1) a campaign to have rents on all single-room occupancy tenements reduced to \$1 a month per apartment; 2) a drive



BOOKED AFTER INDICTMENT, Hulan Jack protested innocence, was released without bond.

to get court orders forcing landlords to repair slums; 3) a study to see if special housing is needed for problem families "unsuitable" for private housing and ineligible for public housing; 4) intensification of all existing efforts.

If there was honesty in Bob Wagner's admission that his administration has failed to cope with slums, there was hollowness in his failure to admit the corruption and inefficiency in Tammany-dominated city government that is crippling the slum fight—a failure that has, in recent weeks, prompted the influential New York *Times* and *Herald-Tribune*, both editorially to demand his ouster.

One bright spot in the city's dark slum picture is the activity of Lawyer (and Republican) Anthony J. Panuch, appointed by Wagner to suggest an overhaul of the whole slum program (News, Oct). Panuch has already made a special report on the city's relocation program for Title I displacees. It suggests a "tenants' bill of rights" for better service under supervision of a new deputy commissioner of real estate. And insiders were predicting that his final reportdue this month-would recommend abolition of Robert Moses' Slum Clearance Committee. At mid-month, the biggest headlines of all reported that a grand jury had indicted Manhattan Borough President Hulan Jack for conspiracy to obstruct justice by making up a tall tale about a \$5,500 remodeling job on his Harlem apartment. The donor: Real Estate Man Sidney Ungar, whose sponsorship of a juicy Title I Redevelopment project was before the Board of Estimate, on which Jack sits. It was just a "friendly loan," Jack insisted.

On balance, it seemed that New York was doing about as well—or ill—as always. NEWS continued on p 74

A HAWAIIAN HOLIDAY

A fun-filled trip to America's Paradise in the Pacific awaits the nation's top builders and their wives in the . . .

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Only Hotpoint CREST Ovens give you all of 1960's newest, most exciting features

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NEW full-width door lifts off; new chrome floor liner, oven units and broiler spatter guards remove for faster, easier oven cleaning.

PLUS-Rota-Grill for recipe-perfect barbecues, Roast-Right Meat thermometer for just-right roasts.

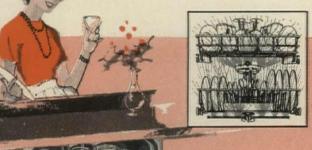


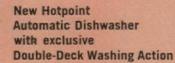
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Can remodeling become a national business?

First faint signs of an emerging class of volume, one-stop contractors gives hope that the long-awaited answer may be yes

By Robert Seaver

"There are more than a million houses being built in this country every year. And nearly everyone who buys a new house is almost immediately a home-improvement prospect. The first thing he wants to do is change something, make it a little more individual."

Thus, aquake with earnestness and stabbing the air with an enormous cigar, Herbert Richheimer, 38, expresses his confidence in the future of the home-modernization market. He has good reason. Since 1954 this roly-poly, ex-air freight salesman has parlayed order taking for a Levittown. Long Island paving contractor into a remodeling business that operates in three states, grossed between \$3 and \$4 million last year.

Nobody really knows just how big the market for home repair and remodeling is. Economist Miles Colean has estimated it at \$12 billion a year with a growth potential of 40-50% in the next decade. Others, with questionable optimism, have guessed anywhere from \$15 to \$25 billion already. Some manufacturers believe that fully half their materials sales go to it. Most are pretty sure that so far the shattered, scattered welter of enterprises in the home-improvement field have failed to sell anywhere near its full potential. Now, however, with the appearance of men like Richheimer, the picture may be changing.

Much as the volume builder grew to dominate the new house market in the early '50s, so in the '60s a breed of contractor seems to be emerging who brings 20th Century business methods and volume techniques to remodeling. He makes it less of a personalized handcraft, and offers materials, installation, and financing to his customers in a single package. He may have a background in housing as homebuilder, craftsman, materials dealer, but at least three of the biggest and most successful have come green to the field from other businesses. Today, the volume one-stop remodeler is taking more and more of the market away from his competitors.

Federal push

If continued, this trend has more than market implications. It may also do much to ease the worries of some troubled officials in the Eisenhower Administration. David Walker, the new urban renewal commissioner, is trying to switch the whole emphasis of federally-aided anti-slum efforts to rehabilitation (*Nov*, *News*).

P. Charbon

To do so, he has warned, means a whole new industry must be created to do a business-like, gyp-free job of one-stop home remodeling. Says Leonard Czarniecke, URA's rehabilitation director: "Rehabilitation will have a major if not *the* major role in total urban renewal from now on."

Statistics on remodelers, like their market, are scant. But NERSICA says that among its 10,000 roofing and siding and other specialty applicator members, about 10% are equipped to contract, one-stop fashion, for jobs that go beyond their specialty. The National Retail Lumber Dealers Assn in a recent poll found 1,000 of its members listed one-stop contracting as part of their service. Among the Home Improvement Council's 1,700 members, 700 Sears & Roebuck retail stores offer installation and financing on a wide range of building products and appliances (though they avoid decorating and major construction like house additions).

Who are the leaders?

Probably the most famous of the big, successful one-stoppers is Richheimer, a German immigrant (at 14) with a passion for figures and a salesman's flair. His success in the mass housing of Long Island (notably Levittown) prompted him to extend his operations to and around Levitt's other projects in Pennsylvania and New Jersey, thus making him the first "mobile" remodeler. But rivaling him is Community Builders Inc of Skokie, Ill., near Chicago. A \$10-million general building firm, CB attributes half its volume to remodeling and 80% of that half to homes. President Robert W. Kendler, 55, started as an apartment rental agent at 17, got into subdividing and homebuilding in the '30s, soon found there was a better market in Depression days for fixed-up older homes, and has been remodeling ever since.

But beyond these spectacular examples, HOUSE & HOME correspondents have found in city after city at least one big onestopper solidly and profitably established in sharp contrast to the smaller fry who compete with them. Items:

• In Baltimore, Joel Zenitz and Alvin Greenfeld, both 35, have combined Zenitz's retail clothing sales and promotion experience with Greenfeld's knack for construction detail to build a 1950 partnership "operating out of our vest pockets" into Zane Construction Co, selling major jobs in Baltimore and Washington, with an expected \$1 million gross this year.

• In San Francisco, Oakland Grocer Moe Leavitt quit his own business in 1947 to sell venetian blinds. Today, he heads Superior Home Supply with stores in Oakland, Belmont, and San Francisco, has been grossing \$1 million a year since '57.

• In New Orleans, the father-son team of Earl Robinson Jr and Sr grew dissatisfied with profits from contractor sales in their

H&H Staff

LONG ISLAND'S RICHHEIMER, puffing his ever-

LONG ISLAND'S RICHHEIMER, putting his everpresent stogie, still pulls spot field inspections, as here with Marketing Consultant Don Moore and a fixup plan.



BALTIMORE'S ZENITZ AND GREENFELD push specials like basement rumpus rooms, use IBM machines to see what ads pull best for their Zane Construction Co.



NEW ORLEANS' ROBINSONS, Jr & Sr, keep lumberyard contractor customers by subbing fixup work out to them, handling materials, and financing themselves.

News

long-established Southern Hardware & Lumber Co. In 1958, they began "easing" into the one-stop market. Today, their overall volume is about the same—\$500,000—but 75% one-stop. They predict a 25% increase this year.

• In Philadelphia, the 45-year old plumbing firm of Henry Ford Co began installing complete kitchens and baths in 1939, expanded to the rest of the house in '53. The company hit \$850,000 in '55, dropped to \$650,000 a year since, because it voluntarily gave up smaller jobs that "were more trouble than the profit was worth."

• In Minneapolis, Arch DeLancey persuaded the mainly (98% of its volume) commercial and wholesale plumbing house of T. D. Gustafson Co to start a one-stop remodeling department in '53. DeLancey sold \$28,800 in the first nine months by himself, and thus last year built gross for the department to \$310,000, or 22% of Gustafson's \$1.5 million.

· Near Detroit, Mt Clemens Lumber Co began wooing consumer sales, found itself blamed for bad workmanship by contractors, in '57 decided to do the contracting itself. First year's volume was only \$50,000, But in the first five months of '59 after tying in with a LIFE magazine remodeled model-home promotion (News, April '59 et seq), it did \$151,000, and is still growing.

How can one-stoppers grow?

Successful as they are, these and other one-stoppers don't add up to the mass remodeling industry called for from all sides. But hope that their numbers will grow faster is held in broad hints by both Richheimer and Zane that they will soon merchandise their knowhow via franchises-perhaps on a national basis. And the existing one-stoppers credit their success to a surprisingly uniform set of principles independently worked out. It gives a good guide to what others must do to match them.

1. Successful remodelers know how to estimate costs.

The art of estimating a job without knowing what is behind the plaster and wallpaper in an older house is universally regarded as the biggest pitfall for the unwary remodeler. A single mistake can-and has in many cases-wiped out his business. But the art has been converted to a science by the successful. Each has his own system to allow for error yet give a fair price. Most depend on careful analysis of past and current costs.

"I have invested \$50,000 to set this up properly," says Richheimer of his meticulous system for recording and controlling costs down to the very nail. "If I hadn't, I would still be like all the rest, living from job to job. Ninety per cent of my executives are former contractors who went broke because they didn't estimate properly." Using data amassed over four years and constantly under revision as 80 jobs a month are logged in Long Island alone (average price: \$2,300), Richheimer's analysts have produced fixed-unit prices (including materials, labor and markup) for every component of a remodeling job, from kitchen cabinets to entire rooms. Armed with these, his salesmen can sit with a client and "build up the job from the shell out" step by step, pricing each item as they go. The estimate is checked by a sales manager, a production supervisor and a cost analyst (and revised if it varies 3% either way from the analysis, sometimes resulting in an actual reduction in price to the customers) before final acceptance. It is usually so accurate that Richheimer's monthly gross profit seldom varies 1% from his 30% goal.

2. Successful remodelers take an adequate markup, ignore price competition.

A common trait of the volume remodeler is his cheerful admission that he can be outbid on price by any competitor. Equally common is his confident prediction that sooner or later that competitor will go broke or be forced into a self-defeating shoddiness of workmanship or materials to stick with his price. Richheimer's 30% markup yields a net of about 5% after overhead and contingencies are paid, he says. After Kendler's customers have "made their own price," he adds "10% for over-head, 10% for profit and 10% for contingencies." Superior grosses 33%, nets 4%. The Robinsons scale their prices to yield a 331/3 % gross. Most one-stoppers require salesmen to quote book prices. Or if, like Zane, they allow salesmen some leeway for incentive, they fix a floor and ceiling to the price.

continued on p 77







VENTILATING FANS give your homes a

FRESH TOUCH!

A complete line of ventilating fans for kitchens, bathrooms, game rooms, laundries... wherever constant or periodic air replacement is needed. Whisper-quiet Emerson Electric ventilating fans are easy to install in wall or ceiling. Ask an engineer about the blade design of Pryne Blo-Fans and Pryne Axial Flo-Fans. Ask a decorator about the styling of the grille design.

Another of the FINISHING TOUCHES from Emerson Electric



Write Dept. BIO, Emerson Electric · 8100 Florissant · St. Louis 36

Removability... makes the <u>big</u> difference in windows

Your prospects know that fine modern homes have modern removable wood windows. They may not ask if the windows are $R \cdot O \cdot Ws$, (because they assume that you would demonstrate them *if* you had them), but $R \cdot O \cdot W$ Removable Windows *do* make homes definitely more saleable.

Compare R·O·W quality with any other window. Check weather-protection and ease of operation. No one feature or product can close the home sale for you, but R·O·W Removable Wood Windows certainly help.

.



EMOVAB,

R-O-W and LIF-T-LOX are the registered trade-marks of the R-O-W Sales Company

R.O.W SALES CO.

1365 ACADEMY AVE. Dept. HH-260

FERNDALE 20, MICHIGAN

News

Fixup men decry financing's high cost, wish FHA would ease use of Sec 203

continued from p 75

3. Successful remodelers stress—and give—quality, reliability & service.

"Our customers may pay a little more for our work," says Robert Kendler. "But our work is guaranteed. Thirty days after it is completed, we call on the customer to see if everything is all right." Similarly, the letter of acceptance which Richheimer issues to his customers after processing their order contains a one-year guarantee of all work. And his salesmen do not finish with a job when they have sold it. "Our men are out on each job at least once a week to see that everything is okay," says Vice President William Kearns of Richheimer's Long Island office. Some one-stoppers—Zane, for instance—provide services like color consultation, decorator help on big jobs. Gustafson salesmen are expected to spend 30 hours on sales and follow-up on a \$3,000 kitchen job.

4. Successful remodelers provide financing.

Most remodelers offer a variety, exact terms depending on their own capital resources and/or the tastes of lenders in their area. Almost without exception, they deplore the high cost—often buried in lenders' jargon so customers are not aware how high it is—and short terms. Both limit the remodeling market they feel.

Most common form of fixup is the discounted loan, like FHA's Title I fixup program. Here borrowers may get up to \$3,500 for as long as five years. It bears no interest, but is discounted at 5% per annum on the first \$2,500; 4% on the excess. This amounts to 9.7% simple interest. Similar arrangements on an uninsured basis are more costly. In Oakland, Superior Home Supply can provide one discounted at 6%—equivalent to $11\frac{1}{2}$ % interest. In New Orleans, the Robinsons get loans from a finance company discounted at 7%. Behind such apparently modest percentages is the fact that a \$5,000 loan discounted at 6% for five years costs the borrower \$1,500, yields him only \$3,500. One reason for such high costs: no equity or security is involved —only the borrower's credit.

Less costly, but harder to arrange, is mortgage refinancing either FHA or conventional. But some remodelers complain they have trouble getting FHA to process refinancing applications fast enough, if at all. In Chicago, Kendler of Community Builders offers to refinance at up to 80% of the appraised value of the house, pay off the existing mortgage, do the fixup, and turn over any balance to the customer to pay bills or use as he sees fit. Term is 15-20 years, interest from $5\frac{1}{2}\%$ to 6% on the declining balance, plus a 1% to 3% fee depending on quality and location of the property. Kendler says he sells 75% of these loans to S&Ls, keeps the rest himself.

Most remodelers agree that until FHA 203s are made easier to get and some better instrument for smaller loans is devised, financing will be a major roadblock to a full-fledged remodeling industry. Richheimer, who has had exceptional success with helping his Long Island customers refinance under Sec 203 (but found FHA balky, lenders hesitant in Pennsylvania) says: "If FHA could be persuaded to push a program to insure second mortgages for home improvement (*Oct, News*), this \$23 billion home improvement market could be a \$200 billion market."

5. Successful one-stoppers plan their selling scientifically —and so sell without overstraining.

Scorning the telephone solicitor's "boiler room" or the houseto-house approach, most successful one-stoppers rely heavily on word-of-mouth, newspaper and billboard advertising to draw their leads. Thus they avoid using methods more typical of gypsters, and a lot of cancellations from second-thinking prospects. But they employ a barrage of sales devices to sell the customer once they know he is interested. Richheimer uses scale models of Levittown houses, with scale model additions that can be fitted on to show customers just how their house will look. Gustafson's salesmen use color slides and a portable projector to show how remodeling jobs look. Nearly all employ storefronts or speciallybuilt showrooms lined with model kitchens, baths, patios, dormers *.continued on p 79*

PRYNE LIGHTS...

From a single source...a full line of recessed lighting fixtures by Pryne and surface-mounted fixtures by Imperial...over 200 incandescent lighting fixtures for home and light commercial use.

LIGHTTOUCH!

give your homes a

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







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



BIRCH

The graceful and airy birch is a strong wood with grain varying from quiet to the well-loved "curly". One of the principal furniture woods of the United States, birch has a natural lustre which gives it a soft satiny sheen ideal for paneling.





WALNUT

Among the handsomest of all trees is the walnut. Since the days of the Renaissance, walnut has been a reigning wood for fine furniture, cabinet work, and interior finishing. Walnut needs no ornate design to bring out Its beauty; the grain of the rich wood is beauty itself.



CHERRY

Some of the loveliest pieces of antique furniture are made of cherry. Time only improves its rich, amber color and silky lustre. The principal uses of the beautiful and highly prized cherry are for furniture and luxurious interior finishing.

Choose genuine wood paneling by

BRICE PLYUELSH

A three-way moneymaker for you is PlyWelsh genuine wood paneling.

Prospects for your new homes will get an immediate impression of over-all quality when they see walls of PlyWelsh paneling. Its lustrous beauty adds elegance and distinction to any style home, from contemporary to colonial.

PlyWelsh paneling costs far less than you might think (less, even, than some wood imitations).

Prefinished and ready to install, PlyWelsh paneling saves in labor costs. PlyWelsh moldings, panel stretchers, and putty sticks, color-matched to paneling woods, make every installation job fast, easy and attractive.

PlyWelsh comes in ten woods . . . all finished and waxed by a patented Bruce process that assures lasting beauty and durability. No refinishing is needed, ever-your home buyers will like that.



The finish won't chip off!

WELSH PLYWOOD CORPORATION, 1218 N. HOLLY WOOD, MEMPHIS, TENN., Subsidiary of E. L. Bruce Co.

News

plus detailed drawings of the prospect's job, are pretty standard. Newest wrinkle, promoted by LIFE, is the remodeled home, in which a whole house is redone to show prospects how much remodeling can do for a home, by contrast with "before" pictures.

How to control the gyps

Even if every applicator became a comprehensive one-stopper, remodeling would have serious problems to overcome before it could become a full-fledged industry.

Most troublesome are the gyp operators, the "suede shoe boys" who use high-pressure tactics to sell shoddy materials at inflated prices to gullible homeowners. A similar plague are irresponsible contractors who pull out of jobs with suppliers unpaid, leaving the homeowner with mechanics' liens on his property. Both are a major source of public distrust and sales resistance. Complaints of home-improvement frauds have led the lists of Better Business Bureaus across the nation every year since '55. This year, BBB's national headquarters has informed FHA that suede shoe boys have been virtually eliminated from misuse of FHA programs. But it sadly notes they are "extremely active" otherwise.

"For real control, we need state licensing," contends Joel Zenitz. "We need organizations with ethics." But many Maryland officials don't foresee any quick action in a state that doesn't even regulate Savings & Loan Assns. If other reputable one-stoppers agree, so far they haven't raised their voices in other parts of the country.

What hope there is for better control of fixup ethics comes mostly from the industry itself. NERSICA has long pushed ethical standards, publishes the banns on prospective members. HIC at last is swinging toward organization of home improvement contractors as well as promoting public demand for fixup. And builders seem to be taking more interest than before in bringing remodelers into the NAHB fold.

What organized builders are doing

Builders have long been cool to home improvement for two reasons: 1) the extra business risks involved and 2) a widespread belief that home improvement curtails the new-house market. So they have shown little inclination to give them house room in local chapter activities, although many small-volume builders use remodeling to fill slack time and NAHB's Washington staff guesses some 50 chapters have remodelers as regular or associate members. Now, notably successful efforts to organize reputable remodelers against the inroads of suede shoe operators, in St Louis and the San Francisco area, have raised the issue of national builder acceptance of such activities.

"The suede shoe boys came in here in droves when we had a bad hurricane last February," says St Louis Builder and Remodeler Gerald Hayman. Hayman was chairman of the local homebuilders' small-volume builders committee. "There was so much adverse publicity (after the tornado) because of the suede shoe operators fleecing owners and insurance companies, that we have decided to do our own radio and newspaper advertising," says Hayman. "That experience really gave our home improvement council its kickoff."

Near San Francisco, a new influx of gyp operators prompted the Greater East Bay homebuilders to organize a remodelers' council two years ago taking in all nine counties of the Bay area. It now has 60 members, half of them never organized into any kind of housing group before. Dennis L. Garrehy, ex-public relations man hired to organize the council, conducts a program of standards and ethics, business procedures and organization, estimating and bidding, helps its members arrange financing with local banks and S&Ls. Last September, 12 members took part in a special promotion, got 50 satisfied former clients to show their remodeling jobs, advertised in newspapers, wrote \$200,000 in new orders.

And while the industry struggles to pull itself together, it has before it the shining confidence of a Richheimer who can say, explosively: "Some day they are going to run out of land to build houses on. Then where are they going to put all those people? Are they going to go up, down, or sideways? You can't tell me they are going to tear down all the ten-and 20-year old houses. No, they are going to modernize them, make them bigger."

NEWS continued on page 81

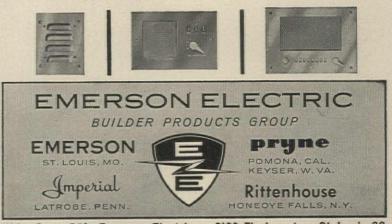
RITTENHOUSE INTERCOMS...



give your homes a SOUND TOUCH!

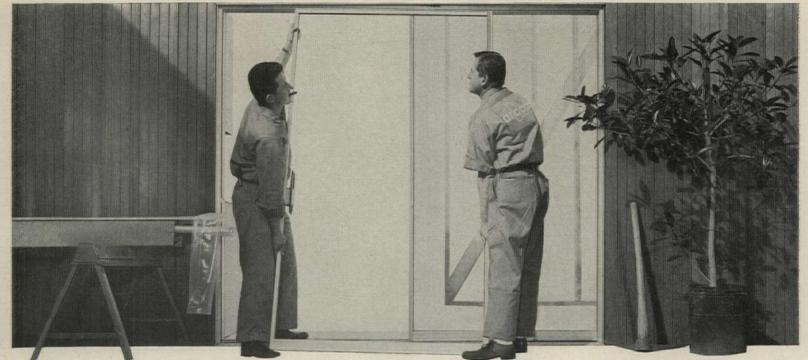
Complete two-way intercom service — plus door chime and radio service to every room. Each system has master station with from one to eight remote stations. Fully-transistorized for low-cost operation and long service-life. Easy to install..., no 115-volt wiring required. Two year warranty.

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



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The touch of quality at a builder's price...



The touch of quality at a buyer's fingertips!



NEWARCADIA/SERIES 150

Quality your prospects can see, touch...and take pride in! Genuine Arcadia quality means the first *inherently weathertight* sliding glass door design, proved in two years of field-testing throughout the country...the first sliding glass door design to eliminate troublesome screen maintenance by placing the screen *inside* where it stays clean and new looking for years...the one sliding glass door selected time after time for *award-winning* custom homes by leading architects and builders. The new Series 150 is genuine Arcadia quality...available in builder sizes to sell at a builder's price! Standard 6'10" height in 5'10", 7'10", and 9'10" widths, either KD or glazed. Get the whole story on Arcadia's *touch of quality* merchandising. See the yellow pages to find your nearby Arcadia distributor, or write to Dept. 151, Arcadia Metal Products, Fullerton, California.

News

STATISTICS:

Housing outlays set record: 1959 rings up 24% gain over '58

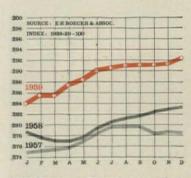
Expenditures for private residential building soared to an all-time peak last year. The \$22.3 billion paid for construction put in place represents a 24% gain over 1958. And the biggest increase—\$3.5 billion or 26%—was in new dwelling units, according to Census Bureau figures.

Even at year-end, residential building was maintaining a 5% lead over a year earlier as gains of nearly 25% in additions, alterations and nonhousekeeping construction offset a 1% dip in new dwelling units.

Public housing (most of it Capehart military units) set a record last year, too, up 13% from 1958. Highways and sewer-water facilities were each up 5%.

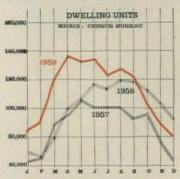
CONSTRUCTIO	ON E)	PEND	DITUR	ES	(in	million	ns of d	lollars)
PRIVATE	1959	1958	1957	1956	1955	1954	1953	1950
Residential New d.u Adds & alts	17,114	13,552	12,615	13,535	14,990	12,070	10.555	11.525
Non hsekpg PUBLIC	771	633	501	447	339	296	267	175

Residential	955	846	506	292	266	336	556	345
Highways	5,800	5,500	4,892	4,395	3,861	3,680	3.015	2.134
Sewer & water		1,387	1,344	1,275	1,085	982	883	659
Sewer	901	836	781	701	615	568	520	383
Water	554	551	563	574	470	414	363	276

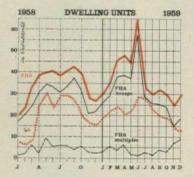


HOUSING STARTS totalled 1,376,000 last year (1,341,500 private, 35,400 public). It was the second highest private housing year on record, topped only by 1950 (with 1,352,200). It represented a 13.8% gain from 1958.

December private starts (81,700) set an annual rate of 1,310,000, down 8.5% from December 1958 but up 8.3% from November. It was the second month of upswing. Public starts for the month were

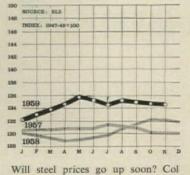


RESIDENTIAL BUILDING COSTS went up another notch to 292.2, up 0.6 point from November's 291.6. This completed a year of slow but steady ascent caused, says Col E. H. Boeckh, by a similar rise in labor costs almost everywhere. The December increase was the result of wage-price push plus higher prices for brass, reflected in a price hike for plumbing fixtures.



only 600,000, down better than 60% from November '59.

FHA applications (right) rose to 18,164 in December, up 12.7% from November but down 20.9% from December '58. Year-end total: 369,747, an 8.2% gain over '58. VA appraisal requests on new units containued downhill to 11,070. This is off 9.3% from November and off 25.2% from December '58. Year's total: 233,984, off 1.1% from '58.



Boeckh thinks so, expects this to be reflected in spring building costs.

BLS' materials prices (right), now a month late, showed an 0.4 decrease in November, to 134.6 from the revised 135 for October. Reason: lower prices for lumber and wood products, only partly offset by advances in plumbing and asphalt roofing.

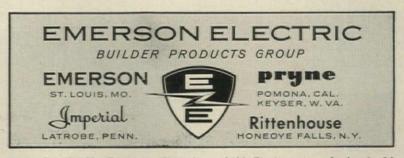
EMERSON ELECTRIC...



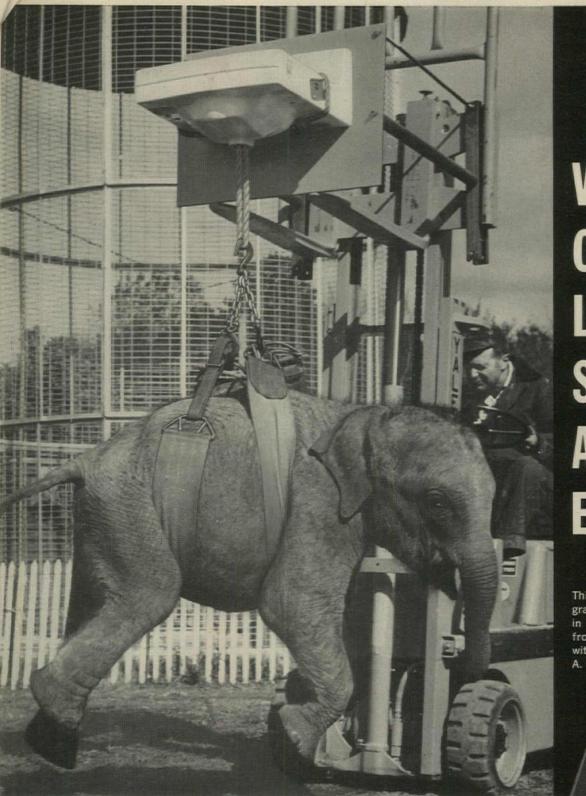
FINISHING TOUCHES

in planned packages save you money!

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



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VITREOUS CHINA LAVATORY SUPPORT AN ELEPHANT?

This is to certify that I, today, photographed the elephant being suspended in a regulation animal hoisting sling from the Universal-Rundle lavatory with the Uni-Lox hanger. Signed: David A. Howard, David A. Howard, Inc.

YES, WITH U/R'S UNI-LOX® HANGER! -

This elephant proves that when lavatories in your homes have Universal-Rundle's patented Uni-Lox hanger, they won't pull off the hanger — ever.

In actual use, with over two million installations, we have never heard of a failure. This means you can have U/R lavatories installed using Uni-Lox hangers with complete confidence. You won't have complaints of the lavatory coming off or starting to come off during your guarantee period.

Another big advantage is that you save money because no legs are needed.

Floor is left clear for easier cleaning, too. And lavatory installations with the Uni-Lox hanger take less of the Plumbing Contractor's time.

Besides, you pay no more for U/R lavatories with the Uni-Lox hanger because it's free. And the buyers of your homes get the extra quality of U/R

Exclusive, patented Uni-Lox hanger is furnished without charge with U/R vitreous china lavatories.

vitreous china lavatories plus the best possible installation. Write for complete catalog to Universal-Rundle Corp., 605 River Road, New Castle, Pa.



MAKER OF THE WORLD'S FINEST PLUMBING FIXTURES

Plants in Camden, New Jersey; Milwaukee, Wisc.; New Castle. Pennsylvania; Redlands, California; Hondo, Texas.



Set 'em and forget 'em Avoid costly call-backs — specify

RIMCO "CASEMENT" WOOD WINDOW UNITS

Rimco's new concealed sliding hinge eliminates sag — support is where you need it, top and bottom. Set the units, finish them and forget them. Nylon bearings and stainless steel tracks provide dependable, smooth, quiet and rust-free operation. No unsightly hardware is exposed to the elements.

Smooth performing gear operator with nylon roller . . . Anodized aluminum and stainless steel weatherstrip . . . Life-time protection with deeppenetrating Woodlife preservative, applied by the Dri-Vac *controlled* process . . . Wide size range with regular or 1/2" insulating glass.

Vary your architectural designs with Rimco's removable grille inserts, available in diamond, horizontal and rectangular lights.

American NOOD WINDOW Institut

The Rimco Casement proudly bears the A. W. W. I. "Seal of Approval," your guide to window value.

Write Dept. B for literature on the complete line of Rimco Wood Window Units.



ROCK ISLAND MILLWORK COMPANY FACTORY DIVISION Rock Island, Illinois

DESIGNED AND ENGINEERED BY ROCK ISLAND MILLWORK COMPANY

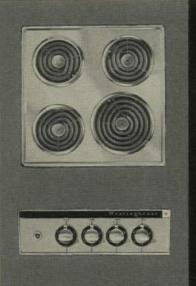
HELPING BUILD AMERICA FOR OVER 90 YEARS



The exciting Westinghouse Imperial Built-in Oven has eye-level controls, side-mounted out of the heat zone. In addition to dramatic new design, the deluxe model shown at left features a Miracle Sealed oven with Built-In Rotisserie and the exclusive Serv-Temp Roast Guard that cooks meat or fowl exactly to taste . . . and keeps it that way for hours. Lift-Off Door and Plug-Out Spread-Even Heaters take the work out of oven cleaning. To add built-in glamour without special cabinetry, use the stack-on model. Both types available without Rotisserie and Roast Guard. Rough-in dimensions: 301/4" x 233/4". Colors: Mint Aqua, Frosting Pink, Lemon Yellow, Coppertan, Coppertex, and Brushed Chrome.

Four-unit Platform shown has Plug-Out Surface Units . . . comes in similar selection of colors and with square or round corners. Rough-in dimensions: 335/8" x 205/8".

WESTINGHOUSE **OVENS AND PLATFORMS** BUILT-IN SALES APPEAL FOR HOMES IN EVERY PRICE RANGE



Food Waste Disposers

Ovens and Platforms

. even the heating.

Refrigerators and Freezers

Electric Water

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TOTAL ELECTRIC gold medallion home

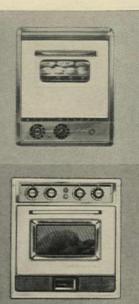
11+

Wood and Steel Cabinets

.

Laundromats and Dryers

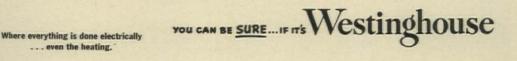
NEW COMPACT RANGE PLAT-FORM. Only 21" x 21" over all, this new platform drops into counterneeds no separate trim ring. Has 4 fast Corox® units with Remote Control Panel that mounts in the most convenient location. Available in standard Westinghouse colors. Rough-in dimensions: 20" x 20"



DELUXE OVEN FITS MINIMUM SPACE.MiracleSealedoven with Plug-Out Spread-Even Heaters for easy cleaning. In standard Westinghouse colors. Also available without Look-In Window, Rough-in dimensions: 211/8" x 26%".

MOST ADVANCED COOKING AP-PLIANCE EVER. Electronic Oven cooks in seconds and minutes instead of hours-makes an exciting demonstration for a model home. Rough-in dimensions: 21%" x 25%".

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□ Please send descriptive catalog covering WESTINGHOUSE OVENS AND RANGE PLATFORMS, P other Westinghouse Appliances. AND RANGE PLATFORMS, plus the complete line of

I wish to have a representative call.

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DUO-FAST STAPLE NAILER drives FHA approved staples



$4\frac{1}{2}$ hour sheathing job cut to 45 minutes...



A Texas contractor cut sheathing application costs 83%... by switching from hand nailing to the new DUO-FAST S-762 Staple Nailer.

Lightweight, easy to handle, the S-762 has built-in safety features . . . drives tight-holding 16 ga., galvanized staples $\frac{7}{8}$ " to $1\frac{1}{2}$ " long at low air pressure.

The DUO-FAST Staple Nailer is made to order for applying sheathing, sub-floors and plywood roof decks.

Send today for Bulletin FT-26 and Case Study B-1 describing this fast, powerful new DUO-FAST Staple Nailer.

Over 50 DUO-FAST Sales & Service Offices in principal cities ready to serve you.

FASTENER CORPORATION 3754-66 River Road, Franklin Park, Illinois



Everything you need for tacking, stapling and nailing.

Letters

Manufactured houses

Your December story on "The Manufactured House in 1960" is an excellent appraisal of the progress our industry has made during the past year.

E. E. KURTZ, president Inland Homes Corp нма, president

We are always glad to see HOUSE & HOME's annual report on prefabrication. I would like to give special praise to Richard O'Neill's appraisal on "What you can expect from prefabrication in the 1960s." It shows a very good grasp of our industry problems and potential. I certainly take issue with you on the

I certainly take issue with you on the number of manufactured homes started this year and last.

Two years ago, at HOUSE & HOME's suggestion, we switched to a survey system on manufactured home starts handled by Price Waterhouse Co. Reports from home manufacturers go directly to Price Waterhouse on a confidential basis. Price Waterhouse then gives us a breakdown of starts by states.

For companies not in the survey, we check their housing starts through Dun & Bradstreet reports, then figure the dollar sales volume of house packages per company per year and divide it by \$3,000, the average price of a package to the builder-dealer.

Through the Price Waterhouse survey and Dun & Bradstreet, HMA reported 110,000 starts last year and I will predict 130,000 to 140,000 this year.

The 1960s appear promising for prefabrication. Growth will come from new companies as well as from expansion of existing companies.

CONRAD "PAT" HARNESS HMA, executive vice president

H&H estimated 1959 manufactured home starts at "more than 80,000." From the time of HOUSE & HOME's first annual prefabrication report, only houses produced by "manufacturers who sell through builders or dealers" have been included in its annual survey of prefabricated house production. This tabulation, therefore, does not take into account "shell house" production unless purchased, erected, and sold by builders or dealers.—ED.

Clear title

The title of your magazine is very appropriate. You are striving to get the "home" into housing and doing an excellent job. SIDNEY CAMPBELL, architect Houston

To be more exact

Thank you for the New Products story on our meter box (Dec '59, H&H). We realize that due to space, it is necessary to edit, but two important bits of information were omitted. The illustration you pictured is: 1) a water meter box, 2) this particular model is for use on a slab type home. We also manufacture gas meter boxes as well as water meter boxes for homes with basements.

NICHOLAS P. COSTIANES, advig manager Handley-Brown Co

USE EFFICIENT FACTORY METHODS on the Jobsite and in the Factory

6W ...



SPOTNAIL LATH (GYPSUM OR METAL)



SPOTNAIL FLOOR SHEATHING



SPOTNAIL FLOOR UNDERLAYMENT



SPOTNAIL WALL SHEATHING



SPOTNAIL ASPHALT SHINGLES



SPOTNAIL ROOF SHEATHING



SPOTNAIL ROOF GUSSETS



SPOTNAIL DOOR FRAMES

SPOTNAILING

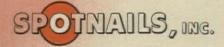
- · Cuts Home Building Costs
- Permits Year 'Round Erection of Homes
- Reduces Worker Fatigue
 and Injuries
- · Meets F.H.A. Standards

SPOTNAILERS

Builder-Proved Finest Portable Automatic Nailers

- · 50% More Loading Capacity
- Uses Less Air—Requires
 Smaller Compressor
- Sturdier-Fewer Moving Parts
- · Controlled Penetration of Drive

Phone or write for a SPOTNAILS demonstration in your office and a copy of our FHA Booklet.



1527 Lyons St., Evanston, Illinois UNiversity 4-2711 26 Offices...Over 100 Representatives to Serve you.

Two sure ways to "showcase" your model homes



anufactured under U.S. Patent 2690590 and patent pending

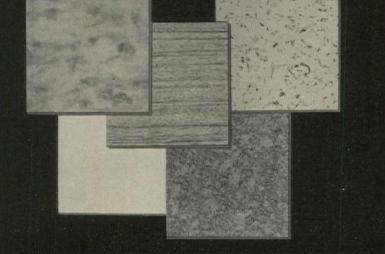
Depend on Goodyear to spark lively interest in prospective buyers—with the double attraction of lovely EVERGLEAM COUNTER TOP and stunning NOSCRUB True Vinyl Flooring.

Both meet your rigid requirements for beauty and quality-yet substantially reduce your costs.

EVERGLEAM COUNTER TOP guards and glamorizes like the most costly materials – yet saves up to 75¢ on the dollar. As durable as it is decorative. Resists practically all counter hazards. Easy to install – so flexible it makes graceful rolled edges or seamless



TRUE VINYL FLOORING BY GOODYEAR



flat edge facings-coves perfectly to sharp radii.

vergleam, NoScrub-T. M.'s The Goodyear Tire & Rubber Company, Akron.

NOSCRUB is a handsome *true vinyl* flooring that costs no more than many non-vinyl or partial vinyl materials. Requires no waxing. Resists dirt, grease, alcohol. Doesn't mildew or rot. Simple to install and maintain.

Both are available in the most-wanted decorator colors -sparkling metallics-coordinated patterns and smartest styles for 1960.

For full information on sizes, colors, prices, write: Goodyear, Flooring Dept., Akron 16, Ohio.

For Solid Success in FINE TRUE VINYL BY EAR GOO

FEBRUARY 1960

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House in La Jolla, Calif. by Frederick Liebhardt Photo: Douglas M. Simmonds

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THE NEW ENGLAND TRADITION

and

No one can say what part, if any, the New England tradition will play in the industrialized house of the later 1960s (see H&H, Jan). But up to now New England prototypes have been some of America's most popular—and most enduring—designs. This is especially true of the Cape Cod cottage—which has also been one of the most seriously abused styles ever built.

To show what the New England tradition really is, to see its essentials, HOUSE & HOME presents here and on the following pages selections from the work of Royal Barry Wills. For 35 years Architect Wills has been building houses in the New England tradition. He is the acknowledged master of the style. So faithful to the tradition are Wills' houses that, after they have seasoned a few years, their exteriors can hardly be distinguished from 18th century originals.

"The first New England houses started out with just one room and then they began to grow. They grew upwards as people built over them, and outwards, along the sides or the back, as people added lean-tos and then whole wings. But no matter how much these houses rambled all over the place, they always managed to be in almost perfect scale."

This is Royal Barry Wills own assessment of the most important single element in the New England tradition: *scale*. You can see it at work in this Cape Cod cottage which he designed. Although only a small part of the house is in the photograph, it shows most of the characteristics which Wills considers essential for the true Cape Cod exterior:

"It is tight to the ground, built to keep the weather out.

"It has an outsized chimney—bigger than it now needs to be—built at the exact center of the house.

"It has a low roof line which hugs the windows, a roof pitch of 10-in-12 (it could be 8-in-12 without loss of authenticity).

"It has clapboards graduating from a 23/4" exposure at the foundation line to 41/4" at the top of the window sills. From there it continues at the same exposure right up to the roof line.

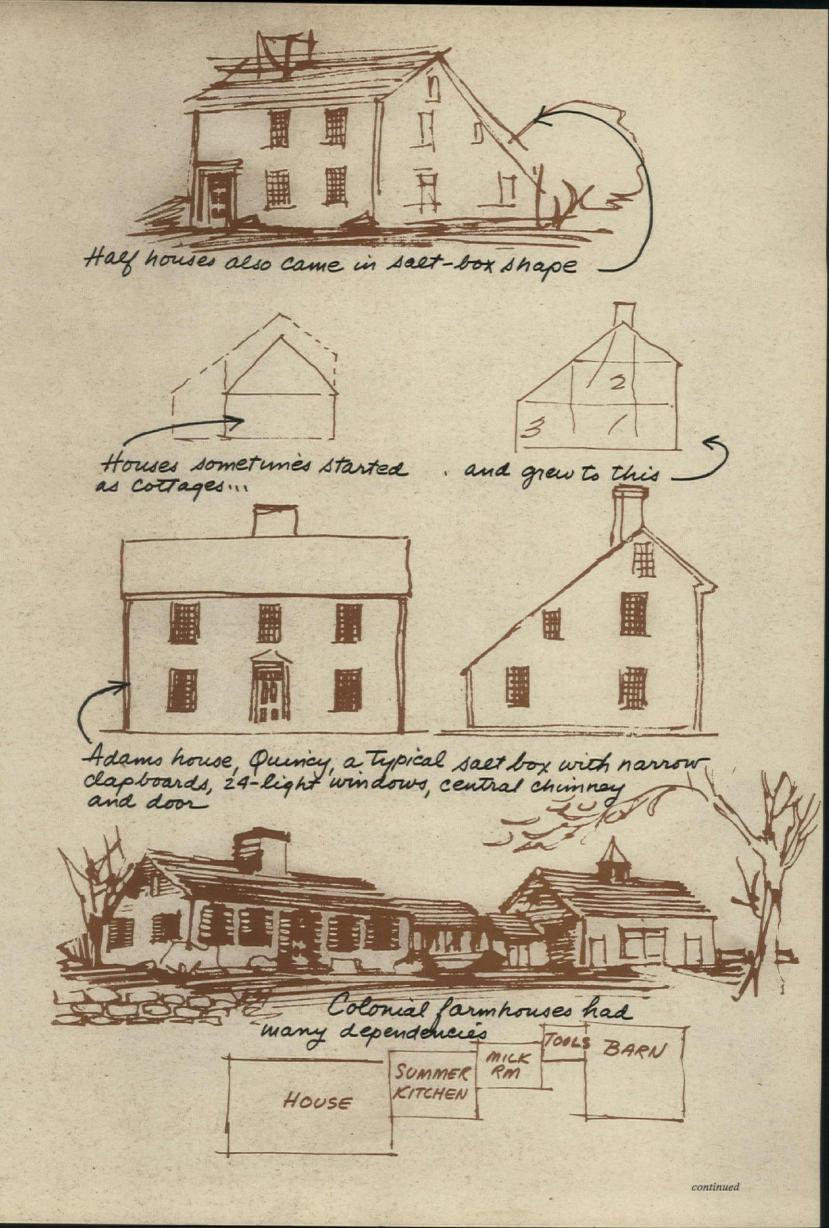
"It has small, almost delicate windows—2' 35/8" x 4' 5" —made up of 24 or 36 individual lights.

"It has windows snug against its corners to let in all the light possible.

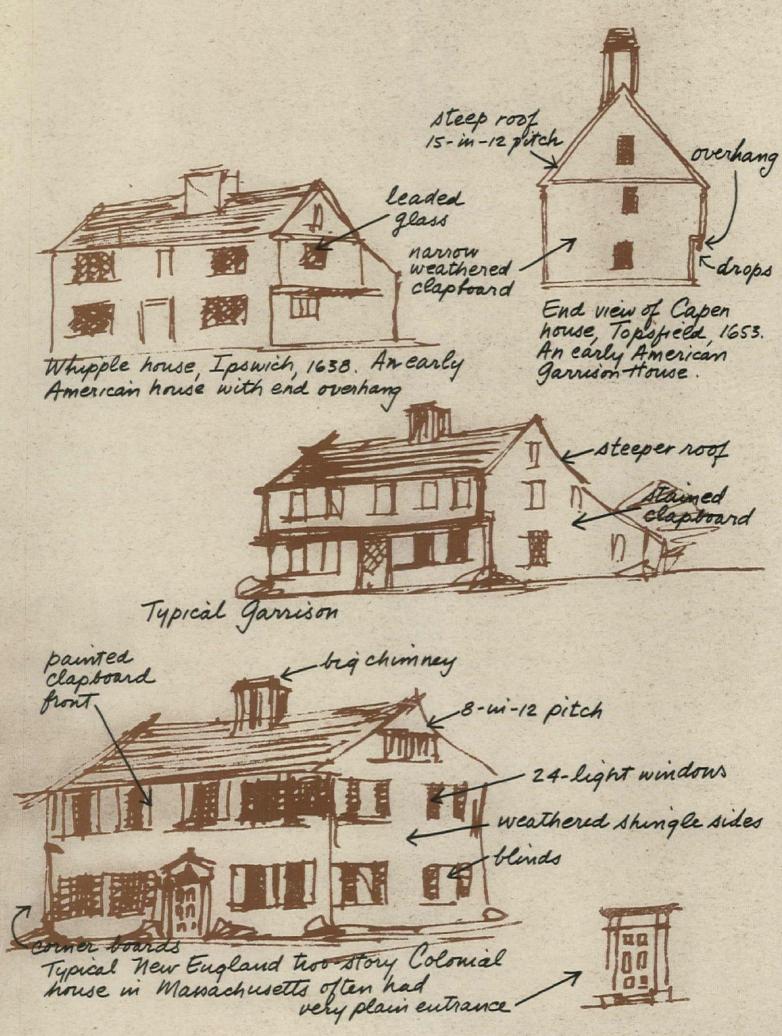
"And it expresses a unity of plan and design where nothing is done without good reason."

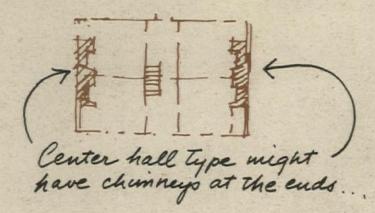
This single Cape Cod cottage is not only a classic example of its type, but, as you can see from the plan and additional pictures on p 105, it does much to explain why the New England tradition is so alive today.

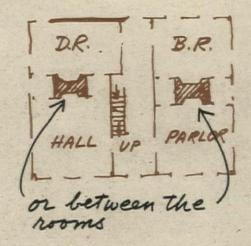
A New England Primer Drawings and comments by Royal Barry Wills B.R KITCHEN BUTTERY HALL 4ALL P PARLOR KEEPING KEEPING The Cape Cod started with one room others were added at the side ... and in a lean-to at the back Cape Cod half house had chimney and door at one end. Note 8-in-12 pitch 24-light windows, 5-panel light over door. full Cape Codo (door at center z windows either side) were often Captain's houses. they did not 'have as many sheds as, say, New Hampshire farmhouses. Connecticit gambrels were to steeper Typical Cape Coo with gambrel roof ____ Aurunusual but interesting bow roof shows influence of early ship builders



A New England Primer continued

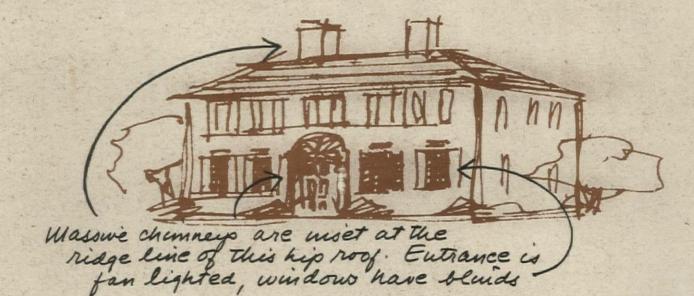




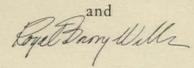








THE NEW ENGLAND TRADITION



Text continued from p 97

While the Cape Cod cottage is the best known New England style, the other house types shown in the primer are important, too. In all of these designs, Wills is an expert. He believes the basic elements of the Cape Codthe scale, the strength and symmetry, even details like the outsized chimney and small paned windows-are also basic to the New England tradition.

And Wills believes that designers who want to work in any form of the tradition should guard against certain common blunders.

Here are the six most-repeated mistakes:

1. A steeply pitched roof. "Don't let it look too high. A 12-in-12 is fairly steep-and looks it on a Cape Cod. The ideal is an 8" rise and a 1' run. But a gambrel roof can be steep and look fine-14-in-12 in front is all right."

2. A too-high story height. "When you make the story too high, you leave a big gap over the windows which throws them-and everything else-out of scale. Keep all proportions in scale within the story."

3. Wide windows. "None of the early houses had them. The garrisons, the Cape Cods, the farmhouses, the salt boxes-all had graceful windows with small panes. Remember that the 3' wide x 4' high window and the 16pane window (four lights high and four lights wide) are just too big for the New England traditional house. And don't use two windows connected by a mullion. It doesn't ring true and doesn't look right."

4. A dinky chimney. "A lean chimney is just out of character. I make mine 4' x 4', sometimes even 5' x 5' and they rise about 6' above the ridge line. Also remember that you can't just slap the chimney in anywhere. It must be dead center, smack in the middle of the roof.'

5. Wide siding. "I've seen it used as wide as 8" and it throws off the scale of the whole house. Use 4" clapboards or 6" shingles, or use long hand-split shingles for a rougher exterior, but don't upset proportions."

6. Fussy entrance door. "The early garrisons had plain pine nail-studded doors. Some of the farmhouses had Dutch doors and sometimes double doors were used-but remember to keep the door in character. In the Cape Cod,

it should be a simple pilastered entrance, with the front door of six to eight raised panels. Five lights over the front door were customary. Sometimes builder-carpenters improvised by putting more detail around the corners."

Wills is a perfectionist

He believes both exterior colors and interior finishes should be in keeping with the type of house.

For example: He often lets natural clapboards weather a silver gray, like the color usually found on the early houses. He uses white cedar shingles on roofs and sidewalls since, in two or three years, they begin to turn the soft silvery color Wills thinks looks best.

He often paints his Cape Cod cottages white "because they sparkle, and you get a nice play of light and shade." But he also uses gray, yellow, or lavender-gray because they are typical New England colors.

For colonial farmhouses, Wills specifies a special paint ("Haddam barn red") that he finds most closely resembles the color of the hand-made paint of 150 years ago. And he warns "red is best as a flat finish, not too shiny."

He uses a clear stain on interior finishes because "it gives a fine look to country pine paneling. The one I use is made from ammonia, water, and clear crystals. Oil-based stains tend to look muddy." Even the flooring Wills uses is completely in character with the houses-wide boards of oak or pine; sometimes spattered with color.

While Wills is particular about details of the New England tradition, he is able to use many cost savers because of his knowledge of the way early houses were built:

"I don't spend money needlessly, but neither do I skimp where it is important," he says. "If the windows are in character with the house style, they are the most economical part of the house. You save material on close cornice work. Shingles and clapboards are economical. You could even build an entire colonial house out of smooth plywood-like the old flush-boarded houses." Wills has built garages like New England lean-tos-from pine boards with battens "because it saves a whole layer of boarding."

Although Wills is best known for his houses in the New England tradition, he is also a fine contemporary architect. He has designed and built more than 2,500 custom houses and his residential practice now averages about 100 custom houses a year, in addition to some work with production builders.

For the past three years, Wills has also been designing prefabs in traditional styles for National Homes. One of these, the best-selling Deerwood, appears below.

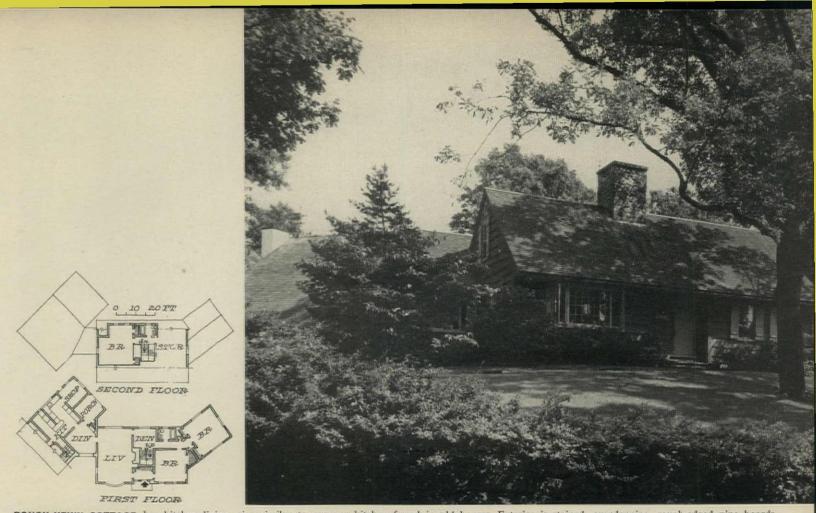
© Ezra Stoller



Robert E. Minot, Wills, his son Richard Wills, and Warren J. Rohter. narrow clapboards, massive chimney of authentic New England style.



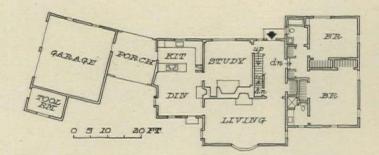
WILLS' ARCHITECTURAL TEAM (1 to r): Merton S. Barrow, DEERWOOD MODEL for National Homes has small-paned windows,



ROUGH-HEWN COTTAGE has kitchen-dining wing similar to summer kitchen found in old houses Exterior is stained, over-lapping, rough-edged pine boards.

Add-on wings are part of the New England tradition

These two Wills houses are built out from a basic cube or rectangle, much like earlier New England houses which were added to—by building on, up, or out—as the family's needs demanded. The cottage above, was designed for a narrow city lot so its wings sweep back to take advantage of lot depth. The farmhouse, below, stretches out across its site, has ample room for outdoor living in front and back.



COLONIAL FARMHOUSE (seen from rear) has two wings and porch connecting to garage. Bowed window was adapted from those found on early shop fronts.

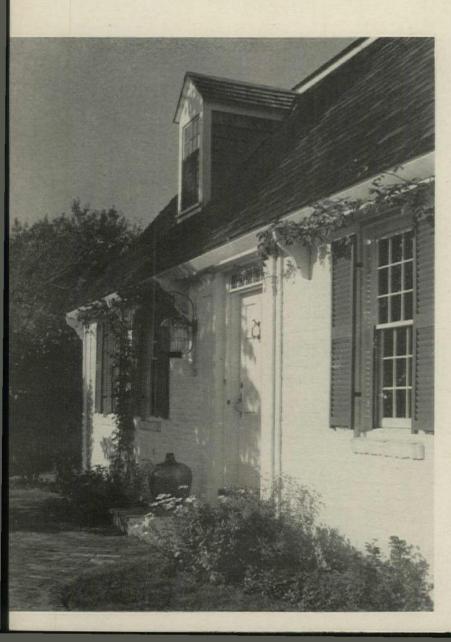






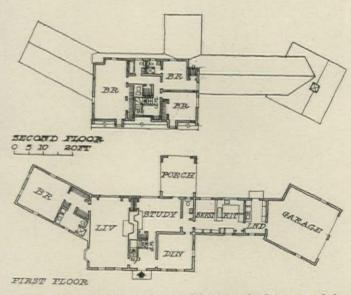
GAMBREL-ROOFED COTTAGE is a full two stories high. Kitchen wing is at the right. The centered chimney; tall, narrow dormers, and the 24light windows are all good examples of traditional scale.

White cottages are part of the New England tradition



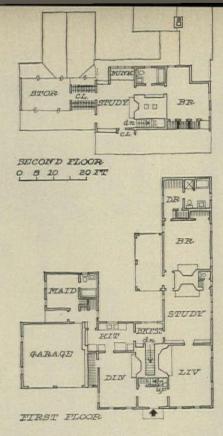
Early cottages were usually one-story houses with attic space, and Wills' cottages generally follow this pattern with the addition of wings to make a bigger house (see plan at right). Traditional practice lets the architect vary the design with gambrel roofs and two full stories (like in the house on this page).

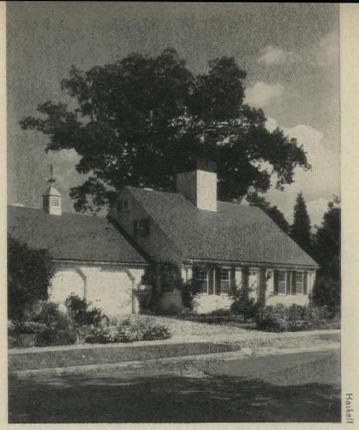
Note that while Wills rarely puts a dormer on the front of a typical Cape Cod, he does use twin dormers on the higher-pitched, gambrel-roofed cottage. And while his main chimney is always oversized and centered on the main house, the secondary chimney (like the one at right) is often high and narrow.



PLAN provides for living and entertaining areas in the center of the house. The kitchen ell opens to the outdoors but is also close to the dining room. All bedrooms have complete privacy.

ENTRANCE has a raised panel door with five top lights. Front of this house is white-painted brick; but side and rear walls are cedar shingled. Note how the low roof line hugs the windows.





PLAN shows how this house stretches out toward rear of lot. Long ell is typical of the way rooms were added in early Cape Cods.

CAPE COD COTTAGE looks small from the street. Although this house is painted white; Wills also uses gray, yellow, lavender-gray colors. The louvered shutters framing the front door are typical. (See also $p \ 96.$)

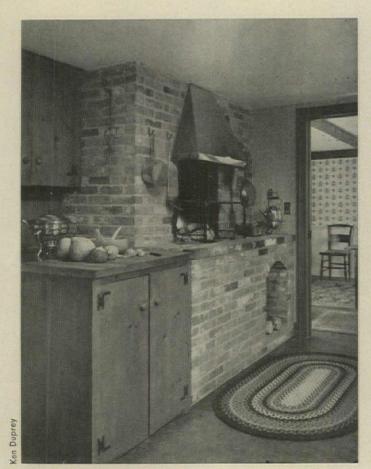
OUTDOOR LIVING AREA, at rear of house, shows how New England tradition is compatible with today's living pattern. Screened porch is off study.





CAPE COD DINING ROOM is in small, intimate scale like exterior. Wainscoating, plain board door are characteristic.

Rooms like these are part of the New England tradition



Because the woodwork, flooring, fireplaces—and even the hardware on doors and cabinets—are in keeping with the house style, Royal Barry Wills' Cape Cods, Colonial farmhouses, and garrison houses always seem to maintain the same sense of scale and balance inside as out.

For example: Wills' Cape Cod cottages have low ceilings, wide plank floors, and ordinary board doors. His Colonial and Federal houses have a greater formality, finer finishes, and more detailing on staircases and paneling (a lot of which Wills says most good finish carpenters can do with a router). And, as you will note here, fireplaces are the heart of Wills' houses—just as chimneys are the focal point of his exteriors. But note how these fireplaces change with the different house styles.

These interiors require careful finishing, but, Wills points out, stock millwork and paneling similar to these examples is available from almost any big lumber yard.

FARMHOUSE KITCHEN has a big barbecue of used brick with a modern vent hood. Built-in pine cabinets have strap hinges and plain wood button pulls. Note plank floor in dining room.

Emelie Danielson

Ken Duprey



FEDERAL-STYLE LIVING ROOM shows fine, formal detailing with fluted columns, white-painted molding, and raised wood paneling. The fireplace is typical of the period, completely within the room scale.

Photos: Haskell



COLONIAL HOUSE HALL gets daylight from small panes set in over the entrance door. Note the scenic wallpaper and the detailing along the open-string stair. Small stair window has diamond-shaped panes.



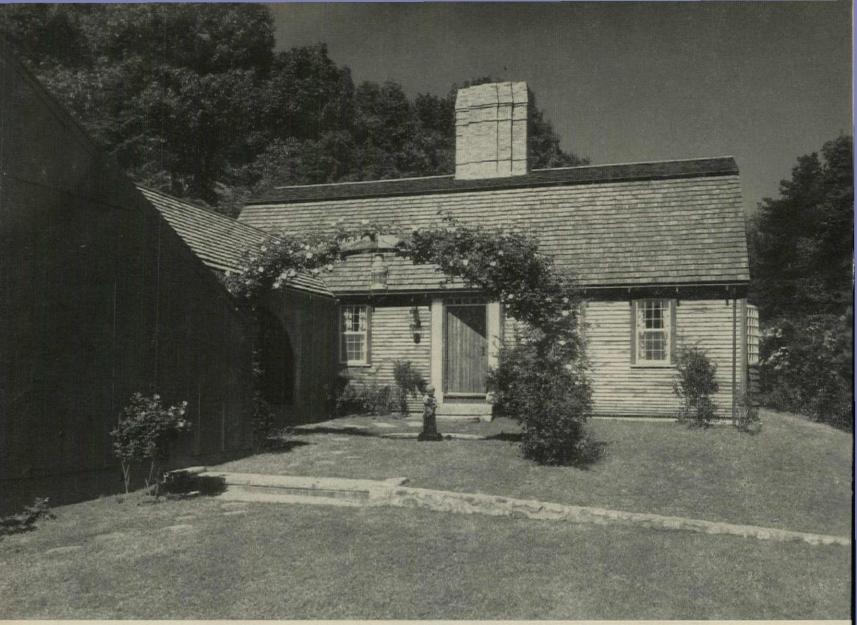
COTTAGE LIVING ROOM has built-in cupboard over a fireplace high and wide enough for cooking.



HALL of same house has a tiny stair leading to floor above. Plank floor is pine, spattered.

EARLY AMERICAN LIVING ROOM seems built around the big fireplace. Paneling, mantel shelf, firewood storage door are typical.





ENTRANCE to the house is past a rose arbor, once part of an old estate. Gambrel roof is of old hand-split shingles.

Wills' own New England house is almost a restoration



It is a restoration in the limited sense that most of its important details—like the huge beams in the family room, opposite—are actually survivors from old New England houses.

Royal Barry Wills not only collected these parts and pieces—he calls them "relics"—over the years, but he put them together with carefully selected new materials in a design that perfectly reflects his affection for the New England past. This devotion, so completely expressed in his own home, explains why Wills has been able to master the New England tradition down to its smallest detail.

The narrow clapboard siding of Wills' house is weathered a silver grey. The massive chimney is in the exact center of the gambrel roof. The windows are delicate in scale, with many panes; a porch and the master bedroom look as if they were added-on at some later date. The house is, in effect, an almost pure distillation of the spirit of an early New England homestead.

VIEW FROM THE PORCH shows antique clapboard siding Wills bought from an old house about to be torn down. The house is sited to trap sun at entrance. Old Ship's lantern hangs by the front door.

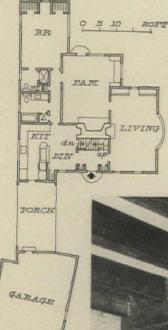
Photos: Zaharis



KITCHEN has modern appliances, antique pine cupboards and panels. Cooking top is behind the pine counter which separates kitchen from the dining area, right. Note old ceiling beams.



DINING ROOM FLOOR is old sidewalk brick; paneling is all pine. Small fireplace shares same chimney as living and family rooms.



PLAN provides for only one bedroom but family room doubles as second bedroom. House has 1,460 sq ft of space.

FAMILY ROOM is also called "pine room." Honey-colored paneling was planed by hand. Ceiling and fireplace beams came from old houses.



Editorial

Three years ago the best informed housing expert in official Washington warned us that America would soon face a glut of cheap housing (H&H, Dec '56).

Since then the price of older houses priced under \$12,000 has confirmed his warning by falling steadily while building costs were rising, thereby making it harder and harder for low-priced new houses to compete. Says C. Armel Nutter, president of NAREB: "In most markets the need for more low-priced homes is over and gone; the great new market we must learn to sell is the trade-up market to quality homes.

Now Economist Miles L. Colean has filled in the figures for us from the Census Bureau's housing inventory (H&H, Jan '60 front cover, reproduced opposite). Says Economist Colean:

"Even if we had stopped building any cheap houses at all three years ago, we would already have 9,400,000 more reasonably-good housing units priced under \$12,400 than we will need in 1970 (not counting 5,000,000 substandard units that should be taken off the market as soon as possible.) But by FHA income requirement standards the next decade will offer us a potential market for:

3,300,000 more homes priced from \$12,400-\$14,200! 5,200,000 more houses priced from \$14,200-\$17,500! 6,000,000 more houses priced from \$17,500-\$23,600! 9,970,000 more houses priced over \$23,600!

"In other words, today's mass market is the quality house. The shelter shortage is over. America already has far more low-priced housing units than families who can not qualify FHA to buy something better. And the whole net population increase in the sixties will be families who could qualify FHA to pay at least \$17,500 for a quality house."

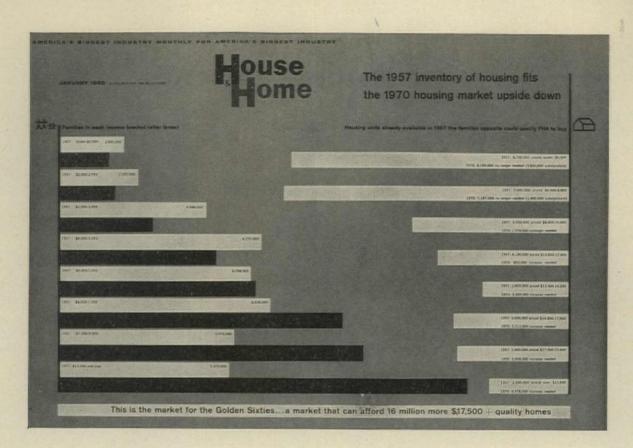
UESTION: if this is the mass market,

The housing industry will stay stuck in the cheap-house market as long as so many homebuilders try to go it alone. The housing industry cannot crack the quality market wide open until the builders ask and get and use:

- a lot more help from the realtors,
- a lot more help from the architects,
- a lot more help from the appraisers,
- a lot more help from the mortgage lenders,
- a lot more help from the dealers, and
- a lot more help from the manufacturers.

The mass market for quality homes is a market of second-time buyers who do not have to buy until they are offered something much more desirable and much better value than the homes they already own. It will take teamwork to get our costs down low enough and our values up high enough to tempt them. It will take teamwork to make our product so attractive that homeowners will want to uproot themselves to get the better living only a new

Answer: we can't sell it without



why don't we go out and sell it?

house can offer. It will take teamwork to make the sale. It will take teamwork to handle the trade-in that is essential to trade-up. It will take teamwork to finance the double sale.

Because we lack industry teamwork, too many builders are afraid of pricing themselves out of the market if they offer the quality and the sales appeals needed to make buyers want better homes as much as they want better cars, better clothes, better trips.

Because we lack industry teamwork, too many builders are trying to sell cheap houses nothing down to first-time buyers who can't afford them, instead of selling quality houses to second-time buyers who have more than a \$100 billion equity they could be using for down payments to trade up. Said Builder Clayton Powell, trustee of the NAHB Research Institute, at the NAHB marketing conference: "Our industry has its entire program geared to selling distress purchasers—the people who *had* to get a house. We have not been building houses good enough to make most of today's homeowners want a new home. We have not been building in enough sales appeal and enough better living to whet their desire."

Because we lack industry teamwork we are selling far fewer houses than we could and should be selling. Oneseventh of all today's homes are substandard and should be replaced or rebuilt at once. Half the rest are obsolescent and should be replaced within a few years. But because we lack the industry teamwork needed to make trade-up work we are replacing used housing only half as fast as England, Holland, and West Germany.

Because we lack industry teamwork we are having the pants sold off us by other industries competing for the same consumer dollar. Alone among America's major industries, we are selling a product only half as expensive, half as good, and half as profitable as our potential market could afford.

a new kind of industry teamwork!

The homebuilders are the hub and heart of the industry but - - -

The homebuilders cannot sell the quality market

without more help from dealers and suppliers

The builders need the dealers' and suppliers' help to cut their selling costs.

The one best way to cut selling costs is to harness the mass selling power of advertising to make more people want the better living and the new way of life that only new homes can offer.

Today the housing industry is being out-advertised five to one and ten to one by other industries competing for the same consumer dollar; the biggest building material advertiser ranks No. 79 among national advertisers; and most of the consumer advertising of housing products makes it harder instead of easier to sell new houses, because most of it is aimed at the high-markup modernization market and sells consumers the idea of fixing up their old homes so they won't have to buy a new one!

The builders need the dealers' and suppliers' help to cut construction costs.

The one best way to lower construction costs and raise construction quality is to build with parts instead of pieces—with prefinished components prefabricated to the standard dimensions developed at HOUSE & HOME's industry round tables on dimensional standardization back in 1955, so they will fit together in a great variety of plans and designs without cutting and piecing on the job. Site labor is too wasteful and too expensive; anything and everything can be made cheaper and better in a shop or a factory; builders can no longer afford to waste thousands of high-wage man-hours fitting thousands of pieces on the site and fastening them together with 60,000 nails.

Standardization, prefinishing, and prefabrication will let builders offer quality houses for \$20,000 as good and as varied as today's custom-built best for \$40,000.

But this breakthrough to quality-at-lower-price will have to wait until more suppliers adjust their thinking to the industry's new teamwork needs and adjust their sizes to the industry's new standard dimensions.

The builders need the dealers' and suppliers' help to cut material handling costs.

Nearly 25% of the whole cost of building a house is the cost of moving all the heavy materials used not once but many times as they pass from raw material to finished erection (H&H, Feb '56). Materials handling costs can be cut only by substituting mechanical muscles for human muscles, and mechanical muscles can be used only if manufacturers plan and package their products for unitized handling and if dealers order and stock for unitized handling and then use their mechanical muscles to deliver the materials right to the final assembly spot.

The homebuilders cannot sell the quality market

without more help from lenders and appraisers, because

Nothing goes into a built-for-sale house unless its cost can be added to the mortgage and financed over 20 or 30 years, for builders have learned the hard way that anything that adds more than a fraction to the down payment will make the house harder instead of easier to sell. That is why Harold Boeschenstein, chairman of Owens-Corning, says, "We won't get anywhere selling quality until the lender gets into the act."

Says Armel Nutter, president of NAREB and past president of The Society of Residential Appraisers: "The lenders who put up the money and the appraisers who set the price can do more than anyone else to raise the standard of housing in America."

Right now too many lenders and too many appraisers exert a negative influence on quality. More than 60% of HOUSE & HOME's research panel of the builders-other-builders-copy report that their lenders give them no encouragement to step up quality; 21% say they have trouble getting credit in their appraisals for the added cost of quality.

The homebuilders cannot sell the quality market

without more help from the architects, because

Most builders are strictly amateurs when it comes to tempting upper-income families to pay \$20,000 to \$30,000 for a home. The builders may be right in claiming they know best what lower-income families will go for, but knowing what sells in the cheaphouse market will be very little help to a builder moving up to quality. Upper-income families have more education and better taste; they are more anxious to keep up with the Jones; they want and appreciate more glamor and more amenities; and they are more familiar with the new and pleasanter way of living that architects are designing into the homes of their wealthier friends.

Architect-and-builder collaboration can open up a new multi-million-house market for the architects' design talent and the builders' construction know-how in the \$20,000 to \$30,000 price range. Architects who have tried it say they can offer homebuyers better houses merchant-built for \$25,000 than they can offer clients custom-built for \$40,000.

The homebuilders cannot sell the quality market

without the realtors' help, for three reasons:

1. The prospects for quality houses are not sleeping in trees. They already own homes, and they cannot trade up to a quality house unless and until someone finds them a buyer to take their present home off their hands and so unfreezes their equity to provide down payment for the new home.

Trade-in is the key to the trade-up quality market, and trade-in is too complicated a deal for a builder to handle alone. Trade-in becomes practical in a big way only if builders team up with realtors and tune in on multiple listing to get the whole realty profession working on the re-sale of the trade-in house.

2. Bad selling is the housing industry's No. 1 problem, and it takes much better selling to sell a quality house than to sell a cheap house. It takes a deep sell—a sell that appeals to reason and exploits all the quality features the builder has spent his money to provide. You can't expect this kind of selling from the kind of house-sitter that is often the best a builder can hire for a short-time job in a model house. You get that kind of selling only from well-trained professionals assured of good pay (\$10,000 base) from a realtor working with enough builders to offer steady employment.

3. Nineteen out of twenty good prospects will continue to get away from us unsold unless someone steers them to the model homes best suited to their wants and their purses and keeps after them until they find the right house and buy it. Out of 20-million prospects (39-million adults) interested enough to drive out and visit model homes last year, only 1,300,000 bought; the other 18,700,-000 got away unsold.

A good realtor with an aggressive follow-up system selling a broad line of builders' houses can turn twice as many prospects into buyers. In Los Angeles, Walker & Lee close a sale for somebody's house to one out of every eight prospects whose names they get at one or another of the 42 model house developments whose sales they handle.

Teamwork to sell quality is just as important

to suppliers, dealers, lenders, realtors, architects

To architects, the quality house offers a great new market for their professional talent and skill. If the architects could make a place for themselves as product designers for a million quality houses a year, and make their services work \$100 a house to the builders, they would add \$100 million a year to their professional earnings—roughly \$12,000 more for every member of the AIA.

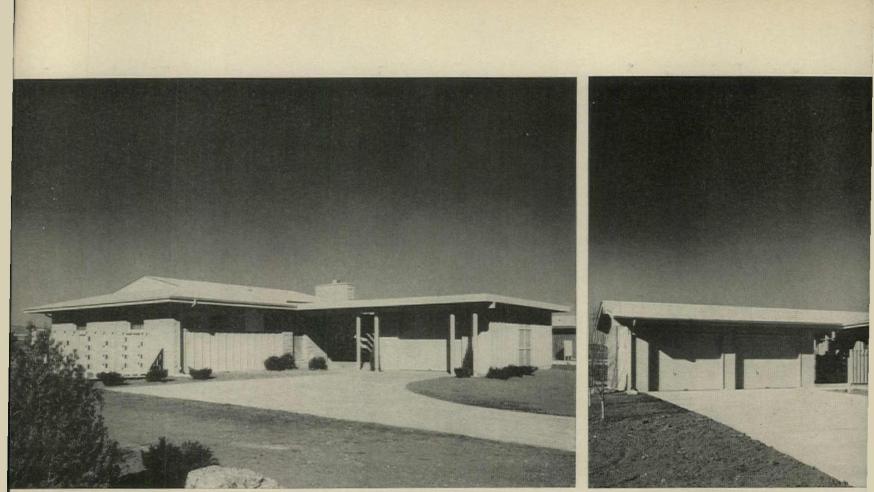
Until recently the market for architectural service in houses has been limited to custom design for upper-income families. The merchant-built quality house offers architects, for the first time in all history, a chance and a challenge to contribute *directly* to better living for everybody.

To realtors, the quality house offers a chance to make five times as many sales, because each quality new house sold lets as many as five or more families play musical chairs and each trade up to buy a better house. (Conversely, whenever a cheap new house is sold it kills the sale of five or six higherpriced used houses; because when first-time buyers buy cheap new homes instead of buying existing homes, the present owners of those existing homes are stuck where they are and unable to trade up. To lenders, the quality house offers much better security. The best-value homes we can build today will be none-too-good for the homebuyers of 1980, when the average family will have a bigger income (in constant dollars) than junior executives made right after the war.

Most of today's cheap houses will be hard to sell before today's 30-year mortgages run out.

To manufacturers and dealers, the quality house offers the *only* market for most of their quality products—the only market for air conditioning, the only market for fully-equipped kitchens, the only market for inter-coms, the only market for anything better than the cheapest line of hardware, windows, bathroom fixtures and fittings, wiring devices, lighting fixtures, flooring, roofing, etc. And each quality house offers twice as big a market for almost everything twice as big a market for bathtubs, twice as big a market for roofing, twice as big a market for flooring, twice as big a market for framing lumber, etc.

The quality house is a much more profitable market—a market where you can sell quality, service, low maintenance, and sales appeal instead of just selling low price. /END



MODEL 1: \$20,800

MODEL 2: \$21,500

How to give buyers what they want

"Today's buyers cannot be sold on a take-it-or-leave-it basis. They are keen, critical, quality-conscious customers. Most have owned one or two houses and think they know what makes a good house."

So say the Strauss Brothers, who have built for years in Omaha and Lincoln, and have just moved into Denver.

To sell today's market the Strausses evolved the three basic models shown above. From these models—as you'll see below they develop enough different, and different looking, houses to please the tastes of a great many different buyers. Says Jim Strauss:

"Today's houses must create their own market . . .

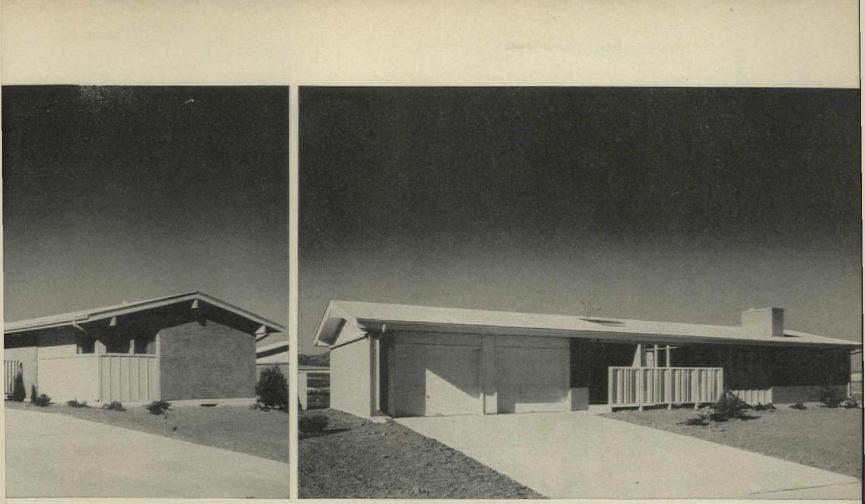
"You can no longer sell the shelter market," Strauss continues. "Houses must now have attractions and qualities that will make people who already have a house want a new house."

The Strausses' view did not come from an armchair study of housing, but from practical knowledge of each of their three markets. When they moved into Denver, for example, the Strausses and their architect visited every open model ("plus a few that weren't open"), and talked to many recent buyers. Only after this survey did they decide that there was a market for houses with custom-house appeals and a wide range of buyer options.

And they were right: In the first two months after their Nov. 15th opening, a total of 30 houses (divided about equally among houses in each price range) were sold.

Lender Henry L. Neuschaefer, president of Silver State Savings & Loan, highlights the big reason for this record: "The Strausses

BUILDER: Strauss Brothers ARCHITECT: Sid Campbell LOCATION: Denver



MODEL 3: \$27,500

-yet build only three basic models

studied the market carefully. Their quality and craftsmanship is excellent. They have a fine sense of what is important—for example, they open every house to the mountain view. And probably most important, they offer a wider choice of houses for the customer to choose from than I've ever seen."

"In planning these houses," says Jim Strauss, "we reversed our usual procedure. We thought last—rather than first—about costs, size, building techniques, and all the other restrictions we used to keep tripping over. Only when we were sure we had developed the designs and concepts that would make the greatest appeal did we think about how we were going to keep our costs down. We figured we'd been building long enough to apply production building methods and know-how to almost any design."

The Strausses offer houses in a new, broad price range

Says John Strauss: "Since most of today's buyers are second- and third-time buyers, they have equity in their old houses. We also know that today's buyer has more income. But we know that not every customer has the same income. So we priced our houses from a low of \$20,800 to a top of \$27,500 [see photos above]."

... and they offer plenty of choice with each model

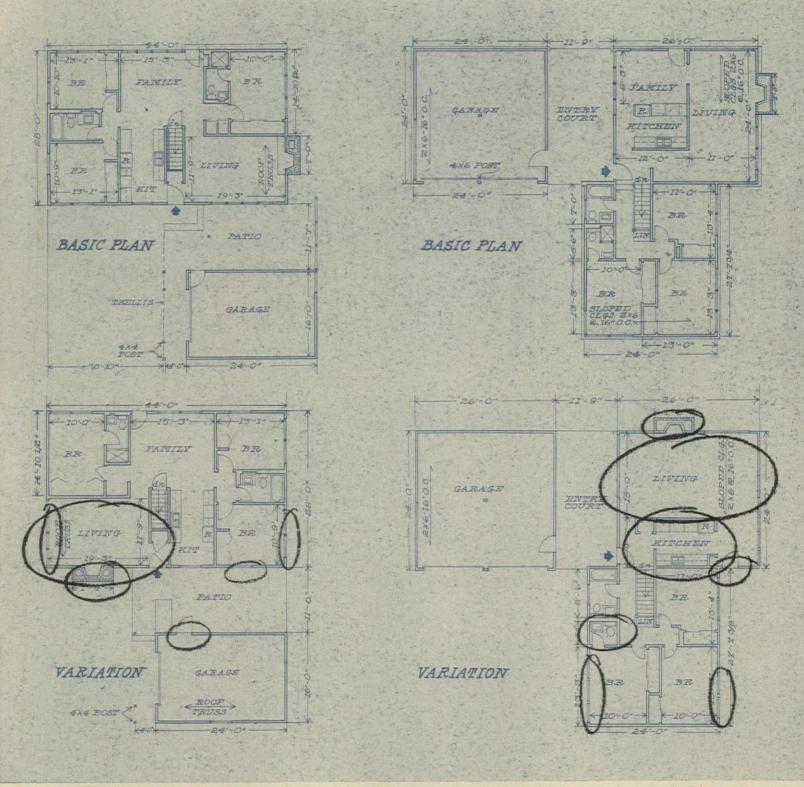
Step 1: They offer a big choice of plan see p 116 Step 2: They offer a big choice of exteriors see p 118 Step 3: They offer a big choice of custom detailing see p 120



MODEL 1



MODEL 2



BASIC PLAN AND ONE ALTERNATE for each of the three models shows some of the simple changes that make the living areas

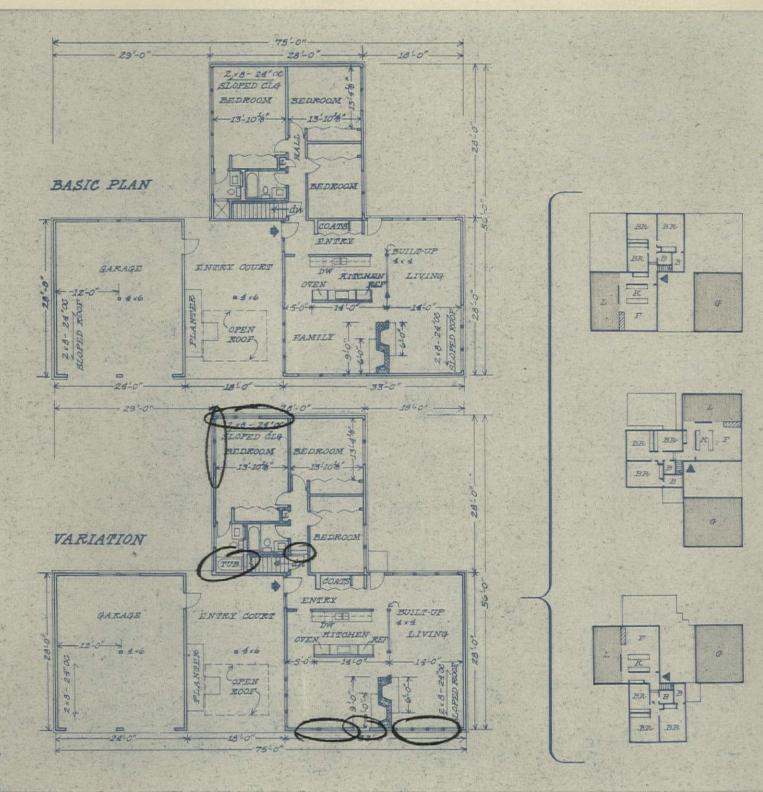
How to give today's buyers what they want-with only three models

Step 1: Offer a big choice of plan with each model

To offer a wide variety of plans without hiking building costs, the Strausses concentrate the variation in the living area, where it counts most; each of the three models has an essentially standard bedroom arrangement. The Strausses get a good deal of variety in the livingfamily room area from relatively simple and inexpensive variations—like reversed plans, relocated kitchens, fireplaces, and window walls. They also get variation by reorienting



MODEL 3



much different to live in. Changes are highlighted by circles on variant plan. Drawings at right show how relation to patios is changed.

the house on the lot. Specifically:

1. Any of the three plans can be reversed (see alternate plans for Model 1). This gives the buyer a choice of a living room open to a covered court or open to the view.

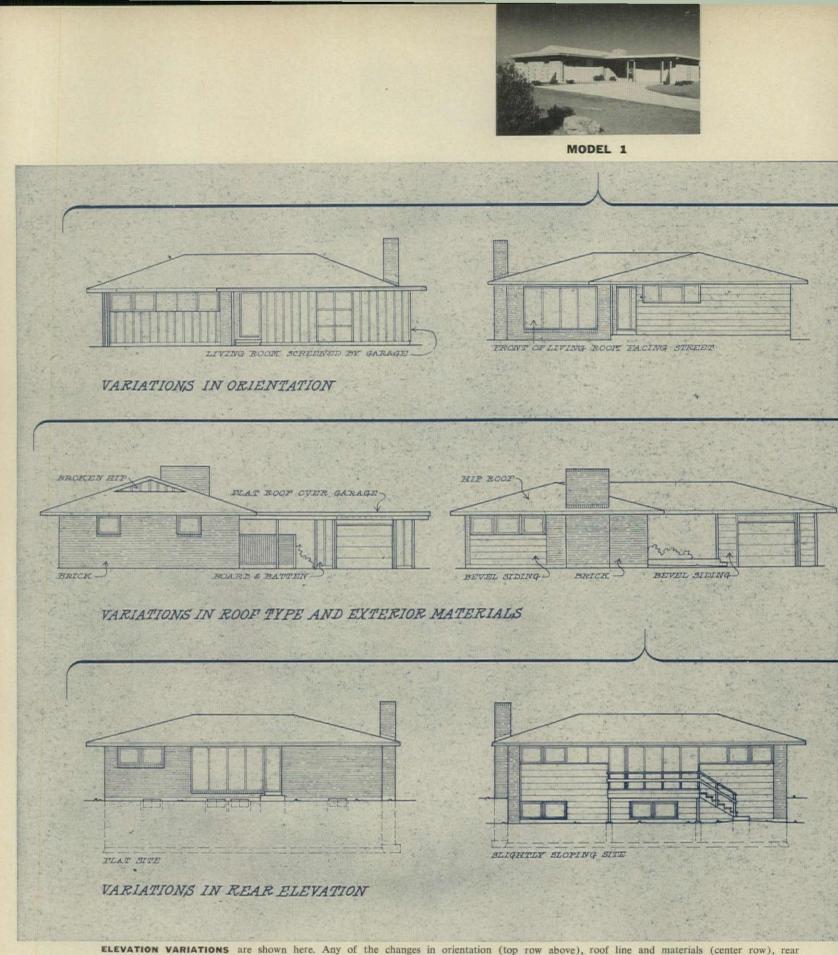
2. Window walls in the living room of all models, and the family room of Models 2 and 3 (see plans) can be located on any wall; which makes it possible to open the room to the best view, and radically changes the appearance of the room.

3. The fireplace can be located in either of two walls of the living room in Models 1 and 2. This is not possible in the other model, where the fireplace acts as a divider.

4. In Models 2 and 3, moving the kitchen area only slightly, and inserting or removing a partition, gives the choice of a big living room, or a smaller living room and a family room (see alternate plans for Model 2).

5. The living room of any model can be oriented for front or rear living by rotating the house on the lot.

6. The relation of the living area to outdoor patios can be shifted, in Models 2 and 3, by moving garage and bedroom wing in relation to the living wing. (See plot plans above.)



LECTATION VARIATIONS are shown here. Any of the changes in orientation (top fow above), foor the and materials (center fow), fear

How to give today's buyers what they want-with only three models

Step 2: Offer a big choice of elevations with each model

"Buyers are even more insistent that their house look different from neighboring houses than they are about plan," says John Strauss.

"That is why we first planned our houses so the elevations

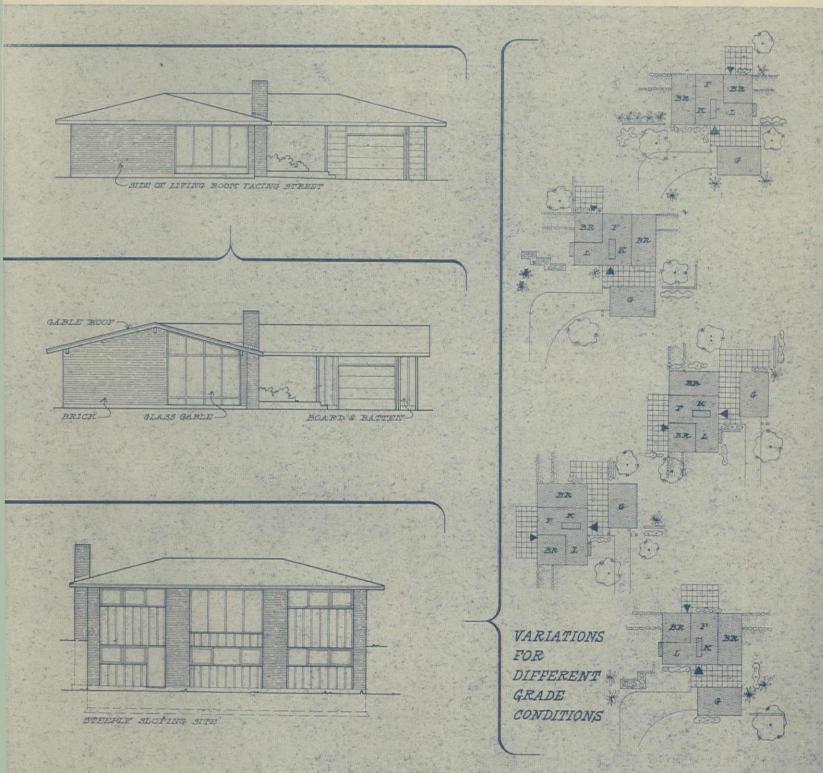
could be changed in as many ways as possible—and only then looked for ways to do it economically." The Strausses do not rely on the usual tricks for changing elevations—false gables over doorways, vari-colored panels under windows,



MODEL 2



MODEL 3



elevation (bottom row), and siting (drawings at right) can be made independently, and on any model. This provides endless variation.

or a jumble of materials. Instead, for each model, they get variety by these more basic methods: 1. Roof lines are changed. The Strausses use hip, broken

 Roof lines are changed. The Strausses use hip, broken hip, and gable end silhouettes (but pitch stays the same).
 Brick and wood masses are changed; siding on some

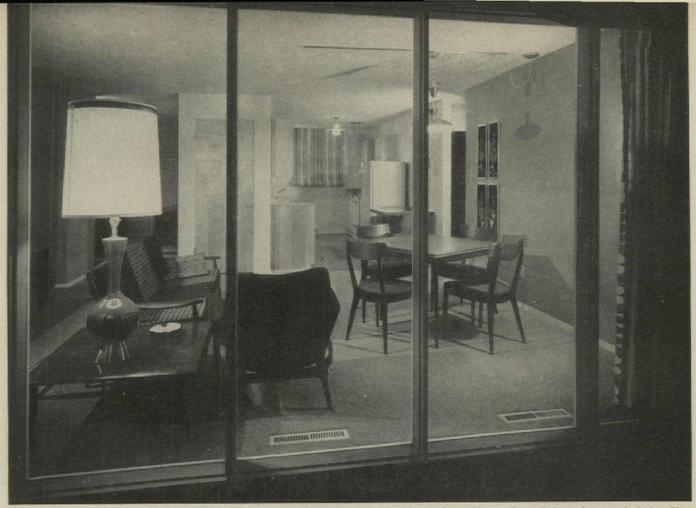
2. Brick and wood masses are changed, stong on some houses is bevel, on others board-and-batten. (Says Architect Sid Campbell: "Too keep from confusing field crews about where to build thicker foundations for brick veneer, we make all foundations the same thickness all around.")

3. Fenestration is changed, but "even when we move

windows, we use the same number of windows."

4. House and garage are oriented in various ways on the lot. "Reorienting the house requires no changes of material or design, but makes a big difference in the appearance of the house from the curb," says Architect Campbell.

5. Houses are sited to take best advantage of sloping sites this gives a different appearance to the front and rear elevations. "With any model, we can give buyers a choice of a basement, a 'garden level,' or a walk-out lower level, depending on site conditions," says Jim Strauss.



WINDOW WALL of family room in \$20,800 model has slim mullions. This model has flat ceiling; others (below) have cathedral ceiling.



CABINET WALL in family room of \$27,500 model has sliding screen to block view of kitchen. Other options permit a more closed plan.



FIREPLACE WALL includes fireplace for living room and family room (through door). Valance-board runs throughout high-ceiling area.

How to give today's buyers what they want-with only three models

Step 3: Offer a choice of custom detailing with each model

"We figured we would have a real appeal to today's critical buyer if we could offer him features and detailing he associates only with custom houses," says John Strauss.

"Our solution was to give our architect a free hand in detailing the houses—and then figure how to apply production ideas and methods to hold costs down."

Some of the detailing and some of the choice of interior finish offered to buyers is shown in the photos above and on the facing page. And here are some other features included in all Strauss houses:

1. Colors on the interior are carried through to the exterior in rooms with glass walls.

2. Brickwork that continues around corners instead of

ending at the corner and having a "pasted-on" look.

3. Windows either grouped, or set in panels, "so they never look like holes punched in the wall."

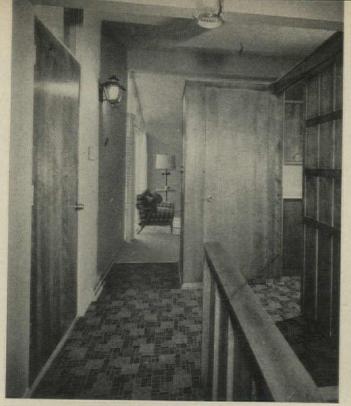
4. Three- or four-foot overhangs.

5. Vent stacks at the back of house in most orientations.

6. At least two, and sometimes three, paved patios with planting areas.

7. Complete landscaping including: a lawn guaranteed to sprout, six trees, eight to 12 major shrubs, and mature flowers—mostly roses.

8. Twelve to 20 lineal feet of privacy fencing in a choice of 12 different designs (see details p 122).

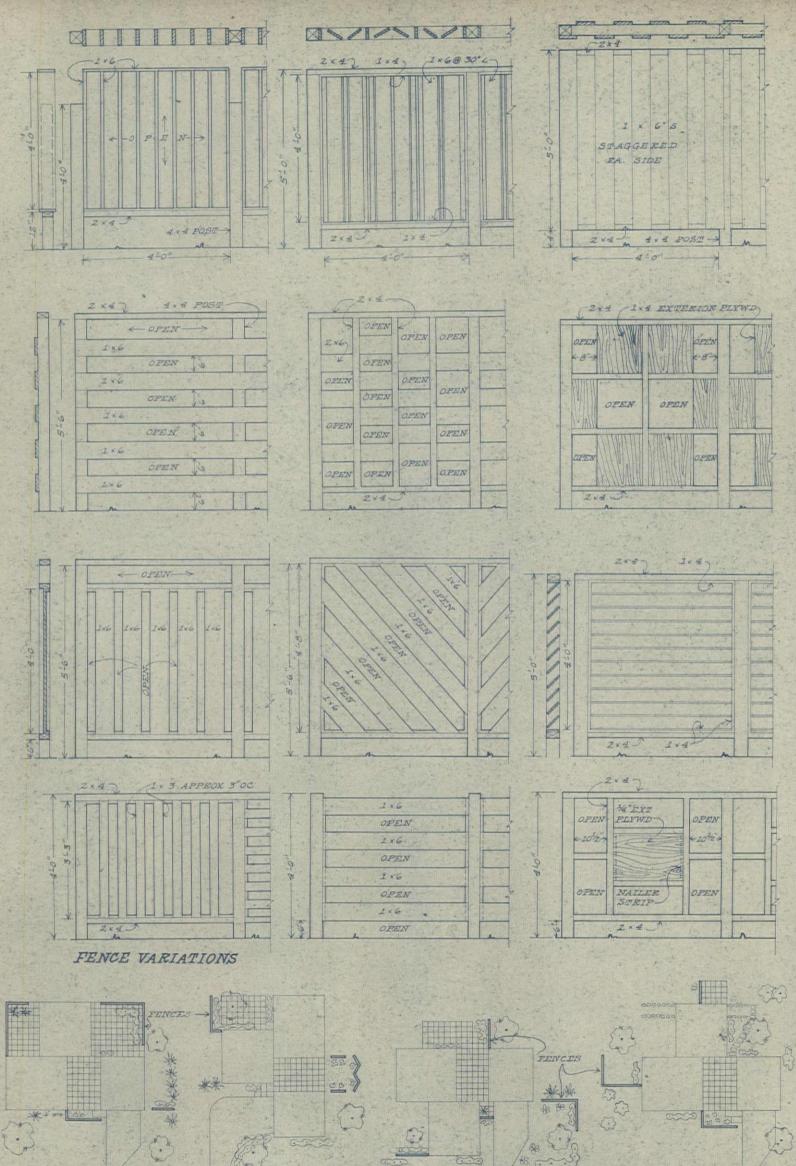


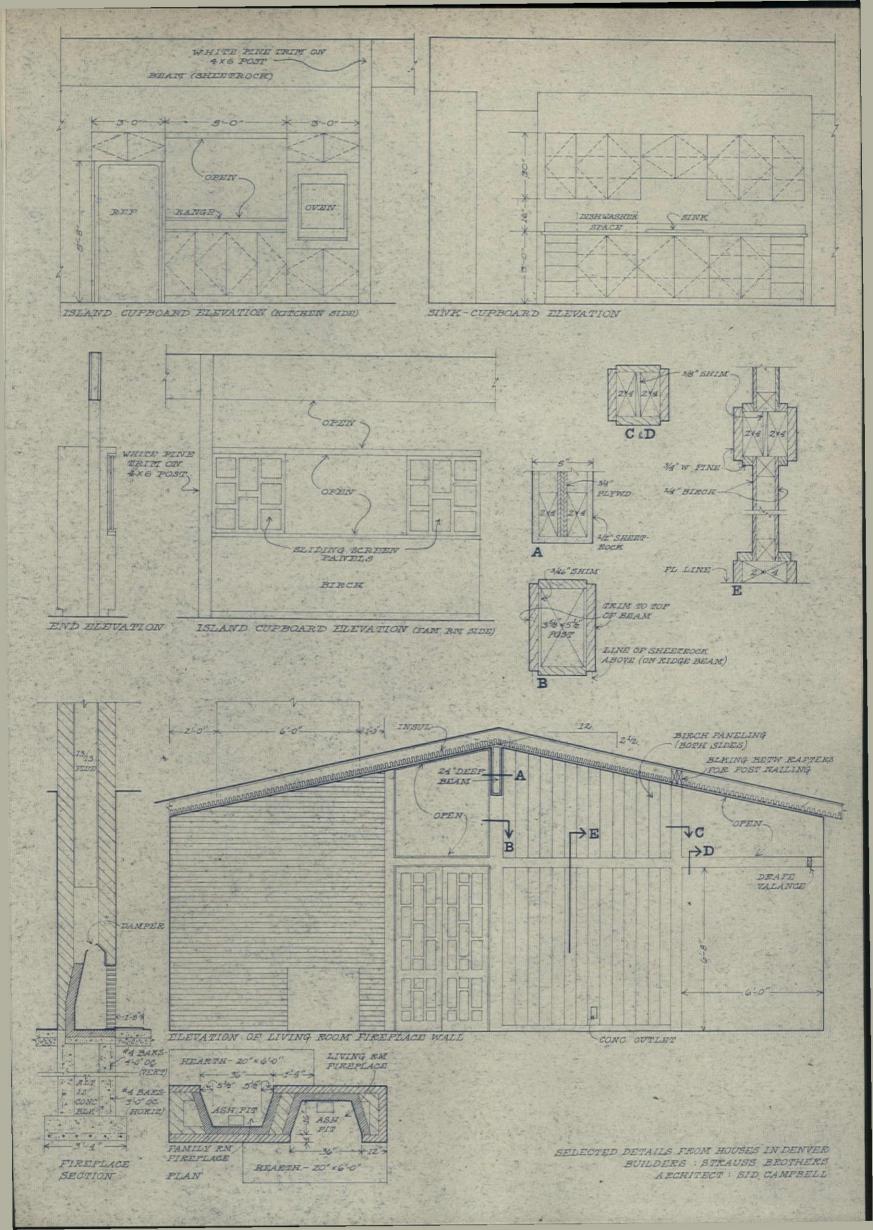
wood paneling is used in the entryway of some models. Paneling and doors are stained to match.

For selected details, turn the page

GARDEN ENTRY COURT open to living or family room is Strauss specialty (see H&H, Dec '59, p 201); is used in most variations.







WHAT THE ARCHITECT CAN DO FOR THE BUILDER HOUSE

Most elevations can be improved -and money saved in the bargain

Many builders realize that in today's tough market, few prospects will buy a house unless they like the way it looks—no matter how well it is built, no matter how good the plan, no matter how many appliances are built in—for good appearance is an essential element of the quality house.

Many builders realize that, almost always, good design (including good exteriors) is cheaper to build than bad design (with bad exteriors). Most good elevations are good because they are basically simple and orderly, and require less material and less labor to build than fussy exteriors like those of "story book" houses.

That is why more builders are turning to architects to design their houses, and that in turn is an important reason why the appearance of the built-for-sale house has improved a great deal in the last few years.

But . . .

There are still some built-for-sale houses with very bad elevations. And the elevations of a great many merchant-built houses would have been much better if their design had followed more closely a few basic rules. To dramatize these rules, H&H Associate Editor Arthur Pieper, who is both a registered architect and a licensed builder, has worked out four case examples.

Each of the four studies on the next four pages highlights a common design fault in built-for-sale house elevations. The "builder's original elevation" at the top of each page was carefully selected as being typical of a common fault in elevations. The center drawing is identical except that the major design fault, plus other questionable details, has been annotated. The bottom drawing is a suggested revision that eliminates the poor features of the design by following the basic rules.

In no case did Pieper make changes that would affect the inside of the house. In no case did he "cheat" by stretching the elevation or lowering room heights or by using artists' tricks of draftsmanship (like planting more shrubbery in the revised elevation). In no case did he make changes that would boost costs—and in most cases the revised elevation would be cheaper to build than the original.



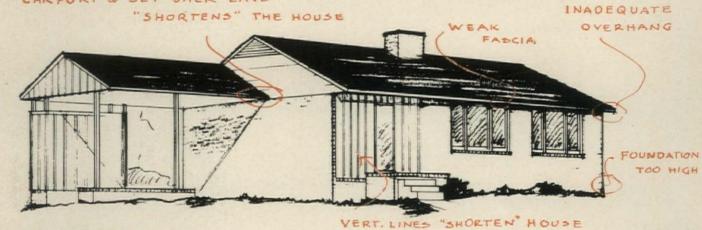
BETTER ELEVATIONS have been a recurring subject in H&H since this article, subtitled "How to keep your house from seeming to fly apart in all directions," appeared in the fourth issue, April '52.



BUILDER'S ORIGINAL ELEVATION is generally neat and orderly, but puts emphasis on vertical elements, has floor 3' above grade.

The house that sticks up out of the ground

Almost nothing will make a house look smaller or clumsier than too high a foundation. It is easy to make a house hug the ground—and so look longer—by: 1) dropping floor joists down inside the foundation wall, 2) pushing earth up against the house during final grading, 3) lowering the foundation wall by digging it deeper or eliminating a course of block. CARPORT & SET-BACK EAVE The annotated drawing just below points up the high foundation, plus the strong vertical lines and weak horizontal lines that also make the house look high. The revision (bottom) shows how lowering the foundation and roof pitch, and stressing horizontals with an unbroken roof, a strong fascia, and a brick wainscoat makes the house look longer.



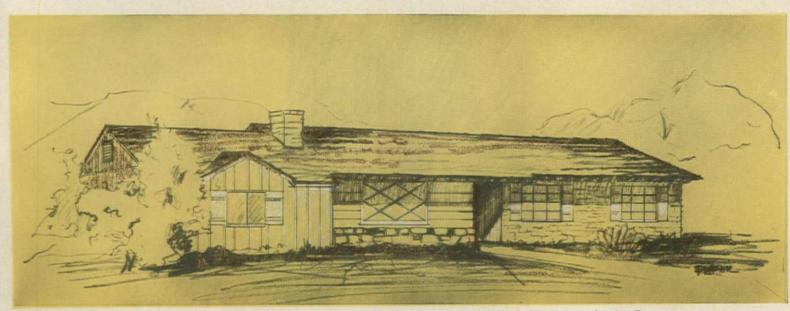
ARCHITECT'S ANALYSIS shows the weak points in the elevation.

continued

ARCHITECT'S REVISION looks much longer than original because horizontal lines are emphasized, but is actually exactly same length.



What the architect can do for the builder house continued



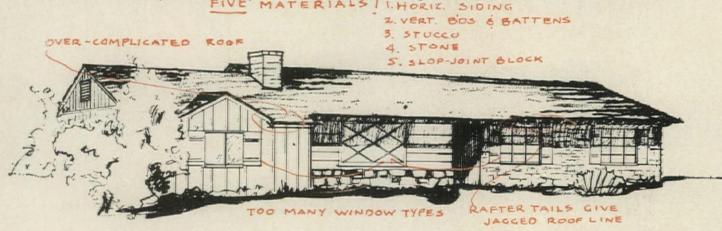
BUILDER'S ORIGINAL ELEVATION is confused not just by so many materials, but by broken, ragged lines of both the roof and walls.

The house with too many exterior materials

While some prospects may think they are charmed by exteriors like this, most *buyers* tire quickly of fussy, broken-up design—especially when they find out how it adds to their maintenance problems.

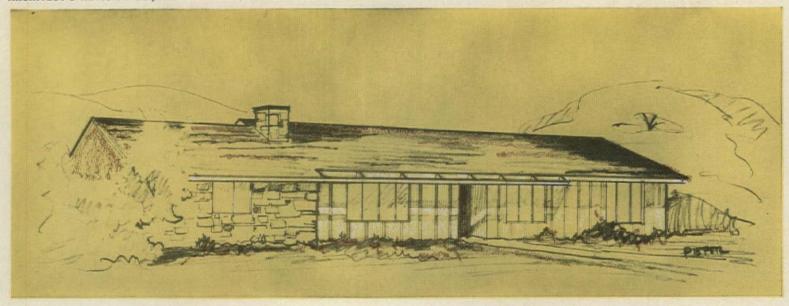
The analysis below shows not only five different wall materials, but a fussy roof and fussy windows that add to

costs. The revision (bottom) shows that the same house looks more distinctive—and more expensive—when only two contrasting wall materials are used and the roof and windows are simplified. Notice that the stone is run in one mass until it reaches a break in the façade—it is a sure mark of poor design to butt two materials in the same plane.



ARCHITECT'S ANALYSIS shows the weak points in the elevation.

ARCHITECT'S REVISION simplifies construction, still has texture and pattern-but it is organized texture and pattern.



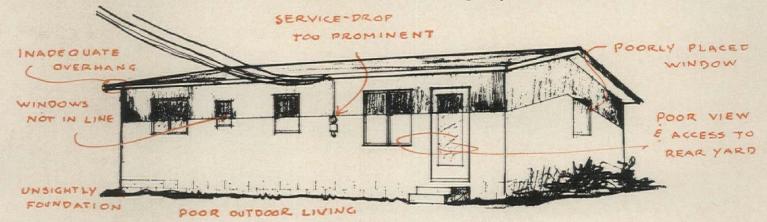


BUILDER'S ORIGINAL ELEVATION of this warm-climate house is uninviting for outdoor living, cannot be opened to the breeze.

The house with the unsightly rear

With the growing emphasis on indoor-outdoor living, chances are that most buyers see as much of the rear elevation of their houses as the front. So the "forgotten façade" is now just as important as the front elevation. It is not hard to eliminate the common design faults pointed out in the analysis below. The revision shows the importance of good access to outdoor

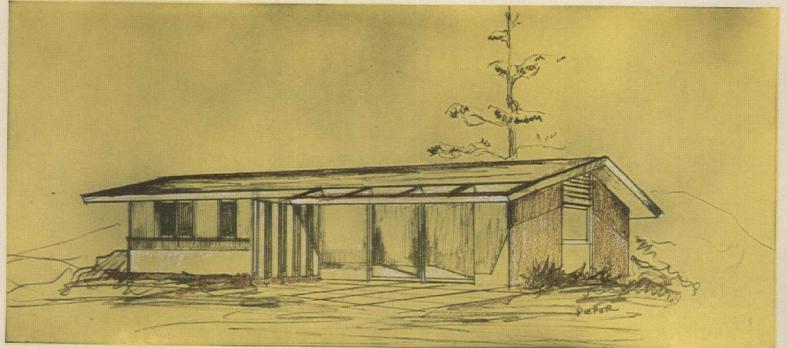
living. A good-sized overhang is important to shade the glass area and keep rain from spotting it. Cleaning up the rear elevation usually involves lining up the windows (and bathroom windows probably need to be the same size as all the others). Final touch: a screen or trellis to add interest and to give shade and privacy to the owners.



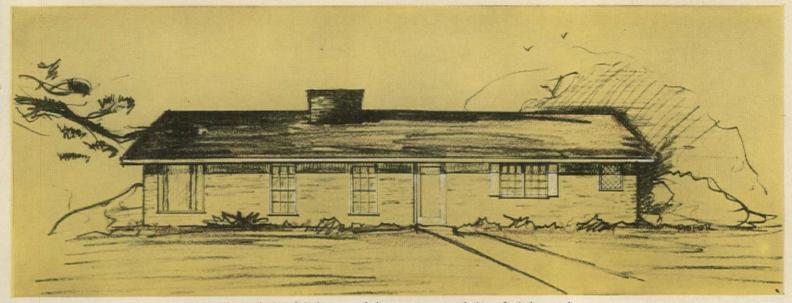
ARCHITECT'S ANALYSIS shows the weak points in the elevation.

continued

ARCHITECT'S REVISION opens house to breeze and terrace. Electric service could be underground for \$100 extra, or run at end of house.



What the architect can do for the builder house continued



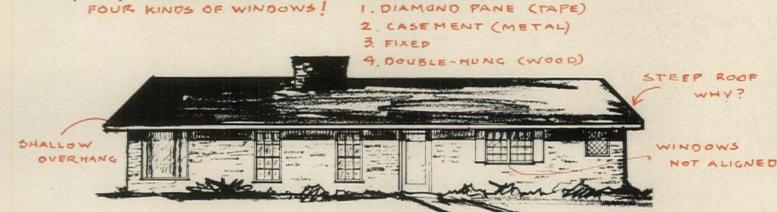
BUILDER'S ORIGINAL ELEVATION looks disorganized mostly because of the many types and sizes of window used.

The house with too many kinds of windows

Windows (and doors) are usually the strongest design elements in any elevation. Mixing several kinds—as in the elevation above—will usually give a cluttered look.

The annotated drawing below points up the five kinds, and many sizes, of window used in this house. The drawing also points up other unsuccessful details. The revision (bottom)

shows the trim and ordered look you get by using only one kind, and only two sizes, of window, and then lining them up. (Exception to the rule on mixing window types is sliding glass and large fixed windows, which often blend well with other windows.) The revision also shows the effect of a lower, longer roof.

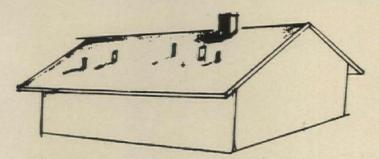


ARCHITECT'S ANALYSIS shows the weak points in the elevation.

ARCHITECT'S REVISION looks ordered because windows are nearly alike. Garden wall at left could be built of brick saved from front wall.

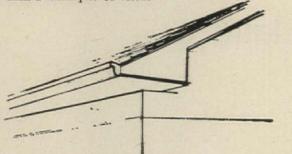


... and here are details that ruin an elevation



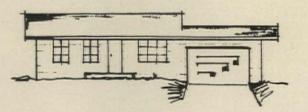
The roof that is disfigured with vents

It is sometimes possible to solve this problem by replanning the house to combine vents into one stack or hide vents in the chimney. If this cannot be done, you can at least put the vents in the rear. And a good-sized chimney always looks better than a weak pile of bricks.



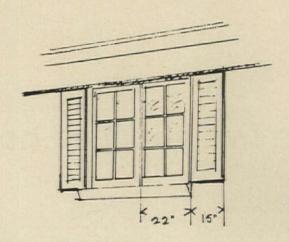
The eave-end that looks like a lamb chop

This bulky and clumsy hump at the end of a house serves no purpose. It is better to use either 1) a pitched eave soffit, or 2) a flat soffit which ends at the end wall of the house, with a projecting gable end.



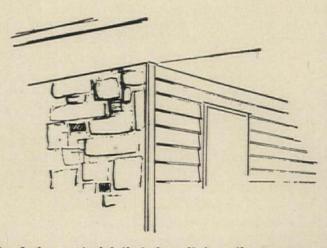
The garage door that doesn't suit the house

The garage door is a giant element in the façade; should be treated in the same spirit as the rest of the elevation, possibly with the same siding. It is often better to put the garage door at the side or rear of the house.



The shutters that don't fit the window

Underscaled shutters scream "useless trim." If you use shutters, use shutters designed to fit the window. In southern climates, operable shutters with operable louvers sometimes make sense to block the sun but let in the breeze.



The facing material that doesn't turn the corner

Details like this stone and clapboard corner tend to cheapen a house. The stone looks artificial because it has no appearance of strength or depth. It is better to continue a material around outside corners for 1', or until it can dead-end at an inside corner or a strong break point like a door or fullheight window.

To sum up ...

Contrary to popular opinion, good elevations are not strictly "a matter of taste." There is of course plenty of room for choice and differences in taste on general style, materials, window treatment, and roof pitch. But there is little room (or excuse) for ignoring basic rules of design on the elevations of built-for-sale houses. Some of these rules have been outlined above. Like other even more basic rules of scale and proportion, they must be applied by a skilled hand. With the help of a good architect, most builders will be able to produce a more salable house, usually at lower cost. /END

These five attached houses suggest a new way to use crowded semi-urban land

They combine the economy of the row-house with the outdoor living space of the detached house—and enjoy more privacy than either.

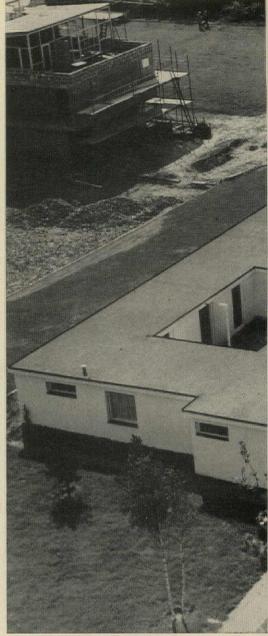
Because each house is only one-story high, all the patios and entrance courts are absolutely private, for none can be seen from a neighbor's upstairs window. In addition, each house has a private entrance, and each even has a one-car garage.

Because the houses are attached, with blank walls and solid wall-high fences to separate the patios and give privacy, the scheme has a much lower percentage of ground coverage than five single-family dwellings.

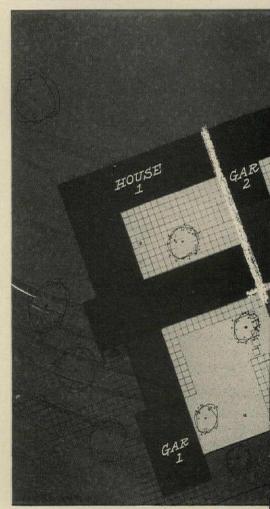
But because no house is more than one-story high, the scheme has a higher percentage of ground coverage than five row houses—and less floor space. (An average row house is 20' wide, 40' deep, two stories high, so it has 1,600 sq ft of floor space. The largest house in this scheme has about 1,400 sq ft of space, excluding the garage, and two have only about 900 sq ft.) The five houses, together with their patios, cover about one half acre. They were built for display at the 1959 International Exhibition of Building in Berlin.

Land use like this fits areas between a real suburb and a real urban center, areas where the land is zoned for multiple dwelling but costs are not so high that only row houses or high-density garden apartments are feasible. It fits retirement couples who cannot manage a single family house but dread apartments. It fits single men and women and married couples who want the amenities of a house without the responsibilities of suburban grounds and surroundings.

The scheme could be applied to as few as two houses or to an indefinite number of units laid out in a rectangular pattern.



FIVE HOUSES are tied together by flat roof

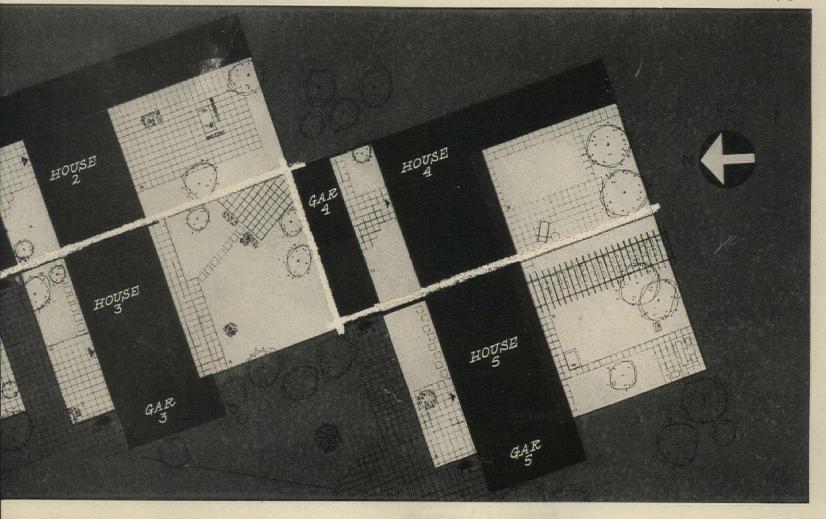


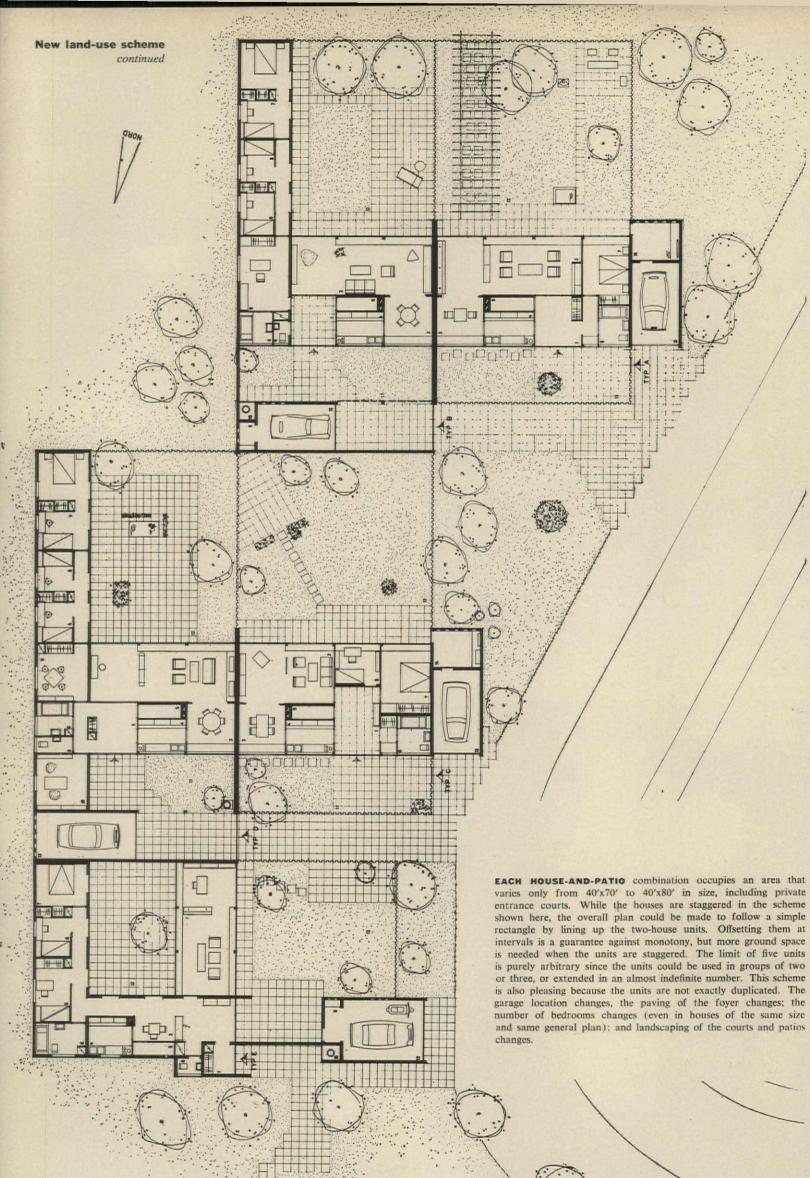
ARCHITECT: Eduard Ludwig LOCATION: Berlin, Germany



economically laid in an unbroken stretch that avoids jumble of roof pitches; fences divide the courts and patios.

Continued on next page \rightarrow





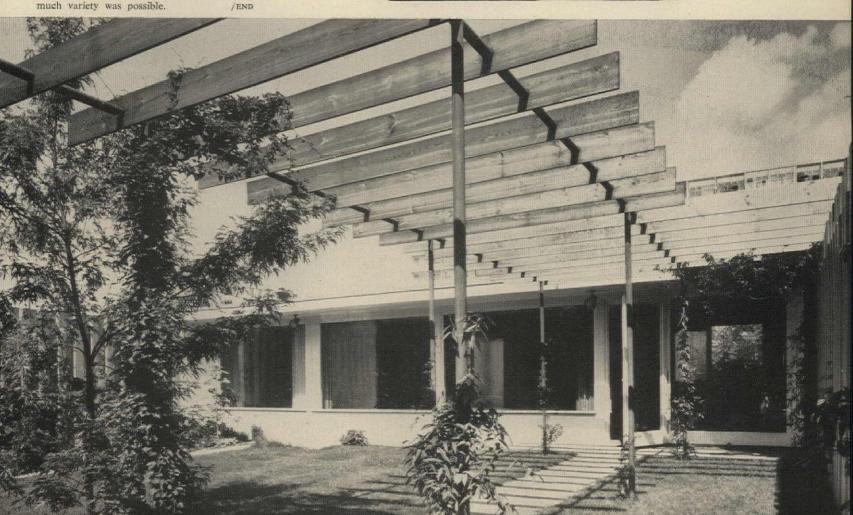


LARGE WINDOWS of fixed glass are on both the patio side of the houses (above) and the entrance court side (not shown).

LARGE LIVING AREA is about 12'x30'; it parallels the patio side of houses. Dining is in the alcove at rear of photo.



LARGE PATIOS average about 1,300 sq ft in size; they were landscaped to show how much variety was possible. /END



Are you thinking about

the four-bedroom market?

Here is what 57 builders (from 46 cities in 26 states*)

say they have learned

about building and selling four-bedroom houses

1. More and more families are able and eager to buy a new four-bedroom house

One builder puts it this way: "Right after the war we were selling mostly two-bedroom, one-bath houses. Then buyers demanded a third bedroom, then a second bath, then a family room. Now many of them are demanding a fourth bedroom."

Reports Bob Scarborough of Haddonfield, N.J.: "Four years ago we saw little demand for a fourth bedroom. Today well over half our buyers want it in our \$20,000 to \$24,000 houses."

Reports Ed Fischer of St Louis: "We opened a fourbedroom model last August. Since then, half our sales have been four-bedroom houses."

Reports Leon Weiner of Wilmington, Del.: "When today's homeowners need a fourth bedroom, they are more inclined to buy a new house than to add onto their old one."

Some builders—like Long Island's Stanley Sedransk (100 four-bedroom sales in the last half of '59)—have already put all of their production into four-bedroom houses.

2. You can sell four-bedroom houses in a surprisingly wide price range

Take the 57 builders, for example. Their four-bedroom houses are priced anywhere from \$13,000 to \$60,000.

Even individual builders are covering a wide price range. Case in point: Harlem Van Deilen of Lambertville, Mich., who has four-bedroom houses priced from \$19,800 to \$45,000. Says Van Deilen: "The fourth bedroom pulled us out of the doldrums. We started building

*The 57 builders have just three things in common: 1. They are all successful. 2. They are all selling four-bedroom houses. 3. And they have all given HOUSE & HOME detailed reports on what they have been building and selling in the four-bedroom market. four-bedroom houses in November, 1958. More than anything else, they increased our sales from 56 in 1958 to 110 in 1959."

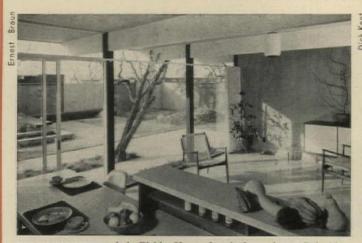
3. You can sell four-bedroom houses to a surprisingly wide variety of buyers

You can sell to families with three or more children. Says Wilmington's Leon Weiner: "Many people want a separate bedroom for each child—particularly if their children are far apart in age." Adds Emil Hanslin, partner in a top Boston realty firm (over 500 four-bedoom newhouse sales last year): "These days, many parents worry about getting their children into college, so they want each child to have plenty of privacy for homework."

You can sell to families who can afford a bigger house —whether they need it or not. "Extra space is a luxury many people like," says Jack Worthman of Fort Wayne. "Buyers—especially in the upper-price range—like more space than they need," says Tom Yedor of Beverly Hills. "Some buyers—particularly those who come from large old houses—simply feel a four-bedroom house gives them more status," says Realtor Hanslin.

You can sell to families who want an extra room for quiet activities. More often than not—the 57 builders report—the fourth bedroom is used as a study, sewing room, or hobby room (painting, ceramics, rug hooking).

You can sell to families who want an office at home. Says Bob Fox of Plymouth Meeting, Pa.: "We've sold most of our four-bedroom houses to junior executives and salesmen who think of the extra room as an office, den,





BIG FAMILY ROOM is in Eichler Homes four-bedroom house, Palo Alto.

BIG KITCHEN is in Mossman-Gladden four-bedroom house, Albuquerque.

"A four-bedroom house should be at big-family scale not just a three-bedroom house with a fourth bedroom tacked on or squeezed in"

So says Architect Henry Norris, who has designed many four-bedroom houses for merchant builders in the Atlanta area (but not the two above).

"For the most part, the family that wants a fourth bedroom also wants extras in other parts of the house," Norris adds.

Here, he says, is what the four-bedroom house needs:

It needs a good-sized master bedroom ---at least 150 sq ft. Two children's bedrooms can be small (minimum dimension: 8') if they open to a play area.

It needs good-sized bedroom closets —at least 4' per room and 8' if the room is to be occupied by two people. ("I think FHA's minimum requirement of one 3' closet per room is too small for any family in any house.")

It needs at least two baths. Add a half bath on the first floor of a twostory house if all the bedrooms are on the second floor. Also add a half bath in the bedroom wing of a one-story house if the master bedroom and its bath are set off from the others.

It needs a family room as well as a living room, and a dining area large enough to seat a large family.

It needs an entry hall or foyer to simplify circulation.

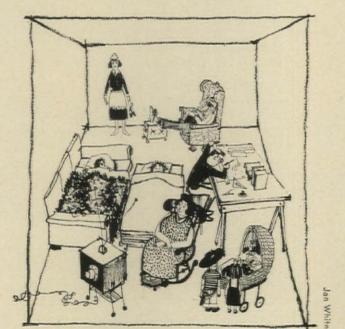
It needs a good-sized kitchen and a good-sized laundry. Both should have plenty of counter space.

It needs hefty utilities—a big water heater, for example, and plenty of electrical capacity to meet the requirements of a large family.

or guest room. Most of them furnish the room with a desk, a large chair, and a day bed."

Adds J. F. Blackman of Swarthmore, Pa.: "There's a tax angle, too. Men who use the fourth bedroom as a part-time office can deduct some of their shelter costs from their income taxes."

You can sell to frequently transferred corporation executives. Reason: these people are particularly con-



HERE IS WHY buyers want a fourth bedroom.

cerned about resale value. Says Wayne Brown of Brown & Kauffmann, San Jose, Calif.: "Many buyers feel it will be easier to sell a four-bedroom house because it won't be outmoded." Comments a Long Island builder: "In this area, resale of homes with less than four bedrooms is almost impossible."

You can sell to families who have live-in servants, says Long Island's Stanley Sedransk: "We find a growing demand in the middle-income market for houses with a maid's room."

You can sell to families who want extra space for in-laws or guests. Says Burton Duenke of St Louis: "The need for a mother-in-law room or a guest room is a big reason for the growth of the four-bedroom market."

And you can even sell to retired couples whose children have grown up. Reason: many of these pecple want plenty of extra space to put up visiting children and grandchildren.

4. You can build four-bedroom houses with a surprising variety of plans

The 57 builders showed House & Home many variations of two-story plans, many variations of split-level plans, and many variations of one-story plans.

Asked what type of house—two-story, split, or ranch—is particularly suitable for four bedrooms, they tended to name the type or types they are building.



Of the 57 builders, 26 see a strong case for . . .



Four bedrooms in the two-story house

Bob Scarborough's most popular four-bedroom house, pictured on this page, shows why so many builders say the two-story house is especially suited to four bedrooms. "Buyers take to it at once," Scarborough says, "because it

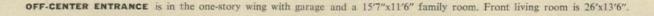
"Buyers take to it at once," Scarborough says, "because it has so much living space downstairs for the larger family that needs the four bedrooms upstairs."

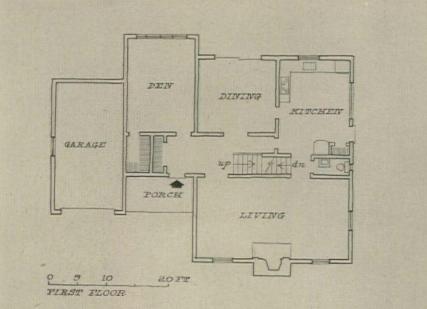
The \$23,400 Haddonfield, N.J. house has 2,030 sq ft of finished area:

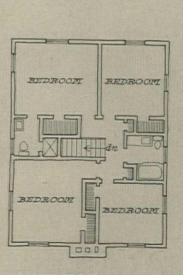
Downstairs, the house has 1,150 sq ft of well planned living space. All four rooms on this floor open to a 6'3" wide hallway, so there is no traffic problem in moving from any one of these big rooms to another. (Only drawback: the distance from the garage to the kitchen.)

All four bedrooms (each with ample closets) and two full baths are on the 880 sq ft upper level.

SEPARATE DINING ROOM (viewed from sliding glass doors, toward hall and living room) is a "must" in Scarborough's area.

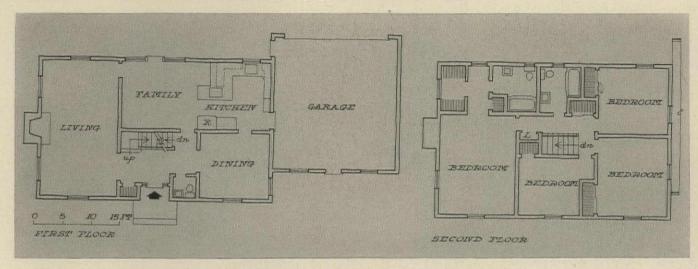






SECOND FLOOR

Three other popular two-story plan solutions:

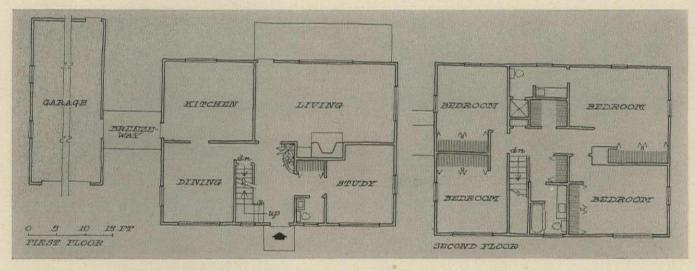


1. Here is a center-entry plan with back-to-back baths

Lefferts feature a large master bedroom with private bath and big walk-in closet

This ingenious plan lets Builder Jake in his \$32,000 Middletown, N.J. house. Second full bath serves three other upstairs bedrooms. Living areas and half

bath on the first floor open to a large entrance foyer. Architects: Harsen, Johns & Kobayashi. Living areas, 2,000 sq ft.

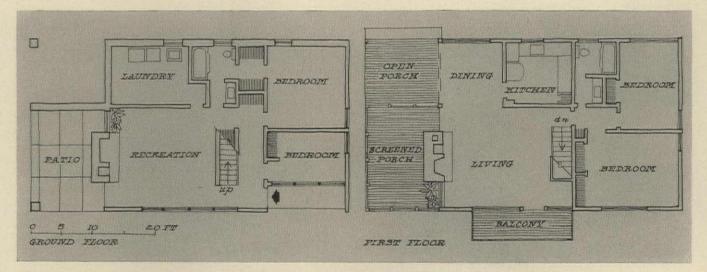


2. Here is a center-entry plan with cross ventilation in every bedroom

The four bedrooms are all corner rooms. The two upstairs baths are in the center

the rear. Downstairs, each living area also has a corner location, with the kitchen of the house, one in the front and one in next to the garage. Builder Irving Carlson & Vogel.

offers the 2,010 sq ft house for \$24,990 in Sellersville, Pa. Architects: Laibow



3. Here is a hillside plan with two bedrooms up and two down

This plan fits steep lots that slope to the front. Both levels have entrances at grade, and each level has two bedrooms, a com-

partmented bath, and an almost equal living area. Builder Ed Bennett says this \$30,000 house (designed by Keyes, Leth-

bridge & Condon) is easily adapted to lots sloping in the opposite direction (to the rear).



Of the 57 builders, 10 see a strong case for ...

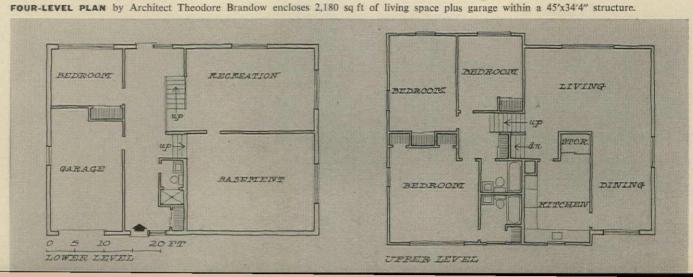
Four bedrooms in the split-level house

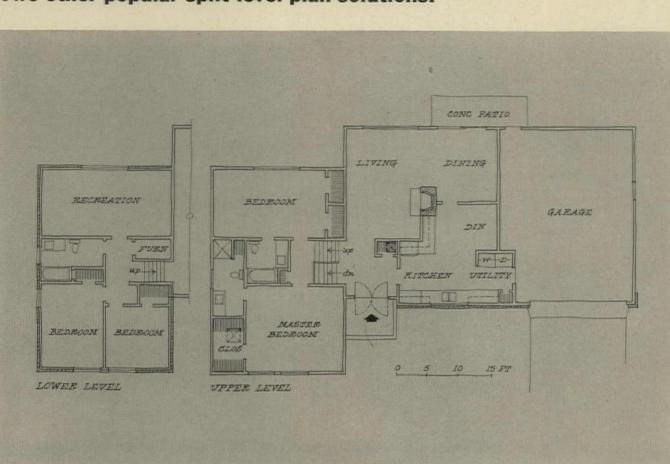


This four-level house has been Franklin Builders' best-seller in Wilmington, Del. (150 sold at \$24,500).

"Buyers like it for two main reasons," says Leon Weiner. "They get a lot of space for their dollar, and the fourth bedroom is off by itself on the ground level and served by a bath -so it can be used in any of many different ways. We find people are using it for teen-agers, for a mother-in-law, for a hobby room, study, or office."

The other three bedrooms are grouped on the top floor, with two full baths. The kitchen-dining-living room level and the lower family room at the rear have 1,250 sq ft of living space.





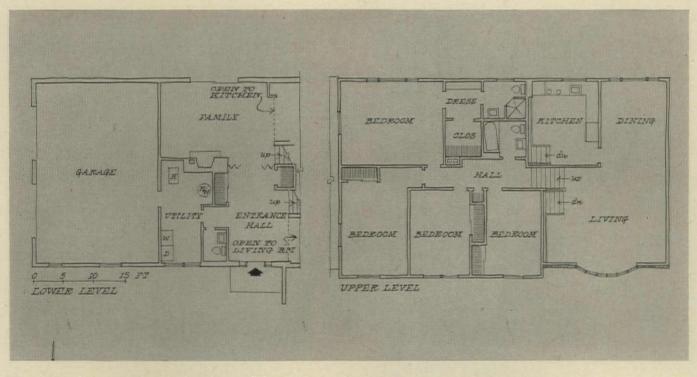
Two other popular split-level plan solutions:

1. Here is a rear-living plan with a pair of bedrooms on each of two levels

Each of two large bedrooms on the top level has a full bath. Two smaller bedrooms on the lower level share a third full bath, and are close to the family

room. (These are usually occupied by children, though the smallest bedroom sometimes is used for a den or office.) All bedrooms have oversized closets, and

all are near the mid-level foyer, kitchen, and living room. Mossman-Gladden offers this 2,300 sq ft split level for \$25,775 in Albuquerque.



2. Here is a center-hall plan with all four bedrooms on one level

The four bedrooms (on the top level) are all large, with large closets. Three of the bedrooms share a bath, and the master bedroom has a dressing room and private kitchen on the middle level. Architect Jack

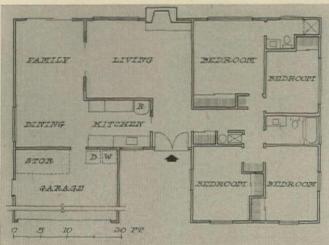
bath. The 10' wide entrance hall and family room on the ground level are open above waist level to the living room and

Swerman designed the 2,338 sq ft house for Builder J.F. Blackman, who offers it at \$27,600 on 13/8-acre lots near Swarthmore, Pa.

Photos: Ernest Braun



Of the 57 builders, 30 see a strong case for . . .



U-SHAPED PLAN puts wide double-doored entry in center of 1,564 sq ft house, close to bedroom hall, kitchen, and rear living room.

"We think this is the most appealing four-bedroom plan we have ever marketed," says Charles C. Wynn of Perma-Bilt

Four bedrooms in the one-story house

Homes, which built the house shown on this page in Cupertino, Calif. "And the demand seems to be backing up our thinking. This \$23,100 house is outselling our other four-bedroom models that are priced as much as \$6,000 lower. It is also outselling

both of our three-bedroom models in the same development." Buyers like the well-zoned plan that groups four bedrooms and two baths in one wing and puts living room, family room, and kitchen in another wing next to the garage. Less than half the area of the house is in the bedroom wing.

Adds Wynn: "Nearly all buyers are coming from threebedroom homes. Many need a fourth bedroom as a bedroom, but quite a few women use it for sewing and ironing. They don't have to clean up every time they use it, as they did when they used the family room."

FAMILY ROOM_furnished in this model as a formal dining room—is separated from living room by louvered sliding doors that recess into walls.

COMPARTMENTED BATH, serving three bedrooms, has glass-enclosed tub, under-counter cabinets."



Six other popular one-story plan solutions:

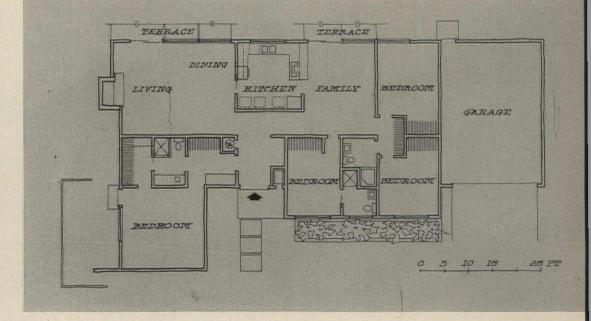
1. This L plan isolates one bedroom as maid's room

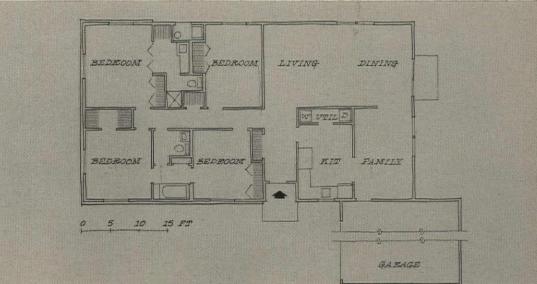
This luxury plan specifies the fourth bedroom as a maid's room, close to the bath that serves the family room, kitchen, and mud room. Two full baths serve the other three bedrooms. The family room is 20'square, the living room 14'x26'. Builder Burt Duenke, Kirkwood, Mo., offers the 2,480 sq ft house for \$44,900.

2. This open plan puts the master bedroom off by itself

The isolated bedroom off the foyer has a private bath, large closets and a patio. The three other bedrooms—served by two baths—open into the family room, which can be used as a children's play area. Builder Nels Severin's 1,820 sq ft house sells for \$30,250 in San Diego. Architect Edward H. Fickett was the designer.

BEDROOM BEDROOM TIVING DEIVING KITCHEN BEDROOM FAMILY PORCH 20 ET 5 20 0 WD MAID'S BEDROOM UTILITY A RAGE STOR





3. This simple plan groups the bedrooms at one end

And three of the bedrooms have direct access to compartmented baths. Bedroom closets range from 5' to $7\frac{1}{2}$ ' wide. There is a wide entrance hall leading to well located living areas and a walk-in washerdryer space in the kitchen. The 1,610 sq ft house sells for \$17,500. It was designed by Architect Elmer J. Son for Indianapolis Builder Tom Perine.

continued

4. This low-cost plan works around a central utility core

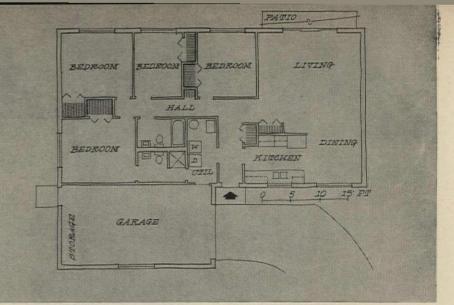
Two full baths and a utility room form the 'ore, close to kitchen plumbing. (One bath opens to both the master bedroom and the utility room near the entrance.) This economy helped Huber Homes in Dayton offer the 1,200 sq ft L-shaped house for \$14,995. In the last half of 1959, this four-bedroom model accounted for 450 sales—43% of Huber's volume.

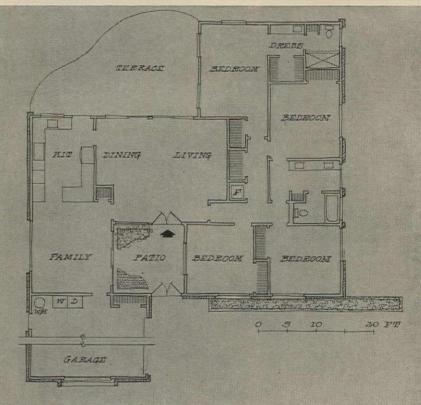
5. This entry-patio plan has U-shaped bedroom wing

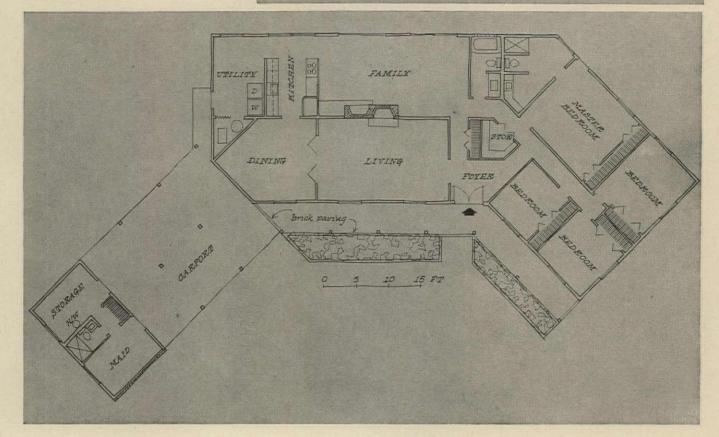
In this odd-shaped plan—possible only with a flat roof—bedrooms are isolated by location as well as by a hallway door near the patio entrance. The master bedroom has a dressing room and bath. The second bath has two entrances to serve the other three bedrooms. Family room opens to the front patio, kitchen and dining-living room to a rear terrace. Roger Rasbach designed the 1,900 sq ft house for Builders Hendryx & McCord in Port Arthur, Tex. Price: \$29,500.

6. This sprawling plan puts big closets in each bedroom

Bedroom closets are from 7' wide to 13' in the master bedroom. (There is also a 6' guest closet and a storage room opposite the bedrooms.) The angled bedroom wing has one hall leading to the family room, another to foyer and living room. One limitation: three bedrooms must be served by a bath 20' away and visible from the family room. House has 2,455 sq ft (including 250 sq ft in separate maid's quarters). St Louis Builders Fischer & Frichtell sell it for \$39,500. /END







Good Ideas File

The portfolio on the following pages is the first in a series that will bring you a variety of good ideas for houses.

They are the kinds of ideas that you would make a note ofmaybe sketch or photograph—if you walked through hundreds of built-for-sale and custom houses each year, as HOUSE & HOME's traveling editors do.

We are sure most of these ideas will interest you. We hope many will turn out to be ideas you can use—either "as is" or adapted to solve your particular problem.

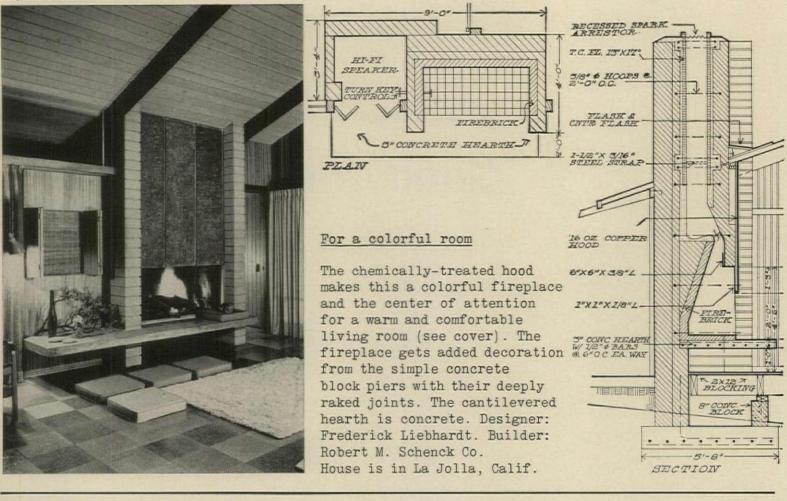
Some of the ideas will help you plan for better living; some will cut costs; some will suggest ways to add architectural interest; some will help you detail special designs; some will suggest ways to build in the kind of special features that attract today's buyers.

We suggest that you file these borrowable ideas; give them a quick glance whenever you are planning a new house.

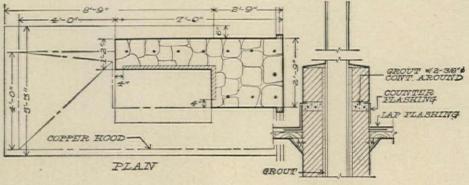
Future portfolios will bring more good ideas. Some will cover one subject—outdoor living or carports, for example. Some will be mixed bags of all kinds of subjects, from kitchens to closets, from baths to swimming pools. And some—like this first installment—will include just a few subjects.

On the next six pages, you will see good ideas for fireplaces (p 144), decorative walls and screens (p 146), entrances (p 148), and storage (p 149). **Good Ideas File—Fireplaces**

Douglas M. Simmonds

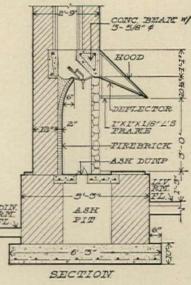


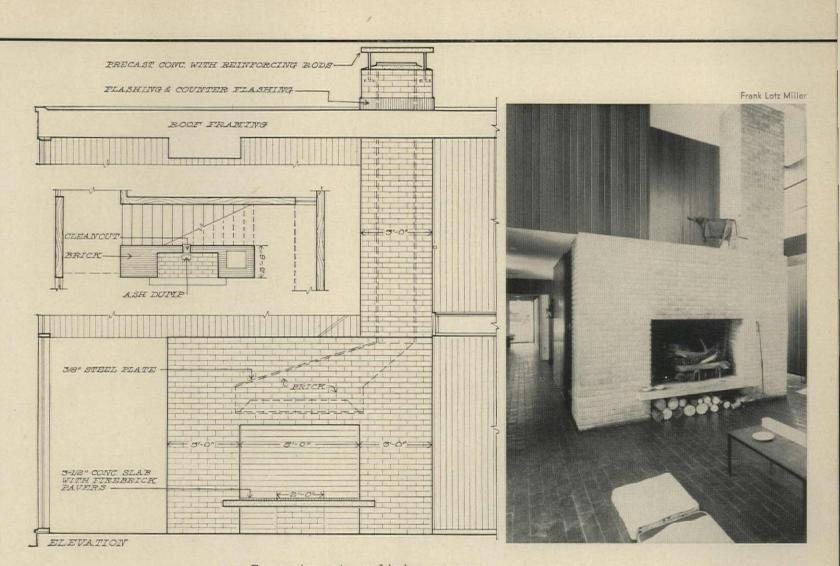




For an informal living area

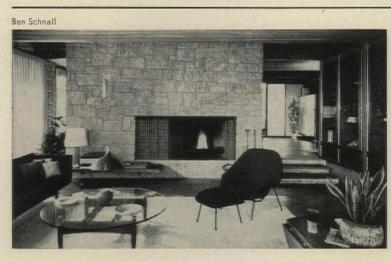
With its broad, raised hearth, its rugged stone chimney, and the unusual form of its hood, this fireplace fits very well into any house where casual living is important. It also has another more practical function: it separates living and dining areas. Architects: Wimberly & Cook. House is in Hawaii.





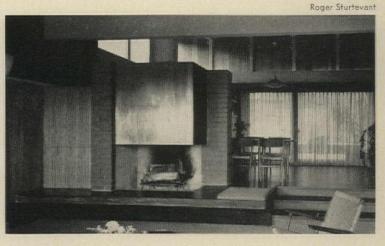
For a two-story living area

This fireplace holds attention at eye-level and helps balance the height of the two-story living area because its mass stops at the first-floor ceiling line. With chimney set back from the fireplace face, the ceiling line continues across the room. Architects: Colbert & Lowrey. House is in Metairie, La.



For a good use of stone

Regular, well-fitted, and uniformly colored stonework with the joints kept in scale makes this fireplace exceptional. Designer: Gerry Luss. House is in Ossining, N.Y.

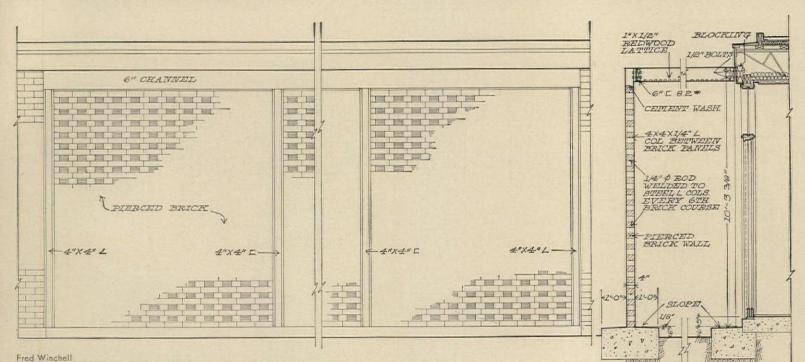


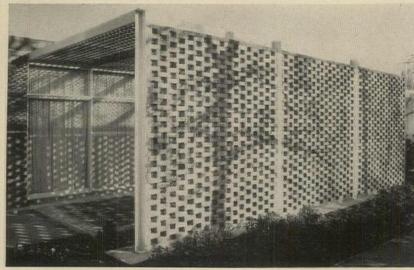
For warm but simple design

Copper, brick, and wood give this fireplace its warm appearance, while simple design makes the materials go well together. Architect: Roger Lee. House is in Berkeley, Calif.

continued

Good Ideas File—Screens

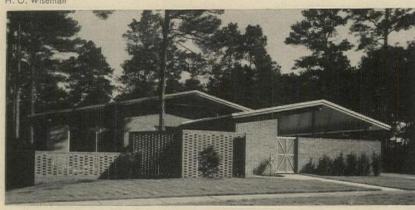




Pierced wall for dining privacy

The pierced brick wall at left screens the dining terrace in a Houston house. The brick panels are set between 4x4 steel angles (which act as columns). Steel rods run horizontally every six courses for extra stability. The terrace is floored with brick in a basketweave pattern and the overhead screen is redwood lattice. Architects: Bolton & Barnstone. Builders: Wilson & Rogers.

H. O. Wiseman



Decorative brick for a service yard

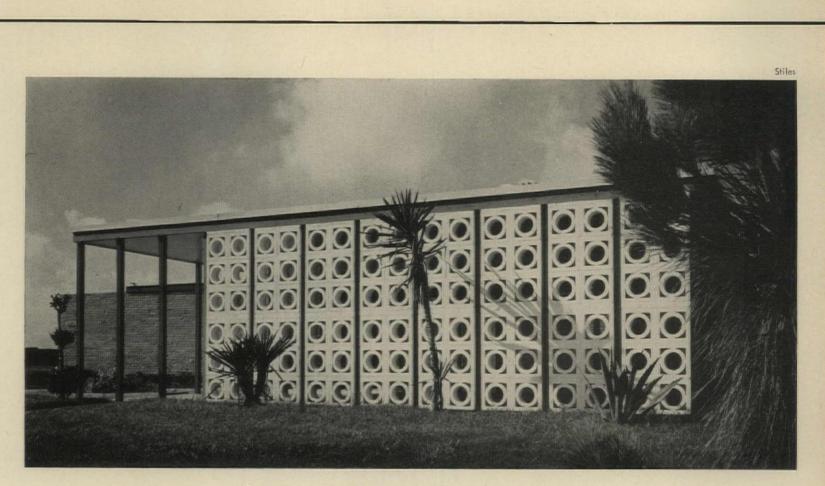
The angled Roman brick wall, above center, hides the service yard of this Shreveport, La. house from passersby on the street. The lower brick wall at left serves the same purpose for a dining terrace. Architect: Lester C. Hass.





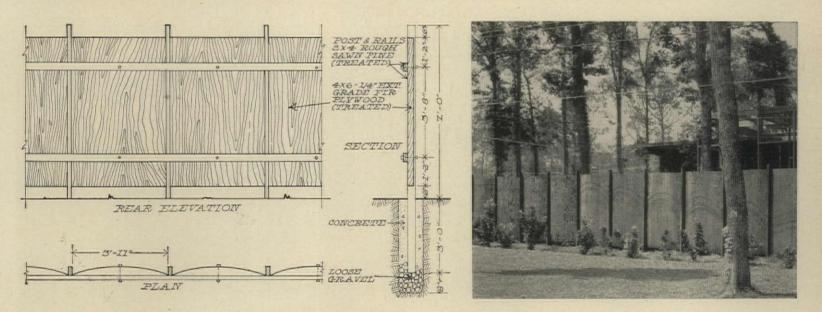
Block for a private play yard

The concrete block wall above surrounds a children's play yard in front of this house in San Mateo, Calif. Turned at right angles, the block gives a lacy effect. Architects: Jones & Emmons. Builder: Eichler Homes.



Precast concrete for a decorative carport

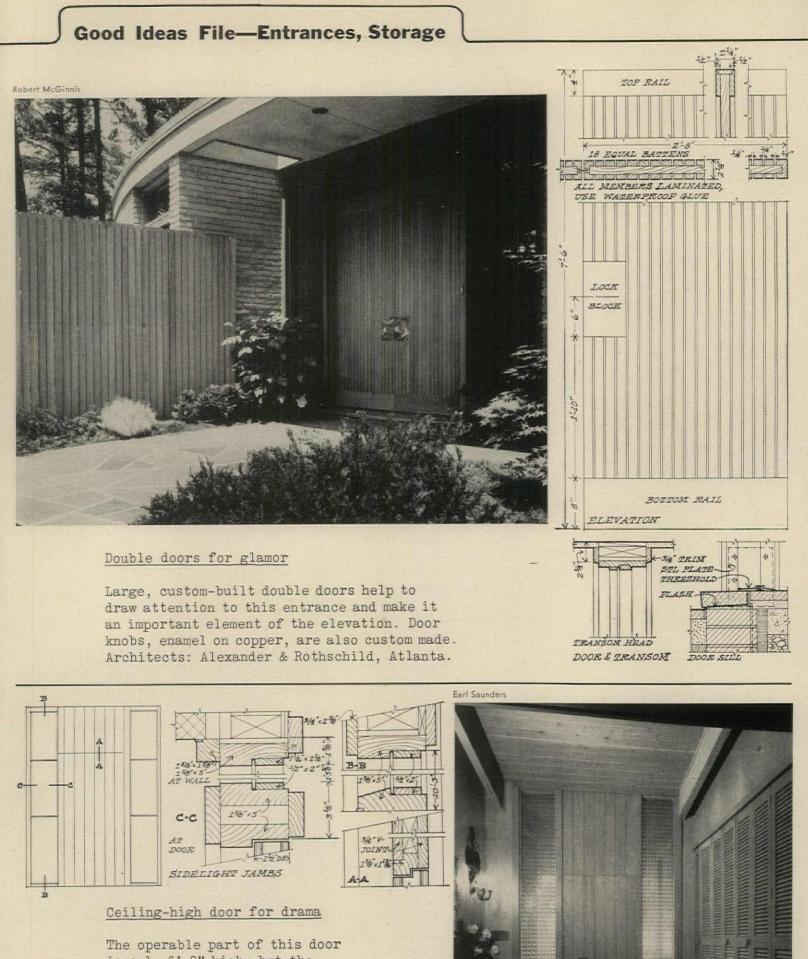
This concrete block adds decoration to the simple lines of a Houston house, also screens the carport and its inevitable clutter. Recessed columns emphasize the panel effect. Architect: William Jenkins. Builder: Alan Huvard.



Plywood wall for the whole back yard

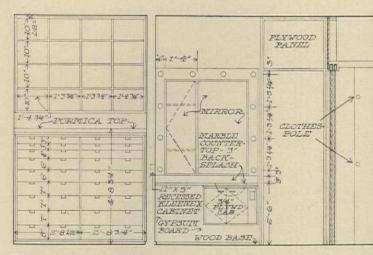
The post-and-plywood wall above provides complete privacy for the rear yard of a house in Beaumont, Tex. Fir plywood and pine posts, treated twice a year with pentachlorophenol in a light oil solution, were used. (The architect suggests redwood plywood and posts as an alternate solution.) Architect: D. Rex Goode. Builder: Winter King & sons. (For more on wood fences, see p 122.)

147



is only 6' 8" high, but the 10' panel in which it is framed makes it dramatic as well as economical. Tall narrow sidelights are "glas-wich." Architects: Erhart, Eichenbaum, Rauch & Blass. Builder: John Ulmer. The house is in Little Rock.





Dressing-room built-ins

2-034

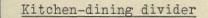
1-62"

-074

STAP FT.EV

Drawers and cabinets give ample storage to this dressing room and bath in a Houston house. The theatre-type vanity adds luxury. Architects: Bolton & Barnstone. Builders: Wilson & Rogers.





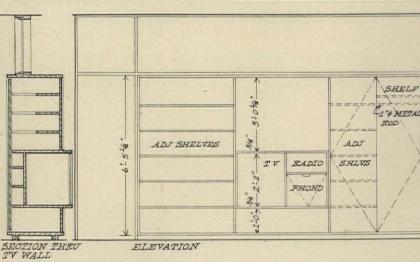
Simple free-standing storage units, opening to both rooms, separate kitchen from dining in this Long Island house. The top unit has glass shelves, glass doors; the bottom has both shelf and drawer space. Architect: George Nemeny.



SHELVES

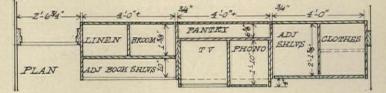
FRONT ELEVATION

ADJ



Storage wall in playroom

TV, phonograph, shelves, and a closet for untidy play things are all part of this wall separating playroom from kitchen. Architect: George Nemeny. /END



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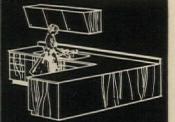
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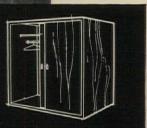
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New products



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are frost-free. Refrigerator and freezer have separate controls. Appliance comes in white or colors or with color vinyl inserts (above).

Westinghouse, Mansfield, Ohio. For details, check No. 1 on coupon, p 242

New style knobs for Challenger 900 Series locksets come in a range of muted colors to complement or contrast with the home decorating scheme. Replaceable inserts in the knob face and a choice of roses give other variations. The new knobs are made of Delrin, a nylon-like plastic-made by DuPont, that will not stain, peel, or rust and has outstanding resistance to impact and abrasion.

Challenger Lock, Anaheim, Calif. For details, check No. 2 on coupon, p 242

And on the following pages

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What the leaders are doing

Report from 478 leading builders. . . . Trade-in supermarket sells houses. . . . see p 187

Publications

Window wall and sliding door details. ... New uses for prefinished block.... High-style kitchen cabinet catalog. ... see p 240

More

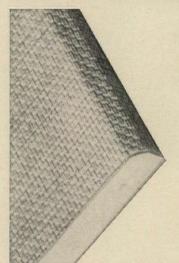
New products

New ideas in kitchen appliances. . . . New year-round filter system. . . . New paneling, flooring, hardware, tools. . . . see p 207

for beautiful accent walls...



New Durasan, the first vinyl-surfaced gypsum wallboard



There's no better looking wall surface than Gold Bond's new Durasan. Its five glamorous colors and richly textured finish make it a beautiful part of any room in the house. Durasan is as practical as it is beautiful. The vinyl plastic surface is completely child-proof: it won't scuff, crack or chip, and can be washed with soap and water. Durasan cuts finishing costs because it goes up fast, needs no additional finishing of any kind. Ask your Gold Bond® Representative or write Dept. HH-260 for free samples and literature.

NATIONAL GYPSUM COMPANY, BUFFALO 13, NEW YORK



SEE THE 1960 HOMES. GO BIY!

KAISER ALUMINUM INTRODUCES A UNIQUE NEW PROGRAM

TO HELP YOU SELL YOUR NEW HOMES ALL YEAR LONG!

- with nation-wide TV support throughout 1960...
- with Spring kick-off campaigns in top new home building areas...
- with new information and new techniques to help you build with aluminum
 —the nation's most talked-about new-home building material...

Read More About It On The Next Three Pages ...

THROUGHOUT YOUR BEST SELLING SEASONS,

KAISER ALUMINUM'S MAYERICK

4 115

WILL HELP PROFESSIONAL BUILDERS

EVERYWHERE SELL TO 40,000,000 TV VIEWERS

"Maverick"— with more than 40,000,000 viewers every week — holds the largest audience of any Sunday-evening TV entertainment! This vast audience will be watching commercials with a theme that sells for professional builders . . .

"SEE THE 1960 HOMES...*GO BUY!"*

These commercials show viewers the better way of living offered in a new home . . . present new features and values that make 1960 the year to buy...help build the kind of model-home traffic you can *sell* to!

Kaiser Aluminum has established this program to help you apply these advantages to your own building projects.



To Build Better...To Live Better *trademark Kalser ALUMINUM & CHEMICAL CORPORATION

This special TV campaign, concentrated in the Spring selling season, will be backed by a complete supporting program — outdoor advertising, exciting new "high fidelity" color newspaper pages and a series of follow-up two-color newspaper advertisements. SPECIAL CAMPAIGN HELPS LAUNCH SPRING SELLING SEASON IN THESE TOP NEW-HOME BUILDING AREAS:

Kaiser Aluminum will create special TV commercials to deliver *local impact* in 16 major new housing markets!

Seattle, San Jose, San Diego, Phoenix, Dallas, Hartford, Atlanta, Orlando, New Orleans, St. Louis, Minneapolis, Denver, Washington, D. C., Cincinnati, Detroit, St. Paul.

And Kaiser Aluminum backs up these majormarket TV efforts (working in cooperation with local Home Builder Associations) with this complete supporting campaign to build model-home traffic.

A-Exciting outdoor posters - seen all over town!

B—The same message on city bus posters—rolling from downtown to suburbia!

C—Special full-page insert-type newspaper ads in exclusive high-fidelity color! (Builders' names and addresses listed.)

D—Large-space, follow-up newspaper ads — two color, repeated on two successive week-ends! (Builders' names and addresses listed.)

HERE'S HOW YOU CAN TIE-IN-AND CASH IN!

If you are a builder member of the local association of the NAHB in one of the 16 markets named, you will be contacted with details of the opportunity this campaign offers.

The materials shown below are available to participating builders — to help them tiein with this tremendous selling campaign right at their own model-home locations.

1. Distinctive lawn signs repeat the colorful outdoor poster design, feature builder's name.

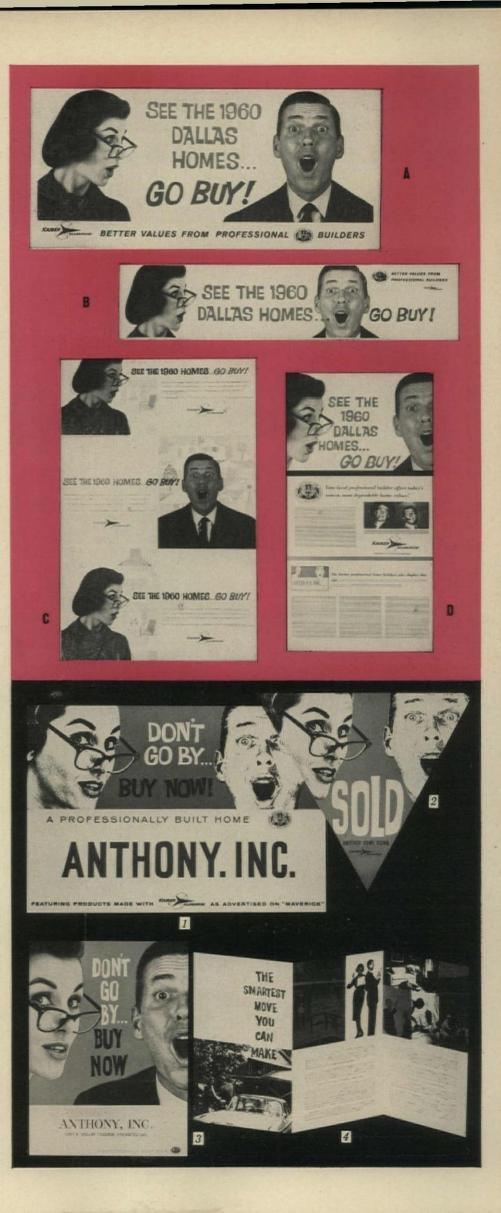
2. Dramatic triangular "Sold" signs help add more sales excitement in your home-selling location.

3. Unique "Prospect Portfolio" organizes vital home data for prospect, gives salesman valuable follow-up lead; large space on cover for your imprint.

4. New booklet helps you sell prospects on the reasons why a professionally-built new home is their best investment in the future.

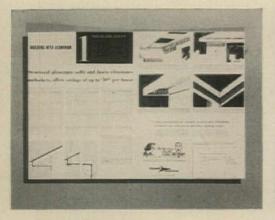
KAISER ALUMINUM OFFERS BUILDERS NEW BUILDING IDEAS WITH ALUMINUM—TODAY'S MOST TALKED-ABOUT MATERIAL!

SEE NEXT PAGE



KAISER ALUMINUM BRINGS BUILDERS NEW PRODUCT IDEAS, NEW APPLICATIONS, NEW PROBLEM-SOLVING TECHNIQUES.

NOW IN 1960, ALUMINUM is offering more and more ways to add value, cut costs, save time and stimulate home buyers' demand.



"Building With Aluminum" Advertising Series—These ads are "idea finders" for builders, introducing new products, new application ideas, money-saving construction techniques. Watch for these idea-stimulating ads appearing regularly in this leading builder publication.



Product Information Bulletins — These bulletins, to be mailed directly to builders, present actual "how to" information for new application techniques and for newly-available aluminum building products. Sign up now for this valuable series! (See coupon below.)



Aluminum Building Product "Supermarket"—To show builders how aluminum products add values, Kaiser Aluminum will set up special showings of locallyavailable aluminum building products in each of the 16 Spring-Campaign cities.



Aluminum Building Products Service Centers—Permanent education and display centers are being established in Kansas City and Cleveland. Their purpose is to serve home buyer prospects both before and after they buy ... and to offer builders assistance in locating and using aluminum building products.



Major Building Conventions—Throughout 1960, Kaiser Aluminum will participate in bringing professional builders the newest in aluminum building material ideas... through such important builder-sponsored events as the NAHB convention.

THIS PROGRAM CAN START WORKING FOR YOU-RIGHT NOW!

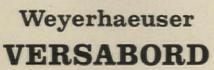
This Kaiser Aluminum program is intended to help you put to use the many new aluminum products that can help you apply improved methods to your own building projects. Send the coupon today.

Department	HB-153 fe Drive, Oakland 12, California	a , me.
Gentlem	ien:	
	Please enter my name to Bulletin series.	receive the Product Information
	indicated (I understand manufacture aluminum I mation on local availabi	cal sources of aluminum product that Kaiser Aluminum does no building products, and that infor ility will be forwarded to me by sers of Kaiser Aluminum).
(Please w	rite in type of product needed)	
NAME		
COMPAN		
ADDRESS		
CITY		STATE



Kaiser Aluminum & Chemical Corp., 300 Lakeside Drive, Oakland 12, California

Guaranteed Underlayment





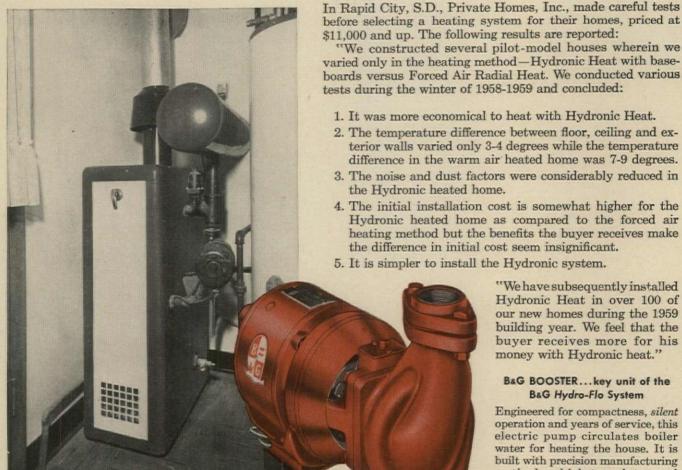
every panel is grade marked and backed by our performance guarantee

> You can use Versabord underlayment with confidence. When installed according to Weyerhaeuser instructions, Versabord is one of the most dependable components in your flooring system. With performance guaranteed, it's the "trouble-free" base for tile, linoleum or carpeting. For further details write:

> > Weyerhaeuser Company Silvatek Division • Tacoma, Washington



private homes, inc. INSTALLS Hydronic^{*} HEATING IN OVER ONE HUNDRED HOMES



before selecting a heating system for their homes, priced at \$11,000 and up. The following results are reported: "We constructed several pilot-model houses wherein we

varied only in the heating method-Hydronic Heat with baseboards versus Forced Air Radial Heat. We conducted various tests during the winter of 1958-1959 and concluded:

- 1. It was more economical to heat with Hydronic Heat.
- 2. The temperature difference between floor, ceiling and exterior walls varied only 3-4 degrees while the temperature difference in the warm air heated home was 7-9 degrees.
- 3. The noise and dust factors were considerably reduced in the Hydronic heated home.
- 4. The initial installation cost is somewhat higher for the Hydronic heated home as compared to the forced air heating method but the benefits the buyer receives make the difference in initial cost seem insignificant.
- 5. It is simpler to install the Hydronic system.

"We have subsequently installed Hydronic Heat in over 100 of our new homes during the 1959 building year. We feel that the buyer receives more for his money with Hydronic heat.'

BaG BOOSTER ... key unit of the B&G Hydro-Flo System

Engineered for compactness, silent operation and years of service, this electric pump circulates boiler water for heating the house. It is built with precision manufacturing methods which translate good

design into superior product. The B&G Booster has a solid reputation for quiet, dependable and long-lived operation. That's why over three million units have been sold to date!

Hydro-Flo SYSTEM

COMPANY Dept. GB-10, Morton Grove, Illinois

L& GOSSETT

Photo shows small space required by a B&G Hydro-Flo System. The boiler can be installed at any level within a building.

HYDRONIC HOMES SALES PROMOTION FOR BUILDERS

A comprehensive program of ideas and sale helps for utilizing the outstanding and exclusive advantages of hydronic* heating. Every builder should see this -there's no obligation in presentationgetting the facts. Write, phone or wire today.

*Modern hot water heating.

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



It HAPPENED to HAPPEN in BLOOMINGTON, Indiana

A group of conscientious people in a small Midwestern town made a decision recently that could revolutionize ceiling construction. In building two new high schools in Bloomington, Indiana, the architect, contractor and school board members all wanted the most attractive ceilings possible—providing maximum sound control and desirable fire protection—but at the lowest possible cost to the taxpayers.



BESTWALL ACOUSTIC PLASTER

From among many possible materials, they selected Bestwall Lite Acoustical Plaster, sprayed on Bestwall 5%" Firestop Gypsum Backer Board—the first time the combination had been used on a major construction job.

This represents a radically new method of application for acoustical ceiling—the simplest, most effective and least costly method ever developed. Typical of Bestwall custom quality, it has a tremendous potential in new construction and remodeling, for all types of building.

Let Bestwall help you solve those difficult plastering applications; see your Bestwall representative or write .

YOUR BEST BUY IS

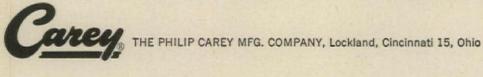
BESTWALL GYPSUM COMPANY

Ardmore, Pennsylvania Plants and offices throughout the United States

SIDING is CAREY'S business

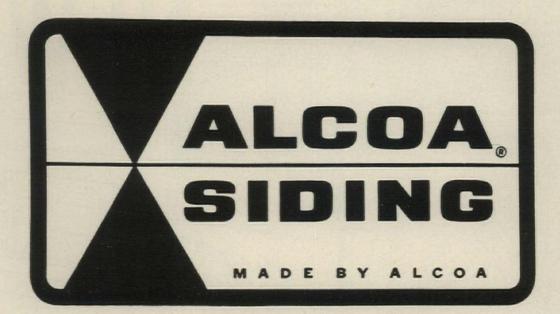
Alcoa Aluminum Siding is CAREY'S NEWEST product!

CAREY is your reliable source of supply for Alcoa Aluminum Siding, The Three Wonderful Walls In One... Now manufactured Carey warehouse stocks at Cincinnati, Ohio = Perth Amboy, New Jersey = Houston, Texas = Boston, Massachusetts = Atlanta, Georgia = Memphis, Tennessee



CALI

Your Carey Representative for full information on Alcoa Aluminum Siding, and on these Carey Quality Products: Ceramo ceramic-surfaced Siding = Styletex plastic-surfaced Siding = Fire-Chex Underwriters' class "A" and Roofmaster self-sealing Roofing Shingles = Miami-Carey Bathroom Cabinets and Accessories = Kitchen Range Hoods = Ventilating Fans = Door Chimes = and hundreds of others.



MANUFACTURE FOR

Barrett R

Your Barrett representative can

take orders today for the complete

line of Alcoa Siding. Prompt, dependable delivery is assured from seven conveniently located Barrett warehouses. And you can top off your next order of Barrett building materials with Alcoa Siding. Just call your Barrett representative, or contact us direct.

DISTRICT SALES OFFICES:

1327 Erie St., BIRMINGHAM 8, Ala.; Merchandise Mart, CHICAGO
 54, III.; 3121 Euclid Ave., CLEVELAND 15, Ohio; 323 South 67th
 54, HOUSTON 11, Texas; 261 Madison Ave., NEW YORK 16, N. Y.;
 36th and Grays Ferry Ave., PHILADELPHIA 46, Pa.; 1125 E. More-head St., CHARLOTTE, North Carolina; 764 Vandalia St., ST. PAUL,
 Minn.; 378 Commercial St., MALDEN 48, Mass.





Nationally advertised to help you off to a BIG sales start

-

IEWS

Perhaps the most massive national consumer advertising program ever put behind a building product will proclaim the news of Bird's great new Alcoa Aluminum Siding.

TV, radio, newspapers, and national magazines all over the country will carry the news right into your own sales area. And all kinds of sales aids and merchandising pieces will help you launch a profitable campaign and sell homes faster.

Ask your Bird Salesman for detailed product and price facts and merchandising aids. Or write Bird & Son, inc., East Walpole, Massachusetts.

NEW BEAUTY THROUGH

HOUSE & HOME

The country's finest <u>ALUMINUM</u> <u>SIDING</u>

by two great names!

made by ALCOA expressly for BIRD

ADD THIS BEAUTY AND DISTINCTION TO YOUR REPUTATION FOR BUILDING QUALITY HOMES OF FINEST PRODUCTS

THE ONLY SIDING on the market made by a basic aluminum manufacturer . . . engineered, manufactured and warranted by Alcoa. This horizontal siding, made by Alcoa for Bird, is fully insulated with polystyrene foam *and* reflective foil; also available uninsulated. The finish, weatherresistant and rot-proof, is Du Pont's beautiful lucite acrylic in white and five decorative pastels, baked on to stay.

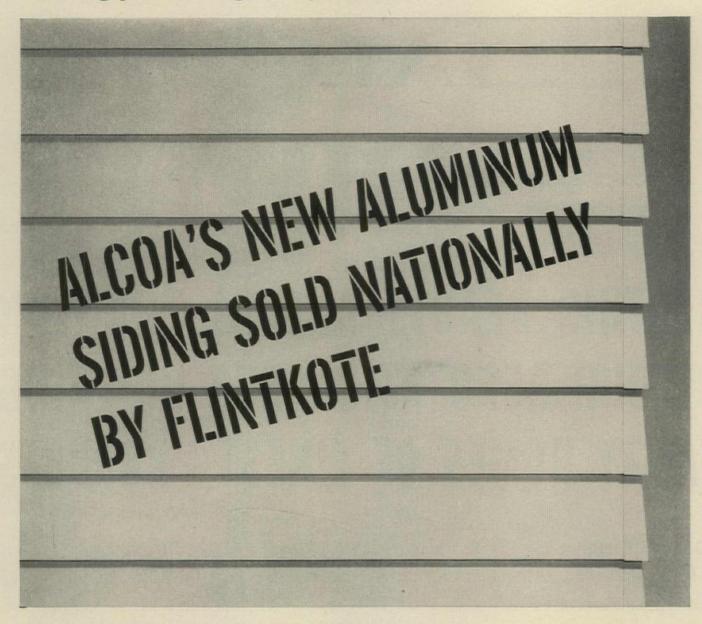
A QUALITY PRODUCT all the way through, from basic material to manufacture, this superlative aluminum siding is fully controlled all along the line by Alcoa to its own high standards of precision and beauty. It is termiteproof, rodentproof, fire resistant and maintenance-free. Your customers will stay sold. No danger of kicks or complaints with two such names as Alcoa and Bird behind a product!

TO ADD SALES APPEAL TO THE HOMES YOU BUILD

Two great names...

ALCOA, and FLINTKOTE.

bring you one great product!



Alcoa . . . the biggest name in aluminum and Flintkote—the biggest name in building products! It's a hard-to-beat combination backed by a powerful, multi-million-dollar advertising and sales promotion program. When you build with Alcoa Siding, brought to you by Flintkote, you have the industry's newest and most exciting building product . . . a quality feature that impresses new home buyers . . . makes your new homes easier to sell.

For particulars: details on prices, delivery, write: THE FLINTKOTE COMPANY, 30 Rockefeller Plaza, New York 20, New York.

FUNTRACE America's Broadest Line of Building Products



"We have been sold ahead for two years and are operating smoothly on our planned program," says Charles Mouch, President of Hinde Development Company, Inc., Sandusky, Ohio. "Our Fairview Lanes development of 408 home sites is one-third completed. Our customers are proud of their Pease Homes... they're our best salesmen. The original planning provided by the Pease staff has paid off with an attractive neighborhood, a fine financing program —and with profits!"

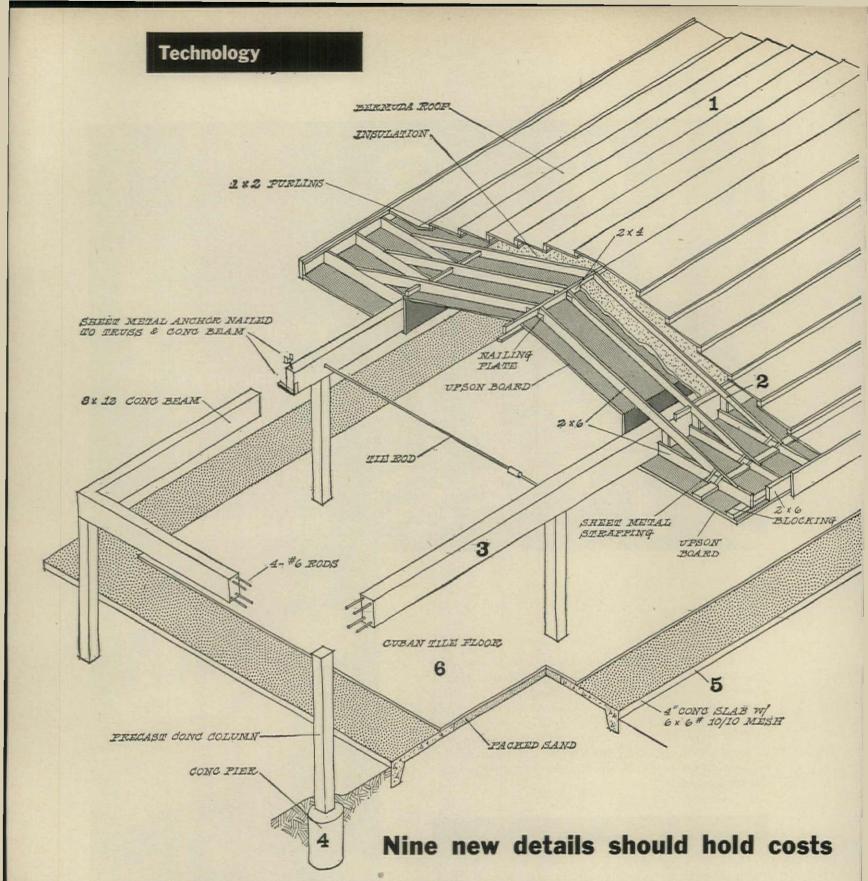
Pease offers land developers and builders with F. H. A. approved lots, a sound program for a quicker conversion of LAND to liquid profits.

- Complete F. H. A. Processing and Financing Service, includes securing... (a) F. H. A. conditional commitments; (b) construction money; (c) mortgage loans.
- Customized Architectural Service...to produce quality homes best suited to your market.
- Personalized Model Home Merchandising and Promotion...a complete model home package including advertising aid, display material and professional advertising assistance.

For more information, write or phone William Stricker, General Sales Manager, and arrange for a sales representative to call. "We are converting land inventory to profits with quality Pease Homes"



PEASE HOMES and Building Materials 935 FOREST AVENUE HAMILTON, OHIO





RENDERING shows one design built around new system.

Florida Architect Rufus Nims developed the structural and curtain wall system detailed above with two goals in mind:

1. A sq ft cost as low as concrete-block-stucco, but

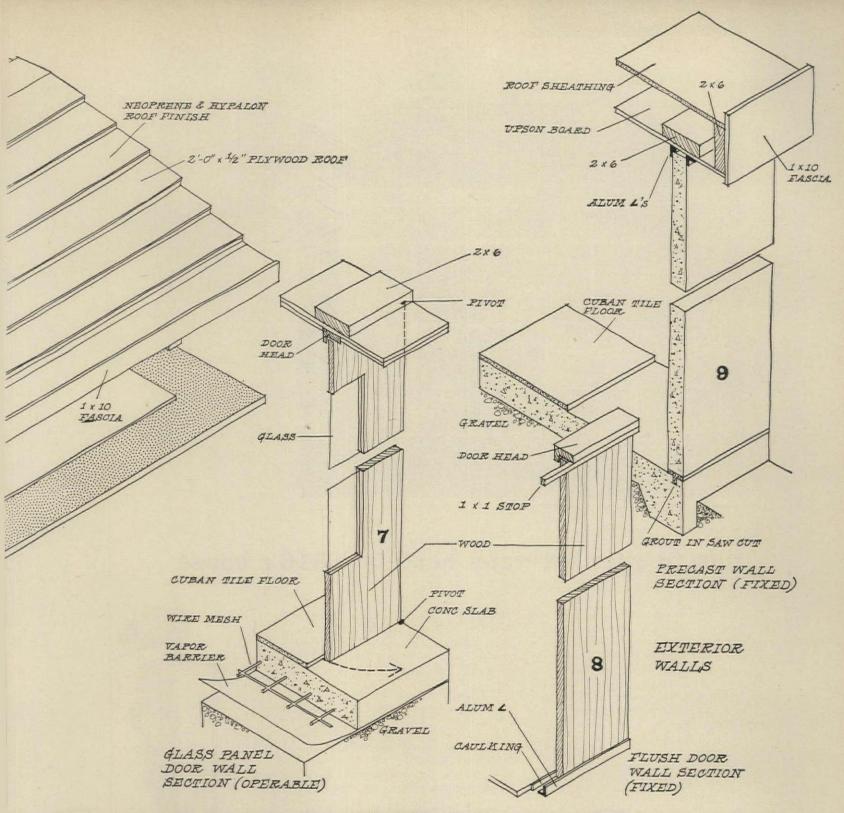
2. Design flexibility much greater than is possible with CBS—which requires heavy (and heavy-looking) load bearing walls, does not lend itself to big glass areas.

CBS construction costs between \$6 and \$7 in southern Florida; careful cost estimates show that houses built using Nims' system will come in at less than \$7. Nims designed the system for Starglade Corp, Miami, a realty and financing company whose builder affiliates will soon begin building several designs using the new system.

Here are the nine details (keyed to the drawing above):

Detail 1 Bermuda roof is formed by nailing 1x2 purlins to the top edge of a 2' wide plywood sheet. Starting at eave, roof is nailed up rafters to ridge.

Detail 2 Roof frame consists of 2x6 rafters with a built-in



to \$7 a sq ft in this industrialized house system

6' overhang. Rafters are strapped to the concrete roof beams, so rods tying the reinforced concrete beams together act as the tension chord of a truss.

Detail 3 Reinforced concrete post-and-beams are poured in place. Side forms for the beams are stripped the day after pouring so roof framing can be placed, but the supporting falsework is left until concrete has fully cured.

Detail 4 Pier footings can be poured or precast; hole for footing is dug by post hole augur.

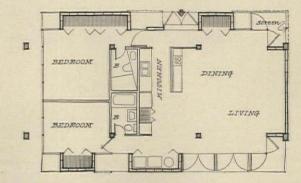
Detail 5 Instead of a complete slab, Nims uses 3'-6" wide strip of concrete around the perimeter of the house. This strip acts as a form for a packed sand subfloor.

Detail 6 Precast Cuban floor tile, a pressed concrete, is laid in place on the packed sand bed. Joints are grouted.

Detail 7 Walls are hollow-core doors, flush or glass paneled. Openable doors swing on pivots, so no mullions are needed.

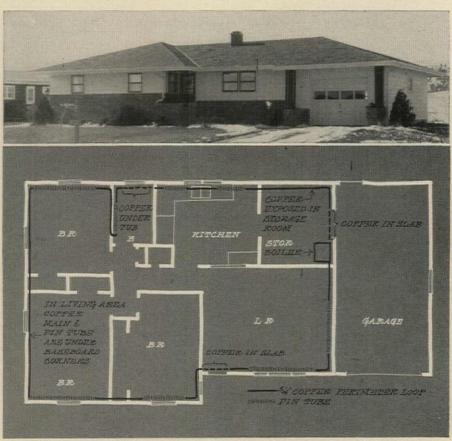
Detail 8 Non-openable flush doors are set with a wood stop at top, aluminum angle and caulking at bottom.

Detail 9 In areas with CBS codes, precast concrete panels are used with stops at top, a grouted key joint at bottom.



HOUSE PLAN shows bathroom-kitchen core and openable walls.

starts on p 170



HOUSE by Builders Panuska & Fraley costs \$11,000 with hot-water heat, all improvements.

How to offer hot-water heat—at \$616 a house

That is the exact cost figure-labor and materials-for the hot-water heating system in the \$11,000 houses shown above and built in Rapid City, S.D. by George Panuska and Ray Fraley.

They put the system (see diagram above) into 150 houses last year, and plan about 150 more this year.

Builder Panuska points out that costs for most hot-water systems in houses like this average about \$900. The \$616 figure, he adds, is less than \$200 more than the cost of a warm-air system.*

Here is how costs are held down:

1. Working closely with plumbingheating contractor D.V. Cline, Builders Panuska & Fraley planned a simple,

*Warm air would cost Fraley & Panuska \$404 a house, according to latest bids; and \$25 extra work at the foundation stage positioning ducts and mesh before concrete is poured.

efficient perimeter baseboard loop system for the house (see above). Cline then figured the materials (detailed below) which became a standard package.

2. Cline purchased this heating package in volume, enough for 50 houses.

3. In his shop, Cline prefabricated the heating package into subassemblies that need less than 20 on-site joints to complete the installation. Result: on-site work is held to 51/2 man-hours.

Fraley & Panuska switched to this system from warm air heat. Reason: "We find it a very attractive sales feature. Ours are the first tract houses in Rapid City to have hot-water heat, and a lot of our buyers are second-time buyers who want a radiant system. They feel they are driving a Cadillac for a Chevrolet price."

Here is the heating package that went into the houses:

1: 2" tee, black

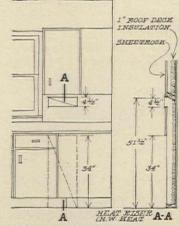
1: package boiler thermostat 1: pump 1: 2" x 1/2" bushing, black 2: 2" x 3/4" bushing, black 3: 3/4" x clo nipple, black 1: 4/2" x 6" nipple, black 1: 4/2" x 21/4" nipple, black 1: 2" x 21/2" nipple, black 1: 3/4" 90° st ell, black 1: 3/4" 90° ell, black

1: 1/2" 90° ell, black

1: 2" tee, black 2: 4/2" plugs, black 1: 1/2" sweat stop 1: 1/2" M boiler drain 1: 3/4" M adapter, copper 1: 3/4" cop x M ell, copper 1: 3/4" x 1/2" tee, copper 100': 3/4" M copper 18: 3/4" 90° ell, copper 5: 3/4" couplings, copper 2: 3/4" baseboard tee, copper 2: 3/4" baseboard tee, copper 2: #9 air vents valve cover 1. end covers (rh & lh) 2: inside corners 3. brackets 5: dampers 1: length, 8', element only length, 3', baseboard unit lengths, 5', baseboard unit lengths, 8', baseboard unit 5: lengths, 8', cover only



PACKAGE BOILER requires only three on-site connections.



KITCHEN HEAT comes out of counter registers over finned tube.

Technology continued on p 176

NEW HOUSE IDEAS YOU CAN MERCHANDISE





lie of trademarks and RCA authorized by trademark owner Radio Corporation of America

exactly to any cabinet decor on the job in just minutes without changing doors!

A dishwasher

you can match

Now, with new RCA WHIRLPOOL built-in dishwasher and exclusive Select-A-Door* trim kit, the dishwasher in your kitchens can match *exactly* the cabinets... match the drapes or floor covering... or harmonize with any other kitchen decorating. Simply fit any material up to $\frac{1}{4}$ " thick...wood, linoleum, plastic, Formica, paper, cloth... into the beautiful chrome frame and attach it to the dishwasher front. That's all, no doors, timers or escutcheons to remove ... the job is done in a few minutes.

In addition, RCA WHIRLPOOL dishwashers have greater capacity, convenient Dial-A-Cycle* controls, Filter-Stream* system that washes dishes spotlessly clean and other wanted features that add woman appeal to your kitchens.

MAIL COUPON TODAY

*Tmks.

Contract Sales Division, Whirlpool Corporation, St. Joseph, I	HH-2-0 Michigan
Please send me complete informati washers and exclusive Select-A-Doo	
Name	
Firm Name	
Firm Address	
City	Zone
County	State

FEBRUARY 1960

173

Now...from YOUNGSTOWN

the only built-in oven-range that installs like a base cabinet

cuts labor costs

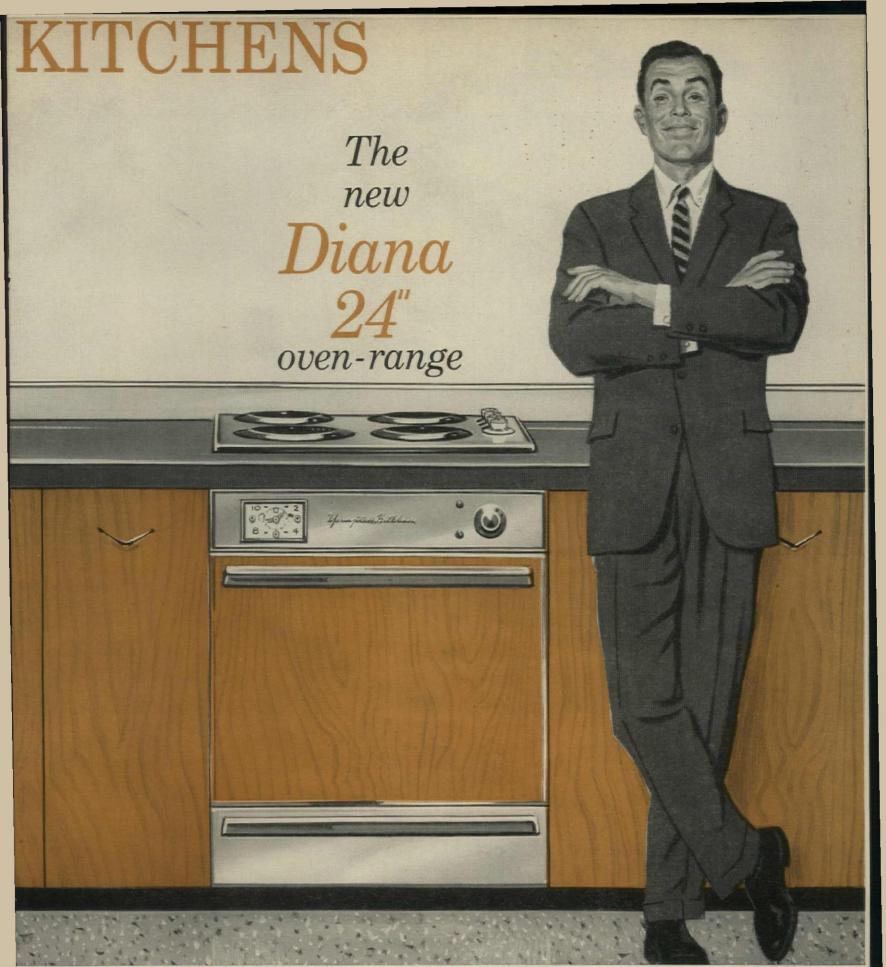
Installs in 15 minutes! Wired (and serviced) from a single junction box. Can just slide into place as one unit.
Make a standard square cut-out in counter top for drop-in *surface* unit. No sealers to install or separate controls to mount. Then slide complete *oven base* unit in place under counter.

flexible

Range units may be placed at any point along counter top. *Do not* have to be installed directly over oven.

saves on cabinet costs

• Eliminates need for separate cabinets. No space-consuming oven cabinet or separate range-top base cabinet.



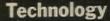
"custom-built" look

• Flush front—fits perfectly with Youngstown Kitchens base cabinets. No jut-outs to interrupt the sleek look of matching units. • 24" De Luxe and Custom 4-burner electric surface units. Hinged to lift up for easy cleaning. One 8" and three 6" burners—8" burner on De Luxe unit has Thermo-Magic control—makes every pan an

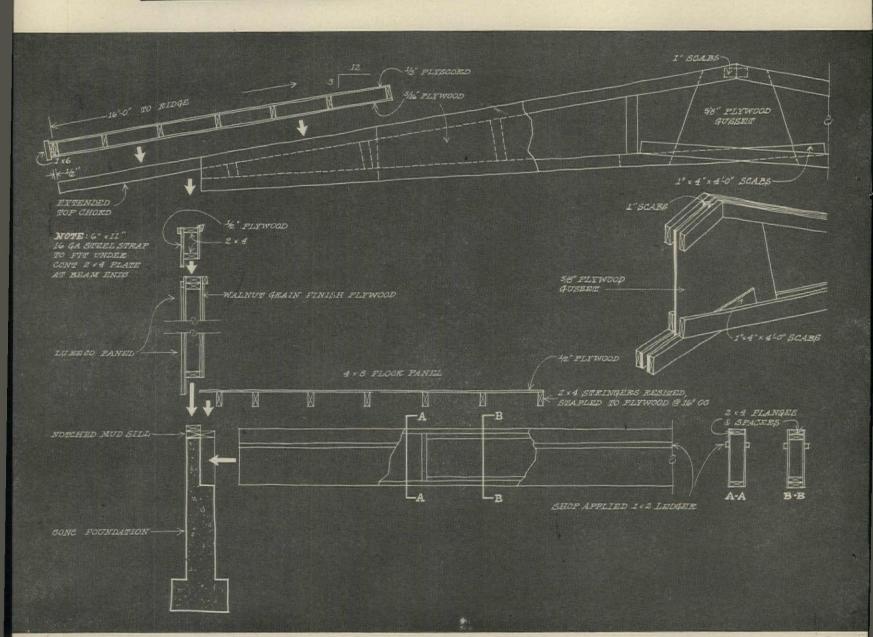


automatic cooking utensil. Each is nickel-chrome lined. • Fingertip controls on top. • Smooth oven interior makes cleaning easy. • Smokeless broiler pan. • Available in White, Chrome, Monterey, Antique Copper, Cherrywood, Honeywood. Ask your Youngstown Kitchens Sales Representative for details. Or mail this coupon:

American-Standard, Young	stown Kitchens Div.	
Builder Information, Box H	H-260, Warren, Ohio	
Your new DIANA 24"	OVEN-RANGE sounds right for my houses.	
Rush information im	mediately.	
NAME		
FIRM NAME		
ADDRESS		
CITY	STATE	







New roof and floor components

save time and materials,

speed erection of LuReCo houses

Using the cathedral-ceiling box beam and roof panel system detailed at top in drawing above, Champaign, Ill. Contractor Richard Fackler cut roof costs an estimated 50% in a new LuReCo demonstration house (see also the photos on the facing page).

And using the box beam and floor panel system also detailed in drawing, Chehalis, Wash. Builder George Osborne and a six-man crew laid complete framing and subfloor for a 1,170 sq ft house in just ten minutes (see photos facing page).

Both new sets of components were developed specifically to work with existing LuReCo components; to add design flexibility to the LuReCo system and to cut floor-framing costs and cathedral-ceiling costs.

They were developed by a new engineering agency-Ply-

wood Fabricators Service. PFS, an affiliate of Douglas Fir Plywood Assn, was set up to encourage and spread the use of components.

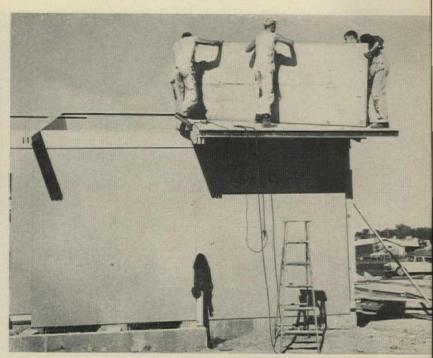
It licenses subscribers—both component manufacturers and lumber dealers—to use PFs-grade trademarks on components that meet its specifications and pass periodic inspection and testing of materials for quality, grade, moisture content, glue-spread, press time, and nailing procedure.

Created in mid-1959, PFs already has testing labs in Chicago, Ridgewood (N.J.), Atlanta, and San Francisco. It will have about 80 subscribers by the end of 1960, says Executive Vice President W.D. Page. As the service expands, additional laboratories are planned in the Portland-Seattle area, Omaha, and Dallas. PFs's address: 1119 A Street, Tacoma.

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CATHEDRAL CEILING BEAMS are spaced on 8' centers; then . . .



STRESSED-SKIN ROOF PANELS are positioned and fastened.

Here is how the new roof system works

Key to the new roof system is an exposed cathedral-ceiling beam, fabricated as a box beam with 5/16'' webs which are resin-overlaid and printed with a walnut grain, need no on-site finishing.

The beams are fabricated in two pieces and joined at the job site by splicing with plywood cover plates nailed to top and bottom flanges and gussets. They are set in place on 8' centers (left photo above) by forklift. The beams support an insulated, stress-skin panel roof deck. The 4'x8' roof panels (right photo above) have 3%" top skins and 5/16" bottom skins pressure glued to 2x4 framing, and are fully insulated. The bottom skin serves as the finish ceiling.

This roof system was used in one wing of the demonstration model in Champaign sponsored by DPFA, LuRe-Co, and PFS. In order to make cost studies (on which results have not yet been released), a second wing was built using conventional trusses, and third wing built using a 2x8 rafter system with glue-nailed joints at eave and ridge that form a rigid bent (this system was developed mainly for farm buildings).

The floor system shown below is a later refinement of the box beam and subfloor panel system which was used in this house.



FLOOR BEAM rests in pocket in foundation.

SUBFLOOR PANELS are dropped between beams.

PANELS rest on ledger strips on side of beams.

Here is how the new floor system works

Key element of the new floor system is a plywood box beam. The beams are glue-nailed, 5" wide by 10" deep, fabricated in 14' or 28' lengths. They can span 14' between footings. Webs of the beam are $\frac{3}{8}$ " Plyscore; flanges and spacers are kiln-dried 2x4s.

The beams are set, on 4' centers, into 8"-deep pockets in the foundation wall. These pockets are formed, during pouring, by reusable blocks nailed to the forms. The 2x8 mud sill and the continuous lower 2x4 in the sill plate must be notched to drop beam in place (left photo above). A polyethylene vapor barrier is nailed to the end of each beam before it is set in the pocket.

The 4'x8' sub-floor panels are $\frac{1}{2}''$ plywood with 2x4 stringers at 16'' centers power stapled underneath (see center photo above).

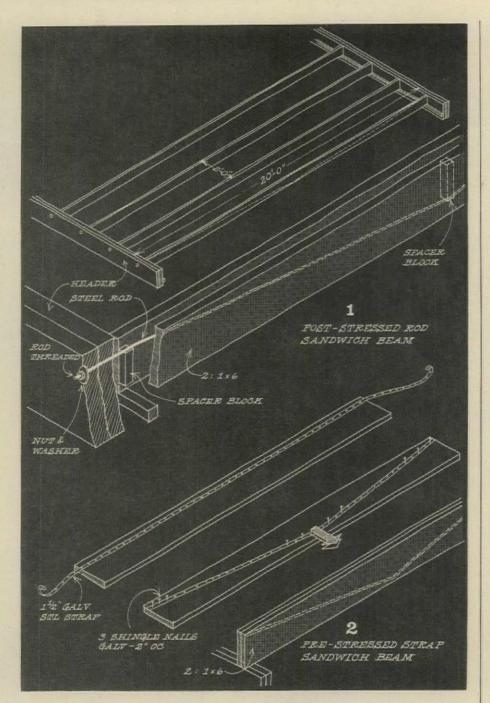
The stringers are 3' 7" long (4' minus 5" width of beam) so they fit snugly between beams; and the plywood ex-

tends $2\frac{1}{2}''$ on each side to form a nailing flange. When the panel is lowered into place, the stringers rest on a $1x^2$ ledger strip glue-nailed to the side of the beams, and the $\frac{1}{2}''$ plywood is nailed to the top of the box beam.

In a house Builder Osborne erected to test this system, sq ft costs for floor framing and sub-floor came to $35 \notin$ a sq ft. Complete house shell, built with LuReCo wall panels and conventional trusses, was erected in 45 man hours.

Technology

starts on p 170



Two new reinforced wood beams save roof framing labor and materials

Both are wood sandwiches—with a steel rod or a strap between.

Both save materials because they require only about half as much lumber (are half as deep) as an ordinary wood beam for the same load and span.

Both save labor because they are only half as heavy as an ordinary beam so are easier to place on the job.

The beams, the product of a twoyear test program, were developed by C. R. (Chet) Pieper of Scottsdale, Ariz. The prototypes were developed by Engineer Pieper for the roof of a building that had to have a low profile, but relatively long, clear spans. The beams in this building have been in place for two years, show no sign of deflection.

Beam 1 in the drawing is of the poststressed type, is built of two 1x6s with a 3/16'' tension rod between. Laid at 24'' centers, the beams span 20' (dead load is small, and no snow load was included in the design). An unexpected benefit of this beam: tightening the rods pulled the beams absolutely straight, making bridging or blocking unnecessary. Pieper figures that this beam costs about \$6 a unit less than a comparable solid framing member.

Beam 2 in the drawing is pre-stressed, strap-reinforced. A later development of beam 1, it has similar strength characteristics but is still cheaper, says Pieper. Made of 1x6s and a $1\frac{1}{2}$ " x .028 strap, this beam showed only an $\frac{1}{8}$ " deflection in a 20' span with a 140 lb concentrated load at the center. The cost of strapping for a 20' beam is about 40ϕ .

Pieper recommends that No. 1 common lumber (or better) be used for either. Twisting, checking, and splitting are practically non-existent.

Contractor guarantees

buyer's heating costs

Salt Lake City Contractor Floyd Olson guarantees, for a five-year period, to pay any difference between actual heating bills and his estimate.

Olson (most of whose installations are electric resistance cable in the ceiling) protects himself two ways:

1. By offering this guarantee only when the builder gives him both the heating *and the insulating* contract, and 2. By figuring his estimates on the

basis of sound technology.

Olson has established his own estimating guides—based on existing texts like the ASHAE Guide. He checks out window placement before construction, specifies double glazing, makes sure a lot of window area faces south for winter sun. Then he insulates to these U factors: walls, .047; ceilings and floors, .0272. If the house has large glass areas facing south, he guarantees a winter heating cost below 8ϕ a sq ft; facing east or west, he guarantees between 8ϕ and 10ϕ a sq ft; facing north, between 10ϕ and 12ϕ .

Some of his houses cost less than 5ϕ a sq ft to heat during a season, but his bonds usually stipulate that costs will not run over 12ϕ a sq ft.

To date, Olson's company—Solar Electric Heat and Insulation, Inc—has guarantees on 800 houses in Utah and Idaho, and Olson reports that he pays only small amounts on a tiny fraction of all the heating bills.

New soil-test apparatus

may be available soon

It will enable a soil engineer to tell in two hours the soil conditions of your site; enable you to determine what type and how strong a foundation you need.

In the plains states, for example, expandable soils can crack slabs when the soil expands and contracts through the wet-dry cycle every season. How much the soil swells will dictate type and strength of slab needed to withstand the soil movement. In many other parts of the country, expandable soils are less of a problem because they remain damp (or dry) all the time.

Here is how the apparatus works: In the field, an unskilled operator takes a small soil sample, tamps it between special stones in his portable unit, adds an exact amount of water, and puts a small meter—to measure soil swell over the sample. From the data read on the meter's dials and from the soil sample, an engineer in the lab can determine plasticity, movement, and other factors affecting soil expansion.

Development of the simple soil testing equipment was begun at Massachusetts Institute of Technology early last year as an FHA project. FHA plans to have the apparatus in most of its field offices as soon as possible. /END ⊗ lazy corner to work! ¥

here's a sink that puts

STAINLESS STEEL SINKS

SELF-RIMMING!

NOW

AT NO EXTRA COST!

en UT

Aeronca does it again! Here's a self-rimmed sink design that puts extra profit in your pocket because it's all yours at *no* extra cost! Called the Aeronca Sani-Rim, this new self-rimming feature saves time and money . . . eliminates rim inventories . . . cuts installation costs. Sani-Rim is now available on the Swirl-Flo and Princess Stainless Steel Sinks shown at left. Made from polished 18-Gauge/Type 302 stainless steel, Aeronca Sinks with Sani-Rim fit any standard cabinet . . . require no extra counter top spaces . . . are actually selfsealing and more sanitary. Send the coupon below for information about the complete line of Aeronca Sinks.

metal products division

RONCA

AERONCA METAL PRODUCTS Dept. H • Middletown, Ohio

Please send me complete information about Aeronca Stainless Steel Sinks with new Sani-Rim design.

NAME			
COMPANY			
STREET			and the
CITY	ZONE	STATE	



Swirl-Flo is also available in single bowl size or corner or sidewall installation.

IT'S THE NEWEST! IT'S THE BEST!

Sani-Rim* is a new selfrimming feature that securely seals the sink to the counter top using a new clamp (designed and developed by Aeronca engineers) that makes it an integral part of the sink for easier installation.







The builder bought it

The buyers loved it . . .





Yours will, too!

Looking for something *practical* and *new* to add appeal to your homes? Herbert L. Sandburg, a prominent Chicago area builder, found it in the NAUTILUS NO-DUCT HOOD*—the new kitchen appliance that eliminates cooking odors, smoke and grease without costly ducts and vents.

Mr. Sandburg installed the NAUTILUS NO-DUCT HOOD in the first 100 of his 250-home development to measure buyer reaction. After several weeks, he asked these new home owners what they thought of it. The unanimous answer was that the NAUTILUS NO-DUCT HOOD was one of the most useful appliances in the house.

"Believe me," says Mr. Sandburg, "The NAUTILUS No-DUCT HOOD is going into all 250 kitchens. And I'm building 20 apartment house units with 200 apartments that will be equipped with the NAUTILUS, too. This is something people want!"



No kitchen is really modern unless there's some way to get rid of cooking odors, grease and smoke. With the NAUTILUS NO-DUCT HOOD AND FAN you can offer pure, clean kitchen air without costly, time-consuming installations required by conventional range hoods.

- Easy screw driver installation . . . no ductwork, carpentry or mason work needed.
- Purifies kitchen air by means of an Activated Charcoal Filter plus a Grease Filter.
- Can be installed in any kitchen . . . on any wall . . . with any kind of range or layout . . . in single or duplex homes and apartments.
- · Full range of sizes and colors available.

GET ALL THE FACTS - MAIL THIS COUPON TODAY!

Nautilus NO-DUCT HOOD	MAJOR INDUSTRIES, INC. 505 N. LaSALLE ST., CHICAGO 10, ILL.
F NAUTILUS NO-DUCT H	 Please rush me full information on the HOOD.
Position	
Company	
Address	



MODEL HOUSES like this have become the standard way of marketing built-for-sale houses all over the US.

The leaders plan more models, higher-priced houses

and they expect 10% more sales in 1960



This is the report from a panel of 478 leaders who built and sold 75,116 houses last year. Each panelist was interviewed for House & Home by the C. E. Hooper Organization.

The market shift to bigger, higher-priced models is indicated by this summary of the survey findings: 33% of the 478 panelists plan to build larger houses in 1960 than they built in 1959 and 40% plan to build higher-priced houses. For full details on these and other 1960 plans (including data on the products and equipment these builders intend to feature in their new models and the wide range of dates they consider best for new model openings) see p 188.

"In almost every market I visited in 1959 I found that less than ten builders of model houses set the pace and most of the other builders have to follow these leaders."

This comment by Carl Mitnick when he was President of NAHB led the editors of HOUSE & HOME to set up the new panel of 478 leading builders. They will be asked to serve as a consulting body for continuing research projects to point up new trends for HOUSE & HOME readers.

The 478-man panel of builders-whom-other-builderscopy was compiled by HOUSE & HOME's editors with the help of lists of model-house builders supplied by officers of many local builder groups representing all areas of the nation. Here are the salient characteristics of the builders on the panel—as shown by their 1959 building and selling activities:

1. Most of these top builders build over 25 houses a year. Specifically:

- -196 (41% of the 478-member panel) built 100 or more houses in 1959.
- -157 (33% of the panel) built 25 to 99 houses.
- -113 (24% of the panel) built fewer than 25 houses.
- -12 (2% of the panel) did not report volume.

—The 75,116 houses built by the 478-member panel account for over 5% of the single-family, non-farm house starts in the US.

2. Most of these top builders sold from model houses. Specifically:

- -77% of the 478-member panel use from one to nine model houses.
- -Four is the median number of models used (half of the builders use more, half the builders use fewer). -3,362 model houses were built by the 478 builders in 1959.

3. Most of these top builders furnished their models with more than carpets and curtains. Specifically:

- -285 builders (60% of the panel) furnish from one to eight models.
- -18 builders (4% of the panel) furnish as many as 20 to 50 models.
- -One builder furnished 112 models last year.

Leaders plan to build well over 10% more houses this year

And the bigger the builder, the more optimistic he is.

This year, 82,778 houses are planned by 444 of the panel members (32 did not predict their 1960 volume). This is 10% over the panel's 1959 total of 75,116. And 208 leaders, about 47% of the panel, expect to sell 100 or more houses for a total of 74,013 units-nearly as many houses as all 478 panel members built in 1959.

Smaller builders on the panel are growing bigger, the survey shows. Last year, almost one-quarter of the panel members were in the under-25-houses category, whereas this year less than one-sixth believe they will build fewer than 25 houses.

Below are tables showing the panel's expectations.

Builder size categories	Number of builders in each category	Percentage of builders in each category	Volume of houses to be built in 1960	Percentages of houses to be built in 1960
Under 25	78	17.6	1,070	1.3
25 to 49	- 78	17.6	2,557	3.1
50 to 99	80	18.0	5,148	6.2
100 & over	208	46.8	74,013	89.4
	444	100.0	82,788	100.0

Leaders plan to open more new model houses in 1960

Last year the panel members opened 3,362 model houses. This year they will show somewhat more, though it is too soon to tell how many more., (Indications are that the average number of models per builder will jump from seven in 1959 to nearly eight this year.)

The survey shows that 427 of the group expect to show 3,329 new models, with 14 planning to use their 1959 models throughout this year. Seventeen did not know in December how many new models they would build, and 20 do not expect to build new models this year.

Most leaders furnish most of their model houses

Most of the top builders on the panel said they furnished the model houses they had on display in '59 (60% of the model houses were completely furnished).

Queried about their plans for '60, some builders had

Here is a rundown on '59 and '60 furnished models:

not made up their minds when the survey was made last December, but among the builders who had come to a decision about furnishing, more planned to furnish all their '60 models than furnished '59 models.

in '60
48%
72%
18% 10%

More leaders will use a special area for product displays

Last year almost half the panelists set aside special areas for quality product displays.

This year slightly over half will use product displays. In 1959, 13% of the builders said they did not have a special area set aside but freely offered the information

that they exhibited products or had displays throughout. For 1960, 10% said they would not set aside a special area but again offered the information that they would have displays throughout the house. Almost 6% of the panelists had not yet come to a decision.

Percent of

Here are the specific figures on product displays:

	builde	rs	total g	roup
	1959	1960	1959	1960
Special area set aside	227	244	47.5	51.0
No special area—				
shown throughout model	61	46	12.7	9.6
No product displays	181	129	37.9	27.0
No response	9	59	1.9	12.4

Number of

symbol of quality since 1906



Goes up with ease and speed adds natural beauty

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

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

0

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

Lockwall is available in a wide choice of carefully selected. Kiln-dried Western woods in modern V-grooved random plank patterns ... clear or knotty styling ... Inland Red Cedar, Idaho White Pine, Inland Larch or Ponderosa Pine. Conveniently packaged in 6 panel units (32" by 7' or 8' lengths) in heavy protective cardboard. Covers 16' of lineal wall space.





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

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

Our facilities, which produce 475 million board feet annually. assure the kind of flexible service today's building industry demands.

POTLATCH FORESTS INC.

LOCK-DECK

* pat. pending

PANELING LUMBER

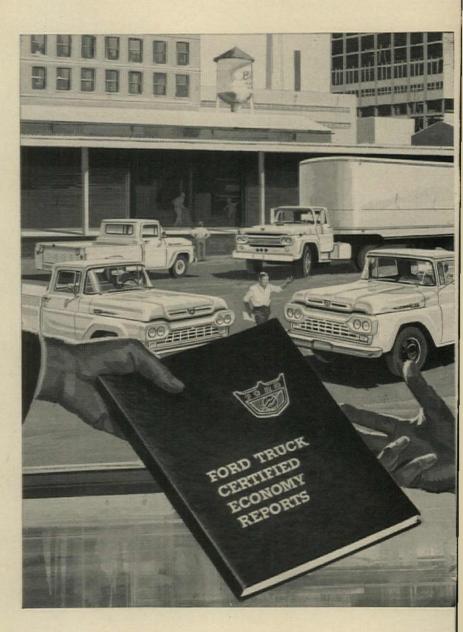
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PATTY-O-PANEL FENCING

Ask your local lumber dealer for more details

EDGE & END GLUED LUMBER

Before you buy a truck, be sure you see this book! It tells what FORD TRUCK SAVINGS can mean to you.



\$26 to \$246 lower priced...25% better

Wouldn't it be great if you could fully test a truck before you bought it? Compare its gas mileage with other makes . . . determine how well it will hold up . . . how reliable it will be on the job?

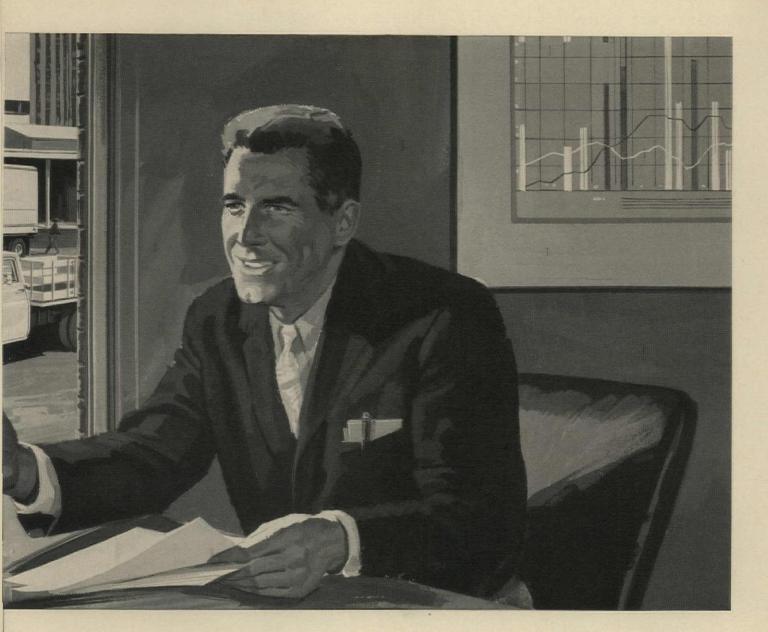
Well, these tests have already been made for you by independent research engineers. The certified results of these tests are now available in the "Certified Economy Reports" book at your local Ford Dealership. These test results, together with a comparison of the manufacturers' suggested list prices of the five leading makes, represent the greatest assurance you can have that Ford Trucks give the most for your transportation dollar. These are the types of savings you can expect with a '60 Ford.

Save with Certified lowest prices*!

Ford's Light and Medium Duty Trucks are priced lower than comparable models of the four other leading makes. For example, you can save from \$33 to \$181 on the list price of a standard ½-ton pickup. The savings on a ¾-ton pickup run from \$32 to \$185 and the initial price advantage on a Ford 1½-ton stake model ranges from \$26 to \$246.

Save with Certified gas economy!

Ford ½-ton pickups beat all competition in Economy Showdown, U.S.A.! Ford's standard 6-cylinder engine delivered more miles per gallon in every test—low and high speed highway driving, simu-



gas mileage...doubled tire life!

lated city traffic and door-to-door delivery. The average figure for all the tests conducted by independent research experts shows a Ford advantage of 25.2% more miles per gallon.

Save with Certified tire life!

Ford's true truck front suspension saves on tire wear. Independent experts checked tire wear of the 1960 Fords with competitive makes using a soft-type suspension and found that the front tires on a Ford lasted twice as long. Your Ford Dealer has all the test results in his "Certified Economy Reports" book. Go in and check the record.

*Based on latest available manufacturers' suggested retail prices, including Federal excise tax, excluding dealer preparation and conditioning and destination charges

FORD TRUCKS COST LESS

... LESS TO BUY ... LESS TO RUN ... BUILT TO LAST LONGER, TOO!

Leaders are scheduling more "off-season" openings

The survey makes clear that you should take the tradition of seasonal openings with a grain of salt.

Many builders automatically plan model houses for a spring or fall opening, believing there is some special sales magic in these two seasons. But the survey reveals that the builders who set the pace are far from rooted in this habit.

Almost 30% of the panelists say they open models any time of the year. And answers from other builders show that homebuilding has become much more of a year-round

Here are the leaders answer to interviewers ...

industry than it once was. Two obvious reasons for the change from wide seasonal fluctuations: the industry is learning how to build during cold weather, and more houses are going up in warm climates. The telephone interviewers had a hard time pinning the leaders down to particular times for openings. Panel members were asked to name the months when they usually open new models, but fewer than half named one or more specific months. Only a minority of the leaders who named particular seasons or months, schedule their openings in the spring.

who tried to get specific months in replies:		
	Total Number	Percent
Any time, year-round	138	28.9
Mentioned specific mor	nths	
January	18	3.8
February	14	2.9
March	18	3.8
April	48	10.0
May	25	5.2
June	10	2.1
July	6	1.3
August	2	0.4
September	17	3.6
October	1	0.2
November	0	0.0
December	1	0.2

Total Number Percent Mentioned one season only Spring 26 5.4 Summer 6 1.3 Fall 2 0.4 Winter 2 0.4 Mentioned two seasons Spring and summer 19 4.0 Spring and fall 61 12.8 2.5 Spring and winter 12 0.6 Summer and fall 3 Summer and winter 10 2.1 Fall and winter 1.9 9 Mentioned three seasons 1.3 Spring, summer, and fall 6 Spring, fall, and winter 4 0.8 0.2 Spring, summer, and winter 1 Summer, fall, and winter 2 0.4

Leaders name top product features to boost 1960 sales

Almost every builder believes that certain products or equipment features are more important than others in selling houses. Leaders know that every product category is important, but they are not unanimous about the order of importance.

To find out how these leaders rate the different categories, Hooper interviewers asked panel members to "name the five main product and equipment features that help your sales the most." No attempt was made to direct answers, so that answers were in effect "write-ins." Some builders named such widely diversified items as high-style chandeliers and heated towel bars. And many builders mentioned other things besides physical equipment, items like floor plans, design, quality, value, location, or their own reputations. Some also disregarded products to mention landscaping, interior decoration, color coordination, and the pre-planned merchandising programs of magazines and utilities.

But the preponderance of answers left little doubt what class of products and equipment the leaders count on most heavily to help sell houses: kitchen equipment, appliances, and accessories were ranked first by almost every builder. And the kind of kitchen equipment most often named was built-in ovens and ranges, mentioned 81 times. (Some builders were so specific that they gave the brand names of almost half the products they mentioned, with one appliance maker named 75 times.)

There is little difference between the features that leaders thought helped them most in 1959 and the ones that they plan to promote most in 1960. Only change in the ranking: windows and doors rank fourth among categories in 1960, ahead of plumbing equipment and bath accessories which they had followed in 1959.

Here is how the five product categories were ranked according to the number of times the panel members mentioned them:

Product or equipment feature	Rank in '60
Kitchen appliances and equipment	1
Air conditioning and heating	2
Walls, ceilings, partition materials	3
Windows and doors	4
Plumbing equipment, bath accessories	5

In addition to the five "main product and equipment features" mentioned, it is significant that the panel made frequent mention of virtually every product classification now being aggressively promoted by building product producers. A noteworthy example is the extremely high mention of hardware. This highly decorative and most important feature has apparently become one of the builders major house-sales helps.

Hooper interviewers uncovered another decidedly important fact for building product merchandisers in the brand consciousness of panel participants. When mentioning plumbing equipment and bathroom accessories, for example, 58% mentioned brand names; 35% mentioned heating, ventilating, and air conditioning brand names.

These facts confirm the importance of model house display of brand name products.

IS A BUILDER BUILDER SHORTSHORTSIGHTED TO SELL ON PRICE ALONE?

The "strictly price" market is changing... 1960 buyers are looking for value first

Today, more builders are building and *selling* quality homes. Why? Because, these builders realize that two out of three new home prospects have already owned their own homes (according to American Home magazine). These buyers recognize the extras that make a house "a good buy." They look for a good location, site planning, a well-designed blueprint and the intelligent use of brand-name products... in other words, good value for the money.

Here are some ways to build and sell the quality people want and can afford...

Here are 6 sales-tested ways to dramatize quality

Many a successful salesman has found that demonstrations such as these have increased the prospect's confidence in the new home and have helped make the sale:

1. Hand the prospect a faucet or other piece of brass as he enters the bathroom or kitchen. Chrome-plated solid brass fittings almost always weigh more than people expect. They have the feel as well as the look of quality.

2. Invite the buyer to rap the side of a bathtub and hear the solid "thunk" of cast iron quality.

3. Show the woman prospect how an oven range with a smooth, nickel-chrome interior is so much easier to clean.

4. Display a piece of flooring from a previous model with the sign "Six months tramping by 67,000 feet couldn't wear out this floor—standard, at no extra cost, in this house."

5. Show the quality features of the heating units by having the salesman point out the symbols that indicate that the model has been tested and approved by such organizations as A.G.A., I-B-R and U.L.

6. Attach the guarantee to the water heater. Have the salesman point out this proof of quality . . . tell prospect that the heater has been performance-rated to supply the needs of a 3-bedroom, 2-bath house (or whatever size you build), plus dishwasher and washing machine.

Trade-ins make it easier to sell a quality house

Millions could afford a better house if they knew of a quick, easy way to dispose of their old home—bought when they had less income.

Those builders who have developed trade-in plans are tapping a big, rich market. In order to sell to this market and to close sales faster, they dispose of the prospect's current home.

Most builders find it convenient to resell

traded-in houses through real estate brokers specialists who know the "second-hand" house market best and may already be handling the builders' new-home sales.

For more details on how to set up a profitable trade-in plan see House & Home, Sept. 1959 or write AMERICAN-STANDARD, Dept. T-39 West 39th Street, New York 18, N.Y.

Here's how to add 14 salable features for a total of about \$900

The following are just a few of the many ways builders can add quality to their houses at a small increase in cost:

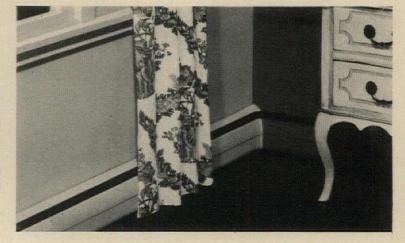
- A corrosion-resistant cast iron boiler, instead of a steel boiler with a hot water heating system, or

 A two-furnace instead of a onefurnace system with warm air.
- Addition of three-zone temperature control to a hot water heating system with a single boiler.
- Sizing warm air ducts for addition of cooling.
- Addition of Weather Station (indoor weather control center).
- A single lever faucet in place of an ordinary sink fitting.

- New quality no-drip fittings rather than budget fittings.
- Addition of a 24" dishwasher-dryer.
- Addition of a 24" oven-range.
- Addition of a food-waste disposer.
- A one-piece toilet instead of a separate-tank toilet.
- A full-sized, 16"-high cast iron tub with large bathing area in place of a small, 14"-high tub with minimum bathing area.
- A choice of colors for fixtures in the master bathroom instead of white fixtures.
- A water heater with a 5-year warranty versus a heater with a 1-year warranty.

Hydronic heat with baseboard panels means quality, comfort

Hydronic^{*} heating, with baseboard panels, is new and appealing to home buyers. They like the draft-free, floor to ceiling warmth and the cleanliness of a Hydronic system. The women are particularly interested in the complete decorating freedom that the compact, attractive American-Standard baseboard heating panels allow. Draperies can be hung to the floor, furniture placed anywhere with this heating system.



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

AMERICAN-STANDARD MONTHLY REPORT

The only rooms you sell completely "furnished" are the bathrooms

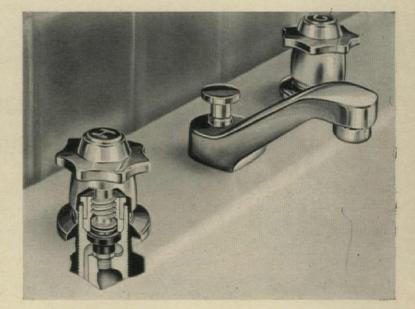
Wall-hung toilet makes buyers

stop, **look**, **talk** about your new homes. One look at the Norwall tells a woman that this is simple, modern design that will look new for years. Have your salesmen point out the off-the-floor installation that allows her to clean under and around the fixture quickly, easily. Like other American-Standard toilets, it is made of genuine vitreous china in decorator colors and white.

Seat and cover snap off for cleaning by pressing buttons at hinge. This solid plastic seat by Church has a smart full-saddle seat, streamlined cover.

Quality fixtures deserve quality

fittings, like these in the new American-Standard Heritage line. No washers to replace with the new Aquaseal valve—when water is turned on, water pressure forces the Aquaseal off the seat, allowing water to flow. Since there is no valve turning on the seat, there is no washer-grinding action, no wear. This means years of dependable service.



New Weather Station controls warm air heating and cooling

Now warm air heating and air conditioning with the new American-Standard Weather Station provides prospects with dramatic visible proof of year-round comfort. Installed almost any place, it reports continuously on indoor temperature and humidity, outdoor temperature and pressure. Push buttons set system for heating, cooling, or air circulation and filtration only. Automatic clock-thermostat gives 24-hour temperature control. Warning light indicates if filter needs changing.



AMERICAN-STANDARD MONTHLY REPORT



New Youngstown Kitchens 24" Diana ovenrange gives kitchen "custom-built" look

The front of the new Diana oven-range fits flush with all Youngstown Kitchens base cabinets. There are no ugly jut-outs to interrupt the smooth flow of matching units. For maximum flexibility, it can be installed as one unit in minutes, or the range top and oven can be installed separately.

Deluxe and Custom surface units have 4 burners . . . three 8" and one 10" . . . and are hinged to lift for easy cleaning. The 10" burner on the Deluxe unit has Thermo-magic control . . . makes every pan an automatic cooking utensil. Chrome lined oven . . . smokeless broiler pan. Available in White, Chrome, Monterey, Antique Copper, Honeywood and Cherrywood.

For more information write to:

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

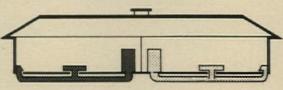
C. F. CHURCH DIVISION Montgomery Street, Willimansett, Mass. 40 West 40th Street, New York 18, N.Y. YOUNGSTOWN KITCHENS DIVISION

PLUMBING AND HEATING DIVISION

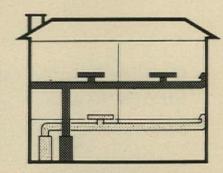
University Street, N.E., Warren, Ohio

NEW CONCEPT: ZONE-A-HOME WITH TWO FURNACES

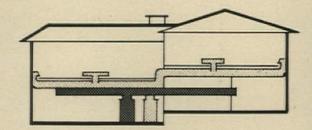
This new idea-heating a home with two furnaces instead of one, is getting an enthusiastic reception from home buyers and builders. Buyers like the idea of complete control of heating comfort in every corner of the home. Builders like the idea of adding a valuable selling feature for little or no extra investment. Many builders have found that American-Standard furnaces are ideal in price, performance, size and ease of installation.



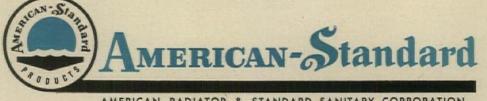
In ranch homes, two-furnace heating assures comfortable heat in even the farthest rooms, because heat for each area comes from its own furnace, controlled by its own thermostat.



In multi-story homes, as in other designs, maximum heat can be delivered where it is needed, when it is needed. This means better heating and much lower fuel bills.



In split-level homes, heat "drift" from one level to another is a problem. Two-furnace heating licks the problem, delivers perfectly balanced heat with no hot spots, no cold spots.



OUGLAS FIR PLYNO SANTIAM'S **QUALITY PLYWOOD** GRADE STAMP protects your building investment

ME



Sweet Home, Oregon Phone EMpire 7-2121, TWX 315-U The Teco Grade Stamp on every sheet of plywood is your guarantee of superior quality. TECO means that plywood carrying this stamp has undergone production line inspection and testing by a technician employed by the Timber Engineering Company. This technician is on duty every day watching and checking every step of the manufacturing process. He knows what goes between the two outer pliesthe core material, the kind and type of glue, patching, in fact the whole operation from log to finished product. Only when plywood meets TECO's rigid requirements is it given the TECO grade stamp approval. For all your sheathing needs use Teco Tested plywood and protect your building investment.

FOR

More leaders will move up the price scale than will move down

prices over 1959 as will drop to a lower price bracket. About the same number of panel members plan to stay

Four times as many panel members will increase 1960 in the same price range as plan to increase prices. The following table analyzes the answers of the 428 builders who reported on prices:

Porcont

	builders	of builders
Higher prices in '60	190	39.7
Lower prices in '60	45	9.4
Same price in '60 as '59	193	40.4
Don't know or will vary	50	10.5

More leaders will increase house size than will decrease it

Five times as many builders will increase 1960 house sizes over their 1959 models as will build smaller houses. But almost half the builders surveyed indicate they will build the same size models. Since land development delays caused many of these builders to postpone openings from

early fall to late fall or winter, it is possible that many will be going into 1960 with the models they opened close to the end of last year (and so they will not be changing sizes early in '60). Here is a table showing the breakdown of house sizes planned:

No. of builders	of builders
157	32.8
32	6.7
227	47.5
49	10.3
	builders 157 32 227

Totals do not add up to 478 or 100% because not all builders answered.

Most leaders use architects to design their houses

5 N T

Nearly three out of five of the panel members will use architects to design all their 1960 models. This fact indicates that the kind of leading builders

who make up the panel are more often aware of the value of professional design service than are run-of-the-mill builders.

	No. of builders	Percent of total
All designs by architects	276	57.8
Some designs by architects	24	5.0
No designs by architects	145	30.3
No response	33	6.9

Most leaders say they have the salesmen and aids to sell quality

Asked by interviewers if they (or their realtor) have trouble getting sales personnel capable of promoting quality sales features in their houses:

62% said "no" Only 37% said "yes" 1% did not answer

And asked if they get the selling help (such as sales aids, sales training, demonstrators) they need from manufacturers, dealers, and distributors:

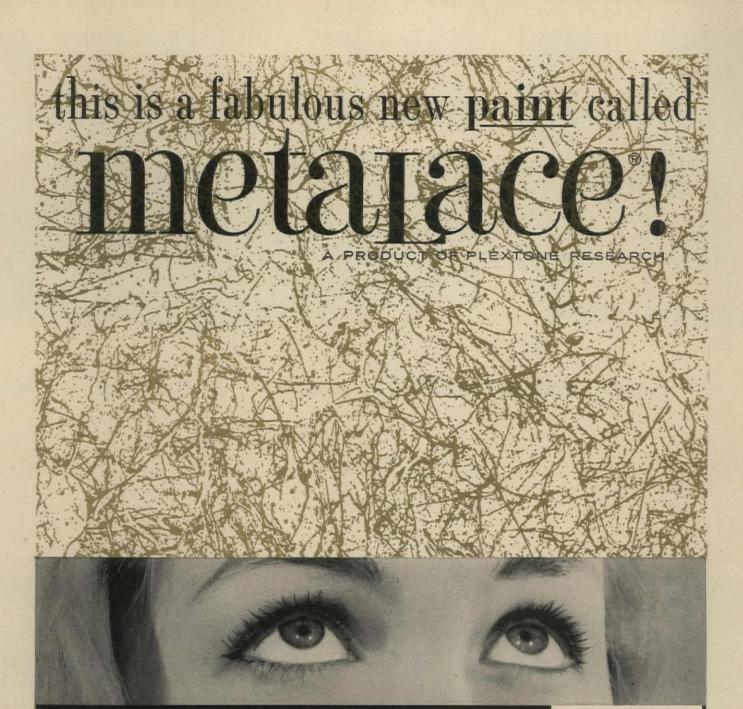
60% said "yes" Only 35% said "no" And 5% "didn't know"

Many leaders say appraisers still do not give credit for quality

Asked if they had trouble getting appraisal credit from many leading builders cannot get credit for quality-it is their mortgage lenders for the added cost of quality products, 21% (99 out of the 478 panel members) said "yes." This percentage is significant because-if so

almost certainly true that a much larger percentage of runof-the-mill builders cannot get credit for the quality they build into their houses.

Leaders continued on p 200



It creates a lace-like metallic pattern of silver or gold over a wide variety of glamorous new decorator colors...

an exciting effect previously available only in the most expensive wall papers...now possible with paint at a fraction of the cost!

Your painting contractor applies MetaLace...quickly, easily, inexpensively for long lasting beauty.

Mail coupon for details on this unique new paint product.

PLEXTONE Corporation of America 2126 McCarter Highway, Newark 4, New Jersey

PACIFIC COAST DIVISION: 10751 VENICE BLVD., LOS ANGELES 34, CALIF.

2123. McCarter Highway, Newark 4, N. J. Please rush color chips & complete data on new METALACE paint. Name Title (or occupation) Title (or occupation) Street Street City City City

PLEXTONE Corporation of America

What the leaders are doing





In this supermarket buyers can trade in old houses for new

start on p 187

To find out how people would react to onestop house buying, Danto Builders last fall erected a big, but temporary, home-shopping center (above) near a busy thoroughfare in Flint, Mich.

Result: "From Labor Day to New Year's Day," says Charles Danto, "we have been selling houses at just short of a house-a-day rate."

So pleased are the Dantos with the way people have responded to the center and to the designs offered that this month they are opening a permanent display center at their 1000-lot Flint community. The new display will supplement the six models which are maintained at the site.

In the display center visitors can see plot plans, construction details, and scale model houses. They can walk into rooms mocked up to duplicate the finished product. Finally, they can find out how much they can expect to get for their old house if they trade it in for a new one.

Says Charles Danto: "New ways to sell houses are always evolving and we try to find the most effective ways. We have found our shopping center gets the best results."



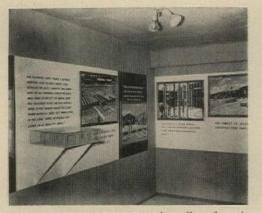
SCALE MODELS show prospects not only how the exteriors of the houses look but how they are sited on each lot for privacy and best use of space.



KITCHEN APPLIANCE is inspected by a woman prospect who was invited to try things out. Room is a full-scale replica in the "supermarket."



FULL-SCALE LIVING ROOM with glass window wall has full-size furniture; cutaways of scale models show other room arrangements.



CONSTRUCTION DETAILS and quality of workmanship are bared on walls by big photographs. At left is a sequence showing how lumber is precut.



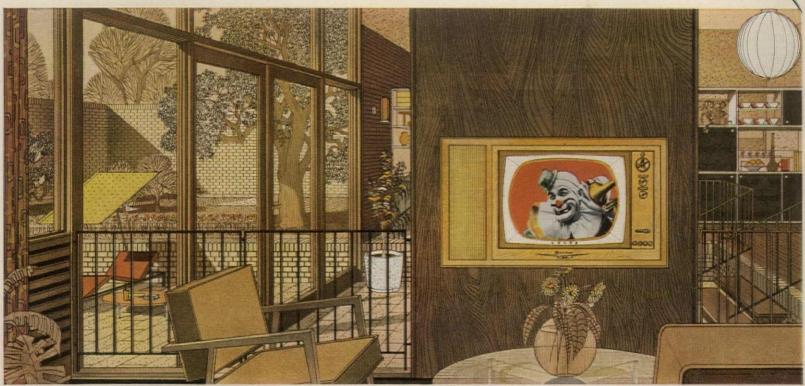
BRAND NAMES are billed as the "Honor Roll" on one wall (left). Actual materials used to build the houses are shown in product displays (right).



BUYERS are told by salesman that they get individualized houses, because they can select the elevations, color, lot size, and materials. /END

Now RCA VICTOR Built-in TV and Stereo... expressly designed for today's modern homes

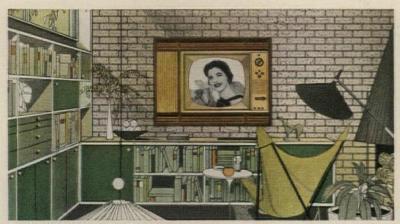
ANOTHER WAY RCA SERVES YOU THROUGH



Room designs by Jacoby

"LIVING COLOR" MURAL TV. Like 2 sets in one, build in the magic of Color TV and get superb B&W reception too. Simplified color-quick tuning, mirror-sharp

V picture, 3-speaker panoramic FM sound, adaptable for stereo. Above, The DK107 Frame for rear ventilation. Front ventilation design also available.



B&W MURAL TV...Another Newsmaker! The custom TV look plus the convenience of "wireless wizard" remote control. Full feature monochrome performance - 25% brighter picture. 3-speaker Panoramic sound. Above, The DK103 designed for front ventilation, rear ventilation troe available.



PUSH BUTTON RADIO-VICTROLA®... High Fidelity Stereo. Monaural and stereo 4-speed record changer that slides out for easy loading, stereo AM-FM. Tuner, visual Stereo Balance Control, 2 in 1 supercharged chassis with 58 watts of power. Above, the BK2 shown with DK109 Panoramic Sound, 3-speaker units. (©RCA Trade Mark for Record Players)

These solid value Built-ins sell houses!



"Everything is built in," says the wife. "... and look at that builtin Color TV!" says the husband. We'll leave it

to you builders how often such comments can clinch the sale.

RCA Victor Built-in units for 1960, the first complete Built-in line in the industry, are engineered with newsmaking style, performance and dependability. They're designed to mount in walls, wall cabinets, room dividers... adaptable to almost any spot where families meet to enjoy TV and music.

RCA Victor sales engineers are prepared to discuss plans, models and costs with you. Their experience will be helpful. Write for complete information and literature to RCA Sales Corp., Box 1226-K, Phila. 5, Pa. Let us show you how builders of national reputation are using RCA Victor Built-ins in model homes to convert "lookers" into buyers.



The most trusted name in TV and STEREO

Elegantly simple design; exceptional durability; can be used above, on, or below grade – Armstrong Tessera Corlon

Today, the most important sheet vinyl floor for both you and your prospects is Armstrong Tessera Corlon. It has extraordinary decorative appeal. The unique, random design of delicately colored vinyl cubes set in clear vinyl provides an elegant background for high style rooms, modern or traditional. Many builders report that prospects are especially impressed by the distinctive look Tessera gives living rooms—and by the fact that it's made by Armstrong —top name in quality building materials.

The amazing durability and easy care of Tessera provide

strong sales features, too . . . and virtually eliminate any chance of callbacks on your floors. Since Tessera comes with the exclusive, alkali-resistant Armstrong Hydrocord Back, you can even use it in basements and slab construction homes.

Basic data on Armstrong Tessera Corlon

Uses: above, on, or below grade; gauge: .090"; durability: excellent; grease and alkali resistance: excellent; ease of maintenance: excellent; colors: 8 monochromatic styles, and 5 with accent chips of contrasting colors; approximate price per sq. ft. installed over concrete: 90ϕ .



For expert flooring advice, contact the Architectural-Builder Consultant at your nearest Armstrong District Office. He can also provide you a complete selection of valuable sales helps. Call him, or write direct to Armstrong Cork Company, 302 Sixth Street, Lancaster, Pennsylvania.

Clear vinyl between colored vinyl cubes gives Tessera an intriguing depth. In this room, Tessera Corlon, style 86538.

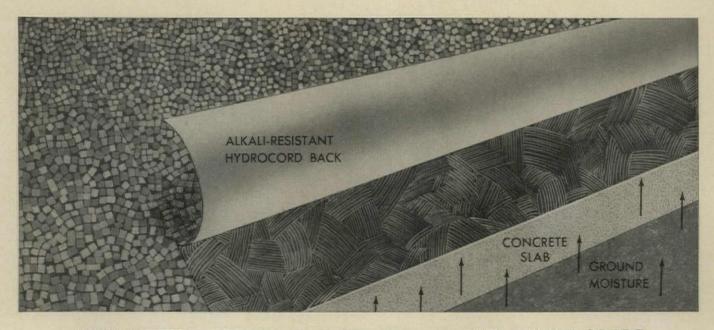


TO KNOW ABOUT VINYL FLOORS



TESSERA BIG HIT IN LUXURY MODEL HOME IN BALTIMORE

Builder Leonard Stulman wanted distinctive floors in keeping with the quality of his \$31,000 model home in the exclusive Ruxton Ridge area of Baltimore. Tessera is the perfect floor for the music room shown above because of its elegant appearance—and because its exceptional durability assures permanent good looks, despite the hundreds of people walking on it every week. The sales manager says he has never had so many inquiries about a floor. People are fascinated by the unique design and subtle colorings. And many buyers have selected Tessera for living and dining rooms—even though it is not included in the base price of the home.

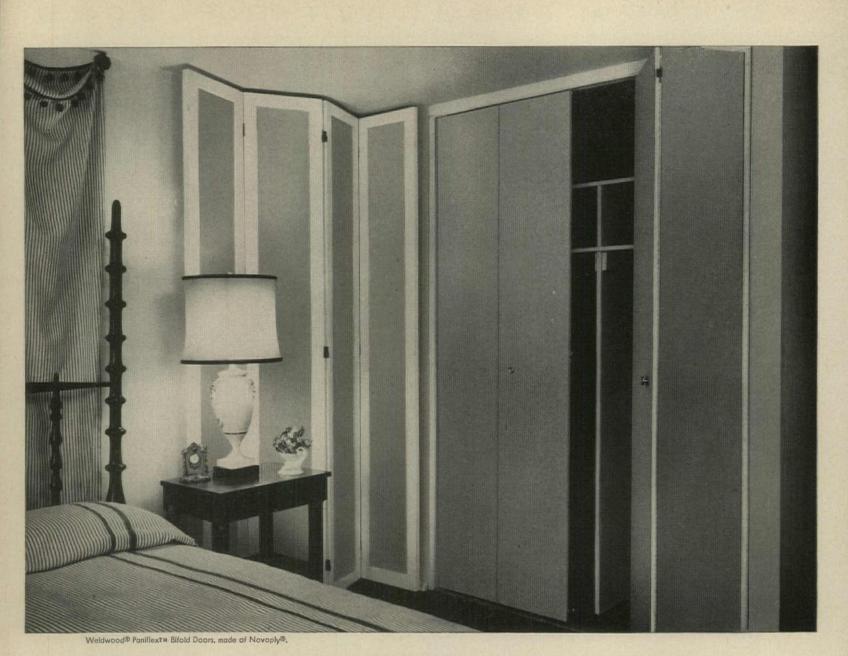


WHY TESSERA CORLON CAN BE USED ON AND BELOW GRADE

With on- and below-grade concrete, ground moisture rises into the slab, forcing the alkaline salts in the concrete to the slab surface (as shown in the illustration above). The resulting alkaline moisture damages wood and linoleum, limiting the use of these materials to above-grade areas. But the new Armstrong Hydrocord Back is completely resistant to alkaline moisture. Available only on Tessera Corlon and certain other Armstrong Floors, Hydrocord enables you to offer all the advantages of sheet vinyl floors in every area of your homes.



SHEET VINYL CORLON • LINOLEUM • EXCELON (Vinyl-Asbestos) TILE • CUSTOM CORLON and OPALESQ (Homogeneous Vinyl) TILES • LINOTILE • RUBBER TILE • CORK TILE • CUSTOM VINYL CORK TILE • ASPHALT TILE



PANIFLEX BIFOLD DOORS OF NOVOPLY...

save you money: they need no framing, save on plaster or sheet rock and studding-prevent costly call-backs because they won't stick-give full closet access, floor-to-ceiling and wall-to-wall-and you can install them in less than 20 minutes.

NOVOPLY MAKES BIFOLD DOORS PRACTICAL. Novoply's unique 3-ply construction makes it the flattest panel on the market. Its face plies of wood flakes and its core of wood chips are resin-impregnated and bonded under heat and pressure. Novoply panels won't sag, twist, or warp.

WELDWOOD PANIFLEX BIFOLD DOORS OF NOVOPLY are available, pre-packaged and ready to install, through your Weldwood representative.

-	SEND FOR FREE BOOKLETS
	United States Plywood 55 West 44th Street, New York 36, N. Y. HH 2-60 Please send me:
	 #1966—"Paniflex Bifold Doors" #1770—"Installation Details for Novoply"
	NAME
	CITYZONESTATE



KELVINATOR KITCHEN includes new 1960 double-door refrigerator-freezer, built-in oven and burner top, and dishwasher.

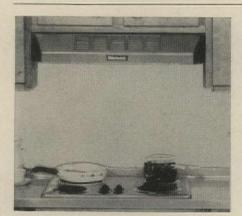
Kelvinator introduces new ranges, refrigerators, and dishwashers

In the photo above, the refrigerator is the 1960 Foodarama, a 41" wide, double-door combination with almost 18 cu ft of refrigerator-freezer space. New this year is no-frost operation, magnetic door seal, automatic ice dispenser. Built-in dishwasher (center, rear) holds up to 12 place settings, provides cycles for normal loads, heavy soil loads, pots and pans, automatic pre-rinse, plate warming. Racks are vinyl-coated; upper rack revolves to expose full content. Built-in cooking equipment (right) is a deluxe oven, with or without rotisserie, that features multi-heat broiling, separate time and

temperature controls, rod-type elements. Surface unit has three 6" 1,250-w elements, one 8" 2,100-w element in a 30''x21'/2'' raised-rim top. All appliances come in brushed steel and four colors.

Kelvinator, Detroit.

For details, check No. 3 on coupon, p 242



New No-Duct hood is a deluxe model in three sizes, with coppertone and silvertone finishes. Built-in fan and light are operated by pushbutton control in front of the hood. New model is designed for unitized construction so it can be sold at a lower price than original No-Duct hood.

Major Industries, Chicago.

For details, check No. 4 on coupon, p 242



Pivoting shelves can now be built in by anybody. Units come in full-circle (above) or corner-shelf models; full circles are 18", 20", 24", 27" in diameter, corners, 20" and 34". Upper pivot is nylon bushing, lower pivot is nylon ball-bearing. Installation is simple. Finish is coppertone.

Washington Steel Prods, Tacoma. For details, check No. 5 on coupon, p 242



Compact kitchen combines steel base cabinets and wood-on-steel wall cabinets with freestanding appliances. Double-bowl sinks, ample countertop space, built-in lighting, and pass-through design are featured. Steel cabinets come in 12 pastel colors, wood fronts are select white maple.

Toledo Desk, Maumee, Ohio. For details, check No. 6 on coupon, p 242 FOLDOOR Beautyline

FOLDOOR help sell homes!

Make the homes you build more versatile, with more attractive interiors. Use custom FOLDOOR or the economy Foldoor BEAUTYLINE. Two quality lines of fabric covered folding doors to fit any home application—doors, room dividers, closets. Variety of vinyl fabrics to fit any decor. FOLDOOR and BEAUTY-LINE are truly bonus attractions for new home buyers—and good profit makers for you!

Builders like FOLDOORS because ...

- More customer appeal
- Less framing, painting costs

More profit for the builder

- Easy to install
- Stock and special sizes to meet all residential and light commercial requirements

Adds flexible floor space

Home owners like FOLDOORS because ...

- Easy to operate
- Custom decorator look
- Easy to keep clean



-more accessible closets • Long lasting quality ... new and different, functional and decorative. A ³/₄" thick styrene grillework in standard designs, factory fabricated in

complete framing systems. Easy to install. No painting required. Ideal as space dividers and screens

in homes, offices, stores.

Holcomb & Hoke Mfg. Co., Inc. Dept A301 1545 Van Buren Street, Indianapolis 7, Indiana

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in America's **biggest** industry...

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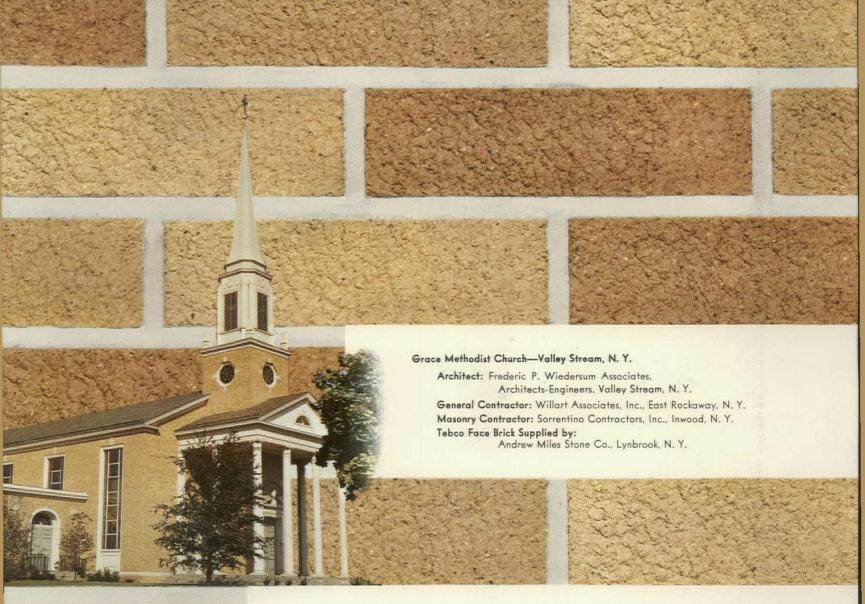
For example: more builders of more model houses than read either of the builder books...and they vote 4 to 1 that HOUSE & HOME is their first choice magazine.

> In a national survey of model house builders (96% built five or more houses), the builders were asked: which of the following magazines gives you the most help in the planning and use of your model homes? Their answers:

House & HOME	44%
American Builder	9%
Practical Builder	9%
Multiple mentions	38%

Also: practically all residential architects, more lenders, more appraisers, more dealers and distributors, more prefabricators, more government officials regularly read HOUSE & HOME.

PUBLISHED BY TIME INC.





Tebco Face Brick NOW...37 Color Combinations! 4 Textures!

The outstanding jobs are going Tebco! And for good reason. No matter what type of building—municipal, commercial, industrial, residential—Tebco Face Brick offers limitless design possibilities. Evans' big millionbrick-a-week production assures fast, depend-

Tangerine Blend, Standard, 45 K.

able delivery of the colors, sizes, and styles you need. For lasting beauty that never loses its appeal, design and build with Tebco. It meets all ASTM and FS standards. Write for new full-color Tebco Catalog.



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One of the nation's largest producers of Clay Pipe. Clay Flue Lining, Wall Coping, Plastic Pipe and related construction materials, with over 50 years of faster, friendlier service.

New Triangle Packaging Unit, with ten 10-ft. lengths, is easy to handle, easy to store.

Lightweight, lifetime EVANITE **PLASTIC SEWER PIPE**

lowers installation costs!

Evanite Sewer Pipe can be jointed outside the trench, then installed. Chemically-fused, leak-proof joints are made in minutes, reducing labor costs by cutting installation time.

Evanite does not deform, "squash out," or "mush up" . . . unharmed by tem-

Diameters through 8 inches • Standard 10-foot lengths • Longer or shorter lengths made to your specifications • Adapters available to combine Evanite in same line with clay, cast iron, fiber, concrete pipe

NO TOXIC COATING MATERIALS Evanite does not cause skin irritations through handling.

perature extremes, harsh drain cleaners, detergents, acids or gases . . . it lasts a lifetime!

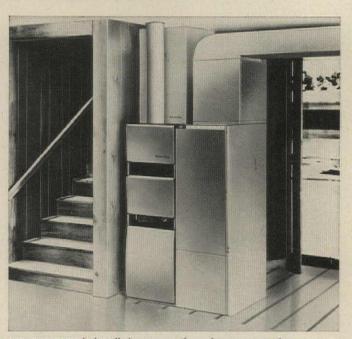
Evanite Pipe is right-for sewers, foundation and downspout drains -Perforated Evanite for septic systems and many drainage jobs.

FAST, EASY INSTALLATION Just brush Evanite Cement on pipe and slip into fitting. Dries watertight in minutes

FOR ADDITIONAL INFORMATION USE THIS COUPON Please send illustrated literature describing the many advantages of Evanite Sewer Pipe to: COMPANY	FITTINGS AND ADAPTERS FOR EVERY NEED Slip-on fittings with precision tolerances and smooth finish require no preparation, keep chemically-fused joints strong and tight. TEE WYE 90° ELL COUPLING ADAPTER FOR OTHER PIPE INCREASER		
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DO IT RIGHT WITH EVANITE SEWER, GAS, WATER, IRRIGATION PIPE

start on p 207



AIR PURIFIER is installed upstream from furnace or cooler.

New filter cleans three ways

Carrier's new system combines dust filtering, humidifying, and odor removal.

Claimed advantages: constant air cleaning with no loss of efficiency; precise control of humidity, continuous odor removal. The filter is an aluminum-mesh type, twice as thick and twice the area of the usual flat-pack filter. It is kept wet with a water-glycol solution so dust sticks to the filter surface, but the solution is poured over the filter in 20-second surges so dust is regularly washed down into a collection sump.

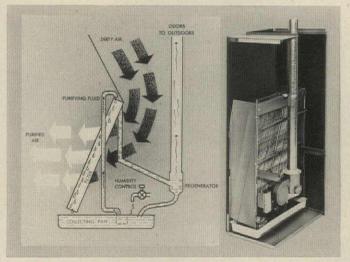
The glycols in the Carrex solution remove odor vapors from the air, carry them to a regenerator where a small heating element and fan drive smelly vapors off and up the stack. At the same time, hardness minerals in the water are precipitated out as floc and carried down to the sump.

When the air in the house gets dry, a humidistat opens a valve to add water to the solution; this added water is then picked up by the air passing through the filter.

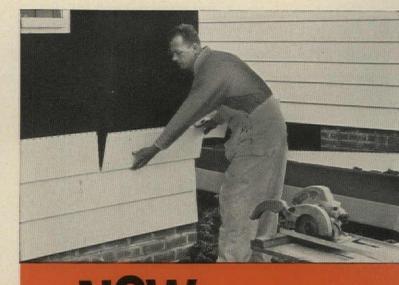
The only attention normally required is twice yearly emptying of the sump. Equipment cost: about \$250; power consumption: 100-w per hr.

Carrier, Syracuse.

For details, check No. 7 on coupon, p 242



OPERATING DIAGRAM and open view (right) show how humidifyingpurifying solution circulates from collecting pan over the filter and back to sump, with small part diverted to regenerator.



NOW...the finest aluminum siding designed for new home building!

NU-HOME

ALUMINUM SIDING

■ Here, for the first time, a siding developed specifically to help you build better new homes for less money. You save on both materials and labor, with no lost time due to weather. Nu-Home Aluminum Siding goes on quickly, even with unskilled workers, and completely *eliminates painting time*. And, you'll sell homes faster, too, when you offer Nu-Home beauty with its many years of freedom from maintenance and painting costs. Mail the coupon below and get the complete story on how Nu-Home can help you build better homes for less. There's no cost, no obligation, so mail the coupon today.

 Panels bonderized and vinylcoated front and back.
 10-year factory warranty on finish. Meets FHA Standards.
 Easy, fast lock-up installation.
 Sold only to builders through building supply firms.

HASTINGS ALUMINUM PRODUCTS, INC. Hastings, Michigan

Complete details for the cost of a stamp! Get the whole Nu-Home product and profit story. Mail this coupon today and we'll rush complete information to you.

lease rush	me additional	information	on Nu-Home	Aluminum S	iding
AME					
ODRESS.		S. Bridge			



Oven tilts into place-

no shims or blocks

needed

Drop-in cook-top fits simple, squarecorner opening! Snap-on frame always fits snugly to cabinet surfacel



ATHENS STOVE WORKS, INC. DEPT. 3 ATHENS. TENNESSEE

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I'm a 🗍 builder	dealer. Ple	ase rush me
full details on the	new Vesta Bui	It-ins!

HOUSE & HOME

MAGNIFICENCE IN EVERY INCH ... GAS OR ELECTRIC!

ALSO BUILDERS OF FAMOUS VESTA RANGES

DOUBLE OVEN

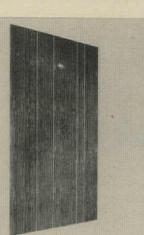
. GIANT 24" OR STANDARD 16"

FULL YEAR FACTORY WARRANTY
 STAINLESS STEEL OR FOUR
 PORCELAIN ENAMEL COLORS

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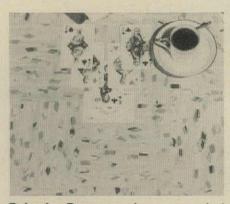
New products

start on p 207



Panelplank is a new photoprinted hardboard paneling. The grain is protected by a clear melamine layer sprayed and baked on. The patterns include mahogany, primavera, platina, cherry, and frost. Randomgrooved sheets come 4'x4' and 4'x8', $\frac{1}{8''}$ thick. The finish carries a 5-year guarantee. Price: about 39e a sq ft, retail.

Panelboard Mfg Co, Newark, N.J. For details, check No. 8 on coupon, p 242



Pabco's Response is a new vinyl linoleum which is cut into 6''x6'' tiles, then mounted on a 6' wide felt backing for installation in sheet form. It sells at retail for about \$4.25 a sq yd. Other new floorings from Pabco include Serenade, a standard gauge linoleum in 9''x9'' tiles or in sheets for \$2.50 a sq yd, and Deluxe Style, a service gauge tile in random chip patterns for 12e a tile. Fibreboard Paper Prods, San Francisco.

For details, check No. 9 on coupon, p 242



Hidden antenna, Jerrold's TV-Receptor, gets the TV antenna off the roof and out of sight. Unit uses house wiring as antenna for either TV or FM, is attached to set's power cord. Inductive coupling picks up signal from the house wiring. The Receptor slips over the cord in less than 30 seconds. Retail price is about \$5.95.

Jerrold Electronics, Philadelphia. For details, check No. 10 on coupon, p 242

continued on p 215



SAVE YOU 300 <u>600</u>

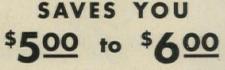
No. 5400 Series — available in 30, 36 and 42 inch widths

Only the new LEIGH No. 5400 Series RANGE HOODS feature such beautiful styling ... to complement the very finest of homes ... yet perfectly priced for budget kitchens!

- LOW COST priced far below all competitive Range Hoods
- QUALITY CONSTRUCTION made of the finest materials, by experienced craftsmen — engineered to provide a housetime of dependable service.
- DECORATOR STYLING—to conform with any kitchen interior — features a rich, copper-tone finish.

Ask for Bulletin 264-L





- Fits 8" pipe without additional cost of an adapter
- Easily installed without framing
- Lifetime chrome-plated grille of high impact Polystyrene
- Powerful, completely-enclosed motor

Ask for Bulletin No. 266-L



In Canada: LEIGH METAL PRODUCTS LTD., London, Ont. - LEIGH-TORNEL DISTRIBUTORS LTD., St. Boniface, Manitoba

The house '''' 7 the MASS MARKET can afford!

The bold and beautiful

Jus NEW

was planned to qualify the huge house-hungry mass market of America! **Designed to sell** with attached garage for **\$8070** plus mortgage financing and lot. The monthly payments for the Mustang are less than rent. For the first time a truly low-cost home with beautiful and varied designs. The Mustang is available in 12 models ... Colonial, Contemporary, French Provincial, Ranch and New Orleans Colonial. Air conditioning can be included for less than \$300.

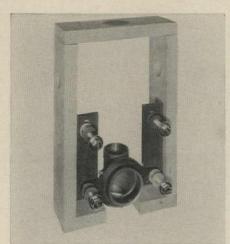
Get all the details about the hot new Mustang that you can sell to the mass market! Write! Wire! P. R. Thompson, Vice President, Sales, Department H-2, or phone PRospect 3-7550, Piqua, Ohio.



INLAND HOMES CORPORATION Plants in Piqua, Ohio; Hanover, Pa.; and NOW CLINTON, IOWA

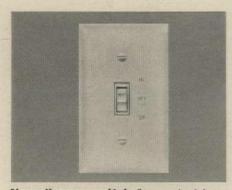
New products

start on p 207



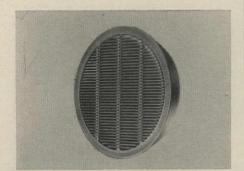
New closet mounting for wall-hung toilets will simplify installation, cut breakage. Wood-framed unit is just set between studs and nailed in place; closet between study and naned in place, closer is hung by simply tightening four nuts. Five models are available: 3" copper and cast-iron models for 6" walls; 4" cast iron for 8" walls; 4" cast iron and 3" copper back-to-back models for 8" walls. Apsco, Fort Wayne, Ind.

For details, check No. 11 on coupon, p 242



New dimmer switch fits standard junction boxes, can replace any existing switch, needs no additional wiring. Doublethrow toggle offers 100%, 30%, and off positions; low position can extend bulb life up to 20 times, maker claims. Hi-Lo dim switches sell for \$8, \$10, and \$12 a unit.

Slater Electronics, Glen Cove, N. Y. For details, check No. 12 on coupon, p 242



Midget louver is now made with smaller grille openings so no screening is needed. Anodized aluminum unit comes in six sizes-1", 11/2", 2", 21/2", 3", and 4" diameter. Louver installs quickly with a press fit in a drilled hole. Three wedges on sides hold it in place without nails or screws.

Midget Louver Co, Norwalk, Conn. For details, check No. 13 on coupon, p 242

continued on p 218

Nine **PAYLOADER**[®] units



help erect 4,000 homes

OAKTREE CONSTRUCTION COMPANY, INC. are busy contractors that specialize in carpentry work for all types of residential and industrial construction in the Central New Jersey area. The firm is geared to build more than 4,000 homes annually and, at present is engaged at seven different locations. One contract is for 2,000 homes in the "Sayrewoods" project that will be completed by mid-1960.

TO HANDLE THE TREMENDOUS AMOUNTS of lumber and material required for these projects, Oaktree has standardized on "PAYLOADER" tractor-shovels fitted with fork lift attachments. Their fleet consists of 9 Hough units, ranging from 3,000-lb. to 7,000-lb. operating capacity. Two of the large Hough units at "Sayrewoods" handle as much as 3,000 board feet per pass. In the mill yard, where all construction material is pre-cut, they unload lumber for storage, feed material in the sawing operation and load-out strapped bundles. At the construction site, they unload trucks and deliver the pre-cut bundles to each house.

"PAYLOADER" TRACTOR-SHOVELS also are available with regular or patented Drott "4-in-1" buckets to do all kinds of excavating, grading, landclearing and materials handling. Fork lift can be interchanged quickly with the bucket. Big pneumatic tires and 4-wheel-drive provide the traction and flotation to work on any kind of terrain. You can learn more about the time-saving, cost-cutting uses of a "PAYLOADER" and the size that will best fit your needs from your nearby Hough Distributor.

PROVEN 'PAYLOADER' MODELS

- are available for every material handling purpose, indoors or out-doors . . . from 2,000 to 12,000-lb. operating capacities . . . and a friendly Hough Distributor nearby can give you complete details.

HOUGH	•
THE FRANK G. HOUGH CO. LIBERTYVILLE, ILLINOIS SUBSIDIARY INTERNATIONAL HARVESTER COMPANY	Ň

Name	
Title	and the second
Company	
5 City	State
	Title Company Street



A scant 1% inches thin, a sleek 4% inches low—Arvin Invisa-Line low wattage baseboard brings you an exciting new dimension in electric heating. Here is a unit that hugs the wall and disappears from conscious view once installed, and it's yours exclusively from Arvin, world leader in portable electric heat and pioneer in electric heating for more than a quarter of a century.

Electric heating is here and rapidly growing in acceptance. Team up with Arvin, foremost in styling, safety and merchan-

HERE'S HOW INVISA-LINE HELPS YOU SELL HOMES

easiest of all to sell!

BRAND ACCEPTANCE— Millions of families enjoy Arvin products, advertised nationally in leading magazines. The Arvin brand name is presold and is recognized as the *leading name* in portable electric heat. These factors combined help assure ready-made acceptance for Arvin *baseboard* heat!

RESEARCH—Serving the Arvin family of finer products, manufactured in 15 Arvin plants, are the extensive Arvin research and development facilities, where Arvin electric baseboard heat was designed using 27 years of experience. The result—the most advanced heating systems available to builders.

PRODUCT EXCELLENCE—The exclusive design and construction of Arvin baseboard heat adds extra selling power to every advantage of electric heating.

GREATEST EYE-PLEASING DESIGN AND SAFETY— Arvin baseboard heat's unmatched trimness blends easiest into any decor, and its low wattage assures safest possible performance. **THE QUIETEST, CLEANEST, FASTEST HEAT**—Arvin's heating element is mounted on floating holders to eliminate all expansion and contraction noises. The natural convection of the heater provides uniform air circulation as the high-capacity heating element produces heat faster and more efficiently.

MOST ACCURATE HEAT CONTROL—Individual thermostats provide individual room-comfort control . . . plus the unparalleled economy that results from this flexible heat control. And for absolute safety in controlling heat output, exclusive Arvin "heat-limit" safety thermostats, build into each baseboard section, prevent overheating.

business from the expanding electric heating market. Com-

pare Arvin electric baseboard with any other unit. See the difference in size. Check the safety difference in wattage. And

note the tremendous selling advantages Arvin offers you with

its established and accepted brand name that's nationally advertised . . . plus a hard-hitting merchandising program designed to help make your Arvin electric heated homes the

LOWEST INSTALLATION COST—Arvin baseboard heat eliminates the need for expensive central heating plant installation, saves approximately 15 square feet of floor space at \$10 to \$15 per foot, plus a chimney at \$80-\$100, and all ductwork. What's more, Arvin baseboard heat sections are *pre-wired* for connection at either end, saving you the time and labor costs of wiring-in."

GREATER HOME VALUE—A home electrically heated with Arvin baseboard units is a better-built home, because it is equipped with the most advanced and efficient of all electric baseboard systems and represents greater loan potential. Remember, too, a warm air furnace requires replacement or major repair every 10 years, whereas electric heat units, with no moving parts, have a life expectancy of 40 to 50 years!

ARVIN ELECTRIC RADIANT CABLE HEAT



The finest in completely concealed heat. New! No braid or loom required; cold leads have heavy, UF-type insulation. Easily installed with new-design staples. Nickel-chrome elements.



ARVIN WALL THERMOSTATS

Single and double pole models. Fast reaction, dependable operation. Element reacts to both room air temperature and radiant heat. Flushmounting; wires from front.

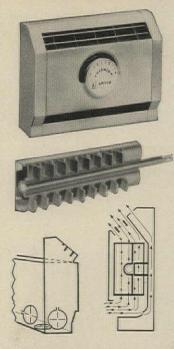


the most advanced!

TAKES THE <u>LEAD</u> IN ELECTRIC HEATING

and an a function of the state of the

Setting the pace in <u>size</u> <u>safety, sales</u> <u>appeal</u> ARVIN INVISA-LINE ELECTRIC BASEBOARD HEAT



ARVIN THERMOSTATS—For economical installation of Arvin electric heat—small, compact, convenient thermostat baseboard sections are available. Each perfectly matches other sections to provide a neat, inconspicuous installation. Arvin baseboard thermostat sections save the cost of "wiring in" a wall thermostat. Arvin wall thermostats can be used if desired. In addition to baseboard thermostat sections, one or more Arvin "heatlimit" safety thermostats are pre-wired into each regular section, depending on length. This safety feature, pioneered by Arvin, makes the safest heat even safer!

ARVIN HEAVY-DUTY FINS—Faster, more efficient heat transfer—from heating element to fins to room—is assured by advanced Arvin engineering. The extra-heavy continuous fins are an integral part of the thick metal section that is welded to the entire length of heating element. To assure long, trouble-free life, heating element temperature is held to one-third of rated capacity. Heavy-duty heating element is fully guaranteed for five years, can be expected to last indefinitely!

ARVIN DESIGNS FOR BEST AIR FLOW—The efficient air flow through Arvin baseboard units is indicated by arrows. Cool air enters bottom of unit, passes over radiating fins where it is warmed and is then radiated outward and convected upward. Secondary air passage in rear of unit keeps back cooler and aids air circulation. New chrome baffle attaches to front of fin section, reflecting heat into air passage to further increase warm air circulation efficiency.

Three Knockouts in Both Ends Simplify Wiring

High Wattage Baseboard—2" wide, 6" high. Approximately 300 watts per linear foot. 2150 to 7270 BTU output, and 2867 to 9693 BTU output.

ARVIN BUILT-IN WALL HEATERS

A *complete* line—six fan-forced and radiant models, from 3413 to 13,652 BTU capacities. Instant-heating elements. Each model features Arvin's new-design rough-in box and quick-fastening clamps that greatly reduce installation time and costs.



ALL YOU NOTICE IS THE WARMTH WITH ARVIN'S INVISA-LINE UNIT!

Attractively finished in the finest beige enamel, Arvin Invisa-Line baseboard heat units blend beautifully into any room in any style home. The low, slim design hugs the wall in such an inconspicuous manner, Arvin baseboard disappears from conscious view once it is installed.

Each section can be painted to match walls or baseboard, if desired. Note the handsome chrome top grill that prevents objects from falling into unit and aids in directing the warm air flow outward and upward into the room.

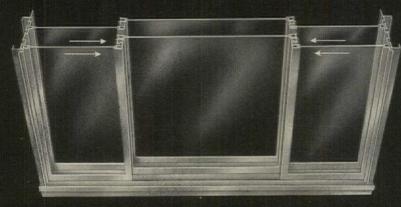
No other baseboard heat offers the over-all trimness of Arvin Invisa-Line, plus true low wattage for maximum safety!



New products

start on p 207

Eliminate cost of Insulating Glass



with the Glamorous



PICTURE SLIDE

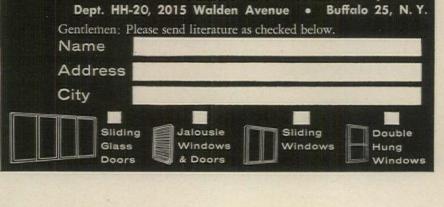
Double Windows for Insulation Direct or Indirect Ventilation Double Weatherstripping on all four sides

 $1\frac{3}{4}$ inches of air space between glass provides superior insulation.

THIS WINDOW STOPS

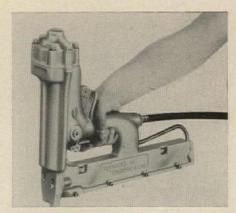
	WIND
All sash cleaned from the inside.	DUST
An sash cleaned from the inside.	NOISE
Opens at finger touch gliding on nylon bearings.	HEAT
on tryion scarriger	COLD

FLEET OF AMERICA, INC.



New sabre saw from Stanley is a heavy-duty tool capable of cutting full 2" lumber. New ball- and needle-bearing motor runs at 3,600 rpm, will maintain speed under load. Base is chrome plated to slide smoothly over work. No. H76 is priced at \$59.50 for the saw and four blades, \$72 for complete kit.

Stanley Works, New Britain, Conn. For details, check No. 14 on coupon, p 242



Lightweight stapler handles staples up to 11/8" long, is 1/2-lb lighter than any comparable gun, holds up to 50% more staples. Tapered face allows working up to a corner stud; self-cleaning action prevents dust entering gun when working with gypsum. Gun can be preset to drive snug or countersink, will not recoil to mar prefinished paneling.

Spotnails Inc, Evanston, III.

For details, check No. 15 on coupon, p 242



New door strike is hammered into position without mortising or screws, in wood or steel jambs. To install a Kwikset Sok-It strike, it is only necessary to drill or punch a hole, place the strike in the hole, and drive it home with the patented staking tool. For line production, air-driven staking tools are available. The new strike will come with any 400 line lockset.

Kwikset, Anaheim, Calif.

For details, check No. 16 on coupon, p 242

continued on p 226

Look what Gas is building-in for you!



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

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

Built-in Acceptance... Both the manufacturers and the American Gas Association are pre-selling Gold Star award-winning ranges to millions of Playhouse 90 viewers, to millions more who see page after page of beautiful 4-color ads in top national magazines. Local advertising and promotion too. A total of \$30,000,000 support.

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

AMERICAN GAS ASSOCIATION

Look for these famous names:

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

OAm. Gas Assoc., Inc. .

Today more people than ever are cooking with A GAS!

New AWMA "Quality Approved" Seal satisfies all FHA requirements

	AWMA Term #18-1	
	ALUMINUM WINDOW MANUFACTURERS ASSOCIATION	
	SPECIFICATION CONFORMANCE TEST REPORT A.W.M.A. Specification DH-A1	
	Dote	
	1. Report of (Testing laboratory)	
	Address(Stote)	
President and a little	2. Window manufacturer	
	Address(Street) (City and zone) (State)	
	3. Window—Model, Series or Designation	
	Description	HH I
	Other identifying features	
	Meets AWMA Requirements	4-1
	Yes No.	
	4. Windows Submitted and Tested	
	Model and nominal size for air infiltration testwide byhigh Model and naminal size for physical load testwide byhigh	
	NOTE: (a) For oir infiltration, window must be 3'0° x 3'0° nominal size. (b) For physical load tests, window must be manufacturer's targest standard size, and not less than	
	3°8° x 5°0°. (a) Windows submitted under (a) and (b) must have corresponding members made from some extrusion actions.	
	QUALITY APPROVED	UN
	A A A A A A A A A A A A A A A A A A A	
	ALUMINUM WINDOW	
	WINDOW SIZE TESTER	SERIES
	8. Performance feature MANUEA	5'0" SERIES: 100 CERT. NO. 400
How Manager	A Physical Load Tests (Dato reported deflection to span ratio.)	5'0" CERT. NO. 400 JRERS NAME
	2,1,4,1 A Harisantal lood—20,4 concentrated at center of unglazed horizontal cash from the span with ,219 maximum, Spaninches Maximum measured deflectioninches the spaninches Maximum measured deflectioninches the span span span span span span span span	ND STATE NAME
	2.1.4.1 B Vertical load-20# concentrated at center (permissible 1/375 at span with .094 maximum).	
	Window memberSponinches Maximum measured deflectioninches 2,1,4,1 C Uniform load10# per sq. 11,maximum allowable deflection of any member shall not exceed 1/175 of	
	'span. Window memberSpanInches Maximum measured deflection inches	
HARS BUILD	B Air Infiltration Test 2.1.4.2 Static pressure equivalent to 25 miles per hour wind velocity—allowable infiltration—34 cubic foot per minute	
	per fact of crack perimeter. The sash shall have been adjusted to open or close with a force not exceeding 20 Ibs. after the sash is in motion. Air infitration	
	Maximum operating force	
	 Testing laboratory has window manufacturer's certification of compliance or non-compliance with requirements of paragraph: 	
	1.2 Material - on file	
	1,4 Finish — on file	
1 Halle states 1	1.5 Protective Coating — on file	
	"We certify the above results were secured by testing in accordance with Rules and Regulations - Test Program and Procedures of the Aluminum Window Manufacturers Association (AWMA Bulletin No. 100) and indicate compliance with the AWMA	
19 State Biod	specification DH-A1 requirements for a maximum window size ofwide byhigh."	
	Authorized signature Laboratory	
FOR YOUR		
an iouk	PROTECTION	
	INSIST ON INSIST ON	
	Unlity A.	
	Annully Ann	TANA-1
	1 yept	oven
	specification DH-A1 requirements for a maximum window size ofwide byhigh." Authorized signature Laboratory PROTECTION INSIST ON Quality Apple	
		10/185
		OUSE & HOME

220

plus Official Conformance Test Report PROTECTS YOU WHEN BUYING ALUMINUM WINDOWS

THESE WINDOW MANUFACTURERS ARE READY TO SUPPLY YOU WITH ALUMINUM WINDOWS THAT MEET ALL THE FHA REQUIREMENTS

-	*	Case	00,00	4°or	Jer.	P of	L.
ADAMS ENGINEERING CO., INC. 19300 Biscayne Blvd., Miami, Fla.	*	0	Ĩ	-	*		-
ALBRITTON ENGINEERING CORP. P.O. Box 31, Bryan, Tex.			*	*			
ALUMINUM & GLASS PRODUCTS CO. 1901 Franklin Ave., Houston 2, Tex.			*	*			
AMERICAN DURALITE CORPORATION P.O. Box 458, Loudon, Tenn.	*	*	*	*			
ARNOLD ALTEX ALUMINUM COMPANY 6721 N.W. 36th Ave., Miami, Fla.	*		*	*	*		*
THE WILLIAM BAYLEY COMPANY 1200 Warder St., Springfield 99, Ohio						*	
CAPITOL PRODUCTS CORPORATION P.O. Box 69, Mechanicsburg, Pa.	*		*	*			
CECO STEEL PRODUCTS CORPORATION 5601 West 26th St., Chicago 50, III.		*	*	*		*	
CROSSLY WINDOW CORPORATION P.O. Box 47-815, Miami, Fla.	*			*			
FENESTRA INCORPORATED 8501 Hegerman St., Philadelphia 36, Pa.		*	*	*		*	
MICHAEL FLYNN MANUFACTURING CO. 700 E. Godfrey Ave., Philadelphia 24, Pa.		*	*	*		*	
MAYFAIR INDUSTRIES, INCORPORATED P.O. Box 324, Lafayette, La.	*		*	*			
MIAMI WINDOW CORPORATION P.O. Box 48-877, Miami 48, Fla.	*				*	*	
PORTERFIELD INDUSTRIES, INC. 164 N.W. 20th St., Miami 37, Fla.			*	*			
REYNOLDS METALS COMPANY Richmond 18, Va.	*	*	*	*	22	*	
THE F. C. RUSSEL COMPANY P.O. Box 26, Columbiana, Ohio	*		*	*	*	*	
TRUSCON DIVISION, Republic Steel Corp. Youngstown 1, Ohio	*	*	*	*	*	*	
VALLEY METAL PRODUCTS COMPANY Bridge St., Plainwell, Mich.	*	*				*	
W. M. PRODUCTS COMPANY P.O. Box 7592, Houston 7, Tex.			*	*			
WINDALUME CORPORATION Route 46, Kenvil, N. J.			*			*	
WISCO INCORPORATED 4015 Michigan Ave., Detroit 10, Mich.				*			*

There's no question about aluminum windows meeting FHA requirements when the windows you choose carry this new "QUALITY APPROVED" seal. To avoid costly delays and possible disappointment look for it on every window you buy.

Every AWMA "Quality Approved" seal is backed by an Official AWMA Conformance Test Report issued by an *Approved* Testing Laboratory. This proves that the window conforms in every detail to FHA Minimum Property Standards.

Why take chances and waste time with windows of questionable quality; - windows that may meet only a few of the FHA requirements, *not all of them*; - windows that may have been tested by a testing laboratory not approved by the AWMA. To be sure, look for the "Quality Approved" seal on the window, before you buy and insist upon seeing the official Conformance Test Report.

The window manufacturers listed here have joined together in the interest of establishing and maintaining high quality standards in the production of aluminum windows. All of them are ready to supply you with "Quality Approved" aluminum windows.

Testing Laboratories Officially Approved by AWMA Airfoil Impellers Corp., College Station, Tex. • BBB Engineering Service, Hialeah, Fla. • Robert W. Hunt Co., Chicago, III. • A. F. Janes Testing Laboratory, Santa Barbara, Calif. • Univ. of Miami Housing Research Laboratory, Coral Gables, Fla. • Pittsburgh Testing Laboratory, Pittsburgh, Pa. • U.S. Testing Co., Hoboken, N. J.

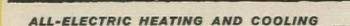
ALUMINUM WINDOW MANUFACTURERS ASSOCIATION

630 Third Avenue, New York 17, New York

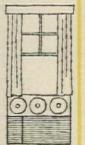
ALUMINUM WINDOWS

INCREASING SALES OPPORTUNITIES FOR BUILDERS

General Electric Gives Powerful, Practical Support to Medallion Home Program



Clean, safe, room-by-room comfort control without fuel problems or flues . . . choice of baseboard, wall or embedded wire heating units and room air conditioners for any installation need. For central heating and cooling systems, electric heat pumps.



LIGHT FOR LIVING

Great beauty and true comfort through fluorescent, incandescent, decorative and outdoor lighting. Also important to *total electric living* is TV, radio and hifi, which have returned entertainment to the home.

GOLD MEDALLION HOMES

Equipped by General Electric

Total electric living is here now . . . practical in homes in every price range.

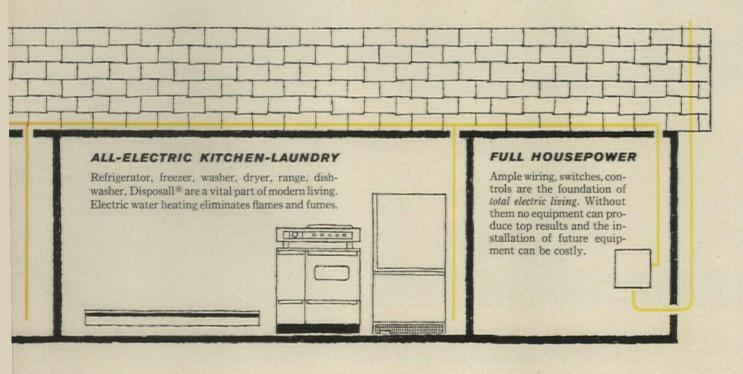
It offers you, the builder, an exciting merchandising concept. For the Medallion Home not only offers a better way of living—it is a new status symbol that helps you compete more effectively for the consumers' busy dollar.

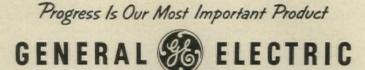
General Electric has organized all divisions of the company into an operation to support the Medallion Home program. A major advertising campaign will presell consumers in Life, Better Homes & Gardens, House Beautiful, House & Garden, New Homes Guide and House Beautiful Building Manual.

But our big plans are local. Your local General Electric Major Appliance Distributor has plans right now to help you increase the electric content of your homes. Call him today—your first step toward real sales increases through the Medallion Home program.

Residential Market Development Operation, General Electric Company, Appliance Park, Louisville 1, Kentucky.

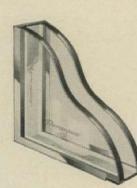




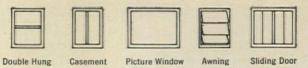


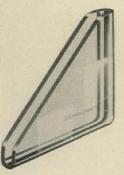


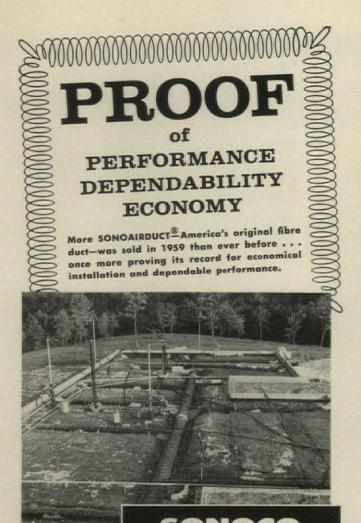
Now 2 types of Thermopane® insulating glass for all kinds of windows



It's both desirable and practical to put insulating glass in all of the windows of a house. Two types of *Thermopane* make it possible: *Thermopane* with *Bondermetic Seal*[®] for picture windows, window walls and sliding doors; *GlasSeal*[®] *Thermopane* for double hung, casement, awning—all types of opening windows.







Especially designed for use in slab perimeter heating or combination heating-cooling systems, SONOAIR-DUCT Fibre Duct maintains construction quality while saving on both initial and installation costs. Long, easy-handling lengths level quickly, have no sharp edges, and will not chip, crack, or break when dropped-every piece is useable.

FIBRE DUCI

FREE

INSTALLATION MANUAL

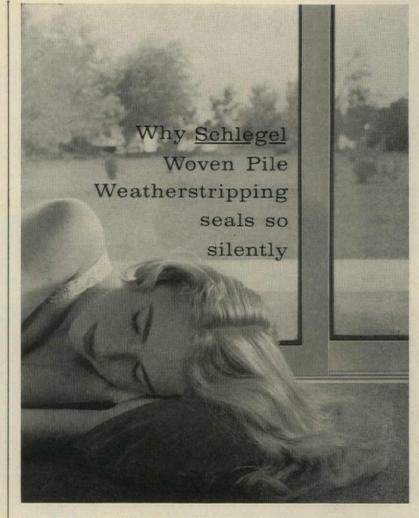
Contains latest, detailed, step-by-step installation data for SONOAIRDUCT Fibre Duct. For copy, send us name, address

send us name, addres on company letterhead.

Available in 23 sizes, 2" to 36" I.D., in standard 18' shipping lengths — special sizes to order. Can be sawed. SONOAIRDUCT Fibre Duct meets or exceeds F.H.A. criteria and test requirements for products in this category.

See our catalog in Sweet's, or write for complete information and prices to:





For sheer soundlessness, nothing matches Schlegel Woven Pile Weatherstripping. Its dense, soft pile won't squeak (like plastic), screech or rasp (like metal). Windows and doors won't bang or rattle-even in a storm. Seals weather out, seals heat and conditioned air in.

SMOOTH ACTION. Doors and windows ride smoothly on Schlegel Woven Pile Weatherstripping, under *all* weather conditions. They never stick or bind. Schlegel Woven Pile is friction-free.

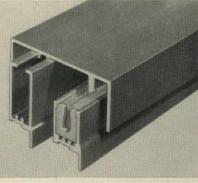
GIVES SURE PROTECTION. Schlegel Woven Pile compresses, is truly resilient. It cushions doors and windows snugly and compensates for irregular metal or wood surfaces.

WEATHERPROOF. Neither air, rain, wind, nor dust can seep in. Only Schlegel Woven Pile is silicone treated to insure complete weatherproofing. Schlegel performance has been proven by rigid FHA tests for air infiltration.

For a comprehensive list of manufacturers using Schlegel Weatherstripping, write for our new booklet, "Your Guide to Windows-Doors-Screens."

Cross-section view showing Schlegel Woven Pile Weatherstripping installed in the aluminum frame head section of Arcadia Sliding Doors, Arcadia Metal Products, Fullerton, Calif.

SEE US AT: THE NAHB SHOW-BOOTH 442 THE HIP SHOW-BOOTH 412 THE NERSICA SHOW-BOOTH 226



for protection that's silent, smooth and sure



SCHLEGEL MANUFACTURING COMPANY P. O. Box 197, Rochester 1, New York . In Canada: Oakville, Ontario

New products

start on p 207

steps to a faster home sale

with new electric Sno-Melter!



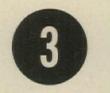
Plans call for a concrete driveway. Just before finish-coat layer is poured, electrical contractor rolls SNO-MELTER units quickly into place. Pre-spaced heater wire anchored in galvanized steel mesh, 18" wide, in 6' or 10' lengths. Pre-assembled lead wires and ground also attached. Saves installation time, cost!





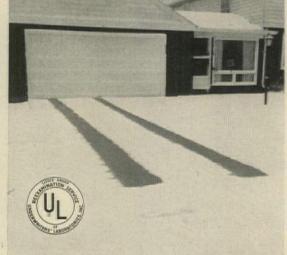


Wires *don't* float as the concrete is poured. With SNO-MELTER, designed for 42 watts per square foot, uniformly even heat is assured! At last, the builder can put a practical price on snow-free walks, tire tracks for the drive! And, homeowner will pay only about 8¢ an hour to melt tracks in the 30-foot drive.

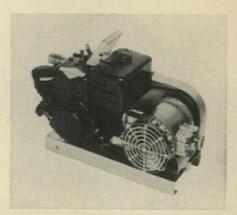


With the first snowfall, SNO-MELTER will graphically demonstrate the convenience of "No more snow to shovel...no more ice to chop!" This "extra" will sell more homes in '60!

> Write for complete, illustrated literature, including step-bystep installation instructions.



EASY-HEAT, INC., "Electric Anti-freeze Devices" Dept. 2-H, Lakeville, Indiana



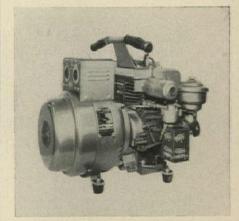
Oilless air compressor is designed and built by Bell & Gossett. New unit delivers oil-free air at up to 90 psi. Two-cylinder compressor is belt-driven by a 4-cycle, air-cooled gasoline engine. Total assembly is only 12" wide, 18½" long, 18" high, weighs only 56 lb. Wheel and handle kit and a portable air tank are optional accessories

accessories. Bell & Gossett, Morton Grove, Ill. For details, check No. 20 on coupon, p 242



Transistorized control automatically starts and stops generators as battery conditions demand. Compact 6"x8" box fits remote-control panel of all PM model electric plants. FAC-500 can also be used as a manual remote start-stop control. Autocharge can also be used to exercise permanently installed generators. Price \$129.50.

Pacific-Mercury, Hollywood, Calif. For details, check No. 21 on coupon, p 242



Portable generator rated at 2,500-w will deliver up to 3,000-w intermittent power. Unit with Briggs & Stratton 4-cycle aluminum engine weighs only 123 lbs. Stock unit has carrying handle but fixed bases, two-wheel dollies, and carrying cradles are available.

Wincharger Corp, Sioux City, Iowa. For details, check No. 22 on coupon, p 242

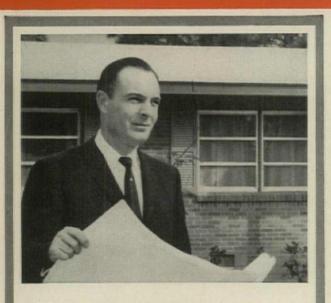
continued on p 226



THE CELOTEX CORPORATION 120 SOUTH LA SALLE STREET, CHICAGO 3, ILLINOIS

If it's "by CELOTEX" you get QUALITY...plus!

KINGSBERRY'S NEW MARKET BUSTER PLAN IS REALLY ROLLING!



Newcomer becomes fastest growing builder in Pensacola within 2 years with **KINGSBERRY**

On April 17, 1958 Mitch Drake shipped his first Kingsberry Home to the Pensacola market. Today, less than 2 years later, Malone, Whiting, and Drake is Pensacola's *fastest growing builder*.

To crack his market, Drake has taken full advantage of Kingsberry's generous cooperative advertising program. Result? In 1960 Drake expects to build 200 houses and is looking for more land. Kingsberry quality gets him favorable mortgage rates too.

THIS SENSATIONAL GROWTH HAS BEEN ACHIEVED ENTIRELY WITH KINGSBERRY HOMES, AND KINGS-BERRY'S MARKET BUSTER PROGRAM.

Now you can get in on this revolutionary plan. Fill out the coupon at right and mail it today.

Mail Coupon NOW and

Why do we urge you to mail this coupon today? Because Kingsberry is NOW introducing to its selected list of builder-dealers a special program which will help them get the jump on this year—will help them capture MORE of their market in 1960.

Because Kingsberry has financing—construction and long-term—available to help you get your program going NOW.

Because Kingsberry has a special market busting, local advertising program to put behind builders who are ready to act NOW. It will break soon. Deadlines won't wait.

Because Kingsberry is *NOW* offering builders the most sensational news in housing for 1960—SPACE HOUSES—the greatest home-buying value ever offered in the South. Builders are taking off with Kingsberry SPACE HOUSES *NOW*.

Kingsberry not only brings you this revolutionary profit opportunity, but backs it with a market busting program to help you *pocket* the profits.

1. Kingsberry's program spotlights you and your development with Kingsberry-paid advertising (in 4-color where available) through the spring selling season. It will be climaxed in May by the astounding new Kingsberry Space Houses.



HERE'S WHAT BUILDERS REPORT FROM THE FIRST MARKET TEST

-on only one ad, run Sept. 13, 1959 in Birmingham News Sunday Supplement.

Advertising results excellent. 171 inquiries recorded to date. Public reaction good. House as pictured was complete and appealing. Price also had a big bearing on public interest. Expect 4 to 6 sales as immediate result of this advertisement.

> Vincent Mazzara, Home Insulation Company -Birmingham

Received 47 inquiries as result of this advertisement. Ad resulted in 2 actual sales. Public reaction very good. This advertisement was excellent and received good response.

Sam Raine, Jr.-Birmingham

Last Kingsberry advertisement in Birmingham News very effective. Have had many inquiries. One couple came from 75 miles away, brought the ad with them and requested price of house constructed in their locality. Consider advertising very powerful.

James K. Coleman-Tuscaloosa

Response and reaction on advertising

excellent. 16 inquiries and 5 expected sales. We strongly endorse continuation of this program.

> Robert F. Medders, Calhoun Realty Company - Anniston

Results on advertisement as follows: 16 inquiries, 4 expected sales. Public reaction good. Personal opinion that this is the finest type of advertising offered a builder.

> Clarence R. Luttrell, Sales Mgr., Hines Realty Company-Brewton

Break Your Market Wide Open in 60 Days: Here's How

2. Kingsberry offers the industry's most generous cash contribution to your local advertising program . . . you become the big-name builder in your market.

3. You get the tested-and-proved Kingsberry "News-Maker" local advertising service for your own use and the Kingsberry "Sales-Maker" merchandising program to help you turn traffic into sales.

4. You benefit by national publicity such as the full-color feature stories that appeared last year in "Good Housekeeping" and "Living for Young Homemakers." More in 1960.

5. Reduced Prices! Kingsberry made news in '59 by upping quality and cutting prices -5% on the average. For '60 prices are cut 2% more . . . plus new 3% savings at job site.

6. Kingsberry guarantees . . . No price increases in 1960! Kingsberry safeguards builder's profits. Pins down 60% of your construction costs for next year. There'll be no increases in the middle of a busy selling season.

7. Kingsberry answers 1960's financing problems. This program includes construction financing . . . special model home ... permanent mortgage and home furnishings financing. And all Kingsberry Homes meet FHA financing requirements.

8. Kingsberry's unique profit-control program lets you build more units on the same investment with smaller overhead and a smaller organization. You'll lower costs, reduce bookkeeping and simplify purchasing.

9. In 1960 Kingsberry presents the newest home packages, the greatest range in sizes and prices, possible only through Kingsberry's architectural and manufacturing resources.

10. Kingsberry Homes are the most flexible you ever worked with . . . with many easy and economical variations that give that "custom look." The designs of Architects Herman York (AIA) and Henry Norris (AIA) . . . men who know what Southerners want . . . are exclusive with Kingsberry.

11. You benefit by Kingsberry's highly automated production that assures better walls, floors, trusses, and roof. You get unique "packaged" bathrooms and kitchen assemblies, "optionals" in heating and kitchen equipment that save money for you and your customers.

Yes, here is a sure-fire way you can increase your home sales . . . and profits . . . this year. That's why we urge you again . . . MAIL THIS COUPON NOW. Don't miss out on 1960's most revolutionary home-building opportunity!

ALL. You can't delay another day!

KINGSBERRY HOMES, Dept. HH-3, Fort Payne, Alabama

Without obligation, please have your representative call with full information about the 1960 KINGSBERRY MARKET BUSTER PROGRAM-and show me how it fits into my present operation. (Please check your interest and fill in number)

At present Kingsberry can serve builders only in the following states: Kentucky, Tennessee, North and South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana.

□ I have__lots ready to build on. □ I have__lots being developed. I have _____acres on which I need development financing. □ I am interested in construction financing.

Zone___

State.

□ I am interested in model home furnishings financing.

Your name Firm name

Street____

City_

New catalogs tell the story of 1960 product lines

New bathroom accessories

Grote's new 16-page catalog shows the company's full line of bathroom cabinets, including a recessed vanitory ensemble and cosmetic cabinets, as well as swinging, sliding, recessed, and surfacemounted medicine cabinets. Bathroom hardware, mirrors, and lighting fixtures are also included.

Grote Mfg Co, Bellevue, Ky.

For copy, check No. 23 on coupon, p 242

Full-line window catalog

Crestline has just issued a 16-page catalog of its residential window line. The 2-color brochure contains information, pictures, and specifications on prime casement, double-hung, sliding, awning, and picture windows, and combination storms and screens.

Crestline Co, Wausau, Wis.

For copy, check No 24 on coupon, p 242



New sliding door details

Arcadia's new 12-page design catalog shows new features of the sliding-door line: sliding panels are now mounted on the outside to improve weathertightness, screens are hung inside to protect them from weather and dust. Details and specifications for three door lines are included; features are summarized in a 2-page selection chart.

For copy, check No. 25 on coupon, p 242

Another new Arcadia catalog tells the story of the new window-wall system. It shows how aluminum framing system provides floor-to-ceiling panels in spandrel and window configurations.

Arcadia, Fullerton, Calif.

For copy, check No. 26 on coupon, p 242

Latest on skylights

The new catalog from Marco updates all previously published data on the company's line of aluminum and fiberglass skylight products. Marco specializes in rectangular corrugated units.

Marco Co, East Orange, N.J.

For copy, check No. 27 on coupon, p 242

Built-in line shown

Preway's 1960 electric and gas built-ins are all shown with complete roughing in dimensions and full installation detail in the company's latest 8-page catalog. Besides the gas and electric ranges, the line includes a built-in refrigeratorfreezer, single- and double-wheel range hoods, and a built-in dishwasher.

Preway, Inc, Wisconsin Rapids, Wis. For copy, check No. 28 on coupon, p 242

Wiring for outdoor living

Bell Electric's new 16-page catalog is entirely devoted to weatherproof electrical fittings for outdoor living areas. Featured are Saf-T-Lock devices in single and double receptacles, 2-wire or 3-wire grounding type. Also featured, six weatherproof switches.

Bell Electric Co, Chicago.

For copy, check No. 29 on coupon, p 242

How to use asbestos cement

Johns-Manville has a new technical data sheet on Micro-Flexboard, an extrastrong, extra-stable asbestos cement sheet recommended as a baseboard for any laminate and as a sandwich panel face. The folder details the material's physical characteristics, tells the forms it comes in, and how it can be used.

Johns-Manville, New York City.

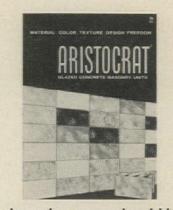
For copy, check No. 32 on coupon, p 242

Pumps, up to date

Kenco's new pump catalog lists and illustrates 32 uses for submersible pumps. The 10-page booklet lists the physical dimensions, pumping capacities, electrical data, and features of each Kenco pump. Sample specification forms are included.

Kenco Pump, Lorain, Ohio.

For copy, check No. 33 on coupon, p 242



Brochure shows new glazed block

New glazed concrete masonry units that lay up into a finished load-bearing wall are described in a color brochure just published by the Aristocrat Assn, the 70-member producers' group. Aristocrat Block is a standard concrete block with a terrazzo-like face. The booklet shows how it has been used, gives standard sizes and standard specifications. It also lists the 70 producers in the US and Canada.

Aristocrat Assn, St Louis.

For copy, check No. 30 on coupon, p 242

Har-Vey Unitrack details

Components for pre-hung prefabricated sliding door units are the subject of this new bulletin. Unitrack line of extruded track, single and double rollers, door guides, and accessories allows the use of standard 6'8" doors and jambs in sliding installations which fit the same rough openings that are called for by swinging doors.

American Screen, Chatsworth, III. For copy, check No. 31 on coupon, p 242



New cabinets described

Mutschler's series 700, the integrated cabinet line designed by Paul McCobb, is shown in colored photographs and detail drawings in new catalog sheets issued by the maker. The booklet shows how the cabinets can be used throughout the house, illustrates the many special cabinet fittings, and reproduces the wheel of 16 colors in Du Pont Dulux enamel that augment the natural wood furniture finishes.

Mutschler Bros, Nappanee, Ind.

For copy, check No. 34 on coupon, p 242

Residential door closer

Norton is introducing its Series 800 Com-A-Door units for fine residences in two just-issued pamphlets; one in AIA file form, the other an envelope stuffer. The unit is a compact hydraulic closer giving full control for doors of either hand, in regular or parallel-arm installations.

Norton Door Closer Co, Berrien Springs, Mich.

For copy, check No. 35 on coupon, p 242

GEDAR CEDAR the RIGHT roof

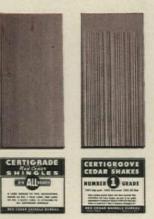
Cedar makes a roof important. It lets you the RIGHT roof combine prominent textures with protec- for today's tive overhangs...broad expanses with dramatic big roof pitches...natural good looks with genuine durability. <u>Cedar says</u> quality. Top off your next design with three thick layers of genuine

red cedar shingles. And watch how quickly it sells!

For complete application details, see your Sweet's File, or write ...

RED CEDAR SHINGLE BUREAU

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



it's **TECO** for products of PROVEN PERFORMANCE



WEDGE-FIT SPLIT RINGS ... for economical clear span TECO Trussed Rafters

TECO

TRIP-L-GRIP Framing Anchors ... for stronger framing of roofs, floors and walls.



FRAMING DEVICES



TECO-U-GRIP Joist and Beam Hangers . . . for better joist support at ½ the cost of old style hangers

DU-AL-CLIP Framing Anchors . . the all purpose economy framing anchor with dual grip action



Send for FREE TECO Products Catalog



TECO FAS-LOK Metal Cross Bridging ... the new MODERN bridging

TIMBER ENGINEERING COMPANY 1319 18th Street, N.W. Washington 6, D. C. Please send me a free copy of your TECO Preducts Catalog

Name	
Firm	
	State
	HH-601

Publications

Guide to vinyl floors

Armstrong Cork has packaged a lot of information on vinyl flooring in two new brochures which are being issued in a single portfolio. One pamphlet tells Armstrong's merchandising story. The other shows the various types of flooring in four-color and gives comprehensive technical and specification data on each. Armstrong Cork, Lancaster, Pa.

For copy, check No. 38 on coupon below

"Garbage-free" communities

In-Sink-Erator has just prepared a public-service booklet stating the case for the "garbage-free" community. The booklet gives the general principles, quotes city administrators who support the plan, tells how to bring about the passage of a garbage disposer ordinance, and prints sample ordinances.

In-Sink-Erator, Racine, Wis. For copy, check No. 39 on coupon below

start on p 240

"Mosaic Medley Patterns"

This 12-page collection of four-color photos shows the Mosaic Tile Co's random mixture ceramic mosaics in interior and exterior, residential and commercial installations as a preview to a sampling of the many patterns in Mosaic's Medley series. Complete specifications information is given.

Mosaic Tile Co, Zanesville, Ohio. For copy, check No. 40 on coupon below

How to control termites

21.
P-M transistorized control
22.
Wincharger portable generator

Velsicol Chemical has a new film telling how to meet FHA termite control standards. In its story, the film tells what termites are, what damage they cause, how pre-treatment work is done. Pretreatment of the Capehart project at Beaufort, S.C., is pictured.

Velsicol Chemical Corp, 330 East Grand Ave, Chicago 11.

For showing, write direct to manufacturer.

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

Time-Life Building, New York 20, N.Y.

NEW PRODUCTS • February

MILL 750 WE STAND

Look for the WCLB STAMP on LUMBER

MILL 750 WG SEL-STR @ MILL 750 WG SEL-MER @ MILL 750 WG CONST @ MILL 750 WG STAND @

Either mill number or name appears as part of stamp.

Shown above are five basic stamps of the WCLB grading system. Details of these as well as all other WCLB grade stamps are shown in a pocket size folder "Grade Stamps for West Coast Lumber" free upon request. The WCLB grade stamp is used by some 450 sawmills operating in Coast-type timber in Western Washington, Western Oregon and Northwestern California. These mills believe in strict conformance to uniform standards of lumber grading and manufacturing. Grading procedure in each of these mills is carefully supervised; they take pride in their reliability and in their product.

Look for the WCLB grade stamp on lumber. For 35 years it has been the "seal of approval" on lumber everywhere.

WEST

COAST

City.

LUMBER INSPECTION BUREAU

Zone____State

West Coast	Lumber Inspection Bureau, Room 19
1410 S. W.	Morrison Street, Portland 5, Oregon
Please send	me your free folder
'Grade Star	nps for West Coast Lumber''.
Name	

FEBRUARY 1960

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In celebration of our 60th year of world-wide progress . . .

Special Anniversary Offer to Builders

A Genuine Coleman gas-lite

with the installation of

America's Only Bonded Line Heating and Air Conditioning

Now you can give your homes the extra elegance of outdoor gas lighting at no extra cost!

As a 60th anniversary salute to builders, Coleman makes this offer: A genuine Coleman Gas-Lite for every home in which you install a Coleman central furnace, wall heater, floor furnace or air conditioner.



This allows you to offer the home buyer a *double* bonus. Bonus No. 1 is an exclusive \$500 Warranty Bond on the Coleman equipment installed. Bonus No. 2 is the Coleman Gas-Lite.

Lamp is easily placed at any point where it adds the most charm—in front yard or patio, along driveway, on wall of house or garage, on a table. And remember—the Gas-Lite is yours with the installation of Coleman heating or air conditioning. Get in touch with your Coleman dealer or mail coupon below.



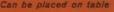
Also makers of famous Vit-Rock water heaters, Decorama space heaters, Coleman lanterns, camp stoves, jugs and coolers mobile home heating and air conditioning

Works on any gas-Installs 4 ways Can be mounted on post (as at left)









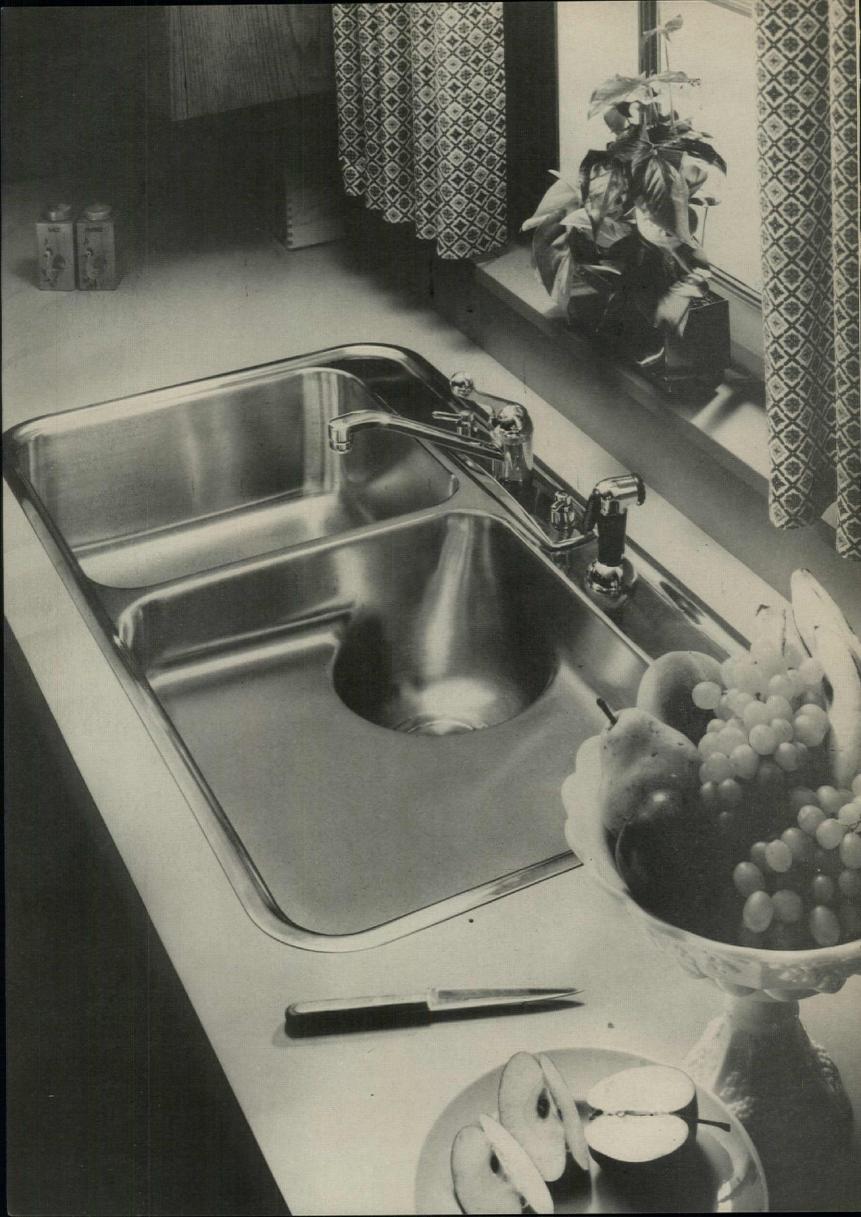


with decorator bracket

The Coleman Company, Inc. Wichita 1, Kansas

I'm interested in your gas-lite offer. Please have your nearest dealer see me.

Name		
Address		
City	Zone	State



The corner that catches buyers... Lyoncraft Disposo-Well[®] Sink

Here's the sink that does things for your homes-and your customers! Lyoncraft Disposo-Well, only sink engineered just for disposer units, is proving an invaluable selling asset for kitchens everywhere ... and giving homemakers new kitchen efficiency as well! That's because the disposer drain has moved to the upper corner for more unbroken work room above and below the counter. Food can be prepared or dishes stacked, and yet the disposer is uncovered for instant use! And with the Redi-Rim® feature, rim and sink are a single, unbroken unit that eliminates crumb-catching cracks. Like the entire Lyoncraft line, Disposo-Well is made of strongest, top-quality nickel stainless steel for lifetime beauty and protection against corrosion. Give your homes the undeniable sales advantage of the efficient Lyoncraft Disposo-Well, in sizes to match your kitchens' or buyers' needs. And for complete sink planning, send for the new Lyoncraft catalog on the coupon below.

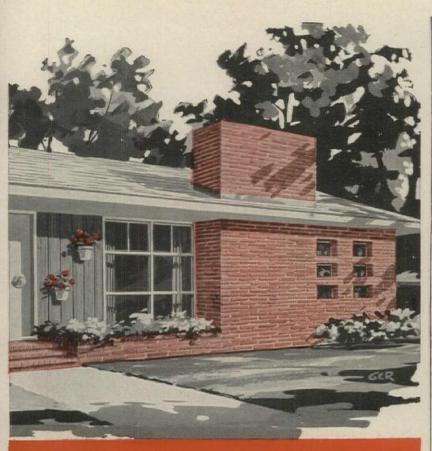
NEW CHOPPING EASE with the handy maple Cutting Board. Creates extra work space for preparing food while offering easy access to disposer.





EXTRA WASHING AREA for large pans, bulky roasters, platters, and griddles speeds kitchen cleanup. Seconds later the sink glistens bright as new.

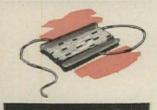
World's largest fabricator of nickel stainless steel	LYON STAINLESS PRODUCTS, 13881 W. Chicago Blvd., Detroit 28, Mich. Please send me a complimentary copy of the new 8-page Lyoncraft sink catalog. NAME
Lyoncraft 13881 W. Chicago Boulevard Detroit 28, Michigan	TITLE COMPANY
AUTOMOBILE WHEEL COVERS . PRESTIGE TABLEWARE KITCHEN SINKS . HOUSEWARES	ADDRESS CITYZONESTATE



Build Better Manage Better Sell Better... with **RRIC**









Save Up to 25% on Overall Costs With New SCR Masonry Process

Today, you can build beautiful and sturdy brick homes at costs competitive with and often less than frame construction. You can save as much as 25% on overall brick construction costs-almost 50% on labor costs alone. How? By using the new SCR Masonry Process. Proven after 5 years of testing and development, the SCR Masonry Process features three different work-saving tools: Corner poles, a light, self-elevating scaffold, and a string guide-line system. Set up quickly, these tools stay set for the life of the job. Using this method, production rises to new heights. Unlike conventional construction, masons at the middle of the wall don't have to wait until the corner men finish their work.

For the complete story on the new, money-saving SCR Masonry Process, see your brick supplier. Also ask him about a new film, "Masonry's Modern Method," produced for home builders by the Structural Clay Products Institute.

Structural Clay Products Institute 1520 18th St. N.W., Washington S, D.C.



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.

Write 707 CRESTLINE THE

COMPANY • 100 Thomas St., Wausau, Wisconsin, Dept. 5H (formerly The Silcrest Company

Windows: Slideby, Double-Hung, Stacking, Casement . Doors . Frames