RCH 1961 SIX DOLLARS A YEAR - ONE DOLLAR A COPY

# Louse Lome

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



ANSWER TO PUBLIC HOUSING? Town houses like these sell at \$63 to \$77 a month

Assembly-line economy for one-of-a-kind houses

How to reduce the risk in land buying and land development

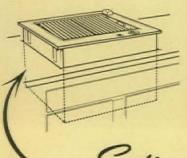
S BEGINS ON PAGE 43 / NEW WAYS TO BUILD BETTER, PAGE 159 / COMPLETE CONTENTS, PAGE 97

## Plan Good Times for your Family Room-with

# NuTone BARBECUE



NuTone's heavy-duty Barbecue Hood-Fan is installed in cabinet above the NuTone Electric Barbecue with Rotisserie.



What a wonderful way for Builders to say . . "This home is planned for FAMILY FUN!"

Delicious barbecue suppers for the family . . gay parties for visiting friends. "Cook-Outs" indoors all year 'round (without rain or chilly weather to spoil the fun). Barbecued steak, hamburger, roast and turkey are but a few of

the many flavor treats that fit into daily for preparation.

And all this at a moderate cost . . so home in every price bracket can afford to include the NuTone Built-In Barbecue. It's so easy install . . the entire unit drops into place any standard cabinet.

Entire Unit Drops In to Standard Cabinets

## **NuTone BARBECUE**

for Luxury in your Kitchen.. at a bargain



NuTone's new 48" heavy-duty Barbecue Hood-Fan can be used for both the range as well as the Built-In Barbecue.

Here's the kind of feature home buyers are looking for. NuTone's Built-In Barbecue gives your kitchen a luxury look . . and yet it has glamour with a purpose.

It's designed for convenience and safety.

Only NuTone's Barbecue offers so many exclusive features . . . channel grids that drain grease away from the heat to prevent

flare-ups . . side panels removable for easy cleaning . . anodized aluminum front panel that keeps its "new" look . . hinged cover retains heat and saves electricity . . rotisserie plugs right into the unit . . . dual heating elements with a triple position switch.

- SEE NEXT PAGE ---

Nu Tone Channel Grids avoid Flare Ups



NUTONE Barbecue

"Party Patio"



Here's a new idea that can make your homes "stand-out" values! For just a few dollars per house you can add a "party patio" that will perk up your sales like magic. Imagine if you offered a Built-In Barbecue . . in the patio . . or yard of your new homes . . what woman could resist?

Never before has so much luxury cost so little. Why not try this proven "sales closer" now? You'll agree it works like a charm.



Write for complete catalogs and Designers
Sketches showing many ways to use built-in
barbecue in the homes you are planning

NUTONE, INC. Dept. B, Cincinnati 27, Ohio

SEE OTHER SIDE

# Plan Good Times for your homes..

## THE FLINTKOTE COMPANY 30 Rockefeller Plaza, New York 20, New York Box 2218 Terminal Annex, Los Angeles 54, Calif. Please send Monoform information I am an: Architect Roofer Contractor ☐ Builder Other\_\_\_\_ THIS MAN IS APPLYING A MONOLITHIC ROOF IN ONE **FAST OPERATION** For complete Monoform Specifications see our catalog 8A/FL in Architectural and Industrial Sweets File and for Membrane Waterproofing information see our catalog 9/FLI in the same file. FLINTKOTE MONOTOPM\* SYSTEM! NEW CONSTRUCTION | RE-ROOFING | BELOW-GRADE MEMBRANES

THE FLINTKOTE COMPANY 30 ROCKEFELLER PLAZA, NEW YORK 20, N.Y. . BOX 2218 TERMINAL ANNEX, LOS ANGELES 54, CALIF.

## 6 WAYS TO TURN "LOOKERS"





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

SO EASY TO USE... SEE INTO... REACH INTO! Meat keeps fresh 7 days without freezing... vegetables stay crisp and store-fresh in the new Westinghouse Center Drawer Refrigerator. Frost-free in refrigerator section, freezer, and center drawer. 8 Choose-N-Change panel colors. For built-in or free-standing installation.



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

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

## INTO "BUYERS"



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



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



## PRESENTING THE NEWEST AND BEST FROM WESTINGHOUSE

Single-unit built-in range with terrace-type platform

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

... if it's Westinghouse.

## Westinghouse

1	99	29	7
	V	Y	1
1			de

Westinghouse Electric Corporatio 246 East Fourth Street	n, Contract Sales Department
Mansfield, Ohio.	
NAME	TITLE
COMPANY	
ADDRESS	
CITY	ZONE STATE



If your sewer pipe is heavy . . . takes too long to install . . . and will rust, rot or corrode . . . then you're taking plenty of underground losses . . . in actual installation costs and in customer good will.

Bermico Life-Guarded Fibre Pipe will save you and your customers time, trouble and money. Bermico is light in weight . . . goes down fast . . . is chemically fortified to assure extra long, trouble-free service.

We'll prove these advantages to you . . . with on-the-job facts and photos . . . in our new Bermico Proof Book. Send for your copy to Dept. HH-3.

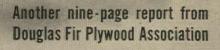
Another Quality Product of

BROWN COMPANY

150 Causeway Street, Boston 14, Massachusetts

Mills: BERLIN, NEW HAMPSHIRE . BIRMINGHAM, ALABAMA . CORVALLIS, OREGON







DALE FORSBERG Minot, North Dakota



ANDY PLACE South Bend, Indiana



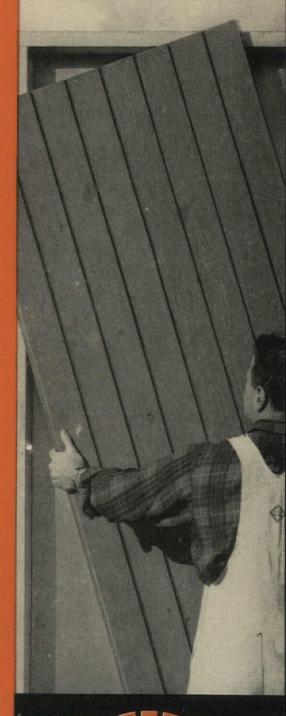
BOB CLARK San Rafael, California

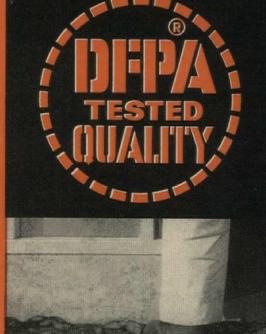


DAN NARODICK Seattle, Washington

These 4 builders show

ways to build more house for the money with FIR PLYWOOD





4 BUILDERS SHOW 16 WAYS TO BUILD

#### **MORE HOUSE**

FOR THE MONEY



DALE FORSBERG Minot, North Dakota

# Plywood construction = savings of over

"We use plywood wherever we can. It's a real cost-cutter. Customers like it, too. Sales are up. Complaints down."

Time is money for Dale Forsberg of Minot, North Dakota. That's why he uses virtually all-plywood construction in 80-100 homes he builds per year in the \$17,000-23,000 price range. Plywood builds a better quality home, yet by capitalizing on its labor-saving advantages and using it to do two jobs in one operation—like siding-sheathing and subfloor-underlayment—he saves \$888 per house. Savings are passed on to home buyers in the form of extras giving the builder a competitive sales edge. Homes are often sold before the foundations are poured.

Every phase of the Forsberg operation is carefully planned and scheduled using specialized crews who retate from house to house. Here is how cost savings with plywood break down on a typical unit.

1.3/8" PlyScord® roof sheathing	\$202.00
2. Leaving plywood roof deck and rafters exposed at the eaves	126.00
3. Exterior plywood siding applied to studs without sheathing .	275.00
4. 2.4.1 plywood subfloor-underlay with spline joint	225.00
plus additional savings in overhead because plywood	
saves 10 days construction time per house	60.00
Total:	\$888.00

Total: \$888.00



## + careful work schedules \$800 per house for Forsberg, Inc.

#### PlyScord® sheathing halves labor, forms solid deck for built-up roof

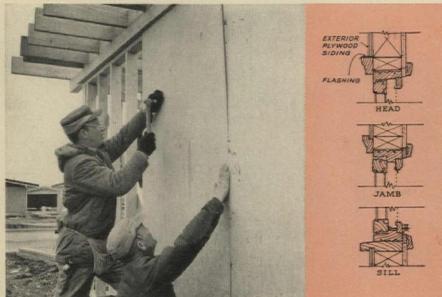
Forsberg uses PlyScord grade plywood roof decks for built-up roofing—at a savings of \$202 per house over the cost of boards. The plywood goes down much faster, forms a stronger, tighter deck for the finish roofing. It requires less nailing and fitting; cuts down on waste. Panels 3%"-thick are used over rafters spaced 16" o.c.

### 2 Smooth underside of plywood deck is exposed, eliminating soffits

Simply by leaving rafters exposed at the eaves, Forsberg saves another \$126 by eliminating both time and materials required to install soffits. He says this is possible because the painted underside of the plywood roof deck is attractive "as is" without boxing-in. He uses A-C grade Exterior plywood, good face down, for all parts of the roof deck exposed to the weather.







3

### Single thickness of Exterior plywood serves as both siding and sheathing

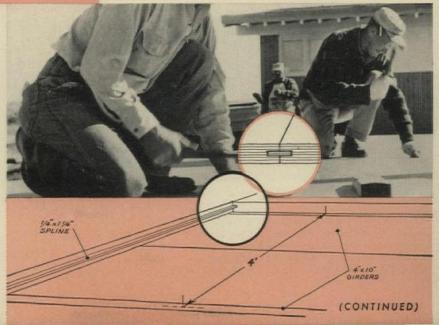
Conventional wall sheathing is completely eliminated by applying either Texture One-Eleven®(vertical grooved panels) or ½" Exterior plywood and battens directly to the studding. Savings: \$275 per house. Plywood combined siding-sheathing has ample bracing strength and meets FHA requirements.

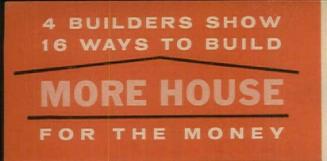
Look for the DFPA-quality trademark on all plywood you buy

#### New idea in floor construction uses 2.4.1° plywood with a spline joint

Savings of \$225 per house are made by using  $2\cdot 4\cdot 1$  ( $1\frac{1}{6}$ "-thick combined subfloor-underlay panels) over girders on 4-foot centers, using splines instead of  $2\times 4$ s to support panel edges. The system saves time and materials, eliminates need for additional underlayment for resilient flooring. It presents an attractive and uncluttered basement ceiling highly popular with buyers.

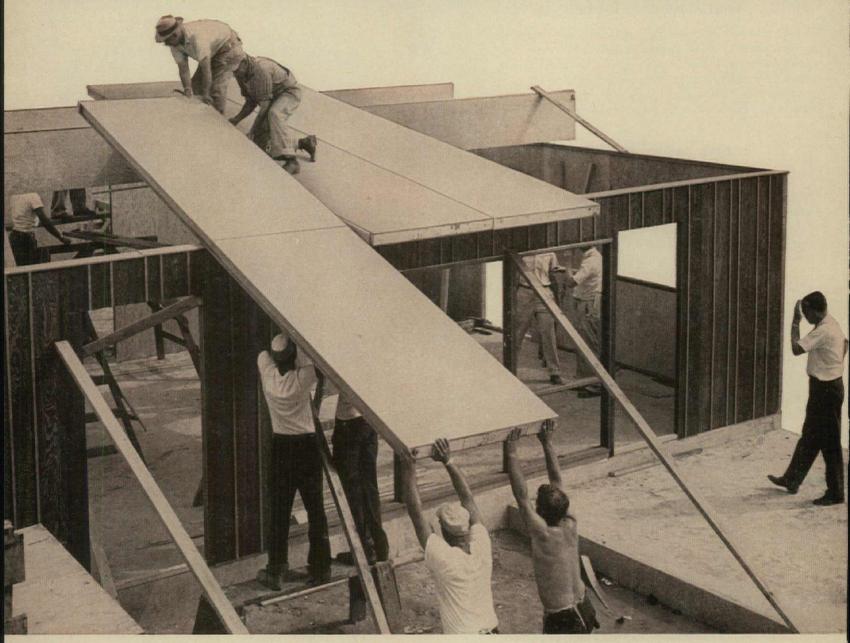
For more information about plywood sheathing, siding or subflooring, write Douglas Fir Plywood Association, Tacoma 2, Washington.

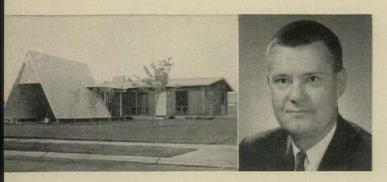




# You'll be using factory like these

NAHB South Bend Research House shows 4 ideas for tomorrow's house you can use today





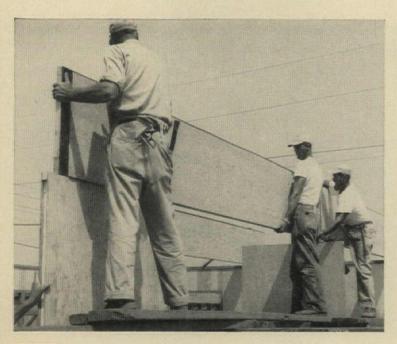
The South Bend Research House was sponsored by NAHB Research Institute to investigate new ways to build better for less. It was built by Andy Place (above), Place & Co., Inc., South Bend. Consulting Architect: Herman York. Both also serve as Research Institute trustees. Coordinating work for the NAHB Research Institute: Ralph Johnson, director and John M. King, assistant director.



**Stressed-skin roof panels** made of DFPA-quality trademarked fir plywood and foamed styrene were installed in less than 2 hours. They combine the function of rafters, roof deck, insulation and finish ceiling in one easily handled component that replaces the many hand fitted layers of a conventional roof and ceiling. Panels (each 4 x 18 ft. and weighing only 190 lbs.) extend from ridge to eave and are joined with splines so that the plywood facings butt to each other. Strength is provided by the ½" fir plywood top and bottom, with foam plastic used for insulation and as a spacer between the skins.

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

# made fir plywood components sooner than you think



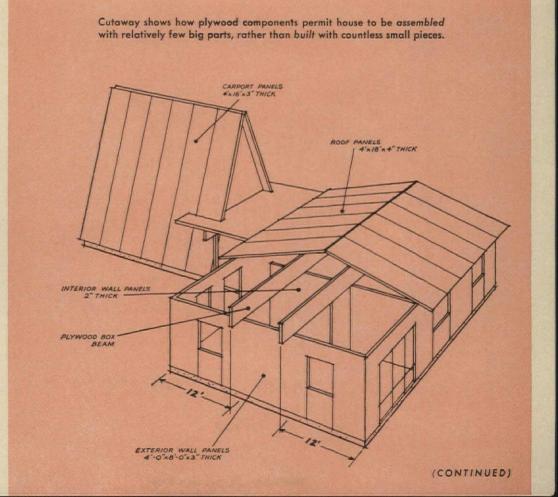
Plywood box beams act as the main roof support, have 3/8" fir plywood skins nail-glued to 2x4 top and bottom chords and stiffeners. Projecting (or recessed) end stiffeners form tongue and groove joints over bearing partitions. Advantages of fir plywood box beams include high strength-weight ratio, design freedom, dimensional stability, easy-to-finish surfaces.



**Exterior wall panels** were erected in 3 hours, 20 minutes. Outer face is ½" "brushed grain" plywood with inset redwood battens; inner face is ¼" fir plywood. Foamed styrene core gives panel a total thickness of 2¾" and a "U" value of 0.1. The individual panels are tied together with splines and a continuous top plate shaped to conform to roof pitch.



Carport, built by hinging foam-core fir plywood panels together prior to erection, cost some \$400 less than conventional semi-enclosed carport. It demonstrates cost-cutting advantages of components as well as new building forms they make possible.



4 BUILDERS SHOW
16 WAYS TO BUILD

MORE HOUSE
FOR THE MONEY

# The extra quality of Builder Bob Clark



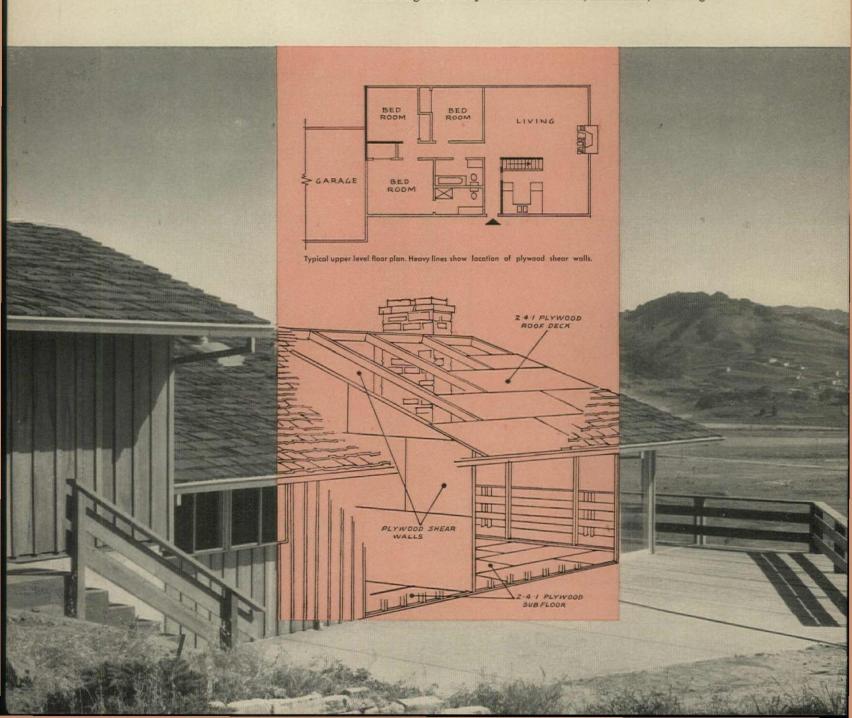
BOB CLARK San Rafael, California

"Solid basic construction is a 'must' in \$30,000 homes. To us that means DFPA plywood. It's the best money can buy."

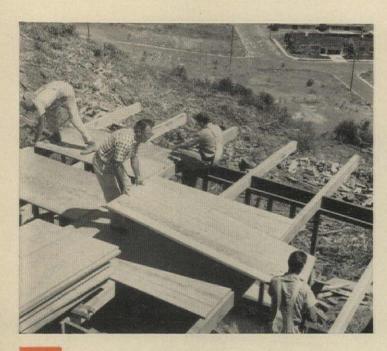
Bob Clark has found today's second-time home buyers a lot more sophisticated about basic structural materials—especially with 2-level homes perched on steep lots in Northern California's earthquake territory. Plywood's extra strength can be just as important as good design, or a spectacular view—all of which are featured in Clark's semi-custom Madera Gardens homes in Corte Madera. He describes his homes structurally as good looking reinforced plywood boxes that can't wrack or twist.

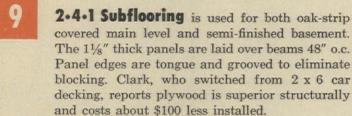
Clark's homes contain over 2,000 square feet and range in price from \$23,500 to \$30,000—or about \$11 a square foot, lot included. Plywood saves about \$200 per house, largely due to lower installation costs.

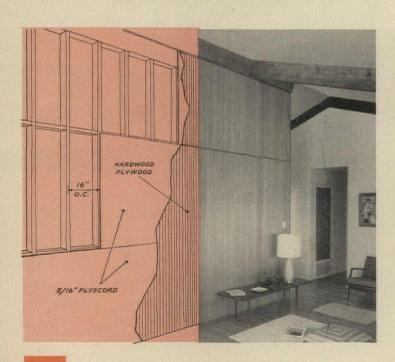
For more information about fir plywood structural applications, write Douglas Fir Plywood Association, Tacoma 2, Washington.



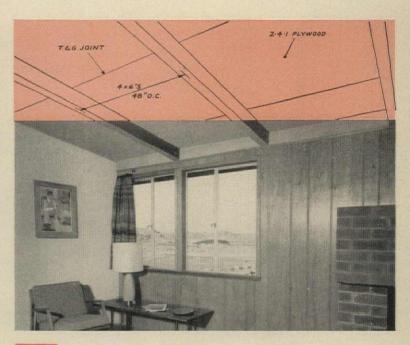
# fir plywood construction helps sell the upper-income market







Plywood shear walls eliminate bracing on all other walls and permit use of large glass areas on the view side. Used in pairs (see floor plan), they work with the horizontal plywood floor and roof diaphragms in resisting high wind or earthquake loads. At least one shear wall on every home is continuous from foundation to roof.



2.4.1 Roof decking is basically a modification of the floor system. Panels serve as both roof sheathing and finish ceiling. Panel edges between beams are tongue and grooved, with eased edges. As with subflooring, the in-place cost of plywood construction comes to \$100 less than car decking; material costs are the same, but plywood can be installed in half the time.



**Texture one-eleven** is used either as the basic side wall covering or as an accent for other materials. Panels are applied directly to the studding without sheathing and are given two coats of a heavily pigmented shake and shingle stain. In the house above Texture One-Eleven is used on the upper level carport to relate it visually to the main structure.

4 BUILDERS SHOW 16 WAYS TO BUILD

#### **MORE HOUSE**

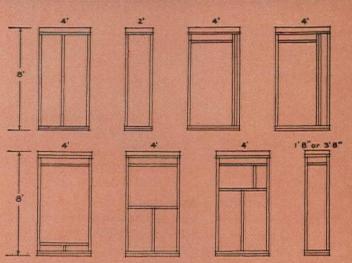
FOR THE MONEY

# How one tract builder -and saves \$300





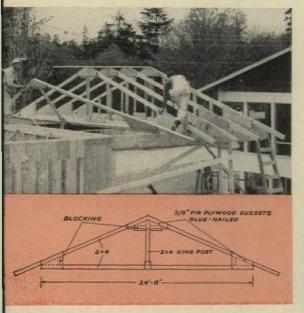
Hebb and Narodick, Seattle, Wash., have just completed one 41-home tract using Lu-Re-Co plywood components, and are using them on another 106-home tract just getting under way. Dan Narodick (above) is partner in charge of the projects. Al Curran is superintendent.



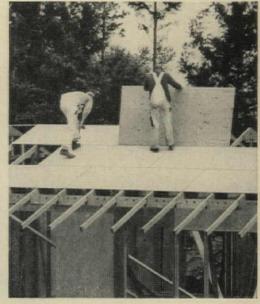
8 basic panels are used, with %'' PlyScard® sheathing over  $2 \times 4s$ , 24'' o.c. Window frames are installed by fabricator. Sections rest on %'' fir plywood sole plate and are tied together by a continuous double  $2 \times 6$  header.

# uses Lu-Re-Co plywood components per house in labor costs alone

Roof construction is fast and easy with plywood sheathing over pre-fab trusses and gable ends







Kingpost trusses eliminate load bearing partitions, save 16 man hours per house. Two men take less than 4 hours to install the 24 trusses

than 4 hours to install the 24 trusses used on each house. Nail-glued fir plywood gusset plates fasten truss members securely... provide added stiffness and rigidity.

15

Pre-fab gable ends are installed by a two-man crew in 20 minutes—compared to four hours required for piece-by-piece construction on the job. Units are basically kingpost trusses covered with 3/8" Exterior fir plywood and battens.

PlyScord® roof sheathing

takes between one third and half the time required to do the job with boards or shiplap. Panels, ½" thick, are applied over trusses on 2-foot centers. Plywood sheathing saves on nailing, reduces waste, provides superior lateral rigidity.

#### WE URGE YOU TO SPECIFY ONLY DFPA TRADEMARKED PLYWOOD

#### because...

The DFPA-industry quality control program assures satisfactory performance of the plywood you buy.

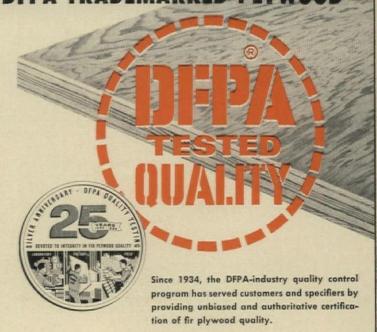
DFPA conducts product research and development to give you the best material for the job—and up-todate information about how to use it.

DFPA works with building codes to clear any road blocks which might prevent you from using plywood to best advantage.

DFPA national advertising programs help pre-sell your customers on plywood construction, as well as enlarge the new home market.

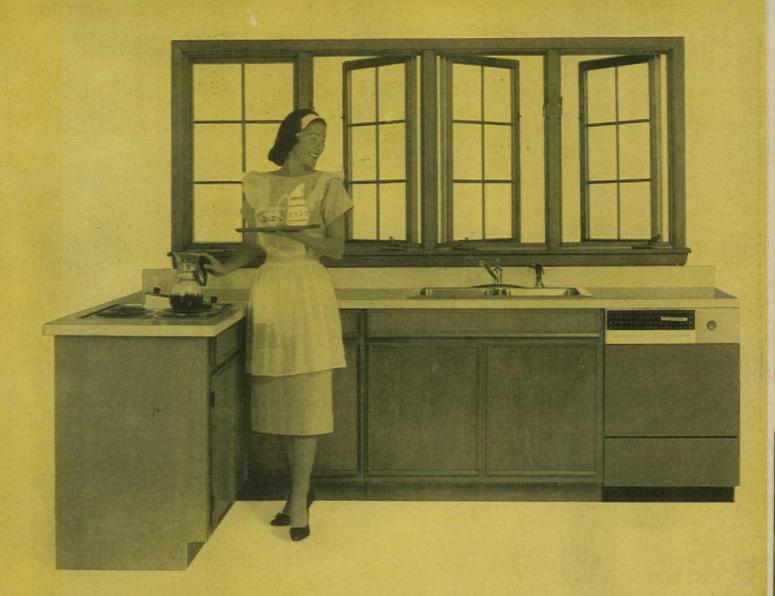
In view of these activities in your behalf, we again urge that you buy only DFPA-trademarked plywood.

DOUGLAS FIR PLYWOOD ASSOCIATION, TACOMA, WASHINGTON
-a non-profit industry organization devoted to research, promotion and quality control



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"

# Wood makes the best STA



HANDSOME VISTARAMA CASEMENT WINDOWS enhance and brighten this modern kitchen setting. Graceful slimline mullions admit maximum light for cheerfulness and lasting charm.

Home buyers want these Vistarama features:

BEAUTY, INSULATION OF WOOD—Vistarama windows, made of clear Ponderosa Pine, have beautiful natural grain and texture. Wood, nature's own insulator, conducts 1800 times less heat and cold than metal.

MORE WEATHERTIGHT—Neoprene weathstrip, wood bead glazing—these Vistarama features afford tighter seal in any weather. Units of wood are designed to reduce condensation . . . resist expansion and contraction, for trouble-free year-round operation.

**VERSATILITY**—Vistarama offers a complete line of Casement, Picture-Awning and Panel window units for every home, every room. Each is precision-engineered for easy installation in countless attractive groupings.

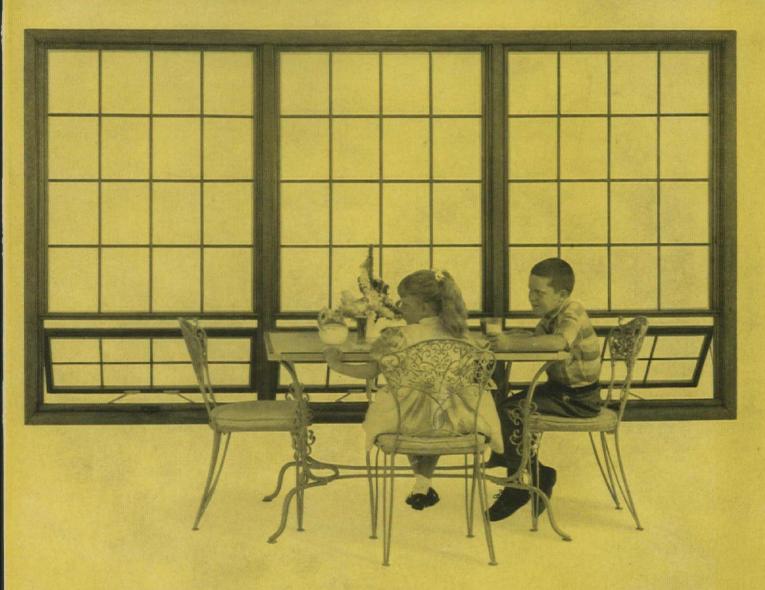
**ENGINEERING KNOW-HOW**—Vistarama's field-leading design and construction features

\*Kitchen built-in appliances by Preway, Inc.; "Continental" kitchen cabinets by Yorktowne.

window...the best wood window is

# RANA

BY WABASH



PRACTICAL VISTARAMA PICTURE-AWNING UNITS afford picture view . . . fresh air, too.

New! Removable framed grids for smart decorator touch. Vistarama units are available with

diamond, horizontal and divided light grids.

are the product of over 75 years of Wabash woodworking skill.

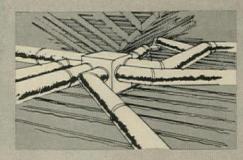
COMPLETE STOCKS AVAILABLE—Check Vistarama specifications at your dealer's. Ask about his Vistarama stocks, prompt delivery. Get the facts on this modern line and you'll settle for nothing less than Vistarama Windows.



#### DISTRIBUTION

Wabash Vistarama Windows are sold through reputable millwork jobbers and lumber dealers. For the name of your nearest dealer, write: WABASH VISTARAMA at the address below.

THE WABASH SCREEN DOOR COMPANY 1217 Florida Street, Memphis 2, Tennessee



G-B DUCT makes heating and air conditioning systems as quiet as "a soft white kitten walking on a plush carpet!" Its uniformly thick glass fiber walls contain millions of tiny sound absorbing cells that soak up equipment noises, thus eliminating a major homeowner complaint about the air conditioning system.

Prefabricated, round 6' sections of G-B DUCT install faster than metal ducts . . . save on heating and cooling expenses by reducing heat loss and heat gain . . . eliminate moisture condensation thanks to a vapor barrier covering. What's more, G-B DUCT is completely inorganic—does not rot, corrode, mildew or deteriorate. Write for complete information today.

Manufacturing Company.
258 W. 10th St., Kansas City 5, Mo.







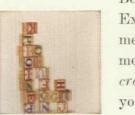


Steel Gray Plate Sash and Door

# A TREASURE HOUSE OF MERCHANDISING IDEAS



Muralex Windbreak and Door



Set like a jewel in the Stone Canyon hills of Bel Air, California, the home shown on these pages embodies today's most wanted residential qualities. It's an expensive house. Yet its unusual features have been economically achieved—so that its value is far greater than its cost. This is largely due to the extensive use of special glasses by A-SG—by Architect William Sutherland Beckett and the Thielen-Coleman Corp., Builders. Experience suggests that many of these merchandising values can be offered in modestly priced homes. Which of these creative ideas in glass is right for your next project?

AMERICAN-SAINT GOBAIN



Designed Satinol Dressing Room Door

RADIANCE...
ELEGANCE...
PRIVACY...
COMFORT...
SPACE



Sliding Muralex Cabinet Door

The house is radiant. By day, natural light floods the interior. Generous expanses of STEEL GRAY PLATE GLASS and matching LUSTRAGRAY® window glass bring in sun and scenery—yet keep out glare. At night, the interior glows—with rich colors subtly modulated by the neutral-tinted glazing. The sliding windows are fabricated and pre-glazed by Fentron, Inc.

The house is *elegant*. Rich glass textures and patterns not only serve practical purposes, but contribute a beauty of their own. Changing light creates constantly changing moods.

Glasses range from almost total obscurity, as in the MURALEX® entrance windbreak, through all degrees of visibility: the sliding shower doors of NUWELD® mesh, the bath and dressing room installations of BEADEX®, RANDEX®, and DESIGNED SATINOL®.

The house is private where privacy is needed. Obscure A-SG glasses pass softly diffused light, but cut off visibility between utility and living areas. In the daytime, the greater opacity of A-SG's gray plate and lustragray — from the outside — keeps occupants from feeling 'on display'.

The house is comfortable — with sun levels controlled by the glarereducing windows. The easy main-



Nuweld Mesh Shower Doors

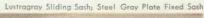
tenance of all glass surfaces contributes to comfort too.

The house is *spacious*—and feels even more so because glass divides its sections without divorcing them ... and brings the outdoors in.

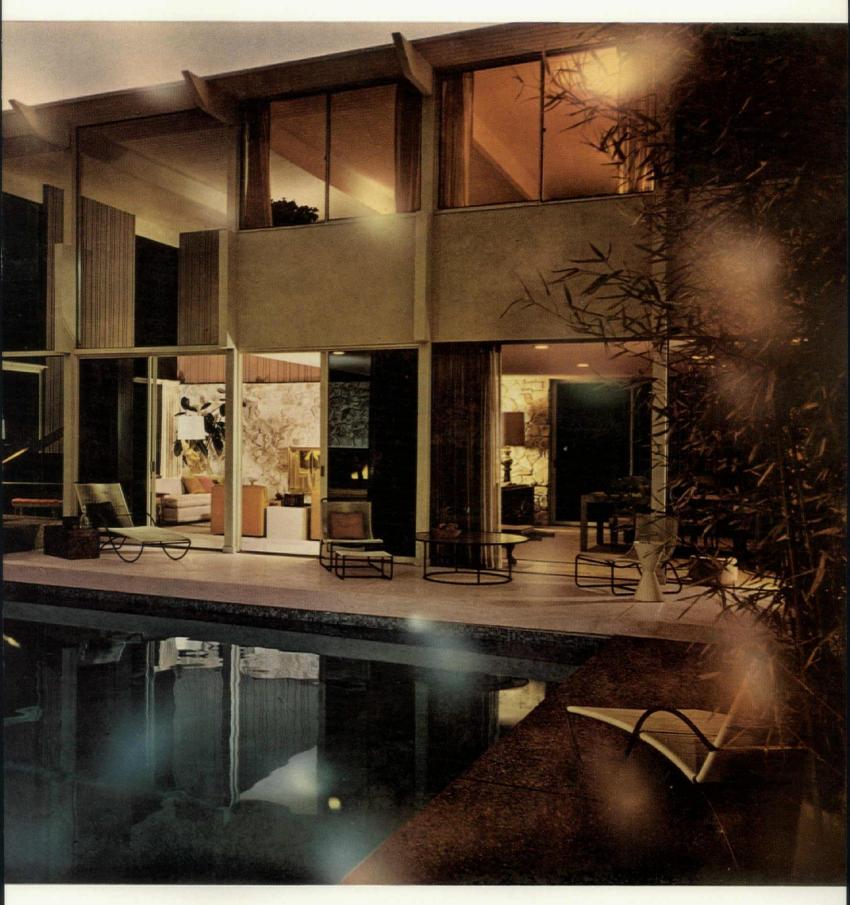


Beadex Matte Bath Entrance









A-SG GLASSES
ADD VALUE...
FAR BEYOND
THEIR COST
... TO ANY
HOME

Yes, you can offer dramatic vistas or glamorous accents at least expense — through the magic of glass by A-SG. No material equals its brightness, its smartness, its versatility. And no qualities are more desired in a home today than the light, the elegance, the feeling of space, and the easy care that only glass can give. You get more merchandising power per dollar—with large-area glazing or decorative uses—than with any

other material or 'extra'.

And remember: functional glass can replace costlier installations. A patterned glass wall, for instance, eliminates lathing, plastering, decorating on both sides...requires far less labor and erection time. What's more, you can give your prospect his own choice of dozens of A-SG styles and patterns...or individualize each of your houses by varying them yourself.



THE BROAD,
FUNCTIONAL
SPECTRUM
OF GLASS BY
AMERICANSAINT
GOBAIN

#### AN ENDLESS SOURCE OF DESIGN AND MERCHANDISING IDEAS

The small sampling of A-SG glasses, above, suggests
the great variety of designs, functions, colors, and special
characteristics available from a single supplier to the building
industry. All major types of flat glass are represented.

For full information, call the American-Saint Gobain
district office nearest you...or write:

Dept. HH11, 625 Madison Avenue, New York 22, N. Y.

#### AMERICAN-SAINT GOBAIN CORPORATION

District Sales Offices in: Atlanta, Boston, Chicago, Dallas, Detroit, Kansas City, Los Angeles, New York, Pittsburgh, San Francisco

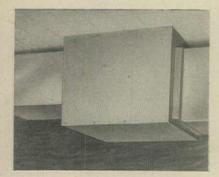




I-HEAT AND COOL any home with this TRANE Climate Changer! (Downflow unit for basementless homes shown.) Oil or gas-fired heating units in sizes and types for any home, in any climate. Matched compressor unit located outside.

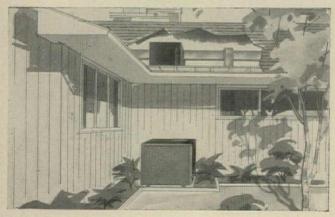
**2** — OFFER OPTIONAL COOLING! Install just the heating unit, now—point out to your customer he may easily add the cooling (lower section) later. Uses same ductwork; and units are *matched* for easy installation, peak performance.

## Trane gives you 4 ways to heat, cool-or both-while holding building costs down!



3-SEPARATE COOLING SYSTEM—not connected with heating system. Fan-coil unit is ideal for use with TRANE Baseboard heating or other types of wet heat, or with electric resistance heating. Tucks away in attic, crawl space, basement, utility room.

'4-NEW HEAT PUMP HEATS, COOLS! Air-to-air type heat pump uses no water; heats and cools entire home. Operates on *electricity*; no chimney, no flue needed! Same ductwork system delivers heating and cooling throughout entire home.



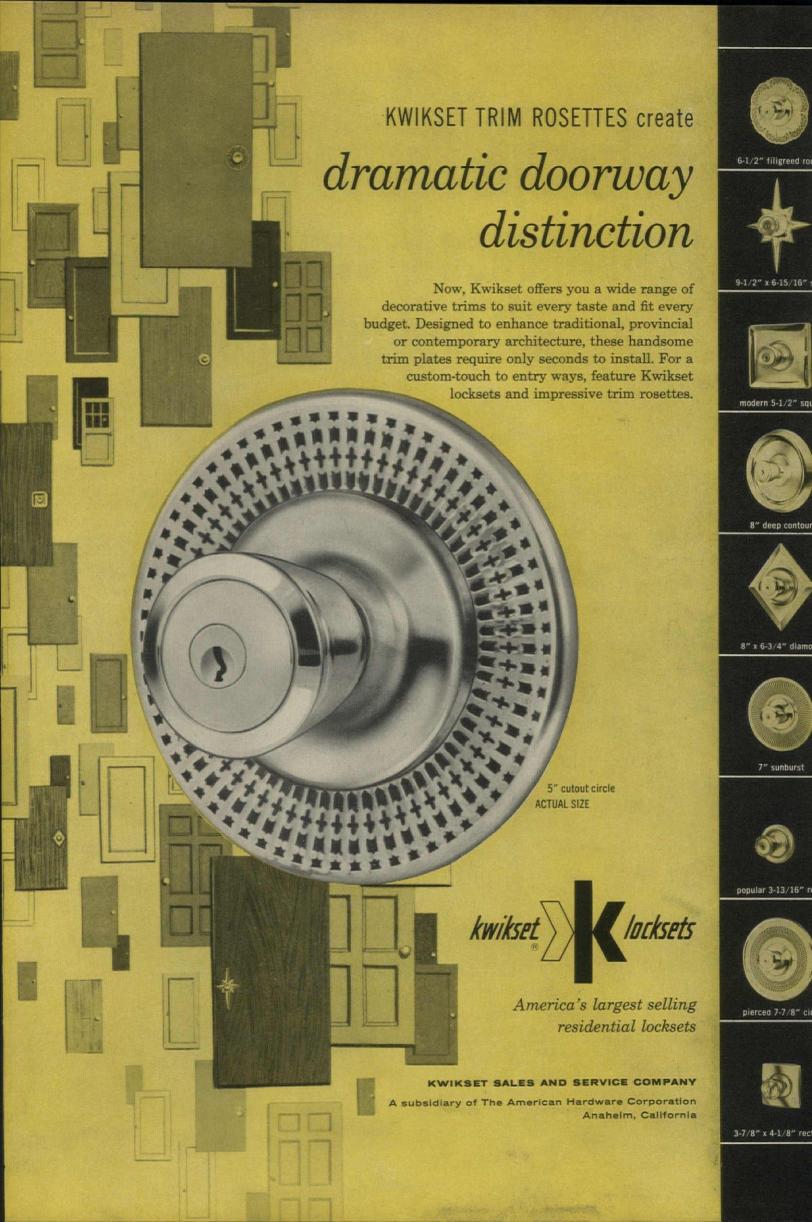
These new Trane Climate Changer units give you a wide choice of systems for heating, cooling—or both. And it's quality air conditioning, from Trane, leaders in big building systems. It's matched equipment, built together to work together. Remember: the name Trane on your heating-cooling system helps mark yours as a quality home because Trane is nationally advertised, nationally recognized for its quality air conditioning equipment. And every Trane system is carefully installed by a selected air conditioning contractor. For complete facts, just call your nearby Trane Sales Office, listed in the Yellow Pages under "Air Conditioning." Or write Trane, La Crosse, Wisconsin.

For any air condition, turn to

# TRANE

MANUFACTURING ENGINEERS OF AIR CONDITIONING, HEATING, VENTILATING AND HEAT TRANSFER EQUIPMENT.

THE TRANE COMPANY, LA CROSSE, WIS. . SCRANTON MFG. DIV., SCRANTON, PA. . CLARKSVILLE MFG. DIV., CLARKSVILLE, TENN. - TRANE COMPANY OF CANADA, LIMITED, TORONTO - 100 U. S. AND 19 CANADIAN OFFICES



# Insulite Primed Siding Performance Proved on more than 4 million homes

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

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

MOVES HOMES FAST. Homes made with Insulite Primed Siding have much more appeal to buyers. The deep shadow line, the absence of knots and splits, the extra smoothness of the finish paint job means these homes move faster in almost any development. It gives you an important "extra" to sell: a lifetime of lower maintenance costs!

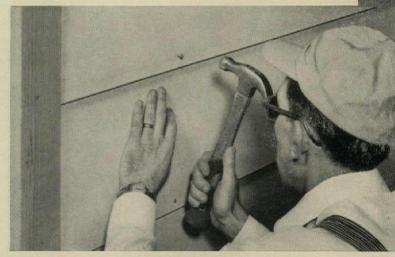
TRY IT YOURSELF. If you haven't yet used Insulite Primed Siding, plan for it on the next homes you start. You'll find out why the thousands of builders order and reorder.



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

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

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

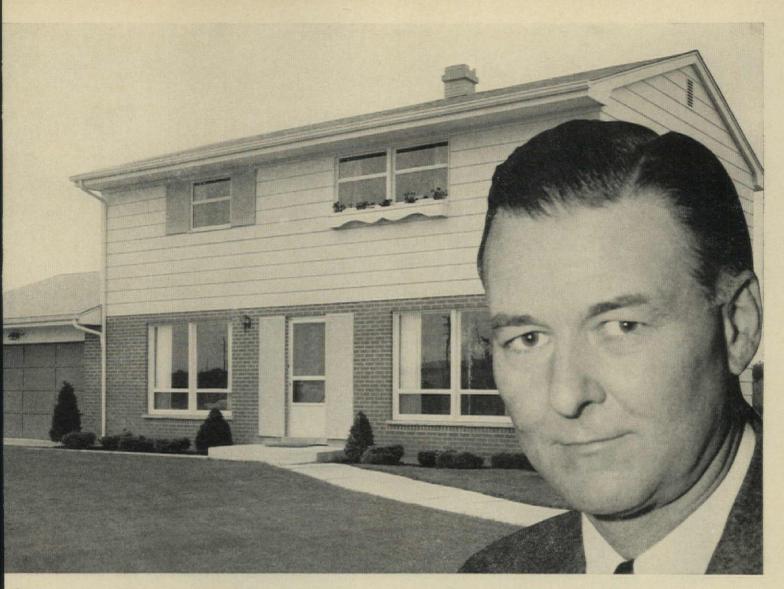


EASY TO HANDLE-EASY TO WORK Easy to saw, plane and nail—and saves carpenters' time because it works so easily. Straight lengths, full widths and square cut ends mean less waste and less application time.

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

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





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

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

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

Primed Siding so resistant to paint blistering? The complete deep-prime coat which is applied at the actory is one reason. In fact new construction can tand for several rainy days without a finish coat—and there's no need to worry about Insulite Siding aking up water.

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

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

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

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

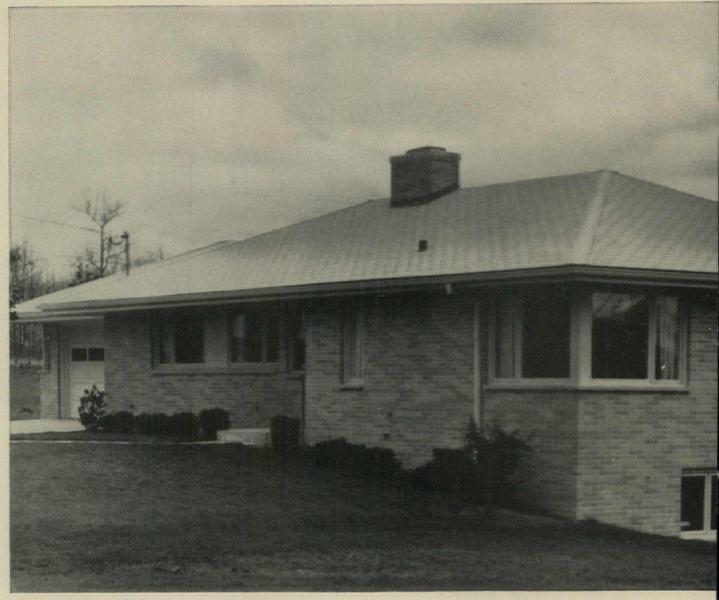
Circle Postcard No. 69

## Build better with INSULITE Primed Siding



Insulite Division, Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota

#### "More favorable comment about



TWINDOW will give this attractive home more sales appeal.

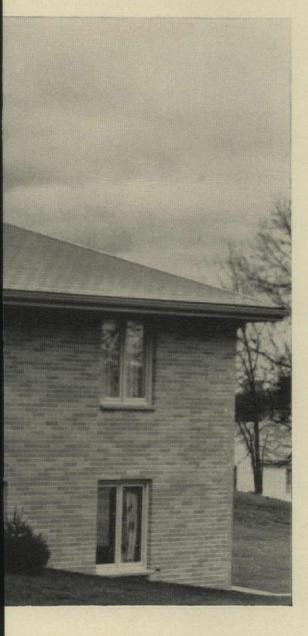


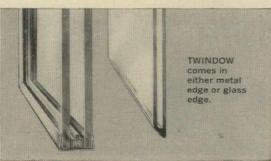
This room will be more comfortable year 'round, because of TWINDOW.



TWINDOW, shown here installed in a Caradco Sash, will help keep this home warmer in winter, cooler in summer.

# TWINDOW than about any other item,"







says Wayne DeDoes A. N. W. Home Builder Kalamazoo, Michigan

In and around Kalamazoo, Michigan, Mr. Wayne DeDoes builds homes in the \$20,000 to \$30,000 price range. Here's what he says about TWINDOW: "I use TWINDOW insulating glass in most homes I erect. I don't know of

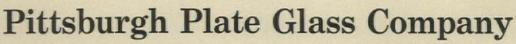
another single item I put into my homes that brings so many favorable comments. Many of these comments come from buyers who have lived a comfortable winter or two in their TWINDOW insulated home. It gives me a feeling of pride when my buyers tell me how much they enjoy the comforts that TWINDOW brings to them."

TWINDOW is two panes of Pittsburgh glass with a layer of dry air sealed between. It insulates; helps keep a home warmer in winter, cooler in summer. TWINDOW eliminates storm windows and minimizes downdrafts, window fog and frost. TWINDOW brings outdoor beauty indoors without cold, heat or dirt.

With TWINDOW in every window and sliding door, homes have more sales appeal. TWINDOW Glass-Edge and TWINDOW Metal-Edge come in all popular sizes for a wide variety of window and door styles. Our free TWINDOW booklet has all the information. Write today, to Pittsburgh Plate Glass Company, Room 1129, 632 Fort Duquesne Blvd., Pittsburgh 22, Pennsylvania.

... the windowpane with insulation built in





Paints • Glass • Chemicals • Fiber Glass In Canada: Canadian Pittsburgh Industries Limited



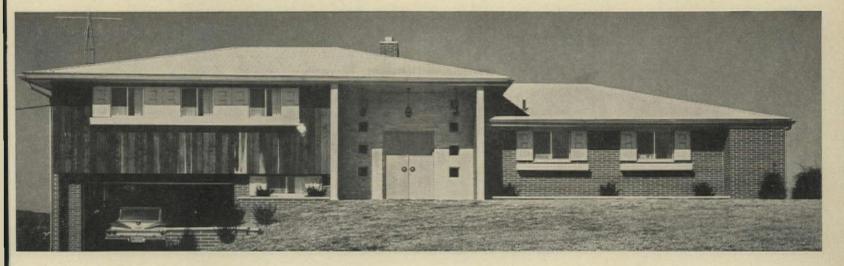


Maintenance-Free REPUBLIC STEEL PIPE for waste lines and vents offers builders and homeowners dependable service at lowest possible cost. Heavy-duty Republic Steel Pipe is galvanized both inside and out for greater protection and corrosion-resistance. Easy to cut and thread on the job. Republic Steel Pipe waste lines were used in a Warrensville Heights, Ohio, development of 30 homes in the \$21,000 to \$30,000 range. Your Republic distributor offers immediate delivery of low-cost steel pipe. Call him, or write for additional information.

Maintenance-Free TRUSCON SERIES 57 STEEL DOORS and CLASSIC LOUVER FOLDING DOORS offer built-in features that sell—at prices builders can afford. Truscon doors never stick, never warp, never sag -eliminate costly builder call backs. Truscon Classic Louver Folding Doors roll smoothly, effortlessly on nylon guides. Truscon Doors are sound-deadened to open and close silently. Steel frames give lowest installation costs, too. Order Truscon Doors, frames, and accessories for same-time delivery from one source. Call your Truscon Dealer listed in the Yellow Pages and refer to Sweet's Light Construction File. Or, send coupon for more information.

Maintenance-Free REPUBLIC STAINLESS STEEL ROOF DRAINAGE PRODUCTS give years and years of trouble-free service at lowest per year cost. Super strong to stand up under heaviest loads of ice and snow. Stainless never bleeds or discolors siding. Stainless can't rust out, never needs replacing. In addition to stainless steel, your Republic Roof Drainage Products Distributor carries a full line of galvanized steel, terne, and copper, with perfectly matched accessories to assure fast, low-cost installations to boost builder profits. Ask for Republic Roof Drainage Products by name—available from your sheet metal distributor.







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World's Widest Range of Standard Steels and Steel Products



Strong, Modern, Dependable

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Please send more information on the following products:

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- ☐ Traditional Finish
- ☐ Republic Steel Pipe
- ☐ Truscon Series 57 Doors
- ☐ Truscon Classic Louver Folding Door
- ☐ Republic Stainless Steel Roof Drainage Products
- ☐ Republic Roof Drainage Products

Address\_\_\_\_

\_Title\_

Zone\_State\_ City\_\_\_



1. I was behind the times in the kind of trim I used.



2. Those long lengths gave me a pain.



While labor costs sprouted, I fussed and fitted to find the most economical cuts.



Still, there were so many leftovers I scarcely knew what to do with them.



## JOHN DAY TRIM

# 

3. Trimming out defects, nicks and stains wasted material and time.



6. But now I'm up to date with John Day Trim. Open the package, miter and it's done—without waste!

## saves money on time, ends waste of material

PRE-CUT...in standard door and window sizes with allowance for mitering. Buy only what you use, avoid the costly waste of many feet of leftovers.

PACKAGED...to stay free of dirt, stains and nicks until you unwrap it for use. Each package clearly end labeled to prevent mistakes in application, ordering or shipping. Everything you need in each door set—stops and casing strips. Two packages trim a window—one containing horizontal members; the other, the vertical parts. Small inventory goes far.

100% CLEAR...made of the finest softtextured Ponderosa Pine, absolutely free of defects. Easy to work. Satin smooth surface easy to finish.

TWO GRADES...for all natural finishes— Type "N", Window and Door Trim. For paint and enamel finishes—Type "P", Door Trim only, which costs 20% less.

# HINES

Dept. 6100

#### FREE SAMPLES!

For your free samples of John Day Packaged Door and Window Trim, clip this panel, sign your name, attach to your letterhead and mail to Edward Hines Lumber Co., 200 S. Michigan Ave., Chicago 4, Ill.

Name-

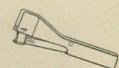
Edward Hines Lumber Co.
Sawmills at Hines, Westfir,
Dee and Bates, Oregon.
Other plants: Plywood, Westfir;
Hardbord, Dee; Millwork, Baker
and Hines, Oregon.
Engineering and
Development Division;
Hood River, Oregon.



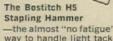
#### IT'S BUILT TO DO JOBS WELL...TO DO JOBS PROFITABLY... TO GIVE YOU MORE TIME FOR MORE JOBS



—the standard for all other spring tackers also available with heavyduty spring.



-the almost "no fatigue" way to handle light tacking jobs.





Stapling Hammer —for on-the-job medium tacking.



Stapling Hammer —for shingling and other heavy-duty stapling. The quality, ease of operation, and long-lasting usefulness built into each Bostitch stapler mean an increase in your profits.

You'll find there's one for every fastening job. Shingles, foiltype and batt insulation, undercourse shakes, ceiling tile and many other materials are fastened quickly and easily, so you can build better at less cost in time and materials.

See the complete line at your Building Supply Dealer. Buy them-profitably-for your next job.

Profits are better and faster with



# Your kitchens will be fully equipped ...with Robertshaw-controlled gas built-ins



### Robertshaw FLAME MASTER®

- . full cooking and baking control, plus low temperatures down to 140°
- thaw frozen food in a jiffy
- warm plates at low temperatures that "pamper" fine china
- keep roasts for hours . . . just right
- keep complete meals at serving temperatures for hours, without overcooking . . . with leisure time to shower, dress, relax or entertain

### ... and the fully-equipped kitchen helps sell the new house.

The most important room in the house, to Mrs. New-Home-Buyer, is the kitchen. Demand Robertshaw gas range and oven controls on your new built-ins . . . and use their superior features as selling points for your kitchens.

All these superior Robertshaw flame set and flame master control features are added selling points for your new homes. Insist on FLAME SET and FLAME MASTER controls for your new built-ins.

For the names of manufacturers using Robertshaw controls as standard equipment, write Robertshaw Thermostat Division, Robertshaw-Fulton Controls Company, Youngwood, Pennsylvania.

For real fast service, use DIRECT DISTANCE DIALING. Dial 412-242-7171.

The name that







PELLA ALSO MAKES QUALITY WOOD MULTI-PURPOSE WINDOWS, WOOD FOLDING DOORS AND PARTITIONS, ROLSCREENS AND WOOD SLIDING GLASS DOORS \_\_\_\_ THIS COUPON ANSWERED WITHIN 24 HOURS \_

ROLSCREEN COMPANY, Dept. MB-24, Pella, Iowa

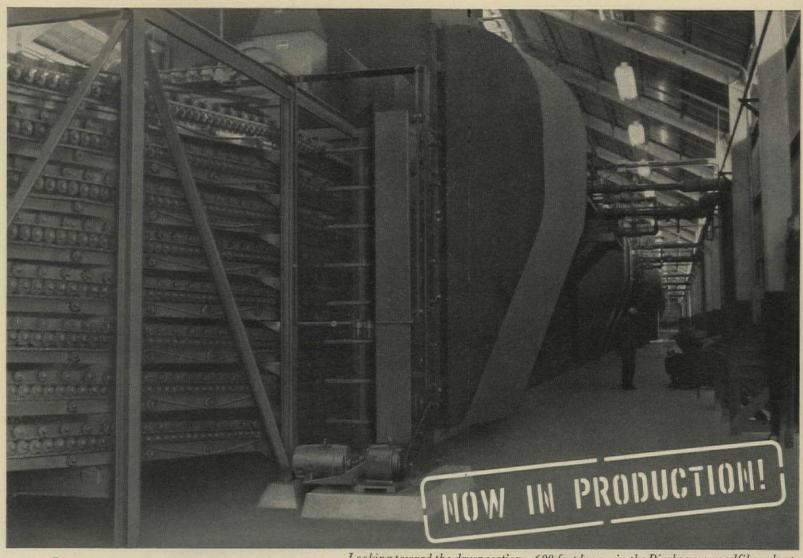
Please send illustrated details on PELLA WOOD CASEMENT WINDOWS with the exclusive Rolscreen feature.

NAME

FIRM NAME

ADDRESS CITY & ZONE

STATE



Looking toward the dryer section - 600 feet long - in the Dierks new woodfiber plant.

# Dierks woodfiber sheathing

a new dimension in sheathing quality

At Craig, Oklahoma at the new Dierks Woodfiber Division plant Dierks engineers have pushed the starting buttons. A new concept in fiberboard production has come into existence. This modern plant, using the most up-to-date machinery available to the industry is now producing Dierks Insulating Sheathing, Shingle Backer and Roof Insulation.

Throughout the long history of the Dierks company its forest products have been produced under exacting standards of quality. Now, Dierks Insulating Sheathing is being manufactured under this same rigid standard.

Dierks Sheathing is available in ½" or 25/32" thicknesses in several sheet sizes.

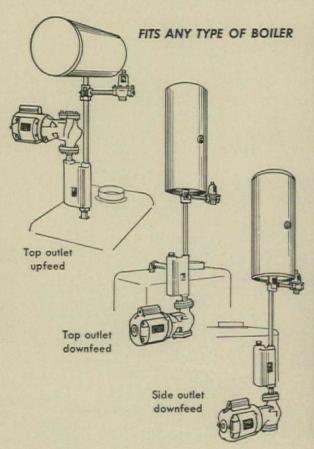
Ask the Dierks Representative that calls on you for further information or write, phone or wire

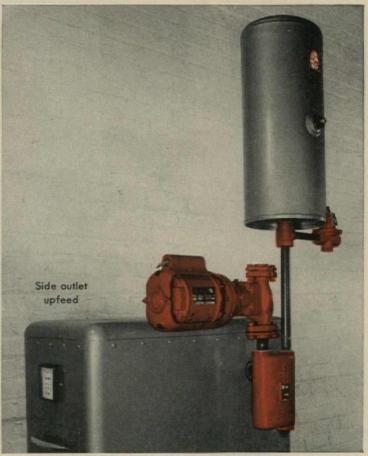
# Dierks Forests, Inc. Woodsiber Division

810 Whittington Ave., Hot Springs, Ark.



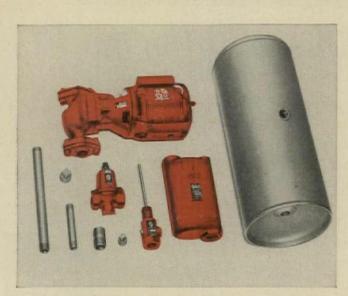
### PRE-ENGINEERED FOR BUILDERS





# B&G Hydro-Flo PAK

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



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

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

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

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

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



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



Eagle Walnut field with Par Cherry used in a strip pattern, one of many combinations available.

# Elegance—Quietly priced for the mass home market Beautiful BondWood\*Parquet

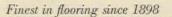
The exquisite beauty of HARRIS BondWood has caught the eye of more home builders in the medium price range than any other parquet. Actually, although BondWood is asso-

ciated with only the finest, there's a Bond-Wood parquet for *every* price home. Oak, Walnut, Maple, Cherry and Angelique (Guiana Teak). Solid hardwoods in small individual slats, arranged in squares, provide

unlimited designs. The square joints assure

a tighter fit—no beveled edges—and bothersome squeaks are eliminated.

Write today for free color booklet, giving you all the details on Bond Wood. Harris Manufacturing Company, Dept. HH31, Johnson City, Tennessee. See our catalog in Sweets.

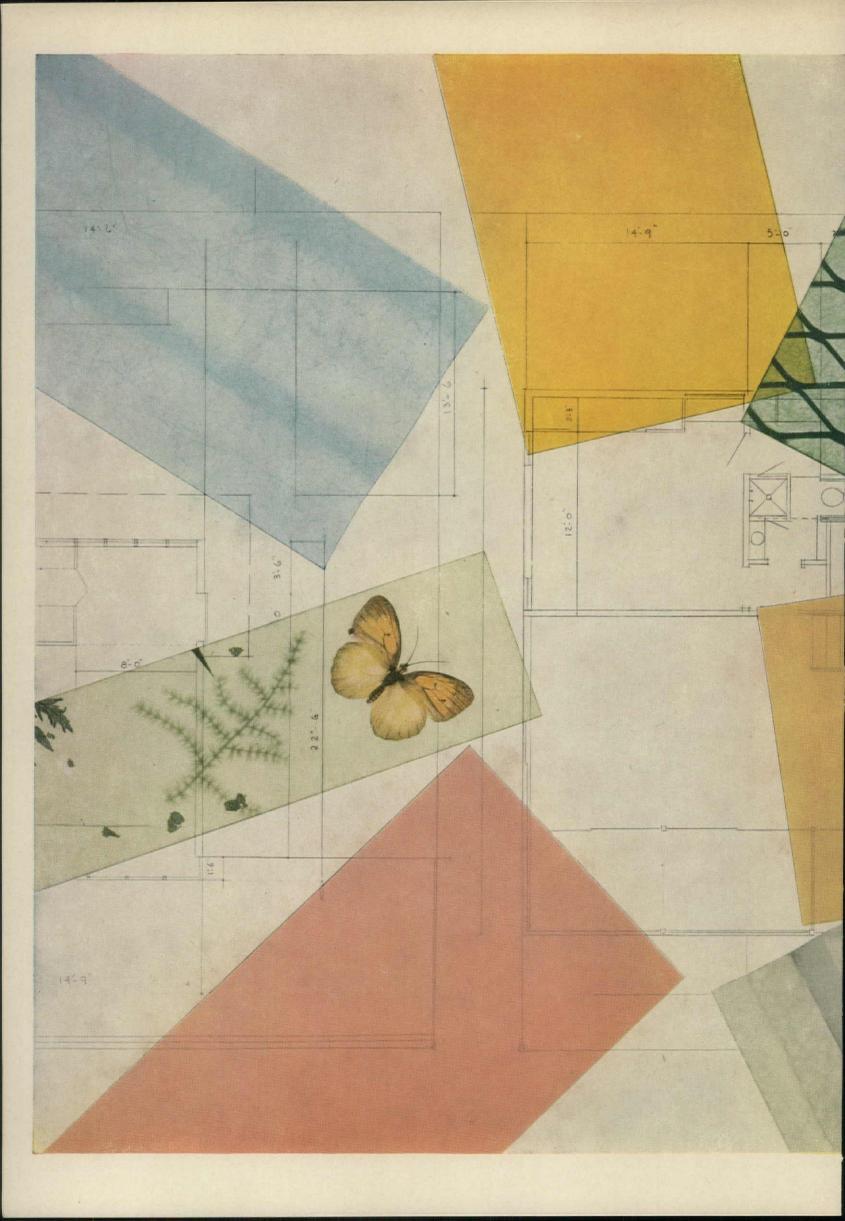


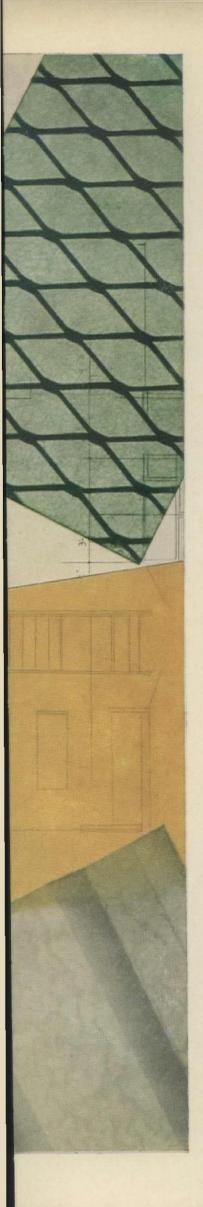
### HARRIS FLOORING



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







# a good start deserves the finishing touch— ALSYNTE

# Plan to use the trend-setting translucent panel with the name your prospects know!

Your starts deserve the best — and you'll find that translucent Alsynite can be the effective touch that makes the most of any plan. Alsynite is the translucent panel of light and beauty that has created an entire new trend in contemporary building. Its complete versatility, handling ease and great inherent strength permit you to use it freely indoors and out to achieve individual effects.

Since Alsynite transmits only soft, glare-free light, it provides illumination with privacy. Reinforced with millions of glass fibers, Alsynite combines great strength with light weight—is absolutely shatterproof, won't warp or chip.

Moreover, Alsynite is the premium quality translucent panel you can rely on. It is backed by its own reputation and the world-wide resources and reputation of RCI, one of the great names in chemicals. An additional bonus to you: Alsynite is the name your prospects will recognize, for its story is being put before the consumer through the biggest advertising promotion in the history of the industry.

Alsynite is available in a variety of colors, sizes and textures in corrugations or flat panels. Talk over your requirements with your dealer, listed in the Yellow Pages under plastic products. Or for free literature or promotional aids, write Alsynite, San Diego 9, California, Dept. HH-361.

ALSYNITE TRANSLUCENT PANELS



A DIVISION OF REICHHOLD CHEMICALS, INC.



Translucent Alsynite transmits only diffused glare-free light. Provides the ideal solution for skylighting, side-lighting, illuminated panels, contemporary interior dividers and partitions.



Shatterproof Alsynite won't warp, chip or peel. Performs beautifully in the kitchen as light ceilings, sliding doors. Perfect, too, as codeapproved shower doors or tub enclosures.



Strong and exceptionally lightweight, Alsynite requires a minimum of structural supports. Can be used in fencing, patio and carport covers to add sales appeal to the finished structure.



Now, with new, lower prices...

# Kentile Rubber Tile costs so little

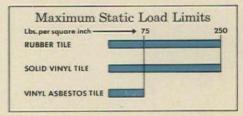


Now you can specify Kentile® Rubber Floors for many more commercial and institutional installations. The cost? Close to Vinyl Asbestos and other floors . . . even less than Solid Vinyl Tile. Look at this comparison:

	1/8" thick marbleized	Approx. installed cost					
10,000 sq. ft.	Rubber Tile	@ 47¢s	q. ft. = \$	54700			
10,000 sq. ft.	Vinyl Asbestos Tile	@ 41¢ s	q. ft. = \$	\$4100			
10,000 sq. ft.	Solid Vinyl Tile	. @ 61¢ s	q. ft. = 8	\$6100			

## Provides so many more advantages

- The most quiet and comfortable underfoot of all colored resilient tile. (Only cork tile exceeds rubber tile in these characteristics.)
- Can be used anywhere indoors . . . even over concrete in contact with the earth, on or below grade, with the use of special adhesive.
- Tight-fitting joints . . . that stay that way permanently.
- Easy to clean and maintain. After the first few months' use, Kentile Rubber
- Floors are as economical to maintain as Vinyl Asbestos or Solid Vinyl floors.
- Excellent resistance to indentation. (See chart below.)



Which tile for which installation? Kentile Architectural Representatives offer expert advice to professionals. Since Kentile makes all leading types of resilient tile, counsel is unbiased. Call your nearest Kentile sales office.

# KENTILE FLOORS

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# Roundup:

### Is Fanny May the key to Kennedy's promised money policy?

In housing, as in nearly everything else, President Kennedy is acting. But some experts wonder if some of his housing moves are as contradictory as the Chief Executive himself concedes his monetary policy seems to be.

In the campaign, he promised to issue an executive order barring racial bias in federally assisted housing. But if he does, he faces a good chance that Congress may defeat major portions of his forthcoming housing program (see p 46), notably public housing and perhaps even his proposal to up housing to cabinet status.

He has cut FHA's interest ceiling (on one- to four-family homes) from  $5\frac{3}{4}$  to  $5\frac{1}{2}$ %. But lenders are promptly boosting discounts almost enough to leave the real cost of mortgage money where it was (see p 63). Builders figure the nudge to starts will be mostly psychological. Pent-up demand is gone; vacancies are rising.

If lower interest rates fail to give housing a big enough shot in the arm, say Washington analysts, the next move may be more direct mortgage support through Fanny May. Such an approach was hinted in the controversial Samuelson task force report on the economy. And if Fanny May buys enough mortgages, it could force long-term investors into other markets and so put downward pressure on interest rates for corporate and tax-free obligations. If Fanny May finances its buying by selling short-term debentures, it would push up short-term rates.

### Home Loan Bank pumping \$1 billion into housing credit

Mortgage rates have already dropped about ½% from their year-ago peak, and most economists agree they are headed for a further fall—perhaps another ¼%. The Home Loan Bank Board's moves in response to President Kennedy's anti-recession drive should nudge rates down even faster. The board has taken four steps that could add as much as \$1 billion to the nation's available mortgage credit.

The most significant, S&L experts say, is revival of special bond-financed 5-year advances to S&Ls, last used by the HLBB during the 1958 recession. Last time this totaled \$290 million in 31/8% loans, even though only 500 S&Ls (out of 4,716 eligible) used the program. S&Ls are more interested this time, because this money promises to be cheaper than paying depositors (average S&L interest to depositors is now 3.97%).

The board has also: 1) lifted the ceiling on advances by regional home loan banks from 12½% to 15% of S&L's deposits; 2) cut minimum down payments for conventionally financed homes priced from \$20,000 to \$25,000 (from 10% down up to an \$18,000 loan to 10% down

up to \$20,000 value and 80% of the next \$5,000 value with a maximum loan of \$22,000; 3) boosted the amount federal S&Ls can lend to buy and develop land from 3% to 5% of their deposits. Up to now, the last item has been used only by a comparatively few S&Ls.

### Rate of private starts gains despite heavy snows

Considering the heavy winter weather in the Northeast, housing is holding up surprisingly. The annual rate of private starts in January jumped 9.7% from December to 1,070,000 (see p 51). That's too low, of course—17% below a year earlier. But with all the snow the wonder is that it wasn't worse. If spring comes early, don't be surprised at floods from the Ohio River to the Atlantic Coast.

#### Do tax changes threaten syndicates, trusts?

Realtors are watching tax reform proposals warily. Some Kennedy advisers are urging that capital gains treatment on profits from the sale of real estate be wiped out—along with the same privilege for other depreciable assets. This would be sweetened by granting faster depreciation to stimulate investment. Eisenhower also asked for a similar change, but only on property other than real estate.

Realtors figure covering realty, too, would tend to freeze property holdings—very bad for their business. They hope to persuade the Treasury to recommend keeping capital gains treatment for long-life items (including buildings). If the reform goes through as proposed, it would nullify the big advantage of real estate syndicates and trusts. One sure result: a major drop in rental construction where fast write-off and capital gains now promise good profits in five to seven years.

#### Mayors blame FHA for slowing urban renewal

President Kennedy's telegram to mayors of 297 cities asking them to speed up urban renewal projects is drawing a lot of replies putting the blame on federal red tape, notably in FHA.

"The greatest bottleneck is the policy of FHA all over the nation," retorted Mayor W. B. Hartsfield of Atlanta. "FHA is so committed to vast suburban building programs that it is reluctant to make reasonable commitments to encourage development in renewal areas." Mayor Robert Wagner of New York also complained that tortuous FHA "procedures (which) have existed for many years" slow renewal. Wagner also suggested that Public Housing Administration drop its rule that localities must acquire two-thirds of a public housing site before they can resort to condemnation.

\*\*News continued on p 46\*\*

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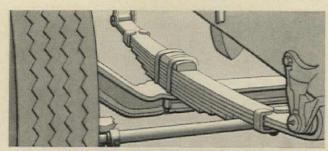
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# Will Kennedy postpone anti-bias moves until Congress votes new housing aids?

Hope is growing in some Washington circles that President Kennedy will postpone issuing an executive order barring race bias in federally aided housing.

How long? Perhaps at least until housing starts to show more signs of a real comeback. Anyway, until the economic slump (Kennedy calls it "recession") is reversed, so any integration-slump in housing would not worsen unemployment.

The most tangible evidence of this possibility—and it is pretty thin—is the belated move by Rep Albert M. Rains (D, Ala.) to reconstitute his House housing subcommittee. Rains stalled a month and a half before taking action. Ordinarily he does so the first week of each Congressional session. The reason was pretty plain to Capitol Hill analysts: Rains wanted assurance from Kennedy that he wouldn't try to force the issue on open occupancy. Apparently, he got some. This will apparently smooth the way for House approval of Kennedy's housing program. Southerners count only a five-vote margin in the House for housing's most controversial 3%, public housing. And that would evaporate if the President moves strongly on race bias, they say.

The prospect, too, is that integration moves might lead Congress to balk the President's plans to convert HHFA into a cabinet-rank Dept of Housing & Urban Affairs (note that Kennedy put housing back into the title in his state-of-the-union message). And on this phase of his program, the President has left no doubt: he wants a cabinet department to help US cities—this year.

In his state of the union message Jan 30, Kennedy promised, among other things, to propose housing legislation in two weeks. Three weeks later, not only was there no hint of immi-

nent proposals but HHFAdministrator Robert C.

Weaver and his advisers were making it clear they would prefer to have much more time to develop plans. So a Presidential housing message may wait until late March or even April, said insiders.

### In the long run, some kind of executive order on race bias seems inevitable.

If the President doesn't issue one, he would renege on one of his most clear-cut campaign promises. He first took up the question during the bobtailed post-convention Congressional session. He taunted President Eisenhower for ignoring the urging of the Civil Rights Commission to issue such an order and promised: "If the present Administration does not, the next Democratic Administration will." He reiterated his stand a month later in a talk in Los Angeles.

In December, when Kennedy announced his selection of Robert Weaver to be HHFAdministrator, newsmen asked him again about race bias in housing. He replied he would get into it after his inauguration. Since January 20, the President has been silent on the subject.

Some federal housing aides favor a mild order putting the Administration on record as favoring non-discriminatory housing—something even southern Congressmen could stomach. But Negro leaders and civil rights groups would raise almost as much protest over this kind of compromise as over no action at all. "It would be pure poison," says NAACP's Clarence Mitchell. Negro groups want an order requiring "positive covenants" by lenders that FHA and VA housing will be open to all races.

### At his confirmation hearing before the Senate banking & currency committee, HHFAdministrator Weaver made these points:

- 1. The timing and scope of any federal order requiring open occupancy in federally aided housing (ie FHA, VA, public housing, urban renewal) will be up to President Kennedy. Weaver says flatly he will not issue such orders on his own authority. In the meantime, he is refusing to be drawn into discussion on the toughest anti-bias question of them all: how far might the Kennedy Administration go in enforcing integration in public housing in the South—a possibility which the South cries would wipe out the program (or force the US to seize and operate projects).
- 2. Weaver does not believe conventional loans made by federally insured savings institutions (ie banks, S&Ls) should be made subject to a federally-imposed open occupancy requirement.
- **3.** There is a vast difference between open occupancy—the principle of equal access to federally aided housing—and total racial desegregation in housing. The latter cannot be legislated, Weaver notes. "These processes and social change take time," he says. Would he take steps to bring this about at once? "I do not think I could if I wanted to and I do not think I should if I could," he says.
- **4.** Weaver opposes benign quotas for racial integration because "I do not think they are effective over the long run."

### What Kennedy has done to spur housing, what he says about his plans

"A reduction in mortgage interest rates is long overdue. Despite the easing of the general money market in the past year, the cost of mortgage credit still hangs just below its postwar peak. I have been assured that officers of many leading lending institutions share my view that present mortgage yields are unrealistic, and are prepared to cooperate in an effort to make mortgage money available at lower rates . . . What is good policy here for the private housing sector is also good policy for public construction activity."

This is President Kennedy's explanation (in his economic message Feb 2) of his major moves so far in housing. At his order:

- FHA has cut its interest ceiling from 534 to 5½ for one- to four-family homes under Secs 203b, 203i, 213, 220, 221, 222, and 809.
- Federal Natl Mortgage Assn has cut its required purchase of FNMA common stock by those who sell FNMA mortgages from 2% to 1% of the mortgage. And it has boosted its buying price ½ point (under its secondary market program) for 5¾% FHA and 5¼% VA loans, and set a matching price schedule for the new FHA 5½s (96½-98½). It also boosted its buying prices for special assistance mortgages ½ point. New schedule: 99½ for FHA 5¾s, 98½ for 5½s, 97½ for 5¼s—with no variations by state.
- Community Facilities Administration has shaved ½ % off interest rates on loans to localities for public works. New rates: ½ % for general obligation bonds, ½ % for revenue bonds. Additionally, CFA has suspended the 10,000 population ceiling for eligible cities. And it will now approve loans for "any type of public works, except those already receiving federal aid, instead of limiting loans to sewer and water systems and gas transmission lines," says HHFA. For college housing, Kennedy freed \$100 million for subsidized loans which the Eisenhower Administration sidetracked.
- HHFA and URA ordered a speed up on projects in nearly 300 cities which are already under way or fully planned. These represent an outlay of nearly \$2 billion in public funds, plus some \$6 billion in private money. "The federal government will do everything in its ability at all levels to quicken the pace of urban renewal work," said the President.

What is Kennedy's philosophy on housing and urban renewal? So far, as President, he has spelled it out in two brief paragraphs:

"... We will do what must be done. For our national household is cluttered with unfinished and neglected tasks, Our cities are being engulfed in squalor. Twelve long years after Congress declared our goal to be 'a decent home and a suitable environment for every American family,' we still have 25 million Americans living in substandard housing. A new housing program under a new housing and urban affairs department will be needed this year" (state of the union message, Jan 30).

"We must have the energy and vision to lay sound foundations for meeting the problems which will result from the steady growth of our urban areas through the balance of this century. This task calls for new initiative and imagination in a great diversity of fields: in housing construction, in the maintenance and improvement of our vast existing stock of housing, in urban renewal, in provision of essential community facilities, and many others. . . It calls for more comprehensive and more practical planning for urban and metropolitan areas" (economic message, Feb 2).

Photos: H&H staff



ARRIVING, New Yorker Weaver (c) is flanked by Sens Jacob Javits (r) (R, N.Y.) and Kenneth Keating (1) (R, N.Y.). Keating presented Weaver to the committee with warm praise. Javits, a committee member, spoke up for him from dias.



TELEVISION CAMERAS (above) meant floodlights throughout the long quiz. Not since the FHA windfall scandals of 1954 has a Capitol Hill housing story drawn such a turnout of top Washington newsmen and photographers.



RECESS, to await a Presidential letter vouching for Weaver's loyalty, interrupted the hearing after only 8 mins. Spectators milled around in a corridor while committeemen argued in executive session. Weaver, sweating, chain-smoked.



PRESIDENTIAL LETTER is shown to newsmen by Chairman Robertson as the interrupted hearing resumed at noon. The timing of the delay let Robertson's move capture headlines in many of the nation's afternoon papers.



LOYALTY QUIZ by Sen William A. Blakley (D, Tex.), Lyndon Johnson's hand-picked successor, left crowd and senators laughing at Blakley when he bumblingly mistook a headline for a by-line, remarked that a review of one of Weaver's writings seemed to be written by "J. Crow, realtor." Witness Weaver (r) never lost his aplomb during more than a day's interrogation, but privately conceded it was "an ordeal."





## Spectacle: Bob Weaver confounds his critics

## at an acrimonious hearing on his confirmation as HHFAdministrator

"This nomination," intoned the white-haired chairman of the Senate banking committee, Sen A. Willis Robertson (D, Va.), "is a controversial one. In addition to . . . the political and social philosophy of the nominee, I received a number of complaints touching on the subject of his loyalty."

Thus, before a standing room only crowd in a small chamber on the fifth floor of Washington's new Senate office building, began the remarkable hearing last month which ended in an 11-4 vote to confirm Dr Robert C. Weaver as HHFAdministrator.

It was an accurate portent of sensations to come, for the hearing was no more than 8 min old before Sen Robertson ordered it into executive session, refusing to continue until President Kennedy replied to his unprecedented request for Presidential clearance of Weaver's loyalty. An hour and a half later Robertson got the letter he wanted. The proceedings moved on to matters more germaine to housing and, two days later, to a voice vote on the Senate floor confirming Weaver after an afternoon of pro forma floor debate.

Weaver's was the first nomination by President Kennedy to draw any adverse votes from a Senate committee. Three of the four votes

SWEARING IN by White House Clerk Herbert Miller (r) was watched by President Kennedy and Mrs. Weaver. Weaver took office as the fourth HHFAdministrator on Feb. 11.

against him came, not unexpectedly, from the committee's three Southern senators: Chairman Robertson, John J. Sparkman of Alabama, and William A. Blakley of Texas—all Democrats. The fourth dissenter was Wallace Bennett (R, Utah), a conservative who has far reaching objections to so much government in housing.

So at least three of the four votes against Weaver—a lifetime crusader for Negro rights and voluble exponent of open occupancy laws for housing—came from legislators whose constituencies would allow them no other public position.

Three other things made the whole confir-

mation proceeding a remarkable event:

- 1. Southern defenders of racial segregation presented their views so backhandedly (Sparkman relied on quoting what Sen Paul Douglas said during debate on the 1949 housing law) that you could sense their feeling the cause is lost
- 2. Even so, the nettlesome questions thrown at Dr Weaver led him to an always philosophical, sometimes brilliant exposition of where he stands on housing's great new issue.
- **3.** In the end, outvoted and frustrated Southerners reached for the smear, tried to tag continued on p 50



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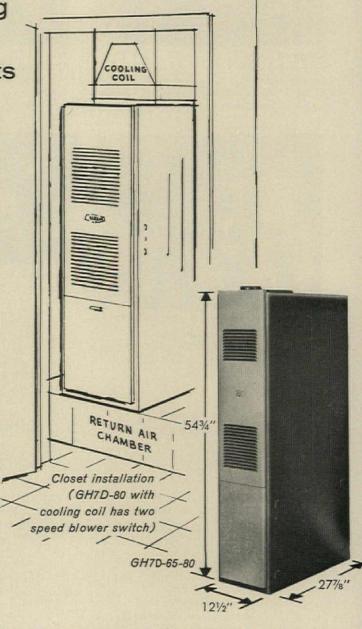
Space-Saving, Money-Saving COMPACTS

For Small Homes or Apartments

The largest of these, with a two-ton cooling coil on top, will slide through a standard door... even with the floor raised for a return air chamber! 51,000, 65,000 and 80,000 Btuh gas input. No clearances to combustibles at sides or rear; return air can be taken at bottom or side. You save space. You save money. These "compacts" are examples of how Lennox continues to meet specific needs of builders in today's highly competitive new home market.

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works like a terrier!

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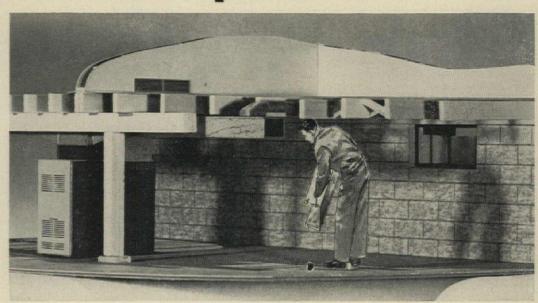
they respect Lennox quality.

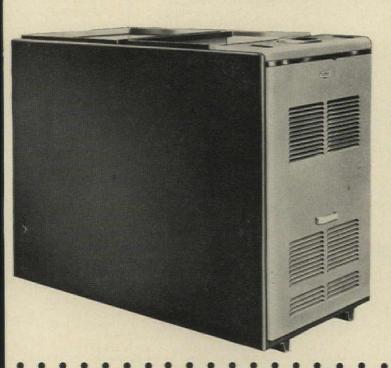
- 4. Dependable customer service— Lennox doesn't leave you out on a limb with poor local service. Lennox deals directly with its 5,000 Lennox dealers who blanket the nation. They are factory-trained in latest service techniques. Behind them stands the industry's finest factory service organization.
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## New Gas Lo-Boy Designed for Split-Level Homes

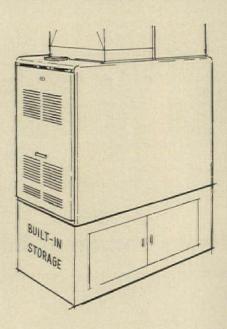
Photo of scale model shows you how easily the new Lennox GF6, including a top mounted cooling coil, fits into a 5-ft. equipment area in a typical split-level home. It handles large homes with ease, providing the type of comfort that keeps home buyers satisfied year after year.





### Here's a Space Saving idea your prospects will like

This "built-in" idea will really add sales appeal to your homes. Because the furnace is so low, you can build about two feet of storage underneath it. There is plenty of room in a 7-ft. basement, even if a cooling coil is added. Makes servicing and filter changing easier, too.





### John Cameron Swayze is now on ABC Radio for Lennox

Every week day this celebrated newscaster tells millions of home buying prospects to look for Lennox in their new home. His powerful selling personality is available for your local promotions. Ask your Lennox representative or write Lennox in Marshall-town for full details.

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Bob Weaver as an old friend of Communists despite Kennedy's unprecedented letter of clearance. This effort, built out of Weaver's fleeting associations 20 years ago with several groups that were later classified as Communist-fronts, backfired so badly it even produced a crop of angry newspaper editorials across the US. Never losing his poise or civility, yet never meek before intimidating questions, Weaver proved to be a witness so adroit that before the first long afternoon was over the whole hearing room—other senators included—was roaring with laughter.

'J. Crow, realtor.' The chief loyalty inquisitor was freshman Sen William A Blakley (D, Tex.), segregationist appointee to the seat vacated by Vice President Lyndon Johnson. Weaver, 53-year-old vice chairman of New York City's housing and redevelopment board who holds a PhD in economics from Harvard, answered Blakley's questions with deadpan gravity. When the senator asked if it were true that Weaver had spoken to the Natl Negro Congress (23 years ago and ten years before it was cited as a Communist front by the Attorney General), Weaver readily admitted it. "I felt I was in fairly good company," he added, because President Roosevelt had sent greetings, the Republican mayor of Philadelphia and the lieutenant governor of Pennsylvania addressed the meeting.

Fellow senators guffawed, but Blakley persisted in the line of questioning (suggested originally to Sen James O. Eastland of Mississippi by White Citizens Councils). What about a review of Weaver's 1948 book, *The Negro Ghetto*, published in a Communist journal, *Masses & Mainstream?* Weaver said he didn't recall the review, asked who wrote it. "This," said Blakley, squinting at a photostat, "seems to be by J. Crow, realtor. Do you know J. Crow?"

"I did not know he wrote book reviews," answered Weaver blandly.\*

Blakley was the only person in the crowded room to keep a straight face. To everyone else, "J. Crow" was obviously Jim Crow. Even Sen Robertson smiled. Blakley went on to ask about Communist infiltration into the Natl Assn for the Advancement of Colored People, of which Weaver was chairman (until the Senate confirmed him). With relish, Weaver read aloud from the writings of J. Edgar Hoover, to refute the charge.

**'Crux of the issue.'** Sen Sparkman expressed the fears of the South that a federal anti-bias order, especially if applied to public housing, would halt the program in the South. He quoted at length from the oratory of his committee colleague, Sen Paul Douglas (D, Ill.) who backed Weaver's appointment, during the 1949 housing debates. Douglas then opposed an anti-bias amendment on the same ground Sparkman now cited.

Weaver was unabashed. "It is the crux of this issue," he said. "There are several approaches. First, there is the approach which articulates civil rights in order to defeat housing. Second, there is the approach which attempts to reconcile a public policy—which the times and, I think, world conditions require—with an effective housing program. I am concerned with the latter."

Rejoined Sparkman: "I think I will desist."

Weaver's integration views. Questioning by Sen Bennett, who asked Weaver to explain dozens of his published comments on racial integration and housing, found Weaver recanting nothing. But it gave Weaver the first chance since his nomination to air his views in detail. Items:

 Would he move to open both public and private housing to integrated occupancy?

The review was actually written by Herbert Aptheker, who signed it at the bottom.

"Within the limits of law and public policy I certainly should."

- Does the housing goal of "a decent home and suitable environment" imply "eventual complete racial integration in housing?" "In the North, you have a situation of land use in which, without open occupancy and flexible land use you will never get enough space to house adequately . . . the minority populations. In order that the dollar in a dark hand shall have the same purchasing power as a dollar in a white hand, that dollar has to have access to the total market. When this will result in complete integration in housing is something I doubt if I will live to see."
- Would he insist on integrated housing in the South, where it might be "impractical" now? "I cannot tell you, because it would depend on the nature of the law or administrative procedure under which I operated. I do not have a law or an order justifying any action at this time." (And Weaver made it clear a federal anti-bias order must originate with Congress or the President.)
- Should areas of the US where "there is little likelihood of integrated housing" be denied federal housing aid? "There should be open access to all housing everywhere public assistance is involved. (But it is) naive to believe this is going to effect a radical and rapid change in the composition of the housing. It is not."

As the first dramatic day of the hearing ended (the second day was brief and anticlimatic), Sen Joseph Clark (D, Pa.) stepped down from the committee dias to shake Weaver's hand. "You were terrific," he smiled. "I was proud of you." Sen Blakley shook Weaver's hand, too.

In the corridor outside, Weaver paused to light a cigarette. "It's unbelievable," he remarked, "the amount of time it took me to get ready for this. I had to go over things I did 25 years ago."

### Press comment backs Weaver, calls loyalty quiz rude

Most editorials across the nation on the contentious hearing over Bob Weaver's nomination leaned heavily in his support. Excerpts:

"Sen A. Willis Robertson's transparent effort to delay or frustrate the confirmation of Robert C. Weaver as federal housing administrator because he is a Negro is a shameful example of racial prejudice, the more shameful because it is made in public and in a high place. No one believes for a minute that the senator from Virginia is really concerned with Mr Weaver's loyalty, or that it was necessary to suspend the hearings until President Kennedy wrote a letter dispelling the senator's sudden and curiously fastidious doubts. . . The southern objection is not so much against Mr Weaver personally against anti-segregation policies in federal housing, policies defined by Mr Kennedy in the campaign, which he might carry out. Mr Weaver could hardly be attacked on his record . is every reason to believe he will handle the delicate job of integrating housing with patience and understanding."-New York Herald

"The smallish furor raised over his appointment seemed impertinent. Yet we would not gainsay the right of the Senate to indulge in such inquiries. They clear the air. In the end Dr Weaver's loyalty—important in any government job—came off unruffled and his executive qualifications stood up."—New York World-Telegram (and many other Scripps-Howard papers).

"The attempt of Sen Robertson to throw a block against approval of Dr Weaver to the highest federal post ever held by a Negro was outrageous . . ."—Los Angeles Examiner (and many other Hearst papers).

". . . a shoddy performance . . ."—St. Louis Post-Dispatch.

"It was a pointless discourtesy for Sen Robertson to hold up the hearing. . . . Both the President and Congress must inevitably be concerned with the urban ills that are spawned by segregated housing. Let the senators have done with the despicable business of implying that there is something subversive about a belief in desegregated housing. Washington Post.

"Robert C. Weaver has been put through a wringer that carries the country back to the days of the McCarthy loyalty circuses. And the offenders in this case are eminent Southern senators, men not normally found in such shabby roles . . . (Weaver's) whole trouble . . . is that he is 1) a Negro and 2) a Negro who believes there would be no racial discrimination in public housing. . . . It is all rather sad."—Charlotte (N.C.) Observer.

". . . A most logical question is whether the Senate committee members would have viewed with similar tolerance a white man had he come before them sporting a record of affinity for as many Communist-dominated organizations as had attracted Weaver? It is impossible to believe that President Kennedy would even have nominated to a high post a white man with the record of association with racial and turned-out-to-be Communist causes that Weaver's record shows.

"Maybe Weaver was completely sincere when he assured the Senate committee that he could divorce himself from the activities and pursuits of a lifetime in assuming the sensitive post of housing administrator, but he was making small allowance for normal human frailty. . . The elements are contained in his appointment for wrecking public housing throughout the South, and possibly nationwide. . . ." —Birmingham (Ala.) News.

". . . he is the wrong man for the wrong job at the wrong time. (There is) no evidence that Mr Weaver is a Communist (but) his own testimony acknowledges that he was, in one case, a 'dupe.' His record, taken at its most favorable interpretation, is that of a man who has been either neglectful or careless in lending his name.

"Weaver's defense is that Franklin D. Roosevelt lent his name also. But Franklin D. Roosevelt and his wife did about as careless a job of name-lending as has ever been witnessed in this country. . . .

"Weaver . . . is a man with a grievance. He is a one-idea man. His career is aimed at getting even with a whole class of people. . . . The US government has already gone too deeply into housing and into telling localities who may be housed where. And if on top of assuming to tell everybody how and where he may live, we put in charge of the telling a man who had made a career of demanding that his grievance be the No. 1 factor in government action, we are riding for trouble. . . "—Columnist Lynn Landrum in the Dallas News.

### HOUSING MARKET:

# Trailers with mortgages offer new competition

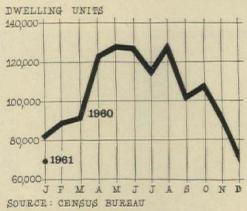
Home builders who are eyeing edgily the threat to their low-priced markets offered by the trailer industry may well mark 1961 as the year the threat became a reality.

One reason: immobile mobile homes have finally graduated from costly chattel mortgage financing to conventional realty mortgages. Another: trailer manufacturers are offering add-on units that make trailers into L-shaped bungalows, un-roadworthy, but infinitely more homelike.

First firm to offer the new financing is Mobilife Corp of Sarasota, Fla., specialists in trailer home retirement communities. They now offer 10-year mortgages on trailer and parking lot with downpayments as low as 25%, only 7% simple interest. While more costly than most home mortgages, this is much cheaper than the chattel mortgages for 5-7 years at a 6% discount (about 11% simple interest) more generally offered. It should multiply the leverage of advantages builders now call unfair competition: 1) exemption from most local building codes that lets the trailer industry enjoy the economies of true industrialized production; and 2) exemption from most local realty taxes. And good experience with the new loans should bring even more liberal terms.

Reasoning behind the new financing, says Mobilife President Sydney Adler, is that many buyers look on their trailer homes as permanent; and that many owners are retirees with stable incomes. The add-on units, say industry spokesmen, simply emphasize this thinking. They join such extras as fireplaces and picture windows in changing the shape and atmosphere of trailers to make them more like houses. With the added unit, a two-bedroom mobile home now rests on its parking pad 10 ft wide by 52 ft long, offers a living room 11 ft 4 in. by 18 ft 6 in., plus dining area and kitchen. Cost: about \$8,800.

With immobile mobile homes now chalking up some 120,000 starts a year, about the only comfort conventional builders can draw is the fact that the industry shared housing's 1960 slump: dollar volume was down to \$575 million from a record \$675 million in 1959, units down some 15% to 100,000 from 1959—about the same percentage as overall home building.



HOUSING STARTS fell again in January to 70,500 (private: 67,900; public: 2,600). But while this was 2.0% under December's figure, and the lowest monthly level covered by Census' new series, the annual rate for private starts was 1,070,000—an encouraging 9.7% above December. Compared with January 1960, starts were off 16.4%; and the annual rate was down 17.1%. Public starts were 60% below December, but double their level in January 1960.

### Rental glut among the orange groves

Orange County, Calif.: "There are going to be people to rent those apartments. They just aren't here yet."

So says an S&L executive, summing up the hopeful feeling of builders and lenders confronted with a glut of apartments in this suburban Los Angeles area. The countrywide vacancy rate is estimated at 18-20% in rental units; in some sections, such as Costa Mesa, Fullerton and Upland, it is 30 to 45%.

Consensus is that it will take almost a year to fill up the units now built. Orange County has long been a single-family housing area. With new houses for sale for as little as \$150 down, demand for apartments is limited mainly to 1) newcomers who want to look around before buying and 2) older people tired of homeowning. Yet builders, undeterred by vacancies and bankruptcies, are putting up more apartments. Why? Land that used to sell for \$3,000/acre now commands \$20,000-\$25,000/acre, making multiple units almost mandatory.

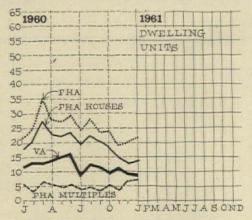
The trend to apartments shows up this way in Security First National Bank statistics:

		9	of singles
	Singles	Multiples	to total
1955	24,323	1,688	93.5
1956		1,743	89.5
1957	11,137	3,321	77
1958	12,380	5,988	67.4
1959	16,794	10,475	61.6
1960	14,289	7,325	66.1

Vacancies are spotty. Apartments in good locations near shopping centers rent well. Those in the middle of an orange grove do not. In Garden Grove, where zoning for multiples comes hard, vacancies are few. In easier Anaheim, they are many—30%

"For Rent" signs are common in all price classes, but luxury apartments are harder hit than lower-priced units. At flossy Newport Beach the vacancy rate is estimated at 45%. An apartment with monthly rentals from \$195 to \$900 (on the waterfront) has leased only 10 of its 38 units since July. The owners, blaming the business slump, concede sadly: "We were a year too late."

Vista del Lido, Newport Beach's first "sky-scraper"—an eight-story co-op with 41 units (from \$28,000 to \$65,000 plus a \$105,000 penthouse) is only a third sold after a year. Burton Romberger, architect and co-builder



FHA APPLICATIONS on private new units rose 8.1% in January to 21,726, only 1% behind January 1960. New home applications, however, at 14,347, were 11.8% lower than last year although 8.9% ahead of December. Project applications of 7,379 were 6.4% above December and a notable 29.8% over January 1960.

VA appraisal requests on new and proposed units declined to 9,410—5.9% under December and 15.7% below January of last year.

### Ten predictions from Norman Mason

Accepting a thank-you plaque from NAHB, outgoing HHFAdministrator Norman Mason offered ten predictions about housing's future (as he had done before NAREB's convention in Dallas). His ten prophecies:

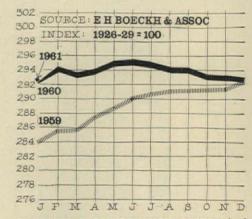
- FHA will achieve a new usefulness under Commissioner-designate Neal J. Hardy.
- 2. "One of the first things the new commissioner will do is lower the interest rate. Don't expect it to drop far." (Next day, President Kennedy fulfilled this forecast.)
- 3. There will be more and more opportunity for "American know-how to function all around the world" in housing. The problem: "unstable currencies and low incomes of people who want to be housed better."
- 4. "Problems of cities will be given first preference by Congress."
- 5. More private mortgage insuring companies will be formed. They will make S&L conventional loans "even more useful."
- **6.** "The new watchword for the housing industry will be: environment. It's no longer good enough to create just a good house. You need an attractive setting to sell."
- 7. "Cities will take over 'environment' as a major operation. Each will begin to develop its own distinctiveness."
- 8. Fanny May will become "more useful and larger." It will do much to "smooth out peaks and valleys."
- 9. A higher percentage of new housing will be in lower price brackets. Many will be second homes—vacation homes.
- 10. Builders of better quality homes, with built-in low upkeep, will find it easier and easier to sell them as the public catches on to what you are trying to do for them."

with George Buccola, says upturn in the business climate would help.

**Dallas:** Single-family housing starts were nosedived 19% last year (from 1959's 12,030 to 9,762) in Dallas County. But apartment building continued to boom, increasing 6.5% over 1959 (from 2,914 to 3,112 units).

Builders and lenders look for a mild comeback in single-family houses this spring. Unsold inventory is "negligible." Builders saw the sales slump coming last July, began cut-

continued on p 55

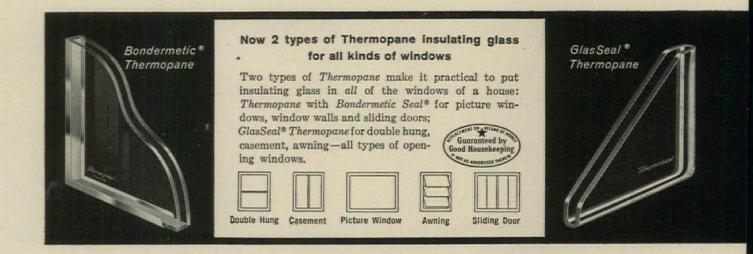


RESIDENTIAL CONSTRUCTION COSTS edged down to 292.3 in January, off 0.5% from December and 0.1% from last year's level on Boeckh's index. As in most recent months, falling lumber prices accounted for the general decline in costs. States Col E. H. Boeckh: "Lumber is now at its lowest point in many years." Plywood is now \$60 for ¼" AD index, producing such a flood of orders that many companies will accept orders based only on price at time of shipment.



PEOPLE ARE LEARNING TO LOOK for the name *Thermopane* on windows in new houses. Advertisements in mass-circulated magazines—

Better Homes & Gardens, American Home, Living, and Good Housekeeping—are urging them to do so for their own protection and comfort.



# Lookers are looking for signs of quality ...like Thermopane®

That's the big reason why  $L \cdot O \cdot F$  lightly inscribes the *Thermopane* trade-mark right on its insulating glass.

A big reason why builders such as R. L. Hoekstra & Co., South Holland, Ill.; Slavik Builders, Detroit; and Medema Brothers, Oak Forest, Ill., are putting *Thermopane* in windows *throughout* their homes.

It's a great way to make a good impression on home buyers—to boost sales. It's quality you can point to with pride... proof that you've used the best insulating glass. Thermopane is made in the U.S.A. only by Libbey · Owens · Ford, a financially responsible manufacturer who stands back of the products it makes.

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L·O·F can supply you with merchandising aids—folders, sill cards, window stickers, sales area displays. Also newspaper mats for your own advertising and literature. Write for order form which lists and describes these sales helps.



# NEW SALES AID FOR BUILDERS



# \$5000 RMITE DAMAG PROTRON

Now offered at low cost by your local Bruce-Terminix Company

Here's one good way to get the jump on competition: In offering your homes for sale, feature Terminix Insured Protection against the damages of termite attack.

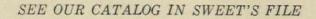
Home buyers have confidence in Terminix, which now protects over 350,000 structures. They've seen it advertised in The Post and other leading national magazines for twenty years.

Terminix will relieve you of future complaints and responsibility for termite attack. Renewable at the owner's option, Terminix Insured Protection provides the homeowner: 1. Periodic inspections.

2. Treating when found necessary. 3. Repairs and/or replacements of any termite damage to building or contents up to \$5000.

Performance is guaranteed by E. L. Bruce Co. and insured by Sun Insurance Office, Ltd.

Look in the yellow pages and phone your local Terminix company (usually listed under "Termite Control"). You'll find his advice helpful and dependable on any problem involving termite protection for new or old homes.





Ask for this aid to sound construction

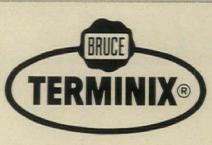
TERMINIX DIVISION, E. L. BRUCE CO., BOX 397-W, MEMPHIS 1, TENN.

Chemical treatment during construction

Treatment as required for infested structures

Protection without treatment for qualified termite-free structures

A nation-wide termite control service



ting back. The burgeoning apartment population offers potential customers for houses. Says Builder Fred Peek: "I keep brochures circulating in apartment areas. The tenants start figuring that payments are cheaper than rent and we have a customer." Unemployment in aircraft and auto assembly plants has hampered sales, but January hinted at a possible change in the market: starts in the city of Dallas totalled 347, vs 334 for the same month in '60. More than a third of sales are three-bedroom, bath-and-a-half homes with brick veneers selling for \$17,000 and under. Early American and southwestern ranch styles are popular.

Fresno: A strong trend toward apartment construction has set in. From a modicum of 179 units (worth \$800,000) in 1959, multiple units zoomed to 1,239 (worth \$6.3 million) in 1960—a 592% jump. The total includes 582 units (costing \$3.5 million) in a senior citizens project. Single-family starts tailed off to 1,000, as against 1,369 in 1959. Builders figure single-family housing has caught up with demand for the moment.

San Antonio: Unsold houses are down 30% from a year ago, with the biggest percentage drop in houses from \$13-\$16,000 finished less than 30 days—down 70%. Weakest showing is in unsold houses priced from \$7-\$10,000, which increased sharply during the last quarter, though showing a sizable decrease from a year ago. Only year-to-year increase in unsold

houses was among those priced over \$16,000 and finished more than 30 days—up 12%.

Chicago: A heavy injection of public housing units has saved housing production in the six-county met area from falling sharply behind 1959. As it is, home and apartment starts of 43,873 are down 8% from the previous year. Of these, 5,247 city and 125 suburban public housing units shot the apartment total from about the same as '59 to an all-time high of 17,760. The last record: '59's 12,177 which included no public housing units. Meanwhile, private home starts hit the lowest level since 1949: 26,113, down 26% from 1959's total of 35,432. Heaviest home building was mainly in North and Northwest suburbs.

Houston: The inventory of unsold houses seems to be dropping, and builders are looking to an influx of new business firms plus a generally healthy economic climate in the Harris County area to reduce overhang even more and send starts on an upturn.

They blame bad weather for a sizable part of the lag in 1960 building. Some basis for their hopes comes in a comparison of starts vs electrical connections in 1960. Starts, at 7,500 for the county, are down 28.6% from 1959's total of 10,500. Connections, at 10,045, are down only 20.5%.

Colorado Springs: After a ten-year boom, home building in the entire El Paso County area has slowed to a walk, with 1960's total output of 724 starts less than half of 1959's 1,544. Of the '60 total, the bulk—493—were inside the city, the balance in outlying areas.

The sudden drop continues a two-year decline from 1958's total of 1,806 homes. It parallels a similar drop in overall construction which local builders blame on completion of major installations for the Air Force Academy, which had swollen the figures substantially. What new construction there is now, say local builders, is mainly commercial.

San Diego: This booming market, which suffered a sharp setback last year (14,413 starts vs 29,900 in 1959), is now reporting a sales upturn. Though no hard figures are yet available, builder after builder reports that his houses are moving faster—an indication that the heavy unsold overhang some analysts blame for the '60 decline in starts is being eaten up.

The city planning dept notes that '59 marked the third straight year of record-breaking totals, and jumped an "astounding" 7,000 units over 1958. Says a department report: "Residential construction trends since 1950 in San Diego County show a cyclic pattern of peaks and valleys." If a new upturn is to be started, says the report, two conditions must exist: a "new balance between current housing demand and supply (which builders think they see now) and an acceleration in the rate of economic growth. . . ."

NEWS continued on p 58

### Study puts dollar figures on how more insulation eases income needs

The table below shows for the first time how much less income a buyer needs to buy a better house, if the builder uses more insulation

For instance, in Albany a builder who spends \$100 more for insulation in the house specified below reduces his heating equipment cost \$20, but he can add the sales advantages of a dishwasher or more square footage, sell his house for \$550 more, at the same time broaden his sales base by lowering the income qualification by \$221.

(The table is merely an example. The U values are not an FHA standard. FHA's only current insulation standard is that heat loss must not be greater than 50 Btu/hr per sq ft of floor space in the house. The U values in

the house example below would give a Btu/hr loss of about 25.)

The figures are the result of an effort by NAHB and the National Mineral Wool Assn to put teeth into FHA's celebrated Letter No. 1789 of Jan 25, 1960 advising its 75 field offices to require *less* income to buy more expensive homes—if calculations show higher mortgage cost more than offset by lower operating and maintenance costs.

Says Beverley Mason, FHA assistant commissioner for technical standards: "We find these figures very good from both a technical and a mortgage credit point of view. FHA will instruct field offices in their use and we hope that builders will use them at preapplication conferences with FHA." The push for insulation credit has been a long time coming. First industry-wide recognition that good insulation could cut housing expense, and so involve less income to qualify a buyer, came through a House & Home Round Table in 1954. And FHA Letter No. 1789 followed a renewed industry focus on the subject at a series of House & Home Round Tables in 1959.

Now an NAHB group headed by Technical Director Milt Smithman and a mineral wool group headed by Staff Architect Art Johnson have worked up the charts, based on a new heating index and FHA housing expense and income curves for the 40 cities shown below. The dollar figures are taken from the individually charted curves for the cities involved.

### REDUCED HOUSING EXPENSE AND ALLOWABLE INCREASE IN MORTGAGE

		Monthly	Possible			
		Reduction	Reduction	Increase		
	Heating	in Housing	in Annual	in		
CITY	Index	Expense	Income	Mortgage		
Albany, N.Y	940	\$3.18	\$221	\$544		
Alburquerque	395	1.16	134	243		
Baltimore	848	2.82	237	490		
Bangor, Me	2,355	8.67	867	1,360		
Boise, Idaho	866	2.89	269	500		
Boston	1,120	3.88	372	648		
Buffalo	730	2.36	198	422		
Burlington, Vt	2,340	8.60	860	1,345		
Camden, N.J	800	2.64	248	464		
Charleston, W. Va	431	1.20	96	249		
Chicago	902	3.03	236	520		
Cincinnati	554	1.68	174	320		
Cleveland	535	1.61	135	310		
Columbus, Ohio	520	1.54	148	299		
Denver	502	1.48	148	290		
Des Moines	651	2.06	173	375		
Detroit	693	2.22	200	400		
Washington, D.C	786	2.58	217	452		
Grand Rapids	758	2.47	198	436		
Greensboro, N.C	494	1.45	113	285		
Hartford	1,505	5.37	446	868		
Indianapolis	655	2.07	169	- 377		
Jamaica, N.Y	968	3.29	271	559		
Kansas City, Mo	339	0.85	73	196		
Knoxville	426	1.18	128	245		
Louisville	382	1.01	83	219		

Manchester, N.H	2,225	8.16	816	1,281
Milwaukee	1,015	3.47	270	585
Newark, N.J	930	3.14	254	535
Omaha	525	1.57	164	304
Philadelphia	794	2.47	244	436
Pittsburgh	645**	2.03°	195*	3710
	473*	1.37*	131*	274*
Portland, Ore	618	1.93	164	356
Providence, R.I	988	3.37	231	570
Reno	1,528	5.46	428	881
Richmond, Va	574	1.76	154	331
Salt Lake City	413	1.13	102	237
Seattle	809	2.67	216	468
Sioux Falls, S.D	787	2.58	209	453
Spokane	986	3.36	310	569
Springfield, Ill	521	1.55	143	300
St Louis	458	1.31	109	265
Topeka	372	0.97	84	214
Wilmington, Del	1,033	3.54	268	595

\* Depending upon which of three local utilities supplies fuel.

Figures are for a 1.000 sq ft house—basement, slab, or crawl space—with 3" ceiling insulation (U of .07) and  $1\frac{1}{2}$ " wall insulation (U of .09), as compared with a house having no wall insulation and  $1\frac{1}{2}$ " in the ceiling. The latter is current FHA minimum requirement.

The heating index equals the heating degree-days in the particular city, times the current cost of natural gas (it could be oil, electricity) per 100,000 Btu divided by an assumed heating equipment efficiency of 75%.

The \$3.18 monthly reduction in housing expense in Albany, for instance, represents a lowered fuel cost of \$3.65 minus the  $47\phi$  mortgage cost of extra insulation.

# YOU QUALIFY MORE BUYERS YOUR HOMES TO CCH

When you insulate your homes to "Comfort Conditioned" standards, two things happen:

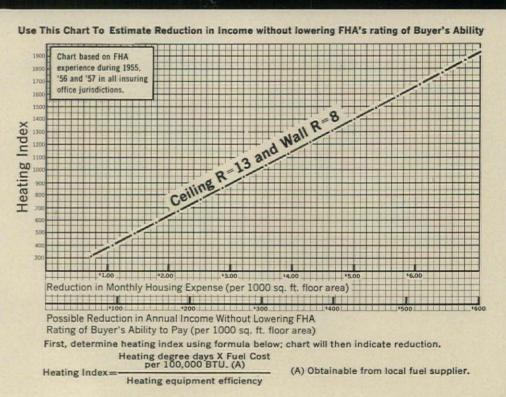
(1) homeowners save on monthly heating costs.

(2) these savings mean buyers with lower monthly incomes may qualify for FHA-insured mortgages on your homes.

### BETTER INSULATION MEANS A BIGGER MARKET

Improving the quality of your new homes by added insulation could probably increase your market by as much as five percent, according to Dr. Robinson Newcomb, a leading construction economist. How much insulation would be required? More than FHA minimums. The Comfort-Conditioned Home standard is R=13 (3 inches) in the ceilings and R=8 (2 inches) in the walls. For an estimate of how this standard works to qualify more buyers for your homes, check your locality in the list (below, right) or use the chart (below).





# WHEN YOU INSULATE STANDARDS. HERE'S WHY...

### **NEW HEATING INDEX GIVES ANSWERS AT A GLANCE**

This simple chart was developed by the NAHB and the National Mineral Wool Insulation Association to help builders relate monthly heating savings to FHA's estimate of "Prospective Monthly House Expense" and rating of the buyer's ability to pay.

FHA has recommended the use of this system by its local offices in deciding on insulation specifications which will give the buyer the most for his money.

### 500 BUILDERS SIGN UP IN JUST 10 WEEKS-HOW ABOUT YOU?

Thousands of new homes are already being built to CCH standards as the 1961 Comfort-Conditioned Home Program gathers steam. And it's still not too late for you to join. For everything you need to know—sales training, marketing assistance, national advertising support, full details of the biggest CCH Program ever—just mail the coupon below.

To See How the index works with CCH Standards, Find Your City Below.

Estimated Amount (\$) by which Annual Gross Income Can Be Reduced to Qualify.	Estimated Amount (\$) by which Annual Gross Income Can Be Reduced to Qualify.	Estimated Amount (\$) by which Annual Gross Income Can Be Reduced to Qualify.
Albany, N.Y\$310 Albuquerque, N. M188	Des Moines, Iowa \$242 Detroit, Mich 280	Philadelphia, Pa\$341 Pittsburgh, Pa273
Baltimore, Md 333	Dist. of Columbia 305	Portland, Oregon 230
Bangor, Maine 718*	Grand Rapids, Mich 277	Providence, R. I 324
Boise, Idaho 376	Greensboro, N. C 158	Reno, Nev 386*
Boston, Mass 447*	Hartford, Conn 414	Richmond, Va 216
Buffalo, N.Y 277	Indianapolis, Ind 236	Salt Lake City, Utah 143
Burlington, Vt 802*	Jamaica, N.Y 380	Seattle, Wash 303
Camden, N. J 347	Kansas City, Mo 102	Sioux Falls, S. D 293
Charleston, W. Va 135	Knoxville, Tenn 179	Spokane, Wash 434
Chicago, III	Louisville, Ky 116	Springfield, III 201
Cincinnati, Ohio 244	Manchester, N. H 638*	St. Louis, Mo
Cleveland, Ohio 189	Milwaukee, Wis 378	Topeka, Kan
Columbus, Ohio 207	Newark, N. J 356	Washington(see D.C.)
Denver, Colorado 207	New York, N.Y(see Jamaica) Omaha, Nebraska 230	Wilmington, Del 375

\*Based on oil heat. All others based on gas heat. 1400 square foot area house used for calculations

### New York tightens grip on realty syndicates

Some real estate syndicators are having trouble with New York State's new disclosure

In the first month of the law, State Attorney General Louis J. Lefkowitz squelched offerings of \$25 million in syndicated securities. The promoters did not divulge information to investors required under the new statute, Lefkowitz says. One syndicate was forced to return \$100,000 to investors. More than \$150 million in offerings was approved.

The law, which went into effect Jan 1, requires realty syndicate promoters to file prospectuses with the attorney general's office giving all pertinent facts about their opera-The law is aimed at curbing shady promoters. Prior to the new law, says Lefkowitz, syndicate promoters obtained millions of dollars from gullible investors while withholding material facts and giving potential investors "the most superficial type of offering

Sparking the mounting interest in syndicates is the apartment building boom. "The pressure for more apartments is irresistible," says President J. M. Bess of Syndication Underwriters Investment Corp. Faced with a "critical shortage of established buildings which can be acquired for deals," adds Bess, "the syndicates are going into new construction of high-rise apartments for the first time in history." Bess predicts a big increase in syndicate investment for rental apartment construction both in cities and suburbs this year.

To finance construction, syndicate promoters are eving the small investor as a fertile source of money. Syndicate units are being offered for as little as \$2,500 each with returns as high as 12%.

## Colonial Mortgage goes to market

Another major mortgage banker is going public

Joining the newest trend to the stock market (NEWS, Feb.), Colonial Mortgage Service Co, Upper Darby, Pa. is seeking SEC registration of 100,000 shares of common stock for public sale. Offering price has not been set yet. The money would boost working capital, let Colonial originate more loans with its own

Colonial's prospectus calls its servicing portfolio the largest in the North Atlantic states and fifth largest in the country (\$359 million). Last fiscal year, it originated \$32 million. The company services more than 200 investors. Some 89% of its loan volume is in homes, the balance in apartments and commercial properties.

Colonial now has outstanding 400,000 shares of common stock, all owned by Board Co-Chairmen A. H. Weiss and M. H. Tyson, their wives, and Executive Committee Chairman H. Bruce Thompson. The stock sale will shave their ownership to 80%. The company promises to pay its first dividend-12¢ a share-in June.

Colonial gets 59% of its income from servicing fees. Other sources: originating fees, 21%; interest (net), 6%; and miscellaneous fees, 14%. Last fiscal year (ended September 30) the company netted \$242,913 (vs fiscal 59's \$121,959). Net per share was 60¢ (vs 59's 30d).

In July 1959, Colonial bought Eastern Mortgage Service Co, Philadelphia, for \$2,255,000. Eastern had a net book value of \$1,076,000. Eastern was liquidated and its president, David H. Solms, became president of Colonial. Colonial also assumed Solms' contract with Eastern guaranteeing him a lifetime job at a minimum salary of \$10,000 a year until retirement and \$5,000 a year after.

In fiscal 1960, the company's officers received, exclusive of profit sharing, these salaries: Weiss and Tyson, \$30,231 each; Thompson, \$34,860; Solms, \$41,439, and Mitchell Leiber, executive vice president, \$30,-231. Mrs. Weiss and Mrs. Tyson, then assistant vice presidents, each were paid \$5,000. Beginning in January, salaries for Weiss and Tyson were set at \$35,000.

Underwriters are Drexel & Co and Stroud & Co, Philadelphia.

Other market developments:

· SEC has barred Michael Eckert and Ronald Marozzi from becoming securities dealers under the name of R. B. Michaels Co, Newark, on the grounds of previous fraudalent operations, including a Florida land venture.

Eckert was accused of making false and misleading statements in selling 1,000 shares of stock in Collier Acres, Collier County, Fla., in 1959. In offering the stock at \$1/share, said the SEC, Eckert represented it as a "very safe investment" when, at the same time, the offering circular admitted it was speculative, and also predicted without justification that the stock might go up to \$9 or \$10 in a year. Also in 1959, said SEC, Eckert and Marozzi sold 1,000 shares in Doman Helicopters, Inc and represented it as a safe investment despite the fact that the company had operated at a loss for some

• Del E. Webb Corp is financing construction of hotels, apartments and shopping centers in California and Arizona through the sale of \$8 million in 61/2 % convertible debentures, 640,-000 shares of common stock and 800,000 common stock purchase warrants. Total capital sought: \$12.4 million.

### Housing index moves up

Financial company stocks are spearheading a generally improved market tone for housing

In House & Home's monthly tabulation of housing industry stocks traded enough to create a market, financial issues as a group went from January's 19.49 to 23.40 at midmonth, a gain of 20.1%. Prefabs also showed strength, moving up from 7.92 to 9.17, a jump of 15.8%

Stocks in all categories picked up-especially shell house issues which continued a twomonth price rise by jumping from 22.71 to 27.54, up 21.3%. All three stocks in the group rose substantially.

Overall, House & Home's index went up from 11.74 to 13.66, a boost of 16.4%. In contrast, Dow-Jones Industrials gained only 2% (from 625.72 to 639.67) and National Quotation Bureau industrials 6.1% (from 110.95 to 117.77).

Here are House & Home's averages combining closing prices for listed stocks with bid prices for over-the-counter issues:

	Dec 12	Jan 11	Feb 10	
Building	5.50	6.00	6.44	
Land development		6.08	6.78	
Finance	17.38	19.49	23.40	
Realty investment	8.28	8.22	8.67	
Prefabrication	6.96	7.92	9.17	
Shell homes	18.63	22.71	27.54	
TOTAL		11.74	13.66	

Company Price	Dec 12 Bid Ask	Jan 11 Bid Ask	Feb 10 Bid Ask	Offering Dec 12 Jan 11 Feb 10 Company Price Bid Ask Bid Ask Bid As
BUILDING				San Diego Imp. e 7% c 8% c 8% c
Eichler Homes e	5% 6%	5% 6	65% 7	Trans Cst Inv . 15 11 11½ 11% 12% 17 17
First Natl Rity &	9.74 0.74	3.78 0	6% 7	Trans World Fin. 8% 9% 9% 11½ 12 13% 13
Const (pfd) . 8	9 91/4	101/4 101/8	1056b	Union Fin 15 12½ 13¼ 12¼ 13¼ 12½ 13
First Natl Rity &	0 0.72	10.74 10.78	10.78	United Fin of
Const (com) . 2	2 1/4 3 1/4	35% b	356b	Cal 10 19 1/4 20 1/4 21 21 3/4 28 28
General Bldrs e	45% b	41/66	5b	Wesco Fin e 21 1/4 21 3/4 23 23 1/2 26 27
Hawaiian Pac Ind 10	1234 13	14% 15	15% 16%	REALTY INVESTMENT
Kavanagh-Smith. 5	61/2 7	784 834	10 1036	Gt Amer Rity e 1/2 7/8 5/8 7/8 13/16 1
Levitt 10	4% 5%	4 1/4 4 1/8	4 % 4 %	Kratter A e 201%b 187%b 185%b
US Home & Dev. e	21/2 31/4	1% 2%	1 1%	Rity Equities 5 1/4 4 3/4 b 4 3/4 b 4 3/4 b
Wenwood e	1% 1%	1% 1%	1% 1%	Wallace Prop 6 734 814 814 914 1014 11
LAND DEVELOPMENT				PREFABRICATION
All-State Prop . "	41/2b	51/4 b	6 % b	Admiral Homes . e 2 21/2 2 21/2 21/4 2
Arvida e	914 934	9% 10%	10% 10%	Crawford 13 10 11½ 9 9¾ 10½ 11
Cons Dev (Fla). 5	6 61/2	61/2 7	71/2 81/4	Harnischfeger e 191/4 b 231/4 b 22b
Coral Ridge Prop. e	11/2 1%	1% 1%	1 1 2 1/8	Inland Homes e 9½ 10 8% 9% 13% b
Fia Palm-Aire e	1% 2	15% 2	2 1/4 2 1/8	Natl Homes A e 9 91/2 111/2 12 141/8 14
Forest City Ent., 10	105% b	11b	13%b	Natl Homes B e 81/2 9 111/4 111/4 137/8 14
Garden Land 63		41/2 5	41/2 5	Richmond Homes. e 11/4 15/8 15/8 11/8 11/4 1
Gen Dev e	113% b	12 1/4 b	11b	Scholz Homes e 31/8 31/2 33/4 41/4 45/4 5
Grt Southwest 18	10 1/2 11 1/4		13 14 14 14	Seaboard Homes. 3 a a a a 65% 7
Laguna Niguel . e	9½ 10	10 10 1/2	The second secon	Techbilt Homes e 5¢ 20¢ 1/8 3/8 1/8
remonin	2 ½ b	2 % b	2½h 3¼ 3¼	SHELL HOMES
mendor resta	1% 1% 6 6%	1 % 2 7 7 %	3¼ 3½ 8½ 9	
Pac Cst Prop 10 Realsite Inc e	15% 17%	1% 1%	1% 2	Bevis d 3½ 4 4½ 4½ 65 6
United Imp & Inv e	516b	584 b	5b	Jim Walter e 47% 48% 46% 47 52% 53 Wise Homes e 10% 11 17% 18% 23% 24
United 1mp & 1m	W 72	M 74		Wise Homes e 10½ 11 17¾ 18¼ 23½ 24
FINANCE				a stock not yet marketed
Calif Fin e	2214 23	25% 26	331/4 341/4	b closing price (American)
Emp Fin e	101/4 11		1814 1814	c closing price (New York)
Fin Fed e	53 1/4 55	60 1/4 61 1/4		d issued in units, each consisting of five 50¢ par comm
First Chrtr Fin. e	28% c	30% c	341/2 c	shares, one \$8 par 9% subordinated sinking fund debenta
First Fin West . e	9% 10%	11% 11%	15% 15%	due Feb 1, 1985, and warrants for purchase of one comm
Gibraltar Fin e	221/2 231/4	2714 28	30 31	share and one \$8 debenture at \$9.50 per unit, expiring I
Grt Wstrn Fin . e	29% c	34c	34c	31, 1962 and 1964, respectively, at \$15.50 per unit. Pri
Hawthorne Fin . e	6 % 7 %	8 % 8 %	10 10%	quoted are for common stock.
Lytton Fin e	14 1436		18 181/2	e stock issued before Jan 1, 1960
Mdwstrn Fin 8%	10 1/8 10 1/8	13 131/2	22 1/2 23 1/2	Sources: New York Hanseatic Corp; American Stock Exchan
Palomar Mtg e	7 71/2	7% 7%	73/2 8	New York Stock Exchange.

## Builders shrug off FHA interest cut; FNMA price hike trims all discounts

The cut in the FHA interest rate from  $5\frac{3}{4}$ % to  $5\frac{1}{2}$ % kicked up a cloud of dust in the mortgage market, but by midmonth housing men were starting to see through the haze. What they saw looked like this:



- The lower rate won't stampede buyers into the market. Few mortgage men or builders see any sharp increase in house sales as a result of it.
- Discounts, nudged by FNMA price increases, will continue to dwindle. The demand for mortgages from investors is still strong.
- VA financing may get a shot-in-the-arm in many areas because VA's 51/4 % interest rate is now much closer to FHA's.

The reaction of the market has not been as unsettling as pessimists feared nor as stimulating as optimists hoped.

## Chief effect of a $5\frac{1}{2}$ % rate on homebuyers will be psychological, agree builders and lenders.

A buyer of a \$15,000 house with a 30-year FHA mortgage will now pay \$87.75 a month instead of \$90.06. Will it make a difference? Yes, says Long Island Builder Len Frank: "Every dollar that monthly payments go up or down means that you qualify or lose a buyer." But, concedes Frank: "The main result will be psychological." California Builder Bill Blackfield agrees: "The buyer will feel he's getting something. It will also make lenders a little less strict in qualifying buyers." But FHA officials doubt that the few dollars in monthly payments will qualify more buyers. "Things aren't cut that fine," says one. Adds Executive Vice President Don McGregor of Houston's

T.J. Bettes: "If people are going to buy, the interest rate won't matter. It has very little effect".

Apart from expressions of hope, builders are taking the rate cut calmly. None have reported plans to boost their production on the strength of it yet. Their watchword: let's see how sales go first.

President C. Elwood Knapp of the US & S&L League is urging S&Ls to cooperate in reducing interest rates. But he adds: "There's a limit to the extent easier credit can stimulate homebuying. Major improvement will depend on increased demand or greater housing values and lower housing costs."

Signs are strong that this time builders (or their customers) won't have to absorb the whole impact of lower interest rates via higher discounts (which lead to inflated prices).

At midmonth mortgage bankers were still trying to get their bearings in the brand new market. Many posted a two-point differential (equivalent to ½% interest) to give investors the same yield as they get with a 5¾% loan. But the market was still in a shakedown phase and a majority felt that discounts on 5½'s will settle somewhere between the two points and the going price on 5¾%'ers. (For comparisons of prices, see table p 65.) One mortgage banker, who marked 5½s two points below 5¾ loans, says glumly: "Builders are passing us up in great numbers. They can get a better deal elsewhere."

## Fanny May also gave the market a nudge up by boosting its buying prices for FHAs and VAs.

Secondary market prices for  $5\frac{3}{4}\%$  FHAs and VAs were increased  $\frac{1}{2}$  point for its contracts executed after Feb 2. At the same time, President Stanley Baughman shoved a floor under the new  $5\frac{1}{2}$ s by posting prices  $1\frac{1}{2}$  points below  $5\frac{3}{4}\%$  paper. Baughman also cut the required purchase of FNMA stock from 2% to 1% of the mortgage. With FNMA stock valued at  $70\phi$  on \$1, this is equivalent to another 0.7 point price boost.

Mortgage men doubt that FNMA's more attractive prices will cause the agency to be deluged with 5½% paper. Not as long as the demand from primary investment sources keeps its pace. In fact. . . .

## The shortage of mortgages is accelerating a new trend: investors rushing to buy mortgages out of Fanny May's portfolio.

For the FNMA paper, some investors are paying 2½ points more than they would for new originations by mortgage bankers. A recent FNMA price boost from par to 100½ hasn't discouraged the trend. Reason: some S&Ls can't find enough conventional loans for their zooming deposits. Some mutual savings banks didn't anticipate their deposit bounceback, found themselves with money in the till and no place to put it. Some insurance companies are buying FNMA paper now too. The yield isn't too attractive but delivery is sure.

### MARKET BRIEFS

### S&Ls bid for pension money

The Federal Home Loan Bank Board has eased the rules for participation loans so S&Ls can make a better pitch for pension-fund money.

New regulations, in effect March 1, let the nation's 4,000 insured S&Ls sell participations in their mortgages directly to pension funds. Up to now, S&Ls could sell participations only to other insured S&Ls. The amount of the loan the originating S&L must retain has also been trimmed from 50% to 25%.

S&L men hope that the normally higher interest rates will persuade pension-fund trustees to invest in conventional mortgage participations. Up to now, pension men have bought almost nothing but FHAs and VAs.

Participations are growing fast. In the third quarter of 1960, S&Ls sold more than \$111 million in participating interests. This was 39% more than the previous quarter and a thumping 80% more than in the comparable 1959 period.

### Individuals buy FHAs

Sales of FHA mortgages to individuals have made some headway despite stiff competition for loans by institutional investors.

In the first two and a half months since FHA amended its regulations in mid-July to let individuals become "investing mortgagees" (News, Sept), 456 mortgages totaling \$4.3 million (average loan: \$9,430) were sold.

Designed to bring more money into the market by tapping individual savings directly, the new policy was started at a time when the market was shifting from an undersupply of money to an undersupply of mortages. Result: many originators have not pushed sales to individuals because servicing is more costly.

### **New FNMA prices**

FNMA standby commitments are pegged at 92 for the new 5½s. Other standby prices: 94—up a point—for 5¾ home and 5¼ multifamily mortgages and 90 for 5¼ paper. Special assistance prices for both immediates and commitments are 98½ for 5½s, 99½ for 5¾ home and 5¼ multifamily mortgages and 97½ for 5¼s. Marketing and commitment fees are unchanged. Purchase of 4¾% home loans is stopped.

#### **FHA** participations

Puerto Rico's largest commercial bank, Banco Popular, is trying a new way to sell FHA mortgages to small investors.

The San Juan bank will offer mortgage participations in units of \$500, \$1,000, \$5,000, \$10,000, and \$25,000. According to Administrative Vice President Abner Kalisch, here's how the plan will work:

Banco Popular is organizing separate trusts of \$1 million face value of FHA 534% 20-year loans, against which it will sell the participations. After deducting the bank's ½% servicing fee and ¼% trustee's fee, net yield to investors will be 5%. Proceeds to investors will be distributed twice a year. The participating certificates will be marketable but not redeemable before maturity.

Kalisch forecasts that \$2 million worth will be sold as soon as the program is started. Participations will be sold only in Puerto Rico to avoid having to register with SEC.

NEWS continued on p 64

# Second mortgaging is major peril in California, economists find

Southern California's second mortgage plague—already the subject of state investigation—is much more serious than even most experts thought.

Secondary financing is so widespread that it has inflated house prices along with sales, boosted foreclosures, exposed both borrowers and lenders to more risk.

These are the chief conclusions of what is perhaps the first well documented survey of secondary financing in the postwar years.\* The study was made by two noted UCLA economists, Leo Grebler and James Gillies. Grebler, a former aide to the White House Council of Economic Advisers, is professor of real estate and land economics. Gillies is assistant dean of the graduate school of business administration.

Summing it up, Grebler says: "We have lost the reforms of the 30s. We're almost back to where we were in the 1920s." (Unsound mortgage financing of the 20s, which included unamortized first mortgages with many a balloon-payment second, contributed heavily to housing's near total collapse in the depression, many economists contend. FHA's creation in the 30s was aimed, among other things, at putting home mortgage finance on a sounder footing.)

Says one Washington housing expert who has reviewed the Grebler-Gillies findings: "California's second mortgage problem isn't just a cold; it's pneumonia."

The 71-page Grebler & Gillies survey—
"Junior Mortgage Financing in Los Angeles
County, 1958-1959"—has been handed to
State Assembly committees studying ways to
tighten up second-mortgage regulations in the
wake of the Ten Percenter mess (News, June
et seq). The State Real Estate Education &
Research Fund footed the \$15,000 bill for
the survey. Taking a 20% sampling of
473,326 trust deeds (used in California instead of mortgages) recorded in the two
years and running the results through an
electronic computer, the professors found:

- Second trust deeds accounted for 34.7% of all deeds recorded in the two years. There are 60 junior trust deeds for every 100 conventional first trust deeds. The ratio has risen every year since 1952, and reached 70/100 in the last part of 1959. For all trust deeds including FHAs and VAs (which forbid secondary financing) the ratio was 53 seconds per 100 firsts.
- Secondary liens accounted for 11.7% of total mortgage debt. Homebuyers took on \$15 in second mortgage debt for each \$100 in conventional first mortgage debt. For all deeds, including FHAs and VAs, the ratio was \$13 per \$100. In late '59, the ratio had gone up to \$20 per \$100.

S&Ls held the senior financing on most property with second deeds. Reason: S&Ls dominate conventional loans where secondary financing is most common, say the professors. But they add that some S&Ls, caught in a high dividend squeeze, need high-yield loans and may be less choosy about borrowers.

Where do the second trust deeds come from? Report Grebler & Gillies:

 Sellers of used houses take back seconds as purchase money mortgages. Realty brokers

\*The House subcommittee on housing, headed by Rep Albert Rains (D, Ala), released a re-

port in January 1960, warning about the growth



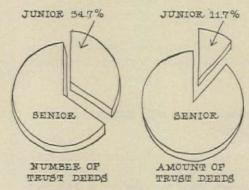
Are we reverting to the 20's?

say secondary financing is involved in 25-35% of their deals.

- Builders take seconds as part of the downpayment on a new house. A survey of builders disclosed that 60% sold houses with secondary financing in 1958. Next year, 67% did so. Land contracts were not included in the study.
- Owners of houses use second-mortgages to get money for home remodeling, bills, personal, or business reasons.

(Builders are more inclined to keep the second trust deed to spread their income from sales over several years, Grebler & Gillies found, while private sellers and realty brokers taking seconds in lieu of commissions usually sell them—at discounts up to 40%.)

Secondary financing is most common at two extremes—buyers paying \$15,000 or less and buyers paying \$35,000 or more. The average second trust deed is for 15% of the



**HOW EXTENSIVE** secondary financing has become in LA's realty market is illustrated in these charts showing relationship of junior and senior trust deeds to all trust deeds recorded in the two years of the Grebler & Gillies' survey.

sales price (some go as high as 25%) and the bulk of the secondary financing is on lower-priced houses.

Most junior liens are for three to five years with a balloon payment at the end. Borrowers pay dearly for the money, Grebler & Gillies found. Interest on second trust deeds hovered between 7% to 7.9% (not counting commissions, fees, and other charges) and sometimes rose higher. Moreover, interest rates were higher and loan terms shorter on first trust deeds where secondary financing was involved. Hence, a homeowner with a first and second lien totalling \$12,826 had to pay a monthly debt service of \$127.18 while a man with a more expensive house and a first trust deed only of \$15,550 paid only \$116.79.

Because of the discounts in peddling seconds, house sellers boosted their prices from \$500 to \$700 to make up the difference. A \$19,000 house sold for \$20,000 if secondary financing was involved, the professors report.

FHA and VA have not eliminated secondary financing as was fondly hoped, lament Grebler & Gillies. In fact, as a result of the two programs, "the American public has become conditioned to the buying homes on the installment plan without substantial equity." So when a buyer can't get an FHA or VA loan he turns to conventional financing and a second mortgage if he can't dig up the down payment.

The second trust-deed boom, the researchers found, has had these effects:

- Many buyers take on more house than they can afford. Foreclosures on houses with second trust deeds were 3½ times the rate on houses with primary financing only.
- Sales are propped up by letting buyers get houses they couldn't otherwise afford. ("It's an indication we're scraping the bottom of the barrel of the market," notes Grebler). It has also broadened the market. ("Demand for a home is more a function of terms and down payment than price.")
- Housing prices are inflated. "The availability of junior financing often makes it possible for sellers in a highly imperfect market to maintain asking prices that are out of tune with the market. In fact, when they intend to sell junior trust deeds at a discount, the discount itself tends to become embedded in the price structure."
- Lenders on primary mortgages are exposed continued on p 65

# Top realty research is their specialty

Leo Grebler and Jim Gillies, backed up by experts like Fred Case, have quietly built one of the best real estate research organizations in the US—though Gillies notes: "It's not really much to say you're among the best. There are so few in this field."

Operating on a \$100,000 a year budget (plus grants of about an equal amount for specific projects) the UCLA real estate research program is currently working on this intriguing series of studies: land use in Los Angeles, growth of management in the construction industry, secondary mortgage market (financed by the US S&L League, Mutual Savings Banks Assn and Life Insurance Assn), the Cal-Vet home loan program, multiple listing services as barometers of real estate activity, outdoor recreational facilities

continued on p 69

of secondary financing in many parts of the US. But the report was based only on estimates by FHA and VA field offices.

to more risks when seconds are involved. · Savings money that ordinarily would go into primary lending institutions is diverted to second trust deeds, thereby creating dependence on an unstable supply of secondary money for house sales.

"It would be patently mistaken to condemn all junior mortgaging as malpractise," the professors caution. Some of it has a legitimate

place. They propose these ways to check abuses:

- 1. Unfreeze FHA and VA interest rates, making the loans more attractive to investors
- 2. Require full disclosure of information to the borrower, particularly about balloon payments.
- 3. Equalize the lending power of all mortgage institutions, so that banks, insurance companies and state-chartered S&Ls can make the same 80% (and in some cases, 90%) loans

that federal S&Ls can.

Relax the geographical limitations on conventional lending institutions to improve the in-terregional flow of money.

5. Study the possibility of setting up a state

or private insurance company to insure the upper part—say 20%—of conventional loans. (The California HBA has advanced a similar proposal.) But G&G indicated that an insurance plan offered many kinks to be worked out before it is feasible.

### MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to House & Home the week ending Feb 17, 1961.

FHA 53/4s (Sec 203) (b)  New Construction Only   Existing*					VA 51/4s  New Construction Only					Conven	Second Control of the			
FNMA Scdry Mkt*	Minimus 30 year	m Down*		more down		City	FNMA Scdry Mktxy	No dowr 30 year			nore down	banks, Insurance Cos.	Savings banks, S & Ls	Construction loans * Interest+fee
98	971/2-981/2	971/2-981/2	981/2	981/2	971/2-981/2	Atlanta	94	94-941/2	94-941/2	A	n.	5¾-6	6-61/4	6-61/2+21/2
99	6	в	a	В	n	Boston local	95	98	98	98	98	51/2	51/2	51/2
1	971/2-98	97½-98	971/2-98	971/2-98	_	out-of-st.	-	931/2-94	931/2-94	931/2-94	931/2-94			
98	971/2-98	В	99	n.	971/2-99	Chicago	94	94-95	921/2-94	94-96	96	51/2-6	51/2-61/4	534-614+11/2-21/2
98	98-99	A	98-99	8	98-99	Cleveland	94	93-94	93	93-94	93	5¾-6	5%-6	6+1
971/2	971/2-99	97-981/2	98-991/2	98-991/2	971/2-99	Denver	931/2	92-931/2	92-931/2	92-941/2	92-941/2	534-61/2	6-63/4	6-61/2+1-21/2
971/2	981/2	981/21	99	99 b	971/2-98	Detroit	931/2	941/2	B.	95	A	534-6	5¾-6	6+1
971/2	961/2	961/2	97	97	961/2-97	Honolulu	931/2	92½ в	h	a	ta .	61/4-7	61/2-71/2	61/2+11/2
98	98-981/2	98-981/2	99-991/2	99-991/2	98-981/2	Houston	94	94	94	94	94	5%-60	534-6	6+1-2
971/2	981/2	h	98-981/2	8	981/2	Los Angeles	931/2	94	931/2-94	В	В	6-61/4	6-7.2	6+1½ e
981/2	99-991/2	99	99-991/2	99	99-991/2	Newark	941/2	94½ b	B	941/24	8	534-6	53/4-6	6+1
99	par	n	par	B	par	New York	95	96	96	96	96	61	61	6+1
971/2	98-981/2	B	981/2-99	14	97-981/2	Okla. City	931/2	931/2-94	93	931/2-94	n.	6-61/4	6-61/2	6-61/2+1-2
981/2	par	par	par	par	par	Philadelphia	941/2	96-97	96-97	96-97	96-97	51/2-53/4	5¾-6	6+1-11/2
971/2	98-99	a	981/2-99	а	97	San. Fran.	931/2	94-941/2	931/2-94		n	6	6-7	6-61/2+11/2-2
98	95-99	941/2-99	96-99	951/2-99	96-98	St. Louis	94		a	n	A	534-61/2	53/4-6.6	6-6.6+1-2
981/2	99-991/2	а	par	a	99½-par	Wash., D.C.	941/2	95	95	951/2	95	534-6	5¾-6	6+11/2

ELLA EL/-	(C	2021	/ILX
FHA 51/25	Sec	203)	(10)

		New Const	ruction On	Existing =				
FNMA Scdry Mkt×y	Scdry 30 year		10% or 1 20-25 ye		Min Down 25 year Immed	City		
96	96-961/2	96-961/2	961/2-971/2	961/2-971/2	96-97	Atlanta		
97	par-101	par-101	par-101	par-101	par-101	Boston local		
	951/2-96	951/4-96	9516-96	951/2-96		out-of-st.		
96	97-971/2	a.	98	В	97-98	Chicago		
96	96-97d	95	96-97	95	95-96	Cleveland		
951/2	951/2-97	95-961/2	96-971/2	96-971/2	951/2-97	Denver		
951/2	961/2	a	97	a	951/2-96	Detroit		
951/2	a .	A	B	В	a	Honolulu		
96	97-971/2	97-971/2	98	98	97	Houston		
951/2	951/2-961/2	96	В	В	951/2-961/2	Los Angeles		
961/2	971/2-98	971/2	971/2-98	971/2	971/2-98	Newark		
97	98	98	98	98	98	New York		
951/2	96-961/2	n	961/2-97	a	95-961/2	Okla. City		
961/2	99-pars	971/2-98	99-pars	971/2-98	99-par#	Philadelphia		
951/2	961/2-97	96-961/2	97-971/2	96-961/2	95-96	San Fran.		
96	96-97			6	n	St. Louis		
96½	97	97	97½	97	97½	Wash., D.C.		

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

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

Footnotes: a—no activity. b—very limited activity. c—commercial banks do very little mortgage lending in Texas. d—local banks paying 99, same as were paying for 5%% paper, e—S&Ls charging 6-7 plus 2½-4 point fees. f—occasional loans available at 5%%, g—federal S&Ls paying par, w—six-month construction loans unless otherwise noted, x—FNMA pays ½ point more for loans with 10% or more down, y—FNMA net price after ½ point purchase and marketing fee plus 1% stock purchase figured at sale for 50¢ on the \$1, z—on houses no more than 30 years old of average quality in a good neighborhood.

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank: Chicago, Murray Wolbach, Jr. vice pres, Draper & Kramer Inc; Cleveland, David O'Neill, vice pres, Jay F. Zook Inc; Denver, C. A. Bacon, vice pres, Mortgage Investment Co; Detroit, Harold Finney, exec vice pres, Citizens Mortgage Corp; Honolulu, Gordon Pattison, vice pres, Bank of Hawaii; Houston, Donald McGregor, exec vice pres, T. J. Bettes Co; 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, Laurence J. Stabler, 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.

#### FNMA PRICES effective Feb 3, 1961

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

Note: If remaining term of an FHA Sec. 213 individual mortgage exceeds 30 years, the price shown is reduced by \(^1\text{29}\) for each 5-year period (or part thereof) above 30 years.

	FHA	53/45	FHA !	51/25	VA 51/4	s
Loan to value ratios	90% or less	over 90%	90% or less	over 90%	90% or less	over 90%
Conn., Me., Mass., N.H., N.Y., R.I., Vt Del., D.C., Md., N.J., Penna		100 991/2	981/ <sub>2</sub> 98	98 971/ <sub>2</sub>	96 <sup>1</sup> / <sub>2</sub> 96	96 951/2
Ala., Ark., Fla., Ga., III., Ind., Iowa, Ky. Minn., Miss., Mo., Neb., N.C., N. Dak., Ohic Ore., S.C., S. Dak., Tenn., Tex., Va., Wash. Wisc., Puerto Rico	991/2	99	971/2	97	951/2	95
Ariz., Calif., Col., Hawaii, Ida., Kan., La Mich., Mont., Nev., N.M., Okla., Utah, W. Va Wyo., Virgin Is.	99	981/2	97	961/2	95	941/2

### **NEW YORK WHOLESALE MORTGAGE MARKET**

Immediates: 98-981/2 Immediates: 961/2-97 Futures: 961/2-97 Futures: 98

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

#### VA 51/45

Futures: 94

FHA 51/2 spot loans

(On homes of varying age and condition) Immediates: 94-941/2 Immediates: 951/2-961/2

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

### **FNMA STOCK**

		N	Month's	Month'.
J	an 11	Feb 14	low	high
Bid	68	683/4	673/4	701/2
Asked	70	703/4	693/4	721/2
Ovotations summlies	7 har C	F Childs	& Co.	

## Rx for more results

Set up new organization inside FHA for renewal, abandon project-by-project setup, revise tax laws to spur fixup, urge Dave Walker and Al Cole.

The rising chorus of complaint about FHA foot-dragging in urban renewal has been joined by the two men from the Eisenhower Administration who wrestled hardest with renewal: outgoing URA Commissioner David M. Walker and former (1953-59) HHFAdministrator Albert M. Cole.

Both urge, in effect, that FHA's suburban-oriented underwriters be stripped of all control over FHA mortgage insurance for urban renewal and that a whole new organization be created within FHA to handle only renewal. Otherwise, they imply, the nation's whole effort to rebuild its cities is likely to 1) remain in low gear, strangled by procedures run by bureaucrats who have no zeal for the cause and 2) fail to achieve its social aim of holding the middle class inside center cities.

This is much the same advice some mayors are giving President Kennedy in reply to his telegram to 297 cities urging them to speed renewal projects (see p 43). And this problem is what HHFAdministrator Robert C. Weaver has in mind when he says: "FHA needs to be keyed more into the whole housing program" (NEWS, Feb.).

Walker, who had been chafing for months at FHA diffidence toward renewal, announced his prescription at a farewell press conference Jan 19, the day before he left office to become a renewal consultant in Philadelphia.

**Echo of Kennedy plans.** Revamping FHA was the highlight of Walker's seven-point proposal—actions he called "urgently needed if this nation is really to come to grips with . . . the accelerating decay and obsolescence of our great urban areas." Some of his ideas are also advocated by President Kennedy's task force on housing policy (H&H, Feb) headed by Joseph McMurray. His suggestions and his arguments:

1. Abandon the project-by-project approach to urban renewal and put federal spending for it on a six-year basis instead of a year-to-year basis so cities will be assured of continuity. Any city that has a communitywide renewal program and enough know-how and men to carry it out "should be able to obtain a single, annual grant" from the US "to meet the needs of all renewal activities under way at any one time. The city could then use its judgment in distributing the grant funds for specific items, thereby eliminating much of the need for detailed federal supervision and control of projects. Each year, when the grant contract is renewed, the amount would be adjusted to the city's ability to put the money immediately to work." This would avoid freezing hundreds of millions of dollars of public funds that "cannot possibly be spent for years," let the nation finance more renewal with the same authorization. Needed: \$500 million a year, with authorization for URA to spend \$100 million more in any one year.

2. Start a "crash program to recruit and train the army of specialists and administrators" needed to carry out renewal. The shortage is "critical and growing." First, the US should expand its intern program under which experts are trained in local renewal agencies. Second, universities should get federal help to train "community development specialists."

3. Repeal the law requiring that renewal projects must be "predominantly residential"—ie either before or after redevelopment. "Non residential blight can be just as serious for the



EX-URA CHIEF WALKER
Seven ways to make renewal click

economic and social health of a community as residential blight—and often slums cannot be realistically attacked unless we also attack other types of urban obsolescence." Cities should take over the burden of maintaining "a balanced attack on blight in all its forms."

4. Set up a separate unit inside FHA to administer Secs 220 and 221 and Title VII (yield insurance). "It may be too much to ask any organization to mix economically sound business with high-risk, socially oriented business. . . . If the programs are enthusiastically administered, by people who are dedicated to make them succeed, who are willing to abandon inflexible mortgage formulas and to adopt new approaches to rental markets, I am convinced that they will soon prove that they are also economically sound."

Insured yield under Title VII should be raised to 4½ or 4¾% to try to woo more investors. So far, Title VII "has proved unworkable."

Fanny May should undergird Secs 220 and 221—"riskier mortgages"—with "guaranteed take-outs." And it should beef up its staff devoted to special assistance mortgages, try to sell "reluctant investors" on such loans.

So far, Secs 220 and 221, and Title VII, are the only way to build or rehabilitate middle-income housing inside cities, on a mass scale, without direct federal subsidy. But "capital grants for renewal will prove an exercise

in futility unless the end objective—construction (of middle-income 220s and 221s)—becomes a predictable reality instead of an uncertain gamble."

5. Create a "new industry of competent, all-around conservation and rehabilitation contractors" by "creating a self-starting market" for such work. How? Let home owners deduct maintenance and repair expenses in the same fashion as investment property owners. And give home owners rapid write off on remodeling outlays. Without the new industry, the rehabilitation job old housing needs will not get done. Without a self-starting market, the industry will not develop. "In the long run, the Treasury will gain more than it will lose."

6. Step up federal aid for metropolitanarea planning by offering "much larger grants" to met areas where cities and suburbs are trying to work together to solve their problems of mass transit, highways, and community redevelopment. The Community Facilities Administration should make loans for "detailed engineering design of mass transit" in met areas where transit and highway planning have been meshed with renewal and other community development.

7. Set aside 0.75% of renewal capital grant authorizations for a major increase in research into the causes of blight and economic and social results of efforts to fight it. Otherwise, the nation may discover "we have wasted much of our substance and energy in fruitless, temporary, or self-defeating attempts to treat the symptoms instead of the disease."†

**220:** a failure. Al Cole, who is now leading Reynolds Metals' efforts to get into renewal as executive vice president of Reynolds Aluminum Service Corp, offered *his* remedies ten days later in two talks during NAHB's Chicago convention.

He called FHA Sec 220 a "failure" for rehabilitation (but not for new renewal housing). His view rates respect, for Cole was chairman of the Presidential commission that devised Sec 220. In six years, said the former US housing chief, "not a single urban renewal rehabilitation project depending primarily on Sec 220 financing has been successful. Only one rehabilitation mortgage has been insured by FHA under Sec 220 for an investor-owned dwelling. Only 73 mortgages for owner-occupied homes have been approved by FHA in the same period."

The problem? FHA procedures, said Cole, "are too complex and too slow." And FHA comes up with loans too small to make rehabilitation practical. He would:

1. Set up a new FHA co-insurance program for 220 rehabilitation loans—the same principle FHA has used for years with Title I repair loans. Let lenders bear the top 10% of any losses. Thus FHA need not review applications in detail, rely on lenders' judgment.

**2.** Devise a new formula for maximum loans under 220 rehabilitation. Base it on debt service needs instead of "the present complex and arbitrary" FHA estimate of value after fixup. Thus a remodeler would get loans based on how much he could repay with rents (or sales prices) obtainable after modernization.

**3.** Create a new section in FHA to handle nothing but renewal work.

<sup>†</sup> Today's whole approach to renewal does just this, some experts contend, because it does nothing to remove the causes of slums—notably federal income and local real estate taxes which now reward neglect of property, penalize its upkeep.

### Forced cash donation for parks illegal, two courts rule

Courts in Oregon and New York have thrown out compulsory payments to county recreational funds by land subdividers.

In Oregon, Builder Dwight Haugen won his plea in the state Supreme Court that Multnomah County (Portland) was collecting \$37.50 per lot illegally. Payments were made under controversial Rule 4.10 which sought to set up a land acquisition fund for parks and schools.

The decision is expected to trigger a rush by Portland builders to reclaim \$216,818 they have paid into the land fund in five years. Recovery seems no problem; two-thirds of land fund assets are in promissory notes which builders signed in hope Haugen would win the test case.

Haugen, who paid \$300 into the fund under protest for eight lots he was developing, won by hammering two points: 1) the fee was a tax in disguise, and 2) there were no limits on how the money could be spent.

The court held that Multnomah officials openly "sought to produce revenue from subdividers to accomplish desirable ends indirectly" by enforcing Rule 4.10. That classed it as an illegal tax rather tham an incidental fee for subdivision.

Rule 4.10 also empowered the planning commission to decide whether the money collected would go to the county or local school district for land acquisition. The Supreme Court ruled that such a vague grant of spending authority "cannot stand because it fails to limit the use of money so produced to the direct benefit of the regulated subdivision."

The decision relied heavily on a 1960 Illinois Supreme Court finding that a school district could not demand \$325 a lot from subdividers\*. But the Oregon court did not examine the allied question of whether a planning commission may force developers to donate part of their land for parks. Multnomah County optionally can demand builders to give the county 0.015 acre per lot but does not enforce this rule because the patches of ground required for small subdivisions would be useless. The Multnomah rules were adopted under a state law allowing planning commissions to facilitate "adequate provision of transportation, water supply, sewerage, drainage, education, recreation or other needs." This law still stands.

In New York, the Orange County Supreme Court (a trial court) threw out a two-year-old state law allowing towns to collect money from subdividers. Newburgh Developers Gulest Associates challenged the law and town regulations based upon it when they were forced to pay \$2,300 (at \$50 a lot) to subdivide 25 acres into 46 lots.

The law let towns collect money "for use by the town for neighborhood park, play-ground or recreation purposes including the acquisition of property." Such language, Gulest complained, is "loaded with permissivity, shot through with discretion and wholly silent as to any standard or guide." Under it the town could spend money "for a public zoo, a rock-and-roll dance hall, a bocce court, a chamber music salon, or for the largest wading pool in the Hudson Valley."

Agreeing, Judge Hugh S. Coyle noted: "The statute compels a landowner who proposes to

\*Rosen v. Village of Downers Grove, 19 1112d 448, 167 NE2d 230.

subdivide to pay more than his proportionate share for parks, playground, and recreational facilities." This amounted to taking private property without due process of law, the judge ruled.

Jubilant homebuilders predicted a wave of claims to collect "hundreds of thousands" of illegally collected dollars. The Builders Institute of Westchester and Putnam County, which supported the test case along with the New York State HBA, is opposing a remedial bill being introduced in New York. And the Westchester builders say they will challenge the power to demand land dedication as well as cash from developers.

The land-cash payment idea is one of home building's thorniest problems although only California, Oregon, and New York have enabling legislation. Many cities exact an unwritten tribute of land that the builder either meets or faces all manner of trouble getting plat approval.

Only one federal court (in Puerto Rico where laws are different) has ever upheld land dedication, says Executive Director Dennis O'Harrow of ASPO. Predicts O'Harrow: "Cities are in such dire financial straits that some kind of dedication will eventually have to be required. It just seems inevitable."

In Congress, Sen Harrison A. Williams Jr (D, N.J.) introduced legislation to set aside \$100 million annually to pay 25% of the cost of local governments buying open space in urban areas. Williams claimed his bill is backed by the US Conference of Mayors, NAHRO, American Recreation Society, National Housing Conference and American Institute of Architects.

### SEGREGATION:

## Moves to adopt, tighten anti-bias laws loom in 12 states

Laws forbidding racial discrimination in housing are being pushed in 12 state legislatures this season. Included are efforts to strengthen one of four existing anti-bias laws applying to private housing and three efforts to cover private housing with open occupancy laws which now apply only to housing assisted by public agencies like FHA and VA.\*

The sharpest fight so far is in PENNSYLVANIA. An anti-bias bill first failed by a single vote in the state Senate, then was resurrected and passed 30-16 a week later. It would bar race, color, or creed discrimination in all real estate except owner-occupied one-family homes or two-family units where one unit is owner occupied.

The Senate action reverses the upper chamber's stand during the last session. In 1959, Pennsylvania's House voted 131-66 for virtually the same bill but a Senate committee pigeonholed it.

Industry opposition. Pennsylvania builders and realtors vigorously opposed the new bill. Builders call it discriminatory because it exempts home owners, their agents, and religious organizations. At the urging of the Pennsylvania Home Builders Assn, many builders left the NAHB convention early to buttonhole

\*Colorado, Connecticut, Massachusetts, and Oregon now ban bias in some private housing. California, New Jersey, New York, and Washington now have laws applying only to publicly aided homes. their senators in Harrisburg before the first vote. Roland Catarinella, Pittsburgh developer and immediate past PHBA president, then called for applying the law only to counties voting to adopt it. But his compromise lost when presented by a Republican senator.

Official support. But the State's Fair Employment Practices Commission (which would be recast as a Human Relations Commission to police the law) argued that 1 million Pennsylvanians are victimized by housing bias. Negroes are almost completely shut out of the new housing market, FEPC asserts, and can buy or rent only substandard homes.

Democratic Gov David L. Lawrence pushed the housing law to the top of his legislative calendar even though he admitted he hadn't read it and "I don't know just what really is in it." Lawrence held his 25 Democratic Senators 100% behind the bill,

Lawrence was accused by Sen Stanley G. Stroup (R) of breaking a campaign pledge. During his election bid, Lawrence promised to extend statewide Pittsburgh's weaker racial bias ordinance which exempts multiple housing up to five units. The bill Lawrence backs is tougher because it falls on all housing except owner-occupied singles and doubles.

**Other moves.** The New Jersey House voted 46-0 for a bill extending coverage of weaker laws to all housing except two-family houses and rooming houses where the owner lives.

Present anti-bias laws cover only dwellings assisted by public agencies like VA and FHA. The measure now goes to the state Senate where the outcome is uncertain.

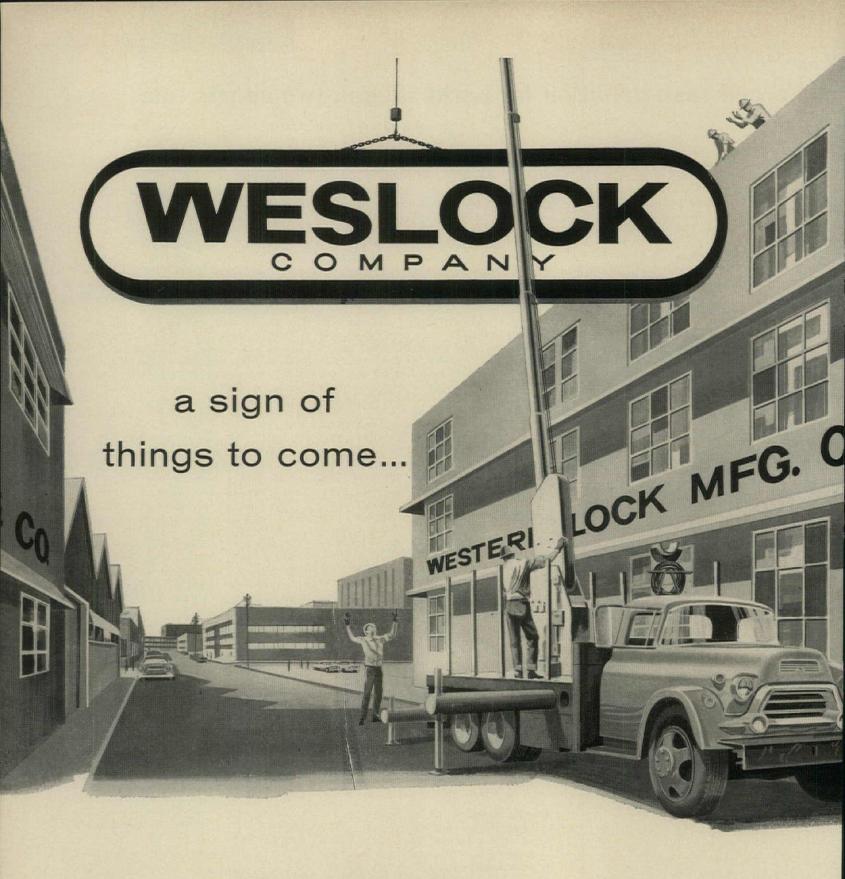
CONNECTICUT lawmakers are considering tightening the present law to cover owners or controllers of three or more *non-contiguous* units. Only five or more *contiguous* units are now covered.

In New YORK, Gov Nelson Rockefeller and majority Republicans are backing a slightly-watered-down version of an anti-bias bill pigeonholed on the last day of the 1960 legislature. Rockefeller agreed to exclude three-unit dwellings where the owner occupies one unit. Such arrangements are common in upstate cities like Buffalo. Development housing of less than 10 homes would also be excluded.

Minority Democrats condemn the measure as leaving perhaps 90% of upstate housing uncovered. Gov Albert D. Rosellini of WASHINGTON is backing a discrimination ban covering all private housing. The Natl Committee Against Discrimination in Housing calls this "the first all-inclusive bill introduced in any state this year." Present Washington law, like New Jersey's forbids bias in public-assisted housing.

Near introduction are bills in MICHIGAN, (where a strong bill died last year), INDIANA, ILLINOIS, MICHIGAN, RHODE ISLAND and WISCONSIN.

NEWS continued on p 72



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# Profile: Grebler & Gillies, realty researchers

continued from p 64

(financed by a Presidential commission). Grebler is also working on the advisory committee to the Commission on Money and Credit. His assignment: to determine how housing fits into the national credit picture.

The UCLA program (like that at UC's Berkeley campus under Sherman Maisel) was started in 1951 at the request of organized real estate groups. (An advisory committee from business still functions, makes suggestions for new areas of study.) The budget at UCLA was tiny (about \$30,000) until in 1958 Dr Grebler was enticed away from the Natl Bureau of Economic Research in New York to take over. (Of this, Gillies—at UCLA since 1951—says: "It was a real coup for us.")

Berlin-born Grebler won a PhD from the University of Giessen, worked as a business newsman in Germany until 1935, specializing in housing and mortgage finance.

He came to the US in 1937, six months later was an analyst with the Home Loan Bank Board. Subsequently he worked for the old Natl Housing Agency, for Miles Colean, as research professor at Columbia and associate director of the Institute for Urban Land Use and Housing Studies, as senior staff member with the President's Council of Economic Advisers, for the Natl Bureau of Research.

Slight and craggy-faced at 60, Grebler says he has made his last move. He loves California. He says he can dig into national problems as well from Los Angeles as he could from New York or Washington.

Unlike 99% of LA's commuter-population Grebler walks to work—from the pleasant Westwood Village home where he lives with his wife and 15-year-old daughter to a street-floor office on busy Westwood Blvd near the UCLA campus. He often swims in UCLA's outdoor pool but finds his chief relaxation in playing the violin.

The affable, easy-going Gillies, 36, was born in Canada, has degrees from the University of Ontario, Brown University, and Indiana. He earned his PhD at Indiana under Business School Dean Arthur Weimer, consultant to the US S&L League. Gillies spent one year with Canada's Central Mortgage & Housing Corp between Brown and Indiana.

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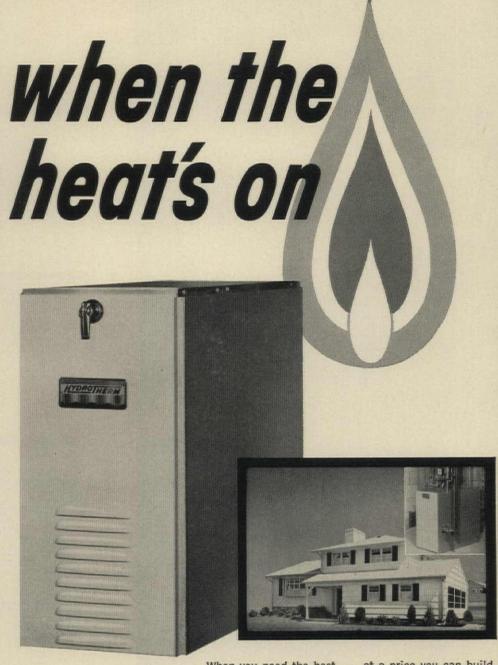
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*Sure* 

Gillies' co-workers say that he "gives five-thirds of his time to UCLA"—two-thirds to the research bureau, two-thirds to his job as assistant dean of the graduate school of business administration and one-third to teaching. In addition he also consults (sometimes with HHFA), writes a savvy monthly newsletter for the Building Contractors Assn.

Gillies turned down "an opportunity to be considered" for deputy HHFAdministrator in the Kennedy Administration because he is unwilling to leave California. He married his dean's secretary, now has two young children and lives in nearby Encino.

Both Grebler and Gillies are energetic evangelists for the cause of real estate research—basic research, not applied research. (They turn down requests like this one: how many flags and signs should be put up around an open house.) They average two public speeches a week each—usually describing their latest published research. "We feel a responsibility to distribute the results of our work. We want the knowledge to be used," says Gillies. NEWS continued on p 72



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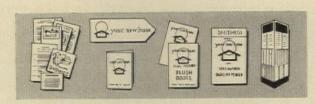
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NAHB CONVENTION:

# Builders probe for ways to tap bypassed markets

NAHB's 17th annual convention-exposition—housing's midwinter spectacular—was notable this year for its strange mixture of hope and fear.

Builders hope the new Administration will act quickly to get their business out of low gear—chiefly by taking steps to end the recession. News that President Kennedy had told FHA to cut its interest rate from 53/4 % to 51/2 % (for Secs 203, 222, 809, 232, and individual mortgages under Secs 213, 220, and 221) drew only lukewarm applause.

Builders fear that Kennedy's new frontier for housing may erode what's left of private enterprise in housing. For three years, NAHB's policy statement has strongly urged that housing be given cabinet status in the federal government. This time, builders dropped the word "strongly" and worried aloud lest a cabinet department downgrade housing by "emphasizing a wide range of other functions such as municipal financing, commuter transportation, and highways" (see col 3).

Even more than that, builders are scared of what might happen if Kennedy keeps his campaign promise by issuing an executive order banning racial discrimination in federally-aided housing (ie FHA, VA, urban renewal, public housing, college housing). Their worries were eased only a little by HHFAdministrator Bob Weaver's diplomatic charm, intelligence, and tact as he moved through a heavy schedule of convention receptions, cocktail parties, and dinners (many in his honor). Buttonholed about open occupancy (which he has espoused as a Negro civil rights crusader for years), Weaver told builders such decisions would be "made by the President." He usually added: "You know where I stand."

## Signs were plentiful that builders are heeding advice many of their leaders have been giving for some time: improve your product, design, selling.

Said Builder Walton E. Edwards of South Bend, Ind.: "The truth is we're running scared. That's why this convention is the biggest we've ever had. Everybody is looking for the product or idea that will pick up business." Added Frank Gerod, Seattle interior decorator: "I've never seen so much money and effort spent in promoting and pushing products. People seem to feel that if they just promote hard enough they can start things rolling again."

NAHB itself is committed to this idea. In cooperation with materials producers, it is backing a new advertising and promotion effort called HIPO (Housing Industry Promotional Operation) aimed at boosting new home sales by 250,000 units a year by 1970.

Overflow attendance at convention panels on such topics as remodeling, urban renewal, housing for the elderly indicated more and more builders are looking for bypassed markets now that the big market of the 50s—the suburban family home—is so much harder to build profitably. And new NAHB President E. J. (Jim) Burke make it clear he will nudge builders to put more stress on building low-priced new homes. Wisecracked Asst FHA Commissioner Ed Dee: "If builders can't build a house for \$6,000 to \$7,000, the trailer manufacturers will take the wheels out from under their product and show you how to do it."

NEW EXPOSITION HALL, Chicago's \$35 million McCormick Place, let the builders' convention put all meetings and exhibits under one roof, instead of scattering them among three downtown hotels. Builders liked this convenience, but complained about the hall's drab finish, mediocre food, and long waiting lines. The convention drew a record 36,000 attendance, says NAHB.

### NAHB hedges backing of cabinet status for housing agency

Builders are having disquieting second thoughts about their espousal of cabinet rank for HHFA.

Their fear seems to be that municipal politicians may grab the reins of power in a proposed Department of Urban Affairs and turn it into an instrument of direct subsidy for localities while private housing (and homebuilders) remain on the sidelines.

Past NAHB President (1958) Nels Severin (chairman of NAHB's resolutions committee) indicated the prevailing mood of uneasiness as NAHB directors threshed out their 1961 policy at Chicago. He emphasized that the policy statement was dated Feb. 1. "The directors will meet again in May," explained Severin. "Our ideas may change by that time when we see what the new Administration has in mind."

Under government housing policy, the proposed statement read:

"We have heretofore recommended a Cabinet Department for Housing and related matters as essential to provide home building a voice at the highest governmental policy level consistent with its importance to our society and the economy. We are disturbed, however, by indications that such a department, if formed, may-contrary to the original intent-actually diminish the importance of home building and home finance by emphasizing, in its structure and personnel, a wide range of other functions such as municipal financing, commuter transportation and highways. We strongly favor a cabinet department, but only one in which housing is given primary importance."

Vice President E. J. (Jim) Burke, presiding, said that the executive committee had raised a question about the last sentence. From the floor, Past President (1949) Rodney Lockwood of Detroit, promptly moved to strike it. Said Lockwood: "Our original position a year ago was in favor of a cabinet department for housing. Events have now demonstrated that this was in error. The Administration's proposal puts so many things in the department that housing will be buried and buried deep." Warning that big-city politicians will gain the upper hand over homebuilding, Lockwood urged the directors to withhold support of HHFA in a cabinet department "to put ourselves in a position where we won't embarrass ourselves if we

Photos: H&H staff

should change our minds." Argued another director: "Housing will be a hostage for mayors to get what they want—like FHA and VA are now."

Drawled Atlanta's Lew Cenker: "The sentence as it stands is a retreat from our previous position. It is cautiously worded. By keeping it as it is we're serving notice that we'll be there when the countdown takes place. If we don't take a stand, they'll think we don't feel our position is worth fighting for. I suggest we vote down the [Lockwood] amendment." Many directors applauded.

Rejoined Ernie Fritsche of Columbus, Ohio: "I was a PHA commissioner. I know what this means. Public housing will be in this department with both feet, along with the mayors. I was for a cabinet department for housing a year ago, but I'm not now."

Despite hands waving on the floor, Burke cut debate short on the ground that both sides of the question had been amply presented. In a standing vote, Lockwood's amendment was defeated, 96-65.

President Martin Bartling said he was concerned over the words "we strongly favor." He moved to eliminate the word "strongly" to soothe misgivings. The motion carried by voice vote.

But many directors were still not satisfied. Past President (1952) Alan Brockbank of Salt Lake City fanned the issue to life later, charging that it had been "glossed over." Said Brockbank: "Housing would have a minor status. It would be a football and would be kicked around—and kicked around plenty." He moved to add: "We oppose the plan in the form currently proposed for a Department of Housing & Urban Development."

Replied Chairman Burke: "There is no such proposal in being now."

"What about the Task Force proposal?" snapped Brockbank. (A Presidential Task Force on housing legislation, headed by Joseph McMurray, had just submitted an 85-page report to Kennedy, H&H, Feb).

"The Task Force proposal hasn't been released yet," countered Burke. "We haven't seen it. So I'll rule the motion out of order."

Retorted Brockbank: "Here's a copy of House & Home's report on it. I don't know how House & Home got a copy of the Task Force proposal when no newspaper did,\* but here it is. I'll quote this from it:

'Builders who have been cheering for cabinet rank for housing may change their minds when they see how FHA is downgraded in the proposed organization of the new department.'"

"We're acting on policy," said Burke. "We can't base our position on what's said in newspapers."

Interposed Severin: "We already say we are disturbed that housing will be subordinated. That should make our position clear."

"You've fiddled with fringe benefits," replied Brockbank. "I want to make it strong."

Lockwood insisted that "Cenker oratory" had beguiled the directors into defeating his amendment. "NAHB's position should be clarified," said Lockwood, "An independent agency is better than being buried in cabinet status."

Eschewing strict parliamentary procedure, Burke called for a voice vote on whether the directors wanted to reopen discussion of policy on cabinet status. In a close count, the directors voted to stand on the statement as it now read.

continued on p 76

\*H&H asked John F. Kennedy, then Presidentelect, for a copy. He authorized its release—for February publication.—ED.



**NEW OFFICERS** exchange congratulations after their election (I to r), President E. J. (Jim) Burke, First Vice President Leonard L. Frank, Second Vice President W. Evans (Bucky) Buchanan, Treasurer William Blackfield, and Secretary Perry

Willits. Willits, a big Miami builder and the only new face among top NAHB officials, defeated J. W. (Bill) Underwood of Jackson, Miss. by a close 170-144 vote for the job. Reorganization will revamp top posts next year.



JUNK OLD HOMES via stepped up code enforcement to bolster the sagging market for new ones, urged Sen John J. Sparkman (D, Ala.). "Every community should be required to carry out code enforcement before being eligible for federal assistance," he said. "Very few new laws are needed" to revive housing.



output above 1.35 million starts this year, warned Economist Gordon McKinley of Prudential Insurance. If the government does, the result will be "serious vacancy rates, widespread builder failures" followed by a "sharp cutback" in starts and more building trades' unemployment.



changing markets mean new opportunities for builders in rental housing, remodeling, urban renewal, and housing for the elderly, counseled Executive Vice President John M. Dickerman of NAHB. "The recent growth of the shell house points to an area we must serve more adequately: low cost shelter."



CORRIDOR HUDDLE brings together (1 to r) Joseph P. McMurray, whose \$20,000 study of how to overhaul public housing stirred mixed reactions; Grover Ensley, executive vice president

of Natl Assn of Mutual Savings Banks; Builder Joseph Eichler of San Francisco; Mortgage Man Frank W. Cortright, former NAHB executive vice president.

NAHB also took stands on these issues:

**Public housing.** Three unusual resolutions from NAHB's Low-Income Housing Committee did not survive the final meeting of the 1960 directors. The resolutions, based on an independent study by McMurray for NAHB (see p 66) urged that:

- Federal laws should be amended to permit public housing units to be sold to qualified poor families as single family homes, co-ops, or condominiums. Objected Ralph Staggs: "This would put public housers in competition with builders. After they see the units they have they would just build more to sell." The resolution was tabled.
- Federal subsidies to public housing should be given a definite limit—no more than 90% of the debt service on 90% of the capital cost. On recommendation of the executive committee, pointing out that NAHB opposes public housing as policy, this was vetoed.
- NAHB should study how to boost home ownership through federal assistance. Said Committee Chairman Quincy Lee: "It's time for NAHB to get on the offensive instead of the defensive." The resolution was referred back to the committee to spell out the hows and whats of subsidies.

Easier mortgage terms. Approved as policy was reducing FHA Sec 203 mortgage payments in the early years of home ownership, accelerating them later. A proposed special amortization schedule calls for amortization for the first five years on a 40-year-term basis, for the next five on a 30-year basis and the balance of the unpaid principal paid over 20 years.

On a 5¾ % \$15,000 mortgage, for example, with a minimum FHA down payment of \$600, payments for the first 5 years would be \$86,18 per month; for the next 5 years they would run \$90.06; for the remaining 20 years of the loan monthly payments would increase to \$99.34.

Thus, say builders, younger couples with lower incomes could buy better houses to start with, carry the heavier payments later when their incomes have improved. FHA has indicated it likes the plan. Its big drawback is that for the first ten years the house would probably depreciate faster than it is paid for (barring inflation), so lenders may shun the idea.

Other recommendations: lower FHA down payments for middle-income buyers, FHA insurance for condominium ownership, flexibility in VA rates up to FHA maximums, equity accumulation in financing houses with trade ins.

A resolution urging FHA to remove the extra ½% service charge allowed on mortgages of \$9,000 and under was killed. Said Cenker: "It would just increase discounts." Said Jim Albert: "We'd be writing out what we fought to write in. It's hard enough to market that type of loan now."

The directors remained on the fence in the touchy issue of federal charters for mutual savings banks. Said one: "The mutuals have been patient with us for not backing them for a long time. They'll be patient a while longer." A policy statement supporting federal MSB's was watered down to favoring a "thorough study" of proposed plans.

Minority housing. In a statesmanlike policy stand, the directors stressed that NAHB acknowledges that its members "must produce homes available to all American citizens." But, went on the statement: "The home building industry did not create the attitudes and prejudices which give rise to discrimination.

It alone should not be made responsible for their elimination."

Urging community group efforts to eliminate "the community attitudes which have kept builders from further progress toward meeting the needs of this portion of the home building market," the statement pointed out that "prejudices cannot be changed overnight by legislation or decree; they will not disappear by the signing of an administrative order nor by any action of the home building industry alone. Housing must be sold or rented under the conditions of the local housing market in which it is located-conditions which arise from the attitudes and emotions of people and which are completely beyond the control of our industry." NAHB pledged to continue trying to provide minority housing.

A proposed amendment to strike out the reference to builders not meeting the needs of minority groups—on the grounds that the unmet need is an unproven assumption—was voted down. Said Severin: "We're hard put when we go before Congress if we don't take a stand like this."

The directors also:

- Asked FHA to prod its field offices on processing housing for the elderly. Said Severin:
   "Housing for the elderly will fall flat on its face unless field offices take a more realistic view."
- Asked FHA to cut red tape in rental housing projects and to recognize the importance of tax considerations in attracting investors.
- Backed state and federal aid to localities for building community facilities.
- Supported FHA insured loans for land development.
- Opposed any legislation weakening Taft-Hartley secondary boycott restrictions.
- Asked for insured long-term loans for home remodeling and rehabilitation.
- Urged FHA to insure mortgages on research houses that don't comply with statutory requirements of "economic soundness."
- Approved a 1961 budget of \$1,575,000, including \$15,000 for a new committee for home improvement.
   NEWS continued on p 76



### Chicago builders to try out job insurance as sales lure

Continental Casualty Co has agreed to write unemployment insurance for up to 10,000 home buyers around Chicago in a test program with builders who hope it will boost their sales.

The plan was announced by Chairman Roy Tuchbreiter of Continental (1), retiring NAHB President Martin Bartling (c), and President Henry W. Collins of Celotex Corp (who originated the idea) as the NAHB convention closed.

Builders will pay 6% of the monthly payment on the house for either one- or two-year buyer protection. (If the monthly payment is \$100, the insurance will cost \$72 a year.) Continental will take over a buyer's monthly mortgage payments—after two months—if he is laid off or fired through no fault of his own, or cannot work because of illness or injury. (Strikers are ineligible, as are self-employed buyers or seasonal workers.) For jobless buyers, the insurance will continue mortgage payments six months. For ill or injured buyers, it lasts five years.

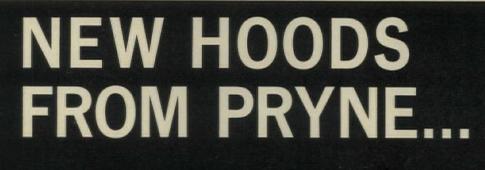
Chicago builders are offering the scheme to all their builder-members. If it clicks, Bartling explained, NAHB hopes it will become available nationally. The cost, of course, adds to builders' overhead. Said Tuchbreiter: "We picked the rate out of the air. We may lose our shirts."

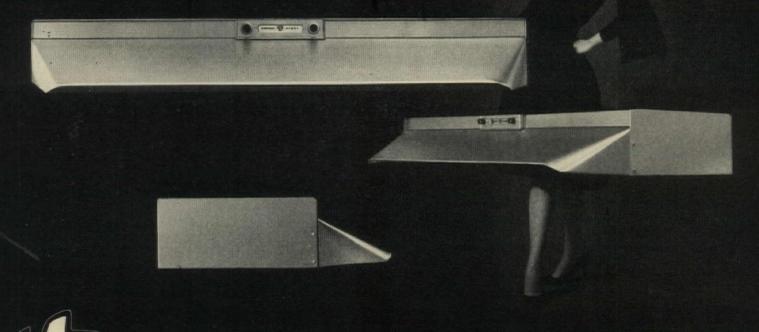


### FHA housing for elderly flops, says FHAide

FHA's Sec 231 program—as far as it applies to housing for profit for the elderly—has "come almost to a standstill," charges the man at FHA who is in charge of it, former senator Gerald P. Nye (hand on chin). "FHA itself is largely responsible," he told an NAHB panel. But he also blamed "selfish" promoters who are trying

to get big FHA mortgage valuations on cheap land they already own, or renovate old hotels that motels are putting out of business. Other panelists (1 to r): James Neville, NAHB rental staffer; William E. Murray, HHFA director of housing for the elderly; Mrs. Helen Holt, FHA special assistant for nursing homes.





## New Fashion Line Styling... Modern Finishes...

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



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



PURE-AIRE MODEL 4400... requires no ducts, 30", 36" and 42" lengths, aluminum mesh activated charcoal filter, powerful fan, all finishes.

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



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KLUTZNICK

#### **New faces in the Administration**

Key spots on the new Administration's housing team are being filled slowly.

Three weeks after John Kennedy took the oath of office as President, HHFAdministrator Bob Weaver—just confirmed himself by the Senate after an acrimonious hearing (see p 46)—was still looking for a deputy administrator, an urban renewal commissioner, a public housing commissioner, and anywhere from half a dozen to a dozen assistant administrators and commissioners for the multi-faceted housing agencies.

Principal appointments of the month:

Sidney H. Woolner, 50, administrative assistant to Gov G. Mennen (Soapy) Williams of Michigan for the last two years, as commissioner of the Community Facilities Administration. Born in Centralia, Ill., Woolner graduated Phi Beta Kappa from the University of Michigan in 1932, worked for a Detroit producer of industrial motion pictures before he became deputy Michigan corporation and securities commissioner in 1949—a job that involved licensing residential builders. In 1953-4 he was leasing agent for the celebrated Eastgate shopping center in Detroit, then became deputy secretary of state and later chief deputy highway commissioner.

Milton P. Semer, 41, counsel of the Senate banking committee since 1959, as general counsel of HHFA. Born in Auburn, Me., Semer attended Bowdoin College, Brunswick, Me., Columbia University, and graduated in economics from the University of Chicago in 1939. During World War 2 he flew B-17 bombers for the Air Force in the European theater. After the war, he studied law at the University of Chicago, was admitted to the bar in Illinois and later in the District of Columbia.

From 1950 to 1955 he was a researcher and counsel for Brookings Institution in Washington, then served as consultant for the Presidential commission on government organization before joining the Senate housing subcommittee. One of his latest jobs was braintrusting the depressed areas plans which Senator Paul Douglas (D, Ill.) incorporated in his latest area redevelopment bill (S.1).

With the nomination of Neal Hardy, President Kennedy's FHA commissioner-designate, not yet before the Senate for confirmation, James Cash took over from Comptroller Lester Thompson at midmonth as acting FHA commissioner. The President apparently was waiting until Weaver finds a Democrat to replace Public Housing Commissioner Bruce Savage, would send both appointments to the Senate together. Savage, alone among Eisenhower's top housing men, was remaining at his job. Among those mentioned as a possible successor: Mrs Marie McGuire, able executive director of the San Antonio (Tex.) Housing Authority.

One new trend complicates Weaver's search for a \$20,000-a-year deputy HHFAdministrator and a URA commissioner: municipal pay for top urban renewal jobs is beginning to soar way past that mark—and housing careerists don't have independent wealth so they can take federal jobs at a sacrifice. Among the latest mentioned as a possibility for No. 2 man at HHFA is **O. W. (Hump) Campbell**, onetime city manager of San Diego who resigned at midmonth as Dade County (Fla.) manager, in a dispute with county commissioners.

INS & OUTS: New administrator of the Small Business Administration is John E. Horne, 53. who for most of the last 14 years has been administrative assistant to Sen. John J. Sparkman (D. Ala.), who is chairman not only of the Senate housing subcommittee but also of the Senate select committee on small business. Horne was administrator (under President Truman) of the Small Defense Plants Administration, a forerunner of the SBA . . . Albert J. Robertson, chairman of the Federal Home Loan Bank Board since Sept 1956, submitted his resignation to outgoing President Eisenhower on Inauguration Day, even though his term did not expire until June 30. Front runner for the vacancy is Joseph P. McMurray, former New York State housing commissioner and onetime staff director of the Senate banking committee, who headed up President Kennedy's task force on housing (H&H, Feb.) . . . Among top FHA officials who have resigned with the change of Administration are Deputy Commissioner Cy Sweet and Asst Commissioner Roy F. Cooke. The latter has headed up FHA's Title I repair loan program since April 1957, won applause for keeping fast buck operators out of it . . . First local FHA director to quit is Chicago's John L. Waner, one of FHA's best field men.

Builder Philip M. Klutznick, 53, onetime (1944-46) public housing commissioner who figured as a possibility for President Kennedy's new HHFAdministrator, instead has been named United States representative to the United Nations Economic and Social Council—with the rank of minister.

Klutznick, one of the builders of Chicago's celebrated Park Forest, resigned as honorary chairman of B'nai B'rith and as general chairman of the United Jewish Appeal (he was elected only last December) to take the job. His confirmation appearance before the Senate foreign relations committee produced a frank discussion of whether his Jewish faith would hinder his working with Arab members of the UN. Said Klutznick: "I hope . . . my behavior and participation will demonstrate that an American of Jewish faith can not only do justice to but will be helpful to those who were once his cousins."

Klutznick also severed his relations with a private organization now building the Israel port city of Ashdod for 150,000 people.

Stepping into Klutznick's role as general chairman of United Jewish Appeal—it is generally considered the most important leadership post in American Jewish life—is Builder Joseph Meyerhoff, 61, of Baltimore. The organization, founded in 1939, has raised more than \$1 billion for aid programs which have helped some 2.7 million Jewish refugees and distressed persons.

Russian-born Meyerhoff came to Baltimore with his parents when he was 7, was graduated at 20 from the University of Maryland law school and began a realty career. He estimates he has built between 10,000 and 12,000 homes, although his 1960 output of 375 fell below his normal 500. Meyerhoff was president of NAHB in 1946, but today he devotes most of his time to philanthropy while his son, Harvey, runs the family business.

NEWS continued on p 78

SC photo



#### One man crusader against building code waste

To prof Henry Charles Burge, acting dean of the School of Architecture at the University of California, this pile of construction codes and manuals is no laughing matter.

Stacked one on another, they would make a six-story tower of waste that he says is costing the people of California alone millions of dollars each year through their "overlapping, contradicting, or duplicating" provisions. Among them: disagreement on such fundamentals as the height of handrails, allowable loads for trusses, allowable contents of pipes. Viewing even the printing of such a mountain of confusion as a tangible and intolerable waste, Burge has started a campaign for a single statewide building code, already has the support of the California Council of AIA. "No one argues with the logic of a single building code for California" he says

ing code for California," he says.

"As a matter of fact," he adds, contemplating broader horizons, "there has been some cry from long-suffering builders and from the public for something by way of a basic uniform building code for the entire nation."

## NEW EMERSON-IMPERIAL



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#### Charlie Wellman is named president of Glendale S&L

Charles A. Wellman, 45, one of mortgage finance's keenest spokesman, has been promoted from executive vice president to presi-



WELLMAN

H&H staff

dent of Glendale (Calif)
Federal S&L. He succeeds Joseph E. Hoeft,
who founded the association with \$6,000 assets in 1934, saw it
grow to fifth largest
(assets: \$350 million)
in the country. Hoeft
remains as board chairman.

Charlie Wellman has been prominent in housing and S&L affairs nationally and locally. He

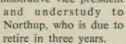
is chairman of the legislative committee of the Natl League of Insured Savings Assns and a member of the legislative committees of both the US and California S&L Leagues. Besides serving as vice chairman of the Treasury Advisory Committee for the savings & loan industry, he has been appointed by Gov Edmund Brown of California to his Business Advisory Council and the Metropolitan Areas Commission. Wellman is a Democrat.

For nine years, Wellman has gone before congressional committees to testify at annual hearings on housing legislation. His balanced insights and lucid exposition have made him a witness heard with respect. A typical Wellmanism: "Continued annual liberalization of government housing programs... has been a perfect alibi to this industry to avoid facing the harder, more difficult problem of fighting the price-cost squeeze. We have achieved about all the mileage available to us from traveling this road."

Chicago-born, Wellman attended UCLA and Columbia University. After graduating with a law degree from Southern California, he practiced in Los Angeles, went into the S&L field with Coast Federal Savings, Los Angeles, in 1939. After Army service in World War 2, he joined Glendale Federal in 1948 as a vice president.

#### NRLDA picks understudy to Cotton Northrup

Ending a year's search, the Natl Retail Lumber Dealers Assn tagged Thomas T. Sneddon, 48, as heir apparent to Executive Vice President H. R. (Cotton) Northup, 65. Sneddon joins NRLDA as administrative vice president





SNEDDON

Sneddon's selection follows the path urged by Chicago management consultants after a 1958 review of NRLDA's lack of a potential Northup successor. A second Chicago firm submitted several names to NRLDA recently after a year long headhunt, but the list did not include Sneddon.

NRLDA's new No. 2 man leaves the retail sales command of 108 Boise Cascade Corp lumber yards grossing \$25 million a year. He entered building materials in 1946 by handling accounting and purchasing for Tri-State Lumber Co in Salt Lake City. His trade association work includes board and executive com-

mittee membership of the Intermountain Lumber Dealers Assn and committee service for the Western Retail Lumbermens Assn.

Succumbing to an offer "too inviting to turn down," Paul C. Watt, 34, departed his \$15,000 planning directorship for Miami's famed Metro government to open a Washington office for Harland Bartholomew & Associates. Metro then moved Roscoe H. Jones, 35, project planning chief, into Watt's chair as acting director.

#### Andy Watt quits US Gypsum; NAHB's Bartling is hired

Doors at US Gypsum swung open last month for NAHB immediate past president Martin L. Bartling Jr and closed behind departing Andrew J. Watt.

Bartling, 44, moves in as assistant to the president where his duties might "by accident"



WATT

bring him into contact with builders. Bartling was founding president of the Knoxville (Tenn.) Home Builders Assn in 1951 and two years ago built an NAHB research house. He explains his low output (0) of homes in 1960 by saying the NAHB presidency "is a full time job."

Andy Watt, 44, shifts from USG to assistant

to the president of Masonite Corp. As USG vice president for sales promotion Watt maintained contacts with home builders. In 1957 he won acclaim for instituting a series of dealer and builder service programs for USG. He is a former president of American Hardboard Assn.

Only one house won a top prize this year in the American Institute of Architects annual honor awards, top AIA-sponsored design competition. It is a summer house in Northville, Mich., by Architects Birkerts and Straub of Birmingham, Mich., built by Contractor William Gruenwald for Mr. and Mrs. Alan Schwartz. The six other honor awards, all for non-residential buildings, went to these celebrated architects: Edward D. Stone, Philip Johnson, Minoru Yamasaki, Mario J. Ciampi and Paul Reiter, and Skidmore Owings & Merrill.

Among 11 awards of merit were two residential structures: a house by Architect Charles R. Colbert of Riverdale, N.Y. for Dr. Henry Simon in New Orleans; Architect John Carl Warnecke's Willow Creek Apartments in Palo Alto (H&H, Oct).

#### Norman Mason joins new firm to make shells, prefabs

Ex-US Housing chief Norman P. Mason is going into the prefab and shell house business.

Mason, who quit as HHFAdministrator last January, has become board chairman of American International Housing Corp, New York, a new concern to manufacture and sell low priced housing in the US and abroad.

American is owned jointly by Empire National Corp, headed by Harry Gilbert, and All-State Properties, Inc, headed by Herbert Sadkin. Empire, until last fall Empire Millwork Corp, won control of E. L. Bruce Co, Memphis manufacturer of hardwood flooring

and other lumber products, after a spectacular proxy fight three years ago. All-State is a multi-pronged real estate firm which develops land, builds homes (1960 volume: 750), apartment houses, shopping centers and bowling alleys.

At midmonth, Mason said his company is still being organized and it is too soon to divulge details of its operations. But American will offer a completely financed housing package, he added, "for the big unmet market—housing for people of really moderate means... the blue collar worker."

Lanky Texas-born Ned A. Cole, 43, is moving from his Austin architectural practice to the new slot of research and design vice president for Crawford Corp, Baton Rouge, prefab company. A pioneer with storage walls and honeycomb panels, Cole was a charter member and trustee of NAHB's Research Institute, managed the historic air conditioned village at Austin (H&H, Aug '54) which gathered builder support for adoption of a uniform method of calculating heat gain and uncovered timing errors whose solution could cut installation costs.

MORTGAGE MEN: Former Gov George M. Leader of Pennsylvania has been named executive vice president of Bankers Bond & Mortgage Co, Philadelphia. He had been with W. A. Clarke Co, the mortgage bankers, at York, Pa.

H. A. Yoars, senior officer in real estate and mortgage lending for First Natl City Bank of New York, has joined General Development Corp, Miami, as financial vice president.

Matthew T. Sawtelle was named executive vice president of Walker & Dunlop, Washington, D.C. mortgage bankers and realtors. Roger W. Hatch was named senior vice president.

DIED: Harold Buttenheim, 84, pioneer and expert in city planning, considered the Bernard Baruch of municipal government, former editor of American City (circulation 31,000) and past president of the American Society of Planning Officials, Jan 11 in Madison, N.J.; William H. Savage, 56, real estate appraiser and first vice president of the Macomb County (Mich) Board of Realtors, Jan 13, in Detroit; Robert H. Armstrong, 60, branch banking and real estate consultant, leading expert on real estate valuations and former editor (1944-55) of The Appraisal Journal, official publication of the American Institute of Real Estate Appraisers, Jan 30, in New York City; Lawrence E. Jones, 72, builder of the first co-operative apartments (1926) in America, Jan 31, in Philadelphia; Kristian H. Lincoln, 69, northern California home builder who with his four sons (one, Luther, resigned as speaker of the state assembly to devote more time to the family business) centered his home construction activities in Sacramento, Contra Costa, Alameda Counties and around Lake Tahoe, Feb. 4, in Sacramento; Clarence Ludwig, 67, city planner and past president of the American Municipal Assn, who was also executive officer for the Intl City Managers Assn and professor of political science at the University of Michigan, for 24 years before retiring, Feb 10, in San Jose, Calif; Everett W. (Pat) Smith, 63, vice president in charge of homebuilding products at Owens-Corning Fiberglas and past president of the Nationaal Mineral Wool Assn and the Fibre Wallboard Assn, Feb 12, in Cincinnati.



















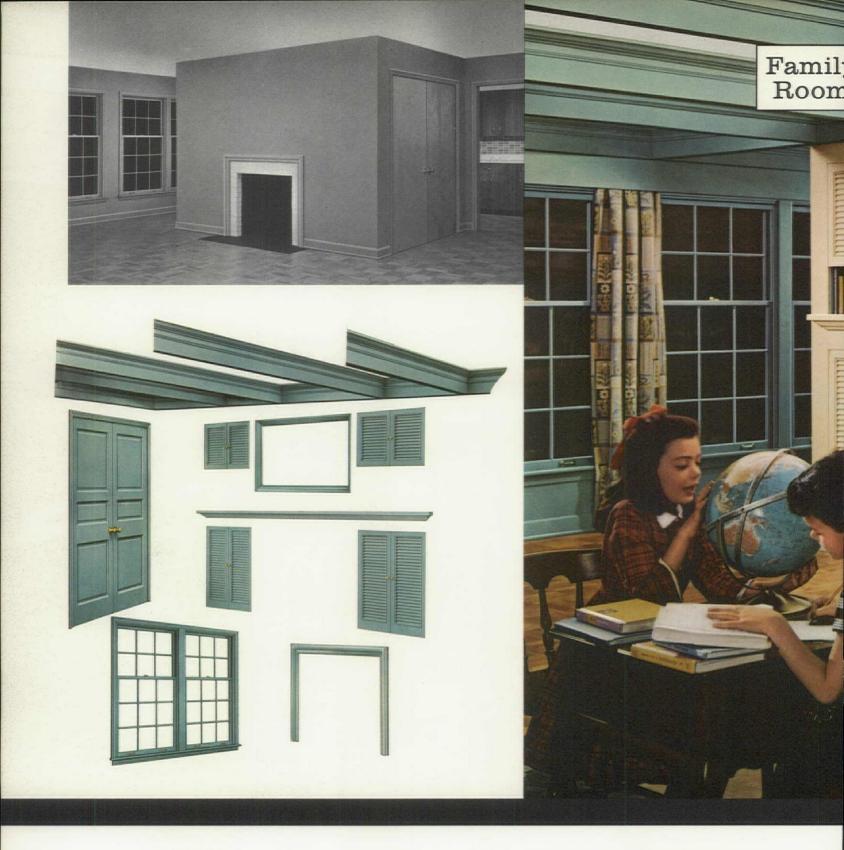






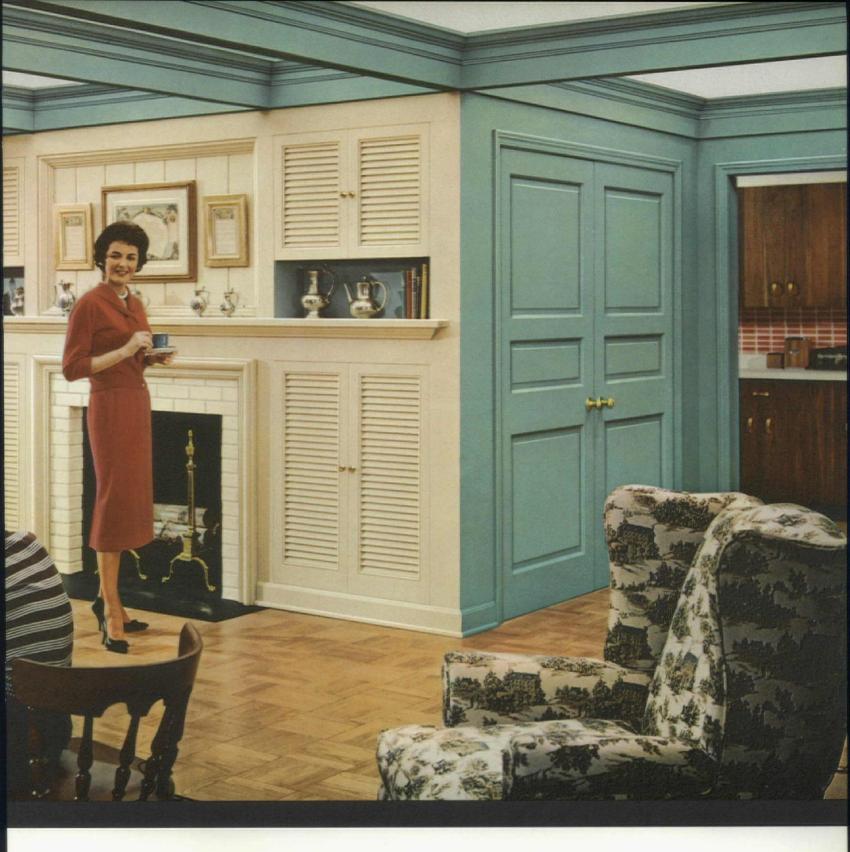
Millions of building-minded prospects are learning how you can bring them new warmth, beauty and livability...

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This beautiful Ponderosa Pine setting is featured in March

### WOODWORK Makes



Better Homes & Gardens, April Living for Young Homemakers and the Spring edition of House Beautiful's Building Manual

# of Ponderosa Pine the Home

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The importance of stock woodwork of Ponderosa Pine to the home buyer is growing daily. This increased interest is due in part to the story which Ponderosa Pine Woodwork is telling to millions of consumers monthly in Better Homes & Gardens, Saturday Evening Post, American Home, Living, House Beautiful, House and Garden and a long list of home improvement guides.

These ads are driving home the salient facts about Ponderosa Pine which home builders and lumber dealers have known for generations:

**WOODWORK** does not conduct heat or cold readily. This advantage wood enjoys over metal products of the same type is obvious.

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**WOODWORK** is readily finished it is easy to paint, stain, wax or varnish. Unlike metal, Ponderosa Pine Woodwork is easy for the home owner to refinish when desired.

**WOODWORK** is workable—it's easy to cut and fit. For example, wood window units can be fitted into wall openings simply and are easily repairable right on the site.

woodwork is beautiful nothing can duplicate the texture, grain figure and color of Ponderosa Pine. It has a warmth and beauty that has attracted people to it for generations.

**WOODWORK** is available—woodwork is precision manufactured in a wide variety of stock sizes and designs to meet all modern building requirements.

WOOD WINDOWS of Ponderosa Pine are available built to exacting standards which carry the American Wood Window Institute seal. Through the quality programs of the American Wood Window Institute, builders, dealers and home owners are learning of the advantages of quality wood windows and how to identify quality windows.

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Ponderosa Pine WOODWORK

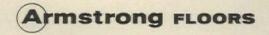


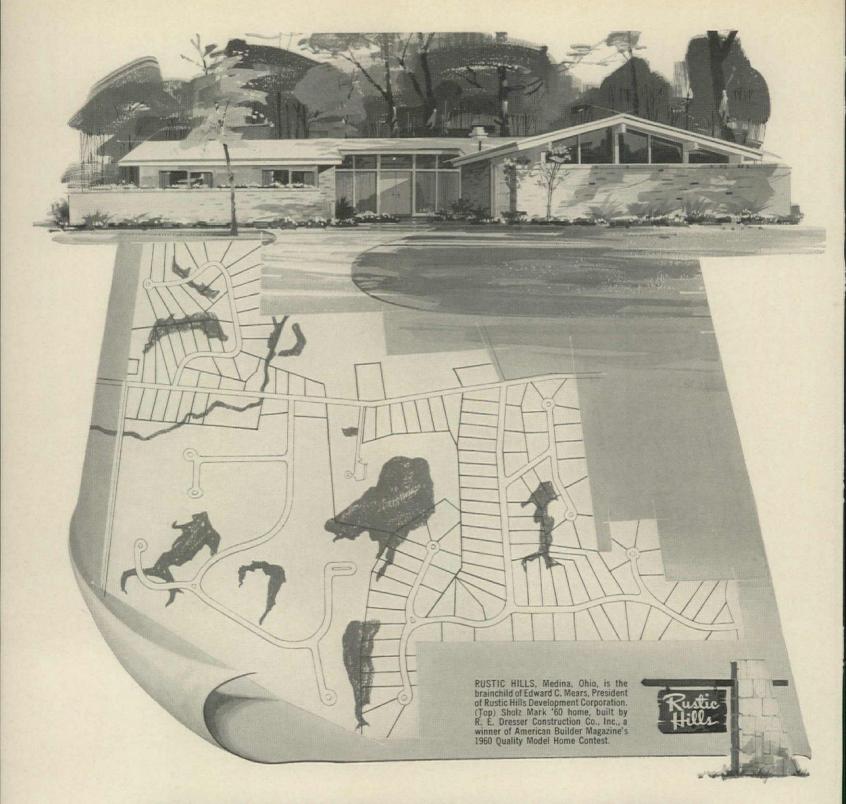


This month and every month all year lots of prospective home buyers in your area will see full-color Armstrong ads in their favorite magazines. These ads create interest in new homes. They give people building and decorating ideas and make them dissatisfied with their present homes. Thousands of interested readers write in requesting samples of the floors shown and ask questions about the room designs. When you feature Armstrong floors like Tessera Vinyl Corlon (in picture), your prospects will know that you feature the best new products and keep pace with the latest decorating trends.

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Every home in this \$10,000,000 project is equipped with a Chrysler Furnace. And most homes have Chrysler Air Conditioning as *standard equipment*.

Rustic Hills' owner Edward C. Mears, as well as the other five builders in the project, make air conditioning standard because they realize that any home without it will soon be obsolete. They specify Chrysler heating and air conditioning because they know its reputation for low installation, operating and service costs. And they know the promotion value of the famous Chrysler name.

Whether your homes sell for \$12,000 or \$50,000, they'll sell faster with year-round Chrysler Air Conditioning. Check with your local Chrysler Air Conditioning Dealer for the full story. And ask him to show you the new Chrysler Model Home Promotion Kit for builders.

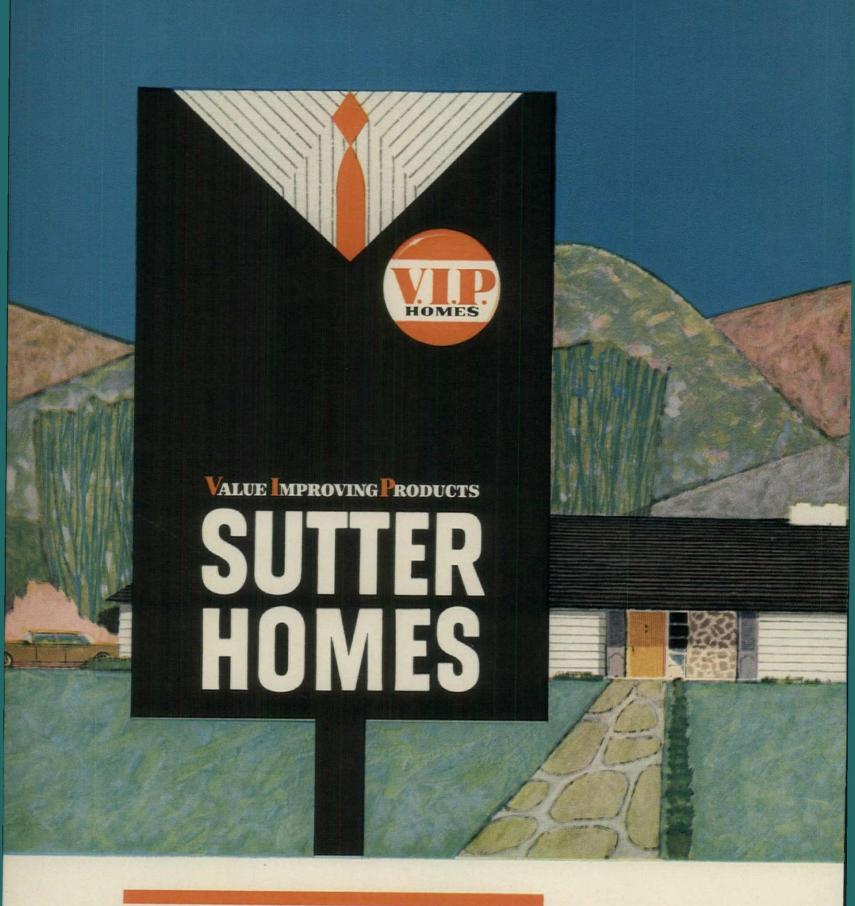


Chrysler Corporation, Airtemp Division, Dept. CT-31, Dayton 4, Ohio.



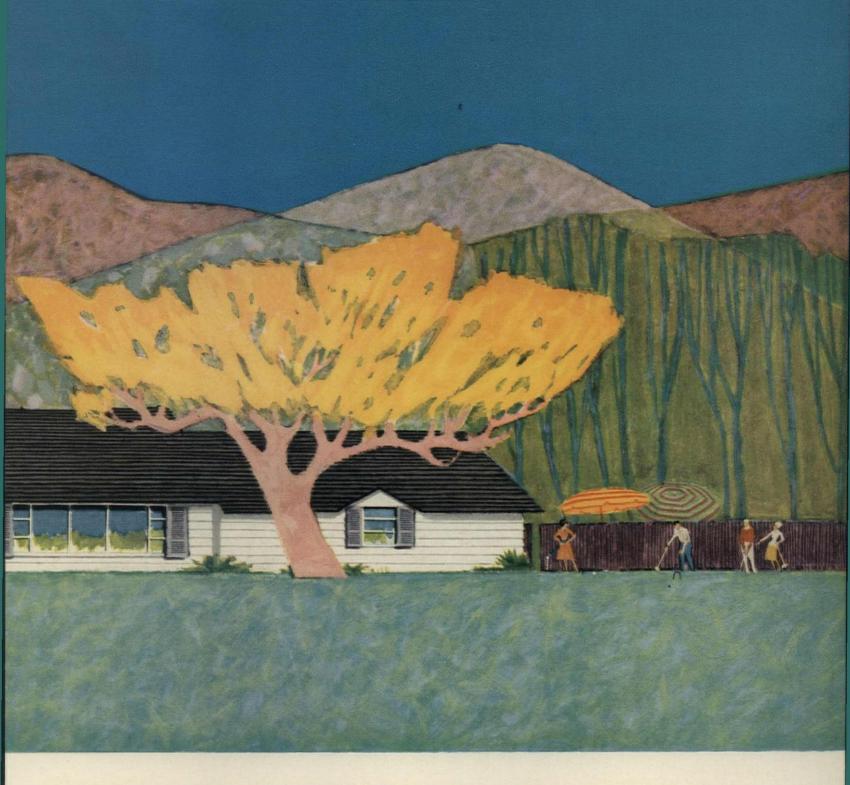


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WHICH MEANS VALUE

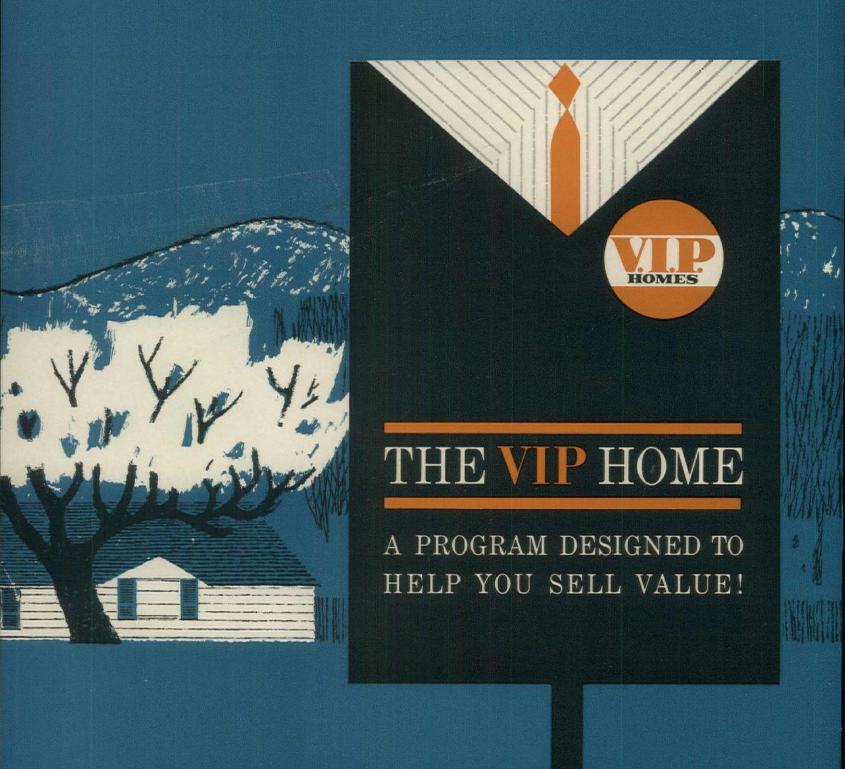


Value. This one word is the most important word you can have in your 1961 sales vocabulary. Because this year, new home buyers are more value conscious than ever... more aware of quality in new home construction... more inclined to compare one building material with another in deciding which home to buy.

One sure way to make your homes a better buy is to build value into them—with Value Improving Products made by customers of Kaiser Aluminum. Products such as Kaiser Approved aluminum siding, aluminum primary windows and sliding glass doors, aluminum shutters, aluminum soffits and fascia, and 54 others. Notice that we call these aluminum products Value Improving Products: that's exactly what they do—improve the value of homes you build.



HERE'S HOW YOUR HOMES ...



Kaiser Aluminum is going all out to insure select V.I.P. Home builders of prestige advertising and promotion support. Nationally, two of the nation's leading television shows — "Maverick" and "Hong Kong" — will feature V.I.P. Home and Value Improving Products in a series of dramatic commercials.

Locally, Kaiser Aluminum has developed a complete traffic-building program designed to put across the "value concept" right in your own front yard. From your own local television commercials to site signs, this program contains everything you need to make V.I.P. Homes the most wanted homes in your area.

Kaiser Aluminum is ready to put the V.I.P. Home Program to work for you right now. To find out how

you can qualify your homes as V.I.P. Homes, WIRE US NOW — COLLECT!

WIRE: Manager, Residential Business Development Kaiser Center, Oakland, California

We'll see that your request gets immediate attention.
SEE "HONG KONG" AND "MAYERICK" WEEKLY ON THE ABC-TV NETWORK.



New leadership in the world of aluminum

#### Letters

#### **New Frontier**

The editorial [H&H, Feb] on Bob Weaver was written with wonderful strength, wisdom, and perception. The digest analysis of The New Frontier for housing was splendid.

James W. Rouse, president action James W. Rouse & Co, mortgage banking Baltimore

#### January issue

I cannot refrain from expressing myself on your January issue, *The industrial revolution in housing*. It is without question the greatest single document the housing industry has ever seen compiled. It is a tribute to the imagination, daring, and progressive attitude of the House & Home staff.

ROBERT W. WOOD, vice president Young America Homes Bountiful, Utah

The January issue is one of the best to hit the builder's desk in a long time. It has influenced many builders that the business end of the industry needs looking into from many different angles. Many people have remarked that the management story on Bob Lusk's organization certainly hit the nail on the head. This article alone boosted the regard with which we hold the magazine.

BERNARD M. ALTERMAN HADDONFIELD, N.J.

Your January issue prompts us to compliment you. Without reservation, we believe it is the best issue of HOUSE & HOME ever. Every article is of interest to the average builder.

LAT W. Purser Jr, exec vice president Ervin Construction Co Charlotte, N.C.

#### Are designers overlooked?

To me, the key to the report (H&H, News, Nov) on the West Coast Design Clinic, was your statement that 40 architects had been expected but only eight showed up. If the unlicensed architect in California were not so much ignored, this conference could have been more worthwhile and certainly better attended.

In California, anywhere from 50% to 90% of residential construction is designed by the unlicensed architect. This would indicate either a lack of interest on the architect's part or demand for fees much beyond the homebuilder's budget. There are many firms, like ours, providing a great many plans for homebuilding, which receive very little publicity in the trade and shelter press. We have a definite effect on what is produced for sale and the fact that our business grows from year to year, indicates we are providing what the builder cannot get from the architect.

Just as Ed Fickett said, there are good and bad designers, just as there are "good and bad architects," but percentage-wise we are holding our own. Representation of our outstanding unlicensed people at the Stanford clinic would possibly have produced a great deal more enlightment and decision for the future.

LESTER GOODMAN, sales manager L.C. Major & Assoc, AIBD Downey, Calif.



William Brockway residence, Los Angeles, Calif. Burton Schutt, architect. Reprint, Sunset Magazine. H. H. Baskerville, Jr.,



Architects: Kegley, Westphall & Arbogast

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**MARCH 1961** 



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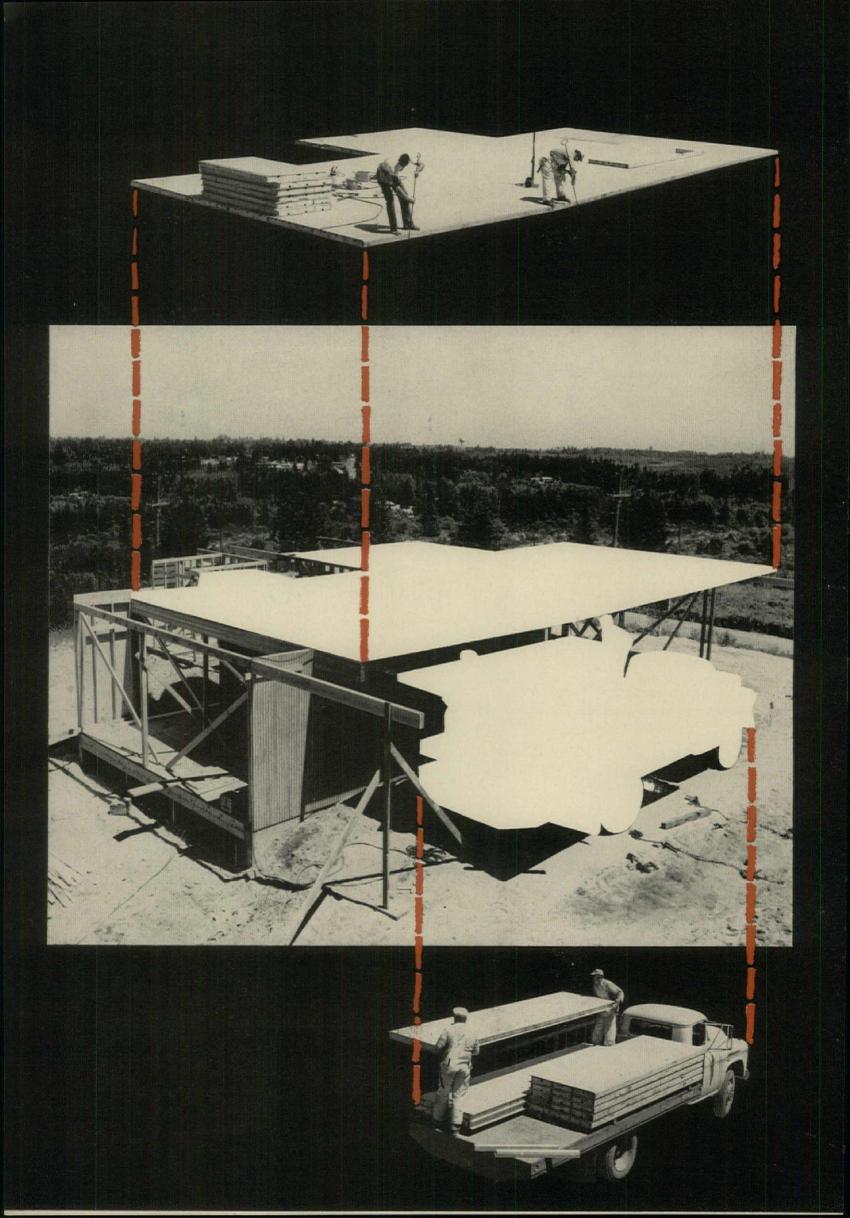
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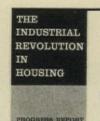
COVER

Town houses in Louisville by Builders Jesse Bollinger and George Martin. Photo: Robert Steinau

COMING NEXT MONTH

Electrical living in the quality house





Here is how to get assembly-line economy in one-of-a-kind houses

Use the same techniques for a custom house you would for mass production—use components for the roof, the walls, and the floors.

This formula will save money on one-of-a-kind houses just as surely as in volume-built housing. So says Peter Bilder of Panelbild Systems Inc, who has been making and selling components to custom-house contractors for more than seven years.

"We can save builders 10% to 25%—on a bid-against-bid basis—on the parts of the house we panelize," says Bilder. And the general contractor has no problem in training his crews to handle components, for Panelbild not only makes the components but does the erection work itself.

Panelbild is tooled to make almost any pressure-glued wood component—stressed-skin panels for floors, walls, and roofs; trusses; laminated beams; even complex parts for vaulted, folded-plate or other special roofs, parts that would be "almost impossible to build on site."

Panelbild was started in 1953, in a 1,000 sq ft shop in Seattle. Today, the company does a \$1 million-a-year business, and last year became a wholly owned subsidiary of US Plywood Corp.

The system works not only for custom houses, but for almost any one-of-a-kind low-rise building designed to a basic module. For details on how the system works in a custom house, a school, and a garden apartment, see the next six pages.

(And you can adopt the same cost-cutting system for garden apartments, shops and stores, schools, and other community buildings)



Component-built apartment

Maarten



Component-built store

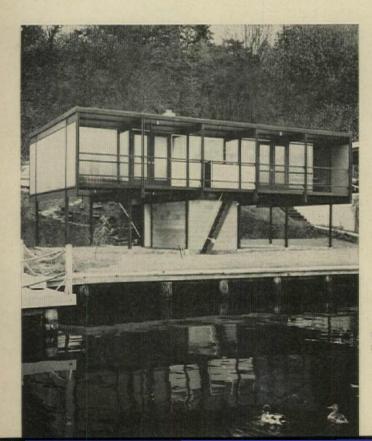


Component-built school



PANELIZED SHELL for this house in Seattle was completed in one day by a four-man crew. Wall panels are placed last.

#### Components closed in this custom house in a day



"I've never had a custom shell finished so fast," says Seattle Architect Charles Metcalf, who designed the house. "The erection crew was in and out in less than a day."

Metcalf cites two other advantages that components gave him on this job:

1. Completeness. "We didn't get just an outer skin in one day. We also got an inside ceiling, a ceiling for the lower deck, inside walls, and insulation."

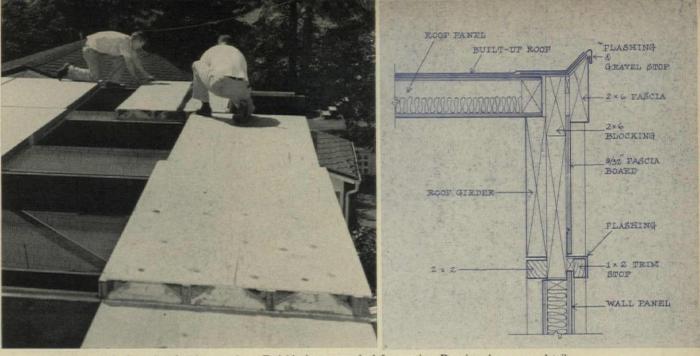
deck, inside walls, and insulation."

2. Low cost. "The Panelbild system looked so good to me right from the start that I never got conventional construction bids for comparison. But I know I could never have found comparable quality for as low a cost." (The in-place costs of the components for this house: roof panels,  $60\phi$  a sq ft; floor panels,  $95\phi$  a sq ft; wall panels, an average of  $90\phi$  a sq ft, including window-frame panels.)

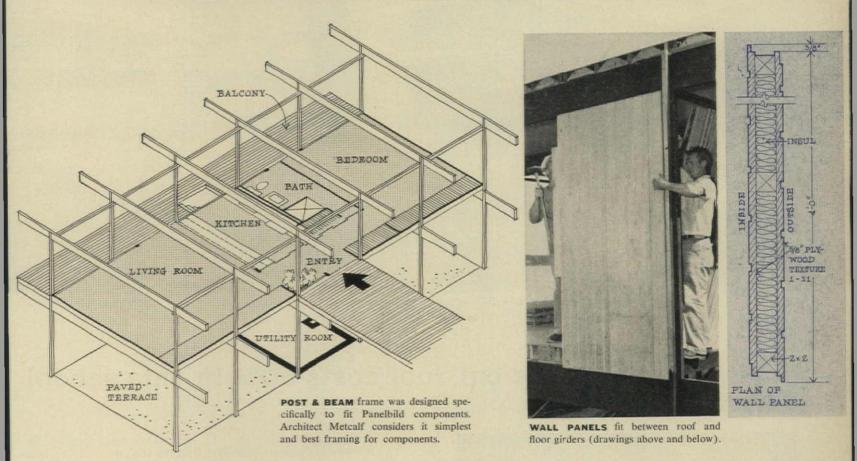
Adds Panelbild's Peter Bilder: "Our cost sheets, which we've been keeping for eight years, show we can save anywhere from 15% to 25% of shell costs on a job like this."

Metcalf designed the house to take advantage of the common 4' module of sheet materials. All panels are 4' wide, and all girders are spaced for an 8' panel length on floors and roof.

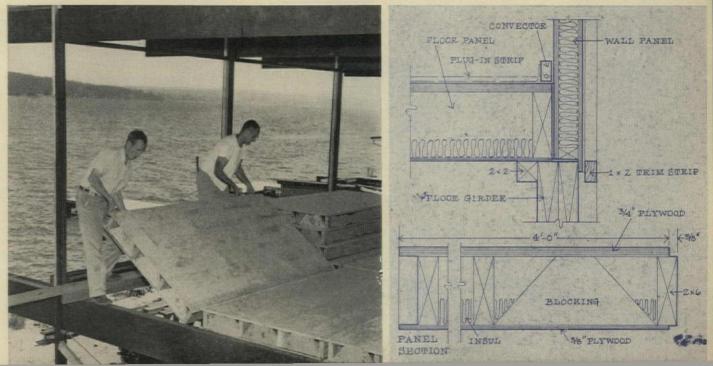
FINISHED HOUSE has glass wall facing water. Masonry section below is utility room. Whole lower level can be enclosed at future date.



ROOF PANELS are 4'x8', have 2x3 framing members. End blocks are notched for venting. Drawing shows eave detail.

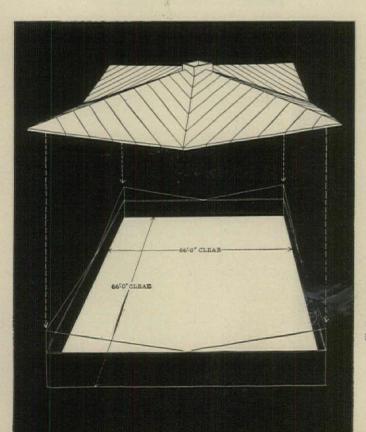


FLOOR PANELS are 4'x8', have 2x6 framing members. Simple floor-wall panel joint is shown in drawing.





#### Components cut roof costs 50% in this school



"Precision-built components are even more important for many complex structures than for flat surfaces," says Tacoma Architect Robert Evans. This school, designed by the firm of Johnson, Evans & Parker, illustrates his point:

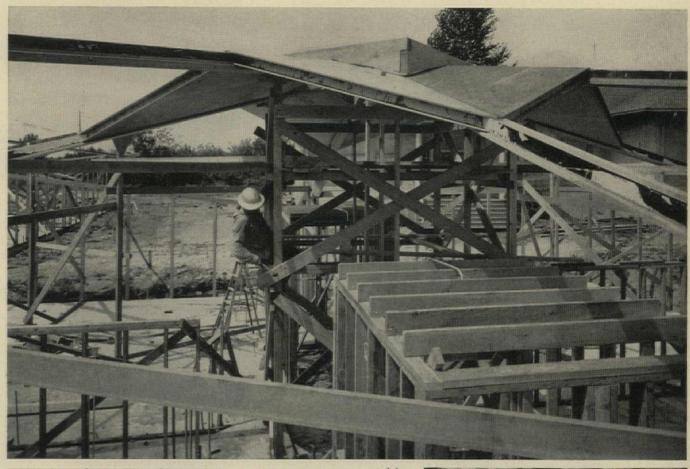
The percentage saving on the complex roof was twice as great as on the simple flat-surfaced wall, where in-place cost was  $67\phi$  a sq ft—about 25% less than the cost for a conventionally built wall.

In contrast to the straightaway wall, the roof is an eightsection space plane designed to span 66' with no intermediate support. Panelbild's in-place price of \$1.45 a sq ft represents a saving of at least 50%, says Evans. "And," he adds, "it might not be possible to build this roof at all with ordinary on-site methods."

Roof panels are all 4' wide, and vary in length from 5' to 25'. All have one side angled at slightly more than 45°. For panels spanning under 17', framing members are 2x4; for panels over 17', 4x4s are used (see drawing opposite).

Laminated girders run from the roof center to the corners of the building and the center of each wall. They support the panels until the roof is finished, then serve only as ties.

**SPACE-PLANE ROOF** has 66' clear span. Lines show edges of 4'-wide panels. Angled plate line is shown in section below.



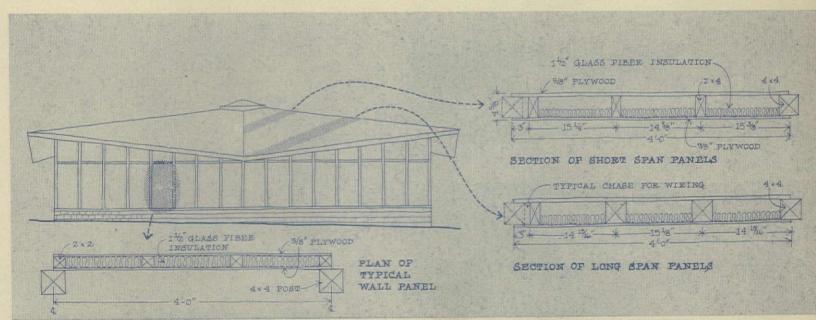


PEAK PANELS are supported by cribwork, the only bracing needed during construction. Girders carry no load, act merely as panel ties.

**SHORT PANEL** (left) is lifted to roof by crane. Plywood on angled edge projects as a nailer.

ANGLED HOLDER (right) supports panel while it is positioned. Cable and winch in foreground pull panel tightly into place.





CONSTRUCTION DETAILS show simplicity of both wall and roof panels. Wall panels lap 4x4 post-&-beam framing which supports roof.

#### Components for custom building



#### Components saved \$10,000 in this garden apartment



**ROOF PANELS** are long (16') but light, so two men can handle them. Stressed skin design and short span (8') need only 2x2 framing members.



"The roof and floor panels made us money in three ways," says Architect Blaine McCool (of McCool & Morgan, Seattle). His analysis:

1. A saving of \$6,500 in direct costs. Says McCool: "We figure the Panelbild components cost in place between 20% and 25% less than conventional construction." (The apartment has about 22,500 sq ft of floor panels at  $72\phi$  a sq ft in place and about 12,500 sq ft of roof panels at  $61\phi$  a sq ft in place.)

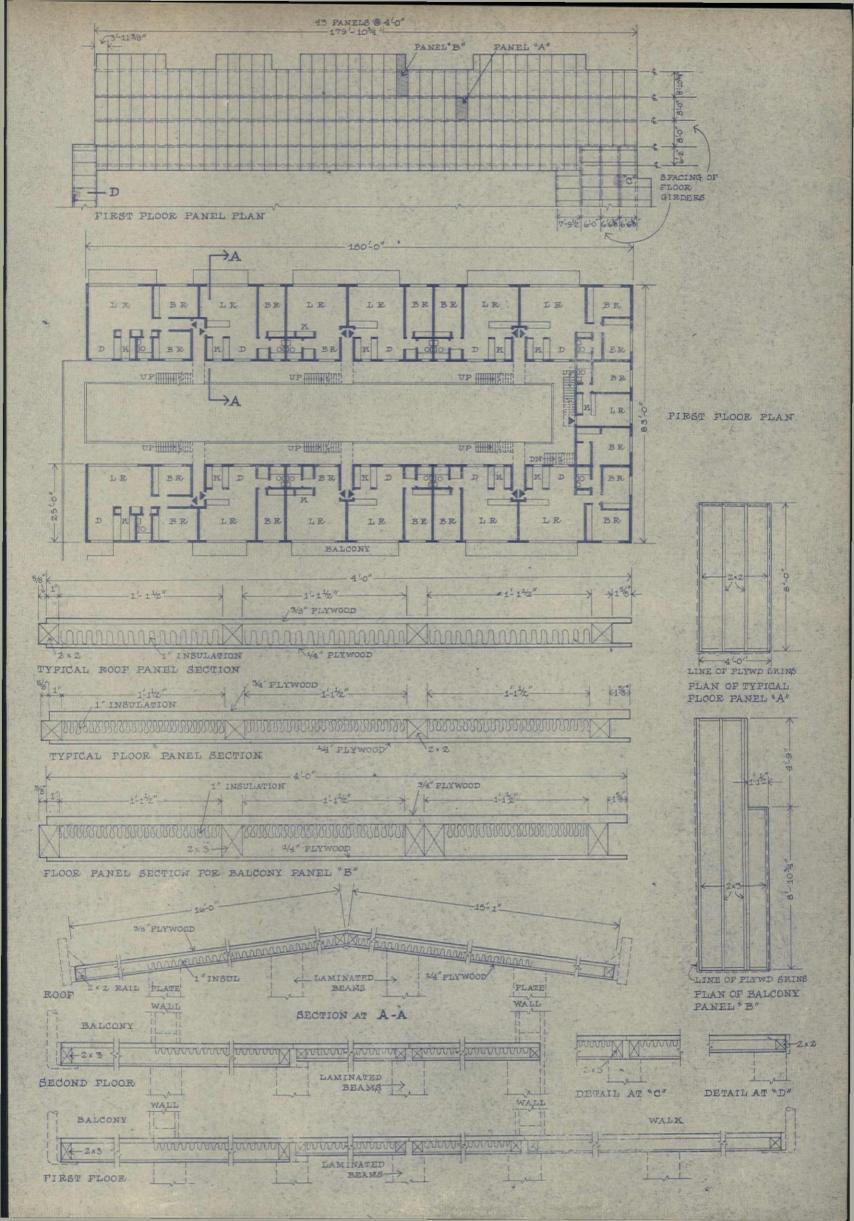
2. A \$900 saving in financing costs. "The apartments were finished in five months, at least a month less than conventional building would have taken," says McCool. "For instance, the roof went on in less than four days, about three times as fast as the job could be done conventionally.

"The \$900 saving is based on a construction loan of \$160,000.

3. Extra rental income of \$2,600 from the month saved. There are 26 units in the apartment, and their average rent is \$100."

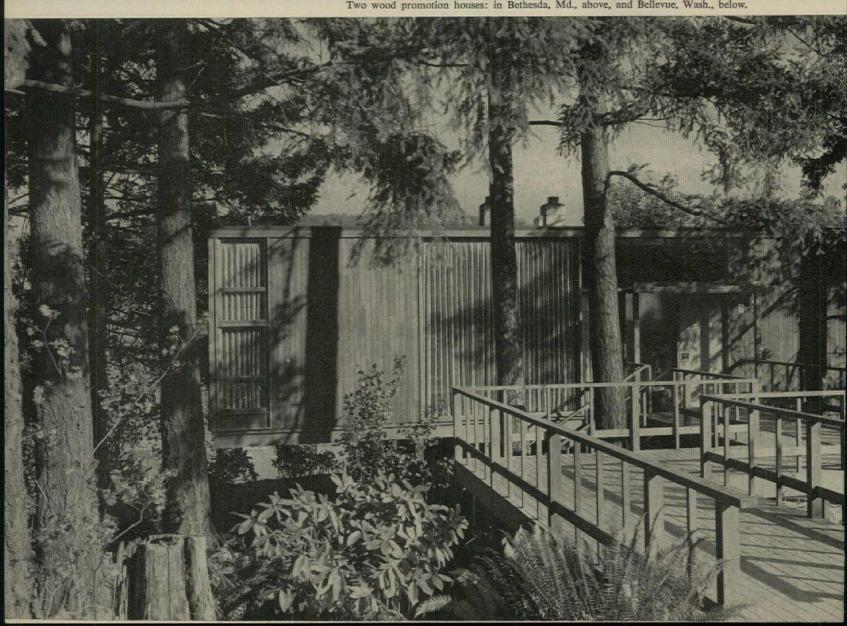
The drawings opposite show the construction of the panels used, and point up McCool's argument that "components make particular sense for the roofs and floors of most structures, because they are big, unbroken planes that can easily be laid out on a basic module and built with repetitions of a few basic panels."

FLOOR PANELS, left, rest on laminated girders 8' oc. Some panels are longer (see drawing, right), and cantilever out to form balconies.





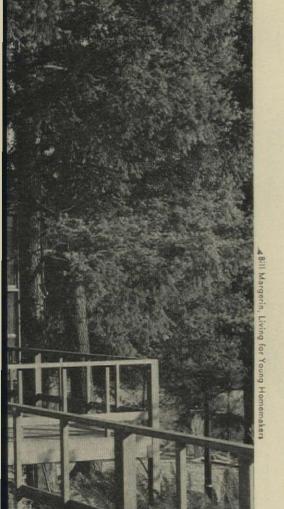
Two wood promotion houses: in Bethesda, Md., above, and Bellevue, Wash., below.





## These two houses explore the tradition

#### and the future of wood



Both are wood promotion houses and both make extensive use of wood—in their structures as well as their trim and decoration. But there the similarity ends.

The house at top is a reminder of the classic practicality of wood as a structural material and the classic beauty of wood as a decorative material. It is a craft house—a house of many pieces and many elements.

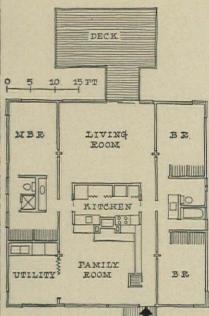
The house in the second photo is intended to point up new uses of wood—wood in new forms, made into highly engineered parts that are fitted together with precision. It argues for wood's place in the increasingly industrialized scheme of things. But the use of wood gives this house a warmth that some highly engineered houses do not have.

The house in the top photo was sponsored by the Washington, D.C. Lumberman's Assn in cooperation with the National Lumber Manufacturers' Assn. It is shown in more detail on p 110.

The second house was sponsored jointly by *Living* for Young Homemakers (as part of its "Basic Materials Research and Design Program"), Andersen Corp, and Weyerhaeuser Co. It is shown overleaf.

Two all-wood houses,





**SQUARE PLAN** is divided into three parallel sections, which cantilever out from four X-shaped columns that support both the floor and the roof.

**PANELS OF WOOD AND GLASS** enclose the living space. The outer edges of the h-p roof are straight, so house appears to be flat roofed.

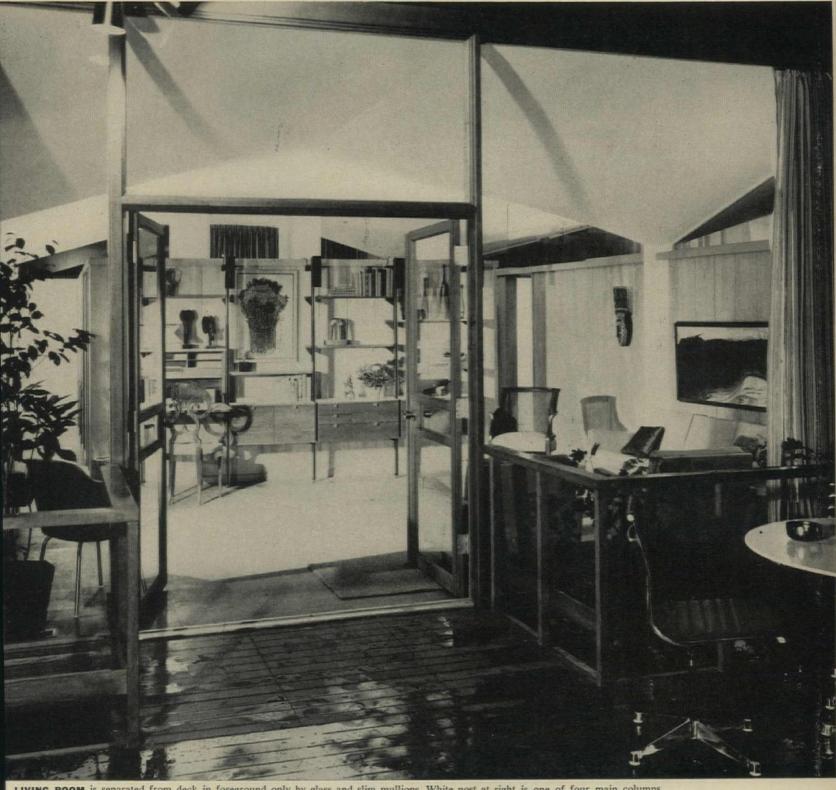
#### This house uses wood in today's new forms



It was built to show how wood fits today's new shapes and meets the precision requirements of today's new design components—and at the same time provides traditional warmth and color.

Architect Kirk used four X-shaped laminated columns for the basic structure, plywood stressed-skin panels for the floor, and four stressed-skin hyperbolic paraboloids for the roof (see also H&H, Feb). Inside and out, the paneling reflects both new and familiar handling of wood: random boards are joined end to end and side to side into big pieces (Weyerhaeuser's Nu-Loc). The pieces are scored for pattern and stained to bring out the natural color of hemlock and cedar.

**INSIDE THE HOUSE**, the undulating ceilings—which reflect the roof paraboloid—are a strong design element. This is family and utility room.



LIVING ROOM is separated from deck in foreground only by glass and slim mullions. White post at right is one of four main columns.



ARCHITECT: Paul Hayden Kirk BUILDER: Pearson & Assoc LOCATION: Bellevue, Wash. FINISHED AREA: 1,600 sq ft PHOTOS: Bill Margerin

House was published in detail in the February issue of Living for Young Homemakers

PANELED LAVATORY (left) works as corridor between master bedroom and dressing area (see plan). Bathroom is beyond wall, left.

KITCHEN (right) is at hub of plan, separates living and family rooms. Straightline cabinets echo basic panelized design used throughout the house.



continued

Two all-wood houses,

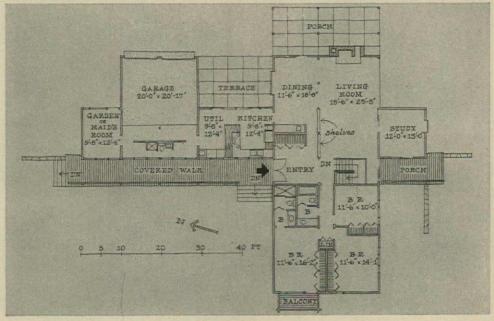
continued



ARCHITECT: Keyes, Lethbridge & Condoi BUILDER: Robert W. Lowe LOCATION: Bethesda, Md.

LOCATION: Bethesda, Md. FINISHED AREA: 2,200 sq ft PHOTOS: Robert C. Lautman

**EXTERIOR** has rhythmic pattern and strong roof line that tie together the sprawling plan. Daylight basement, right, includes guest and recreation rooms.



CENTRAL ENTRY PLAN provides good circulation and zoning of working, living, and bedroom areas. Almost every room opens to outdoor living space.

#### This house uses wood in traditional forms



It was built to bring out the beauty of wood construction, by showing wood in many patterns, many textures, and many colors and finishes.

Both inside and out, the Douglas fir and Southern pine structure is left exposed. The strong rhythm of the heavy posts and beams—apparent inside and out—contrasts with the smaller patterns of the interior paneling and ceiling boards, and with the board-&-batten exterior siding, the porch railings, and the exposed rafter tails and purlins.

The siding, battens, fascia, and porch decks of the house are redwood, the roof is western red cedar shakes. Many woods—Honduras mahogany, white oak, Douglas fir, birch, Idaho white pine and southern yellow pine—are used for floors, walls, and ceilings (see photos for examples).

KITCHEN paneling and kitchen cabinets are Honduras mahogany, set off by light-colored ceiling and vinyl flooring, and laminated wood counter-top.



LIVING ROOM has posts, beams, and rafters exposed as decoration. Ceiling is flush white-pine boards; floor is random-width white oak. /END



### NAHB's new president Jim Burke

#### Burke on TODAY'S MARKET:

"We must go after by-passed areas in the market. . . . We have neglected housing for minorities; we have overlooked retirement housing, the vacation house, and private-enterprise housing for low-income families. . . . We have not done enough about urban renewal. And we have left home improvement too much to others who are less qualified than we are for the job."

#### Burke on QUALITY:

"We should stress quality in all our selling. Remember you can have a quality low-priced house as well as a quality high-priced house."

#### Burke on CODES:

"We should not be required to put anything into a house that adds to its price without adding to its value."

#### Burke on TECHNOLOGY:

"We need to acquaint all builders with the progress we have already made. . . . The industry could take great strides overnight if we all just started using today's best techniques and methods."

The nation's homebuilders could hardly have picked a less talkative spokesman than Jim Burke.

As he himself puts it, "I don't talk unless I have something to say." Some of the things he has recently had to say are printed on the opposite page. They tell you a lot about him, and they may even preview a new public image of the US homebuilder, an image that a leader like Jim Burke could conceivably create in a year like 1961.

The image is of a man who puts his faith in action, a man who believes in his own ability to do something about the problem at hand, and who would rather begin the job than talk about it.

The record bears out the impression: At 40, Jim (born Elmo James Jr) Burke, a tall (6'1"), husky (200 lb) Texan, is the youngest man since '49 to head the National Association of Home Builders, Behind his new eminence is a string of lesser NAHB posts and a 15-year career as the builder of 7,000 houses, five shopping centers, three apartment-house projects, and three motels—all in or near San Antonio.

Homebuilding has made Burke a rich man, and when you talk with him you get the feeling that he is eager—in an unassuming way—to repay the industry and the community that gave him his chance. You sense this most when he tells you he believes there is a need today to build private-enterprise housing for families whose incomes are in the public-housing bracket.

#### Last year Burke pilot-tested houses to sell at \$59 a month

He teamed up with San Antonio Builder Quincy Lee, chairman of the NAHB committee on low-income housing, to organize a group of local builders to put up houses priced competitively with public-housing rents.

To clear the way for construction of the houses on a ten-acre site, the group persuaded city officials to relax building codes and subdivision ordinances. The city and the builders agreed on Fha minimum standards for the houses, and special engineering and health boards were set up to supervise the work and analyze the results (see H&H, Jan, p 57). Burke credits City Manager Lynn Andrews for much of the program.

To test the plan, Burke himself built ten houses priced from \$6,450 to \$6,950. The units were offered with no landscaping, no driveways, no carports, and no interior decoration. He sold all ten over a single weekend at \$59 a month—and nothing down. ("I'd rather have the buyers use any money they have to improve the houses and build up their equity.")

Burke financed the pilot houses with private mortgage loans from the Burke Foundation. He says the experiment convinced him that low-priced houses can be built and sold.

"There is a tremendous interest in this thing among all our local builders. What we now need are successful tests in six or eight other cities around the country so builders can't say, 'Well, it works fine in San Antonio, but how is it going to work on Long Island?'"

#### Burke thinks self-help is one way out of housing's current slump

"Right now the biggest problem our industry faces is the lack of public confidence in the general economy."

Burke believes the economy may continue to slide a little while longer—but he was happily surprised to find "quite a few" optimistic builders at the NAHB January convention.

He has no panaceas for today's market, but says: "We just can't sit idly by. We must work harder and use more ingenuity. The housing industry must re-examine itself. We must go after bypassed areas in the market. We have neglected housing for the minorities; we have overlooked retirement housing, the vacation house, and private-enterprise housing for low-income families. We have not done enough about urban renewal."

Burke, who has always concentrated on the lower end of the price scale himself, sees housing's greatest opportunity in lower prices: "Most minority groups have low incomes and need low-priced houses. We can stimulate the vacation-house market by providing good, lower-priced second houses. Retirement housing must necessarily be low in price. And most urban-renewal housing must be modest in price to replace the living quarters of low- and middle-income families."

One of the biggest and least tapped areas of housing, Burke believes, is the remodeling and modernization market. "A lot of families like where they live: their children go to good schools, they belong to a church, and they have friends in the neighborhood. But their houses may be too small, their kitchens too old-fashioned, their bedrooms too few. Or they may just want to upgrade what they have-add a garage or a family room, or a second or third bath. Work like this isn't cheap. And a lot of people want and need to have it done. The biggest drawback to home improvement is the poor financing available for it. More builders could move into this field if the size or the term of the mortgages could be increased."

#### Integration may be the big test of Burke's leadership

His present views on integrated housing are what you might expect from a man who is both moderate and a Texan: "You can't force integration, it has to come on the local level. In my home town, San Antonio, segregation is as much a matter of difference in economic strata as anything else, I suspect this is true elsewhere."

In San Antonio, Burke has built one 550-unit, all-Negro subdivision. He says that NAHB's policy statement on segregation expresses his own sentiments: "The homebuilding industry did not create the attitudes and prejudices which give rise to discrimination. It alone should not be made responsible for their elimination."

Burke has seen public opinion change in its attitude toward racial discrimination in housing. He himself helped open San Antonio's subdivisions to occupancy by Mexican-Americans. He recalls vividly the circumstances which years ago changed his own attitude:

"I noticed a bedraggled Mexican-American wandering around my sub-division. He was so ragtag that I asked him into my sales office and told him I wasn't going to sell him a house so he might just as well move along. He swore at me, pulled up his dirty sweater and pointed to an ugly machine-gun wound, and shouted, 'You people let us fight for you, but you won't let us live next door to you.' I sold him a house."

Burke has been selling houses to Mexican-Americans ever since.

He is sensitive to the criticisms leveled at the housing industry on integration: "Colored people say the housing industry discriminates against them in four ways: 1) by raising downpayment requirements, 2) by charging as much as 10% more for the same house we sell to whites, 3) by using more stringent credit requirements, and 4) by locating Negro subdivisions in the worst part of town.

"These charges, if accurate, are problems the housing industry can and should do something about."

Burke sheepishly admits his own Negro subdivision is not located in a very desirable area. He adds, "The need for minority housing is on the increase and we are all going to have to do something more about it."

#### Burke blames outdated codes for much of todays high cost

"I don't think we should ever have to put anything in a house that adds to its price without adding to its value." "There is no reason why we should be forced to use flexible conduit when we could use armored cable to do the same job. There is no reason why we should be forced to run a lot of vent stacks up through a roof, or to use wiped lead joints—or do dozens of other things that are needless, costly, and nonsensical."

A lawyer before he became a builder, Burke believes more mutual understanding between the legal profession and the homebuilding industry might eliminate some of the code problems. "When a community sets up a code, it is often getting into the realm of an individual's legal rights. I think we do great harm if we lightly abolish the rights of the individual on grounds of health, public safety, or police powers."

Price alone, Burke warns, should not be the builder's only consideration. "Remember you can have a quality low-priced house as well as quality high-priced house. We should stress quality in all our building and all our selling." As a builder of low-priced houses, he admits the problem is ticklish: "I guess all builders are like I am. They all want to build a better house. They start out with a model and then gradually enlarge and improve it until finally they find they've moved out of their price class. Then they chop back. The important thing is not to chop back on quality."

#### "We'd build more if we built as well as we already know how"

"Our industry could take great strides overnight if we all just started using today's best techniques and methods." Burke says.

"We need to acquaint all builders with the progress we have already made. We can't look forward to tomorrow without working with all the wonderful things that are available to us today. There are lots of excellent new products on the market. And there are lots of better ways to build houses. We'd help ourselves best if we all started using them."

Much of Burke's kind of thinking will be embodied in the 1961 NAHB Research House. It will be built only of products now on the market and with the best currently accepted construction techniques.

Says Burke: "I guess we've all seen people hesitate to do the job at hand today because they are afraid of being too deeply involved when tomorrow comes along with bigger and newer opportunities. I think we would make more progress if we worked harder with what we have right now. If there's any key to my own success, I think it is that I seize upon the opportunities

that present themselves today. I don't spend time worrying about the wonders of tomorrow."

#### Homebuilding was Burke's second choice for a career

"My grandfather and father were both builders, and they wanted me to be a builder," says Burke. "But I always wanted to be a lawyer."

He got his law degree in 1942, immediately enlisted in the Marines: "I deliberately neglected to tell them about my degree, but I ended up where there was no fighting, teaching court martial law on American Samoa."

While stationed there, Burke served on a three-man commission that recodified Samoan law. Once he successfully defended a Samoan chief's son charged with murder and was made honorary chief of the native village.

When the war ended, Burke was still teaching law and thus declared essential and ineligible for immediate discharge: "Like everybody else, I wanted to get home, but they wouldn't let me go. I had almost given up hope of getting out when I got a letter from my dad who was in the hospital with pneumonia, I knew he would need me and wanted me to help out, so I told him that I'd go into homebuilding for good if he'd get me out of the service. I told him to contact Gen Alexander Vandegrift [Marine Corps Commandant]. He phoned the general, and I was home three days later." That was Christmas Eve. 1945.

The day after Christmas Jim was in the building business. Burke Sr gave him 100 acres of land ("enough to keep you busy almost the rest of your life"). When Burke Sr had to leave town for six weeks, Jim started building in a big way. "Materials were very short at the time, so we made a deal with the Texas Housing Corp, a prefab firm that had materials. I asked our sales manager if we could sell more than a house a week. He thought we could. We started building and we started selling. We were soon ordering a house a day, then two a day, then more." Before Burke Sr returned to Texas, Jim was building four houses a day.

"Dad was amazed. He said 'All right, you can build houses, but let me look at the books to see if you can make money.' He looked over the books, went home, and hasn't objected since."

Burke continued to build in the low-price field. His average volume: over 400 houses a year. He built one-bedroom houses for as little as \$4,800, two-bedroom houses for \$6,000 and \$7,000. Then he expanded into FHA 608 rental units, shopping centers, and motels.

"Things weren't always rosy, though," he recalls. At one point in 1949 he had 195 houses finished but unsold. What to do? Burke decided to drop closing costs from about \$195 to \$5-"exactly what it cost us for a credit check." Before his big Sunday ad appeared, word got around and Burke sold 87 houses on Saturday, 287 houses over the weekend. "I don't know what was magic about \$5, but it worked. We sold hundreds of houses and stimulated sales all over town. But builders started complaining that we were cornering the market by prepaying closing costs, so the local va office put out a regulation to stop us. But that was all right, we were back in the building business."

#### Burke is a homebuilder with many outside interests

He is interested in education. Although an Episcopalian, he has received awards for his support of several Catholic colleges. ("They fascinate me because they are so ready to create new and flexible courses.")

He is interested in housing law. ("Building is one of America's biggest industries, but there is no special body of law for it as there is for oil, taxes, patents, etc.") Burke endowed a chair for homebuilder's jurisprudence at St Mary's Law School, helped establish the first Institute of Municipal Law and Homebuilder's Jurisprudence, and has just offered a \$1,000 scholarship for the study of housing law.

He is interested in flying. He is a licensed pilot and a member of the National Pilots Assn and the Aircraft Owners & Pilots Assn. His wife Betty shares his interest in airplanes, needs one solo flight to get her pilot's license.

He is interested in a variety of organizations. He is a Shriner, a member of the local Lion's club, the San Antonio Livestock Assn, and the San Antonio Zoological Society.

More than anything else right now he is interested in the newest addition to his family—a son born the day after he became NAHB's 22nd president.

Jim Burke's widespread activities helped bring on a heart attack 15 months ago at the NAHB convention. Since then, he has kept regular hours ("to bed every night at ten"), cut out smoking cigars ("they used to be part of my facial makeup"), and done less flying ("I fly myself only when I don't have to be somewhere at a definite time").

But his outside interests have not curbed his enthusiasm for homebuilding: "I still get a thrill out of driving out at night and watching the lights go on in the houses I've built." /END



Jim's first year at school

El page from the Burke family album



Jan marcus Academy American Samoa, 1945





Jumi loading his Decederaft for

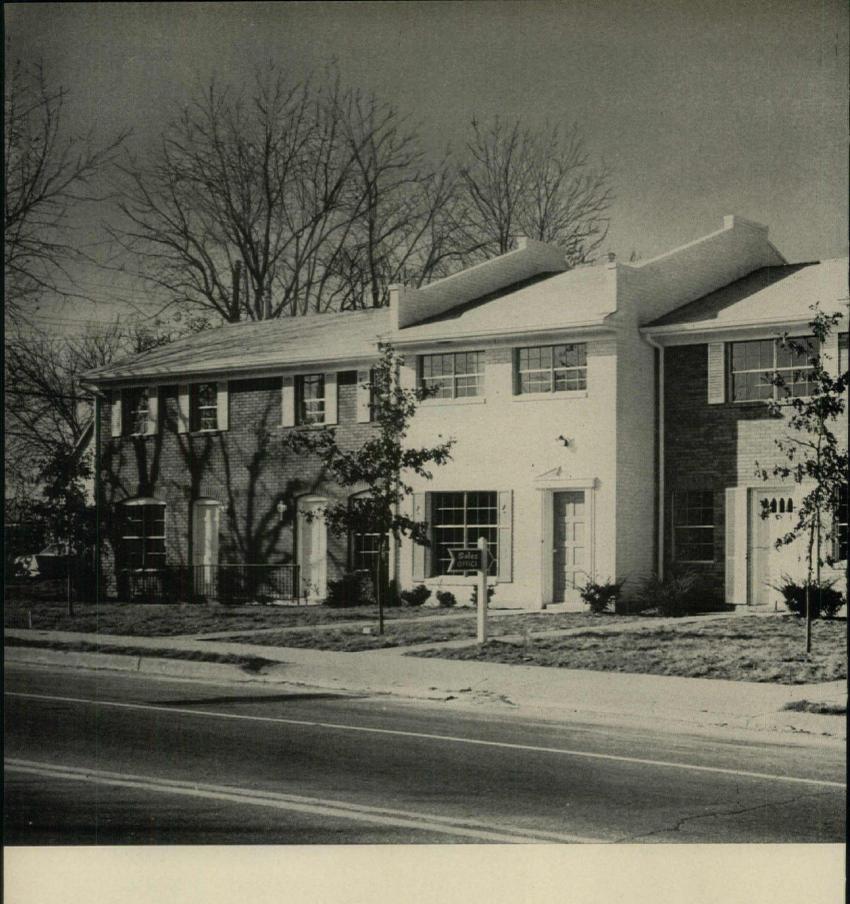


Jim with LBJ at 1951 Jeyan State Convention



em + Betty after a beg catel off mazatlan newco





These new town houses are selling fast in Louisville for \$63 to \$77 a month\*



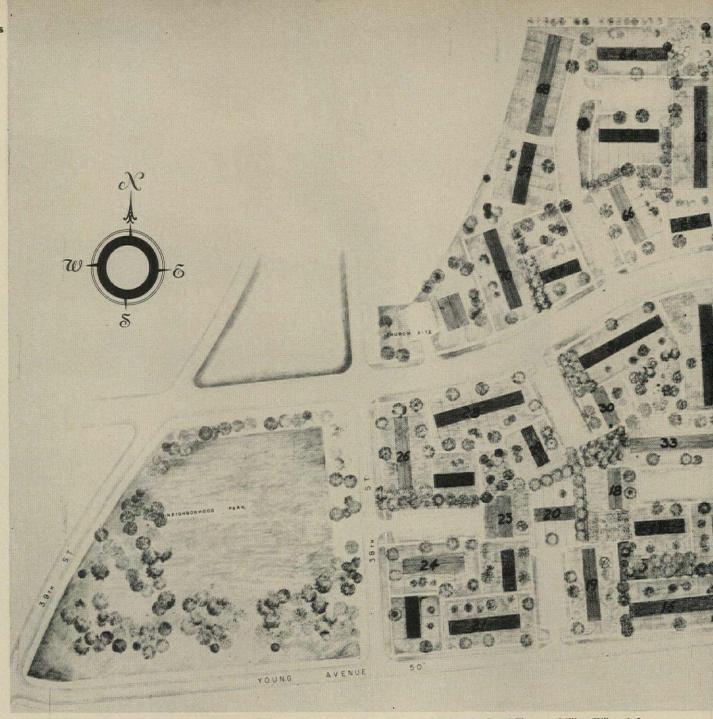
Jesse Bollinger and George Martin have sold more than 300 in two months.

The houses are 1,006 to 1,402 sq ft, have two to four bedrooms and air cooling units.

Prices range from \$8,550 to \$11,700 (with land)—average \$8.45 a sq ft.

How does Bollinger-Martin do it? One answer is volume buying.

But three other answers are even more important. For the first, turn the page.



500 TOWN HOUSES in 70 buildings are grouped around parking bays, play yards, and gardens by Land Planners Miller, Wihry & Lantz.

# This town-house land plan cuts site costs two-thirds

It lets Builders Bollinger and Martin use 18'x100' lots, so land that cost them \$15,000 an acre works out to only \$1,000 a house.

By contrast, if they had decided to build detached single-family houses on the same site, the smallest lot permitted by zoning would have been 55'x120', so the land cost would have been \$2,800 a house.

Says Bollinger: "Our low lot cost—made possible by the town-house land plan—was a big factor in keeping house prices within the means of our buyers." Bollinger-Martin's buyers are Negro families whose incomes average \$3,400. Most of them already live in the area, and about 15% are moving from public housing shown in the aerial photo opposite.

Besides reducing land costs by permitting more houses on the site, the land plan has other advantages:

1. It provides plenty of off-street open space. Five hundred houses are being built in groups of four to ten units, and the 70 buildings are arranged around common grounds, play

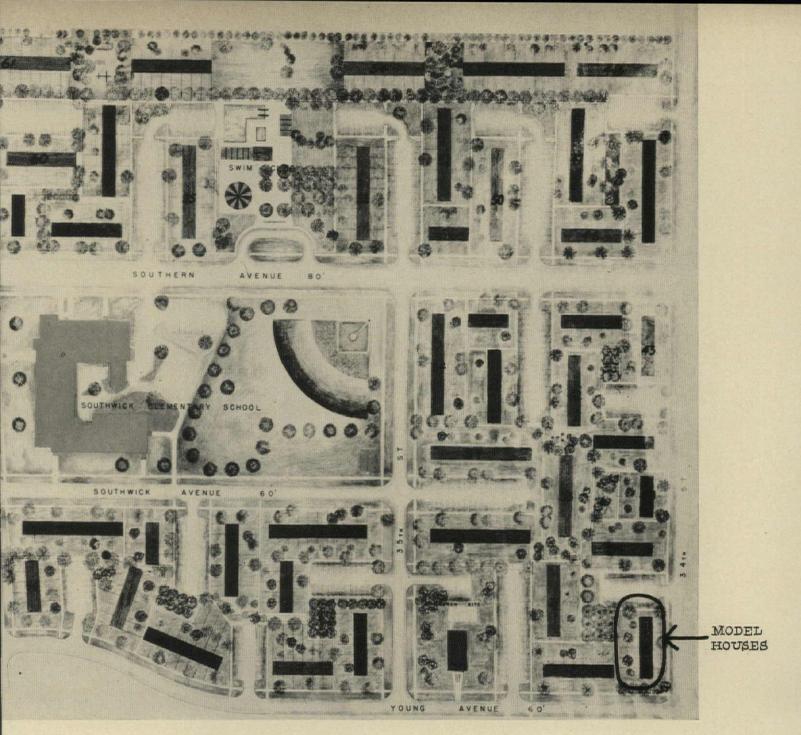
yards for small children, and parking bays with space for one car per family.

2. It provides for community facilities. Land has been set aside for tennis courts, two churches, and a swimming club to be built for \$75,000 by Bollinger-Martin.

It requires less paving and shorter utility service lines than if the town houses were arranged in long straight rows.

The project is part of a larger urban-renewal plan. Bollinger-Martin bought 34 acres (all the area shown above except the streets, school block, and park at far left) from the City of Louisville, which installed main utility lines and made some changes in existing streets. Parking bays, which also serve as access roads, will be dedicated to the city as they are completed. Other community property will be turned over to a homeowners' association which will charge each homeowner \$1 a month for community land maintenance.

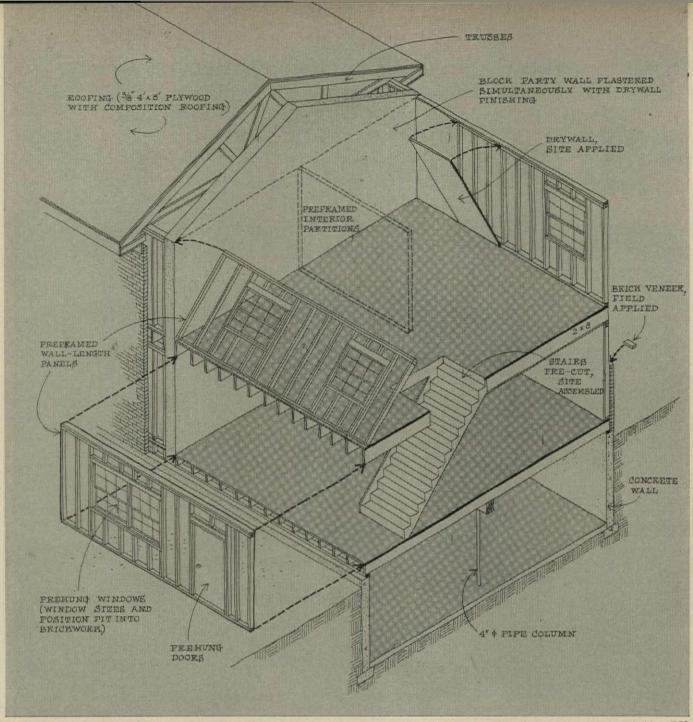
Says Richard Beck, Louisville's urban-renewal chief: "It's the best land plan I've ever seen for a renewal area."



Photos: Robert Steinau



TOWN-HOUSE SITE, 34 acres in Louisville slum area, is part of urban-renewal project. City will raze slum dwellings as new houses are built.



TOWN-HOUSE COMPONENTS-trusses, partition panels, and front and rear panels-are preframed for builder by Tru-Bilt Corp of Louisville.

# This town-house structural system cuts costs five ways

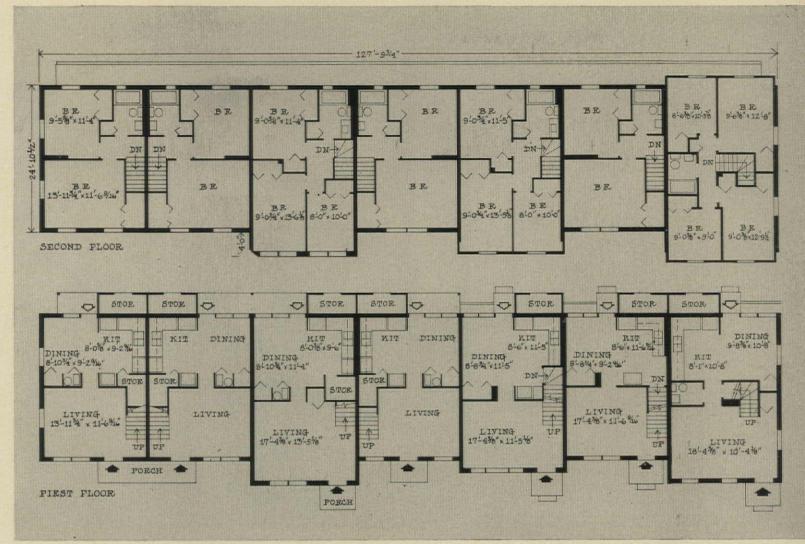


MAINTENANCE-SAVING MATERIALS, shown here at rear of houses, include redwood (for storage sheds), brick (for wall veneer), aluminum (for windows and gutters).

Builders Bollinger and Martin can sell their town houses for \$7.35 to \$7.56 a sq ft (without land) because:

- 1. Outside walls are limited to an average of 60 lin ft per unit since all side walls except those at the ends of each row of houses are party walls.
- 2. Foundations (also roofs and masonry walls) for as many as ten units can be constructed in a single operation.
- Preframed wall-length panels are used for the front and rear of each house.
  - 4. Preframed panels are used for interior partitions.
  - 5. Glue-nail trusses are used to frame the roofs.

The basic two-bedroom unit sells for \$8,550 or \$63.12 a month (this covers a 9,000-Btuh cooling unit, range and oven, and the entry fee in a community swimming club. Each extra bedroom costs buyers \$1,000; a basement costs \$800; a finished basement recreation room \$350 more. Most families take a three-bedroom unit with basement and recreation room for \$10,700 or \$74.45 a month.



TYPICAL BUILDING PLAN shows how two-, three-, and four-bedroom units fit together. Architects are Edward Augustus and John Doumas.

Photos: Robert Sleinau





TYPICAL ROOMS are kitchen (with color cabinets, range, and oven) and dining area (above), master bedroom and living room (below).





Town houses continued



# This town-house selling benefits from FHA Sec 221 terms

Buyers are attracted to Bollinger-Martin's town houses not only because of their low prices but also because of the terms offered. These terms-the most favorable allowed by FHAlet the builders sell houses priced from \$8,550 to \$11,000 for nothing down and only \$63 to \$77 a month.\*

Under Sec 221 (available to families displaced by urban renewal or other government activity), buyers get 40-year mortgages and can finance closing costs over 18 months. Although the market to which Bollinger-Martin can offer these terms is limited to families eligible for 221 financing, the builders have gotten quick results: 80 applications to buy (with good-faith deposits of \$25 to \$200) on opening day, 150 in the first week. Says Bollinger: "We stopped taking applications after the first 320 because we didn't want to sell too far ahead of construction.'

These units are the first town houses financed under Sec 221 (but town house have been financed under Sec 220). Says HHFA Regional Director Walter Keyes: "A precedent well worth trying in other cities."

Says Realtor Michael J. O'Dea, chairman of the Mayor's Advisory Committee on Urban Renewal in Louisville: "Town houses like these are private industry's best answer to public housing. Families in public-housing units can often buy these houses for no more than they have been paying in rent."

Sec 221 town houses were possible in Louisville because

of close cooperation by everyone involved in the city's urbanrenewal program. Says Richard L. Beck, Louisville's urbanrenewal consultant: "This project proves that builders, architects, realtors, and local and federal government men working closely together can produce exciting new ideas in private housing for the low-income market."

Item: The city passed a new zoning ordinance which for the first time permits town houses to be built in Louisville. Few cities in the South or West zone for town houses-and few anywhere have so advanced a zoning law regulating townhouse construction. In Louisville, town houses can now be built if 1) they are built on minimum three-acre sites, 2) have off-street parking and recreation spaces, and 3) meet planningboard design standards.

Item: The city and FHA gave Bollinger-Martin permission to build their first units to test demand, even before zoning regulations were modified (Feb 14) to allow town houses.

Item: The city agreed to clear the 34-acre site only as fast as Bollinger-Martin can ready new town houses for families displaced by the slum clearance. This reduces costs and hardships in relocating the families.

Item: The project has set a speed record for urban-renewal housing-19 months from the start of planning to the first sales from models. This was possible because private industry took the lead several years ago in pushing through a \$5 million urban-renewal bond issue to speed redevelopment.

<sup>\*</sup> A few buyers who select Bollinger-Martin's top-priced town house-\$11,700—must pay \$700 down because the ceiling on FHA 221 mort-gages in Louisville is \$11,000.

# Here is what you should know about FHA Sec 221

### What is the purpose of Sec 221?

To help private industry provide low-cost relocation housing for families displaced by slum clearance or other government action.

### What kinds of housing can be financed under 221?

Single-family houses (new, rehabilitated, or existing); two- to four-unit dwellings where the borrower agrees to rent the added units to displaced families; and multi-family buildings with ten or more units (new or proposed for repairs).

### What makes a community eligible for 221 housing?

It must have a need—determined by HHFA—for low-price housing to relocate families displaced by urban renewal or other government activity. HHFA certifies the need to FHA. The mayor then writes to FHA for 221 assistance, to HHFA for allocation of 221 certificates.

It must have what HHFA calls a "workable program" for urban renewal. This means the city has a plan to eliminate slums or blight by enforcement of adequate local codes, by comprehensive planning for the community, by close analysis of needs in blighted areas, by setting up adequate organizations and funds to carry out the program, by relocating displaced families, and by getting citizen participation in these activities.

#### What families are eligible for 221 financing?

This section was set up primarily for families displaced from slum clearance sites. But it has broad coverage. It is also for families evicted from public housing units because their incomes are too high, for families who can show their present homes are substandard under local codes, and for families who are forced to move because of highway or other federally supported construction or because of construction by state universities and other quasi-public bodies.

#### How does an eligible family get 221 aid?

By obtaining a 221 certificate from the city and presenting it to the builder or lender when a new home is chosen.

#### How does a builder get a 221 commitment from FHA

He applies through his mortgage lender to the district FHA office. FHA bases its commitments on acceptability of sites, unit sizes and sales prices—all in relationship to needs of probable buyers and their ability to pay.

#### What are 221 minimum property standards?

The same as FHA standards for other housing.

#### Must 221 units be sold only to displaced people?

No. New units or those modernized with 221 commitments can be sold only to holders of 221 certificates for the first 60 days after construction, but may then be sold to any buyers under 221 terms. In fact, only 38% of 221 units have been bought by displaced

families in the past. However, URA is checking more closely on cities' requests for 221 allocations, and in the future it hopes fewer units will be sold to others than certificate holders.

### Is 221 housing limited to urban-renewal sites?

No. Units can be built anywhere in or near the city—either on the site from which families have been displaced or elsewhere.

#### What is the price limit for 221 financing?

It is \$9,000 to \$12,000 on a one-family house, depending on construction costs (and displaced families' ability to pay) in the area. Maximum prices are \$18,000 to \$20,000 on two-family dwellings, \$25,000 to \$27,500 on three-family dwellings, \$32,000 to \$35,000 on four-family dwellings, and \$9,000 to \$12,000 per unit on buildings with 10 or more rental units.

## What are 221 mortgage terms?

All mortgages are 40 years at 5½%. With one exception, all are for 100% of appraised value. The exception: 90% mortgages on large rental apartments (10 or more units) built for profit.

#### Where does 221 money come from?

The great majority of units financed under Sec 221 involve FNMA assistance. FNMA is authorized to purchase or make advance commitments to buy 221 mortgages. FNMA gets 1% for commitment charges plus ½% for purchasing and marketing fees. Mortgage sellers do not have to buy FNMA stock. But in some cities local lenders have joined to buy 221 mortgages.

#### How does 221 differ from Sec 220?

Sec 220 also helps finance housing in urban-renewal areas but is not intended primarily for low-income families or restricted to displaced families. It provides mortgage insurance on new or remodeled housing (for rent or sale) within renewal sites. New houses may be insured for up to \$22,500. Buyers pay 3% down on 30-year terms.

#### Can a 220 unit be shifted to 221?

Yes, if the house sells for \$12,000 or less and meets other requirements of Sec 221.

#### Do many buyers default on 221 mortgage payments?

FHA reports only a slightly higher percentage of defaults on 221s than on standard single-family houses financed under Sec 203.

#### How many 221 mortgages have been insured?

As of Dec 31, 1960, FHA had insured 21,313 units in about 90 cities. Commitments totaled 30,649, applications totaled 35,570, and authorized quotas were 101,201 (the latter in about 310 cities).



# How to reduce the risk in land buying and land development

One of the most expensive mistakes you can make is to buy the wrong piece of land.

When you buy land, you start a chain reaction of decisions on which the success or failure of your new subdivision will depend. If the location or the price of your raw land is not right, almost nothing else—up to and including the sale of the finished houses —will go right.

If you are buying a piece of land right next to your present operation, you probably don't need to do too much checking. You know what kind of houses will sell. You know how much the land will cost to develop.

But the farther you go from familiar territory, the greater the risk of making a mistake—and the more checking and analysis you need to do.

# The trick, says Builder-Developer Mayer Mitchell, is to get the answers before you buy the land

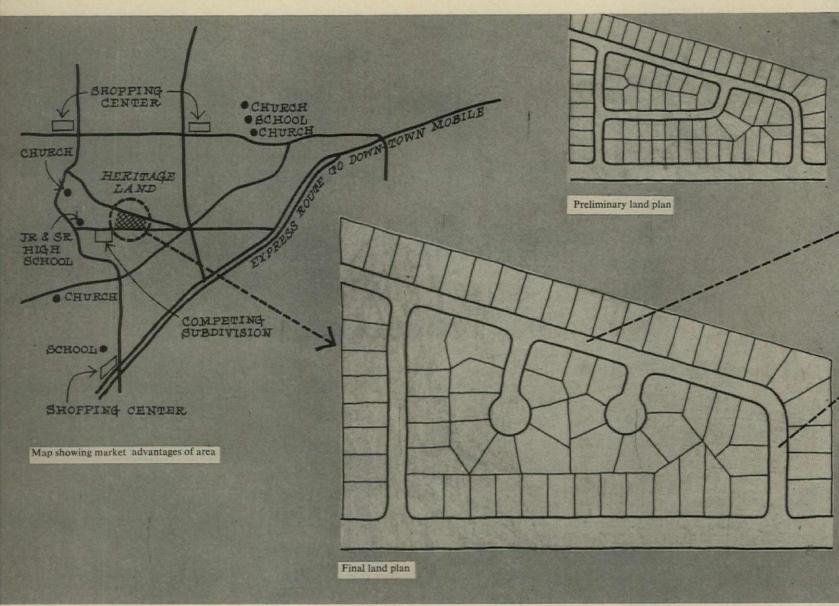
Few builders do a more thorough job of analyzing the profit potential of a piece of land than Mitchell, who builds in Mobile, Ala. Says he: "Buying land without careful appraisal is like flying by the seat of your pants—and just as dangerous. We do it when we have to, but a good pilot has a preflight checklist and he checks off—on paper—all the things he should know before he takes off."

"Appraisal" is the key word in the Mitchell land-buying technique. Four top men in the firm have had training as residential appraisers (Vice President Stillman Knight is president of the Alabama Society of Residential Appraisers). This training has shown them how to analyze systematically just what a piece of land is worth raw and what it will be worth when developed. "We probably don't do anything any prudent builder doesn't do," says Mitchell, "but we put down more on paper." To see how Mitchell "appraised" a piece of raw land, and how he controlled its development to reduce his risk, begin on the next page.



MAYER MITCHELL of Mobile is a 28-yr-old realtor-builderdeveloper who typifies the new type of businessman-builder. A graduate of the Wharton School of Finance, where he specialized in real estate, he has continued to take refresher courses in residential appraisal work (and encourage his staff to do so). He took over a family real estate business three years ago, has since revitalized it and expanded its activities. The Mitchell Corp now builds about 150 houses a year ranging from \$9,750 to \$40,000; as well as apartments and shopping centers. It has its own land-development and road-building subsidiary.

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MARKET ANALYSIS included area plan which lists neighborhood assets. Street plan went through five stages; two are shown here.

# Before you buy land: get your plans and your costs

"Deciding whether to buy a piece of land," says Mayer Mitchell, "is a job that takes time—time to study and analyze all the complex factors that determine whether or not you make a profit on the deal.

"So, whenever possible, we take an option on land that looks promising—to give us time to do five things:

"I. Make a market survey to check the location and the price range to build in."

On an area map (like the one shown above used by Mitchell in studying the land for his Heritage subdivision) Mitchell lists the features that would make buyers want (or not want) to live there. He finds out: Are there schools, churches, stores nearby? Is there water, sewerage, gas, electricity? Is the city growing in this direction? Is this a prestige area or is it on the downgrade? Are there fast roads downtown? A bus line? What kinds of houses are selling in the area? At what prices? Is there a pleasant approach to the land? What are the zoning requirements? Does zoning of adjacent land permit building that would lower property values?

"2. Work out the best possible land plan—to determine the number of lots and to get a good valuation."

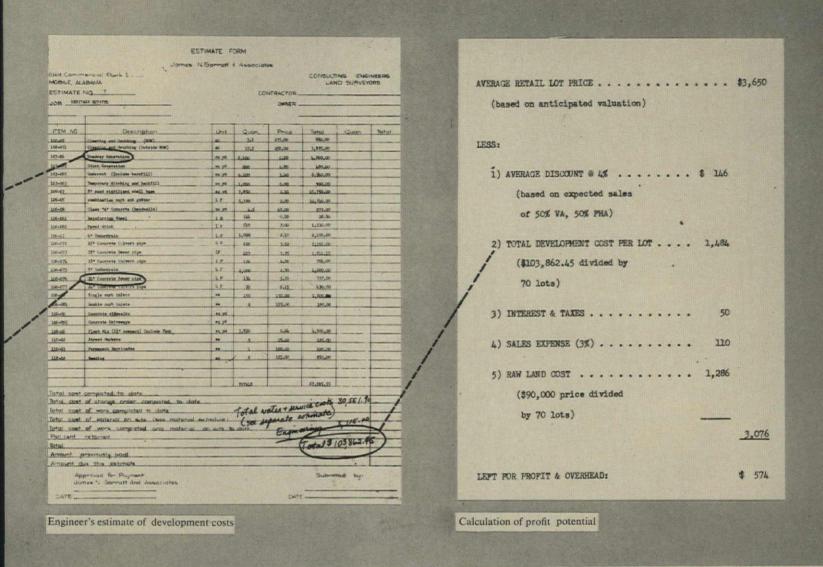
For large tracts of land, Mitchell usually retains Bartholo-

mew Assoc, St Louis land planners, to lay out streets and lots, but since the Heritage land was only 19 acres, Mitchell worked with a local consulting engineer. In all, five different land plans were developed (see above for one of the earliest and the final cul-de-sac layout). "You should never be satisfied with your first layouts," says Mitchell. "You can always make improvements." The cul-de-sac layout finally adopted not only produced more lots (70) than the first plan, but produced ten premium lots around the culs-de-sac and saved \$3,000 in street and paving costs.

"3. Get an accurate, written estimate of what it will cost to develop the land."

A key factor in Mitchell's land-buying decisions is the consulting engineer's estimate of development costs. The engineer (James N. Garratt, Mobile) has made scores of studies in the area, knows land conditions and current costs for every type of work. "We rely heavily on his report," says Mitchell, "and never buy land without it."

At Heritage, the land had long been bypassed because it was "swampy," but it was generally flat and heavily wooded. The big unknown was the subsoil condition. Garratt hired a firm specializing in soil analysis to make some 20 test borings.



CONSULTING ENGINEER'S analysis of development costs provided basis for Mitchell's own summing-up and for his decision to buy.

# down on paper, to be surer of making a profit

The report showed there was a sand base and the land could be drained at a reasonable cost.

Garratt submitted the itemized costs shown above for developing the Heritage land. The estimate included bids for water and sewer work, made by several local firms as well as Mitchell's own earthmoving subsidiary.

"4. Make a tentative decision on the selling prices of your houses—and have your architect make sketches."

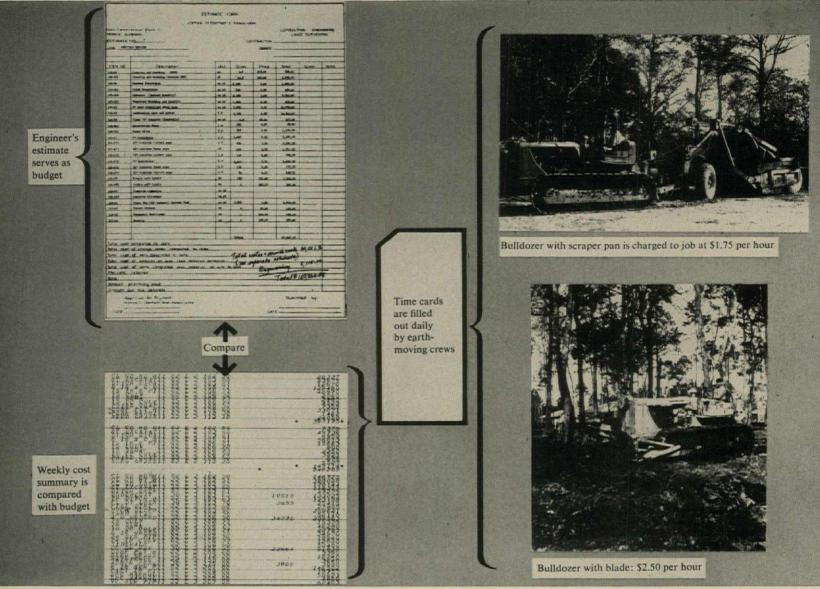
Mitchell originally planned to build \$15,000 houses at Heritage. But as he learned more about the market and about costs, he decided to move up to a \$16,500 to \$19,000 range. His reasons: 1) He did not want to compete directly with a nearby subdivision, 2) His market reports showed that many prospects at that subdivision wanted bigger houses with two full baths and four bedrooms, and 3) He decided that the Heritage land plan, with culs-de-sac, wooded lots, sidewalks, and straight (rather than rolled) curbs would support a slightly higher-priced house.

"5. Get a preliminary approval from your lender and FHA-VA."

Carrying the market survey, the land plans, and the cost sheets, Vice President Stillman Knight went to the Birmingham FHA office. With him went Architect Frederick Woods, with his tentative house plans. Says Mitchell: "If you can show FHA exactly what you have in mind—and that you've figured it out carefully—you have a better chance of getting a good valuation. Sometimes you can get an unofficial preliminary appraisal, and that's a big help in deciding whether to buy land." Knight and Woods got a go-ahead from both FHA and Mortgage Banker John Hall of Cobb, Allen & Hall.

# At this point, says Mitchell, you can make a good guess at your valuation—and decide whether to buy

Based on Knight's preliminary discussion with FhA, and on comparisons of the plans for Heritage and the nearby competing subdivision (appraised at \$40 a front-foot), Mitchell figured he could get a \$50-per-front-foot appraisal—which would mean an average valuation per lot of \$3,650. (This is what he later got.) He then went through the cost calculation (shown at right, above)—which showed that after all costs were paid, there would be \$574 per lot for overhead and profit. On this basis, Mitchell and his staff decided to buy the land.



COST CONTROL begins with engineer's estimate of development costs (upper left) which is compared with weekly IBM cost summary (lower left).

# After you buy land: make your profit more certain

"It makes no sense," says Mitchell, "to make careful plans and figure all your costs and then not follow up to make sure your plans come true."

Mitchell does two things to make sure his land-development plans come true: 1) He makes a regular weekly check to see that development costs are within the budget. 2) He does his own earthmoving.

#### To get the cost facts he needs for fast action, Mitchell uses a machine accounting system

Here is how his control system works:

- 1. When the engineer's estimate of development costs (see p 127 and above, upper left) is accepted, it becomes a budget for the land operation. This budget is divided into a sub-budget for each of the 15 job phases—eg, clearing roads, street excavation, ditch excavation, etc.
- 2. Each day, every man working on land development fills in an IBM card showing hours worked, on which job phase, and on which machine (if any). Cards are machine tabulated to get labor and machine charges for each job phase.
- 3. Each week, Mitchell gets an IBM sheet (lower left in panel above) which sums up the total labor, machine, and

materials cost to date for each job phase.

- 4. Each week, the land-development superintendent files a report showing "percentage completion" of each job phase.
- 5. From this report, Mitchell can figure how much of the budget should have been spent, compare it with what actually has been spent. Suppose, for example, that the superintendent reports that street excavation is 10% complete. Since the budget for that phase is \$4,860 (see estimate) Mitchell knows that about \$500 should have been spent so far, can check this figure against the costs on the IBM sheet.
- 6. Every month, Mitchell gets a further check from the consulting engineer. The engineer makes a careful analysis of the "percentage completion" on each job phase, a figure that is used like the superintendent's weekly report.

"This system," says Mitchell, "tells us fast—so we can take action—when any part of the job gets out of line."

# Michell does his own earthmoving for two reasons: better control and lower costs

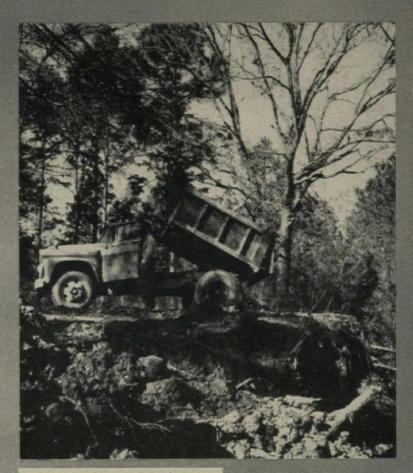
He believes that any builder who develops 150 or more lots a year can make earthmoving machinery pay off. His reasoning:



Road grader is charged to job at \$1.75 per hour



Back hoe with attachments is charged to job at 50¢ per hour



Dump truck is charged to job at \$1 per hour

All machines shown are owned by Mitchell and are charged to the job on basis of standard hourly costs.

# by controlling your land development costs

"Control of the time element is a basic necessity. We were shooting for a November opening at Heritage. We would never have made this schedule if we'd been using a subcontractor. We had a lot of rain—and when it rains before 8:00 AM the subs won't come to work. But our own men will start as soon as the rain stops, and if necessary they'll work under lights to catch up.

"In earlier subdivisions, we've had subs move their men and machines off to do other jobs—and then had trouble getting them back on the job. Most subs around here are big firms—and it is hard to get them interested in small jobs like Heritage [which was only 19 acres].

"Further, having your own equipment reduces the cost of developing 'hazardous' land. Heritage had a lot of water and drainage problems, and a sub would have added a big cushion in his bid to cover unknowns. Owning and controlling our own equipment is also a big help when we build apartments and develop land for shopping centers."

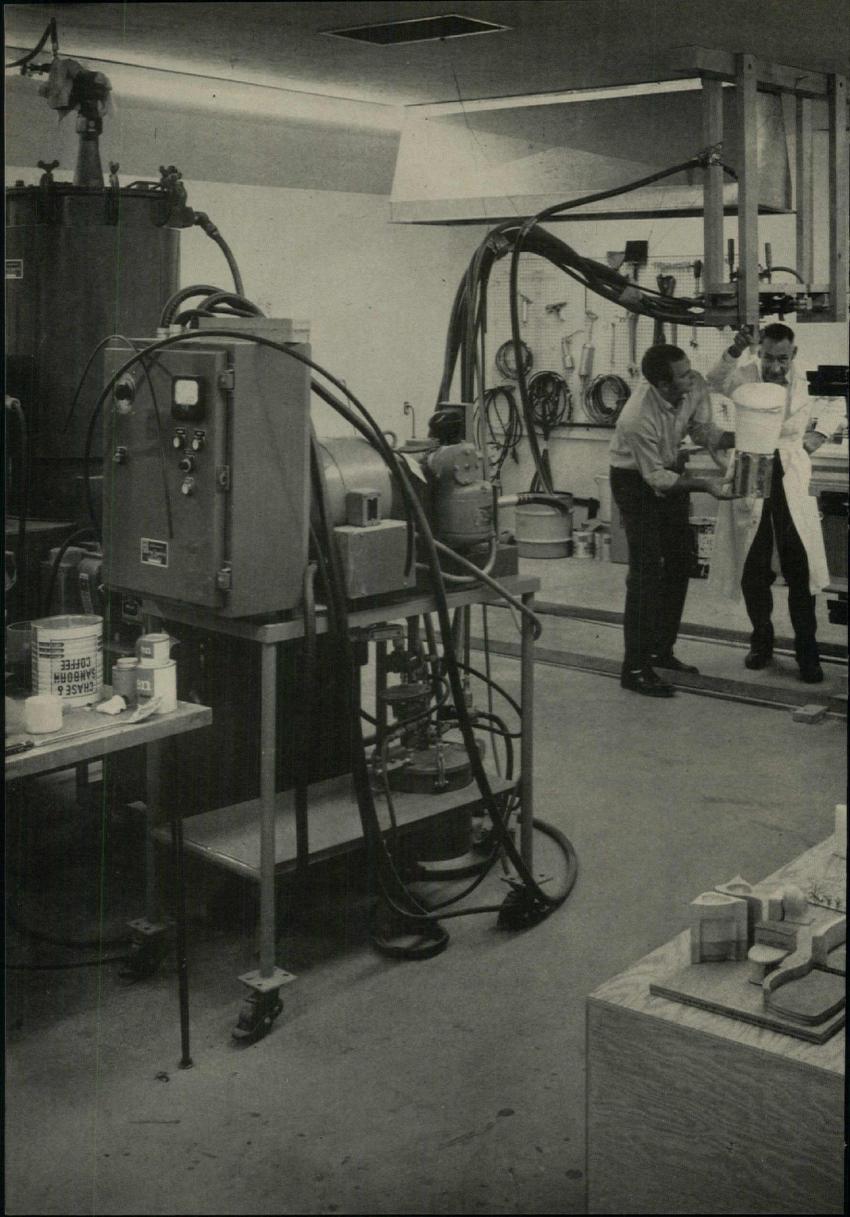
The machines shown above and on *p 124* are all Mitchellowned. His total investment in these and other machines (including a sheepsfoot roller, an asphalt roller, and five more dump trucks) is about \$120,000.



**OPENING DAY** was on schedule with model street finished, lawns green, and earthmoving costs practically on budget. Houses have sold well.

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Photos: Thigpe





# John Long's researchers are spending \$100,000 to find new ways to build better for less

What they have learned can help you save money

no matter how many houses you build, or where or how you build them

In the last 12 months, research men working in this Phoenix laboratory have studied some 100 ways to cut the cost of homebuilding.

They have come up with many new ideas that many builders can use—new ideas like a copyable kitchen-counter design that saves both material and labor, ideas like a new easy-to-install window that is now available commercially, ideas like a new machine that halves the cost of laying curbs and sidewalks.

Long's research and development program is probably unique in homebuilding. It is a separate division of his company, it has a flexible budget, and it has a license to come up with an occasional failure. Long knows that finding what not to do is often just as important as finding what to do.

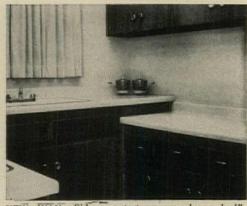
Research Chief Charles Ince (right in photo) can call on anyone in the Long organization for help: Head Architect Malcolm McPherson, construction superintendents, foremen, salesmen, or Long himself. Since the program started, Long has built five complete research houses to field test the ideas developed in the lab.

Says Long: "Our aim in setting up this program was to explore every phase of our operation for ways to give the buyer more house for his money—either by cutting costs or upgrading the house without raising costs."

To see how he has succeeded, and to see how you can adapt some of Long's new developments to your own operation—turn the page.



old way: Plastic läminate countertops were mitered at corners to get a neat joint.



NEW WAY: Side countertops are dropped 4", simply butt against cabinets in sink counter.

# Project 1: To find a countertop that doesn't waste material and labor on mitered corners

Background: Most Long kitchens have U or L counters with post-formed, plastic-laminate tops. Long used to miter the countertops at the corners (photo, upper left)—a painstaking manual job that wasted 4 sq ft of material at each corner.

Action: Long's researchers figured that the way to eliminate the problem was to use straight sections of material. So they redesigned the counters—kept the central sink counter at the standard 36" height, but dropped both side counters to 32". Now the side counters simply butt against the under-sink cabinets (photo, upper right). Material saved by eliminating the miters was put back into the house: the snack bar left uses the same amount of laminate that was previously thrown away.

Result: Long has standardized on the new countertop design. He reports buyers find the lower side counters easier to work at.



BONUS: Material saved by eliminating waste is used to build this snack bar.

Markow

# Project 2: To find a switch that eliminates wiring in walls

Background: Long has been testing surfacemounted wiring systems for use with panel walls and partitions. Baseboard raceways solve his problems—except for switch legs.

Action: Researcher Ince first tried low-voltage relay wiring—but found it too expensive. Then he decided to try to eliminate

the switch legs. He experimented with a wireless control unit which, at the push of a button, sends a signal that actuates nearby relays on "switched outlets" in the raceway. The unit could be fastened to the wall.

Result: Still experimental. Unsolved to date: problem of selective switching and cost.

Markow



# Project 3: To find a plumbing tree that one man can install

Background: Long has used shop-built plumbing trees for some time. But the weight of trees made with conventional materials (about 180 lbs) makes them difficult to transport and install.

Action: To cut weight, Ince decided to try plastic. He assembled an ABS plastic plumbing tree for the first research house (started in May 1959). The tree has been in use satisfactorily ever since. Next, as an acceler-

ated aging test, he buried a completely assembled tree for a year, exposed it to acids, alkalis, greases, hot water, and other corrosives. When he dug the tree up neither the pipe nor the solvent-welded joint showed any sign of deterioration or distortion.

Result: Long will standardize on the ABS tree as soon as he gets code approval. He feels it is unsurpassed for waste and vent lines, will last for the life of the house.

H&H staff

# Project 4: To find a soffit to simplify painting under the eaves

Background: Most of the exterior of a Long house is painted with pressure-fed rollers. But the exposed rafter tails and roof sheathing under the eaves form a complex and awkward-to-reach surface that must be painted by hand.

Action: Long decided to try to box the eave so it could be roller-painted with the rest of the house. Ince developed the prefabricated unit shown: a shop-built cornice made up of outriggers 2' oc, a fascia, and a soffit with vents and mesh installed. The unit is nailed to the tails of the trusses before the roof is sheathed.

Result: Unit adopted, saves considerable paint as well as labor time.



# Project 5: To find a way to upgrade cabinets and trim

Background: Long wanted to add the look of natural wood to his kitchens.

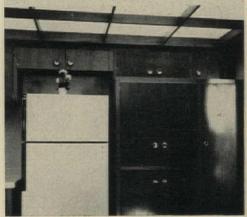
Action: He studied the comparative costs of painted soft wood and natural finish mahogany and found he could install mahogany cabinets and trim at no extra cost. Here is why:

1. With soft wood, material costs are low, but finishing costs are high because cabinets and trim need a prime coat and a finish coat of paint for satisfactory results.

2. With mahogany, materials costs are relatively high (\$300 per mbf delivered in San Diego), but finishing costs are low because cabinets and trim can be shop-sprayed with a single coat of nitrocellulose lacquer.

Long also found that he could build blinddowled-and-glued cabinets for no more than the cost of nailed cabinets if he retooled his cabinet shop with new equipment.

Result: Mahogany cabinets and trim are now standard in all Long houses.



# Project 6: To find a form that leaves foundations ready for painting

**Background:** Long paints his foundations wherever they show above grade. With ordinary wood forms, the concrete was so rough that it had to be parge-coated.

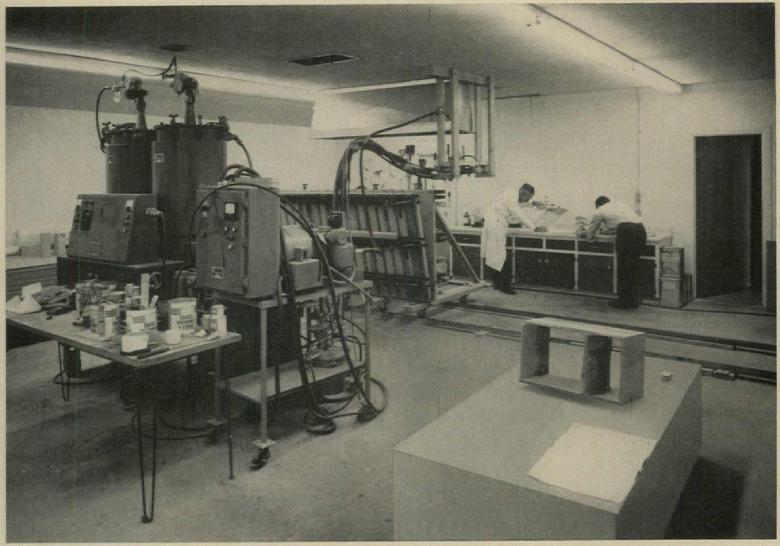
Action: Ince reasoned that if he could make the forms smooth enough, he could eliminate the parge coat. So he roller coated the inside of plywood forms with a glassy-smooth polyester resin. This not only solves the problem, but also protects the forms so they can be used 100 times before they show wear. The stripping tool at right (an adapation of a truck tire iron) jolts the plywood form loose without denting it.

Result: System adopted, saves \$8 a house.

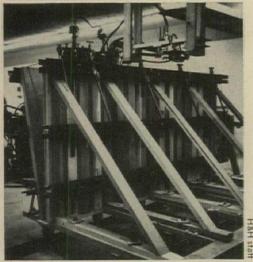


continued

133



FOAMING MACHINE, left, was bought by Long to make experimental panels with foamed-urethane cores. Panels were tested in research houses.



PANEL PRESS was built in the lab, may be used for future experiments on new sandwich panels.



RESEARCH HOUSE, third of five, used polystyrene foam-core panels for roof, walls, and partitions.

# Project 7: To find a sandwich panel competitive with block

Background: Long builds with light-aggregate block. His in-place cost (46¢ a sq ft) for walls—including finished dry-wall and exterior paint—is hard to beat with any new material or new system.

Nevertheless, like many builders interested in industrialization, Long believes that factory-made sandwich panels offer the best chance of cutting wall and partition costs. Last year he hoped to be building walls and partitions of foam-core sandwich panels by late 1961 (H&H Mar '60).

**Action:** Early last year, Long set up a major program to test foam-core panels:

Long built two research houses with factory-made partition panels with foamedpolystyrene cores. The panels were well accepted by buyers, but Long considered the cost data inconclusive.

He then built a third research house using foamed-polystyrene panels for the roof, the walls, and the partitions.

On the basis of costs collected on this job, Long found that his standard truss roof was definitely less expensive. So...

He built a fourth research house with a truss roof, used the foamed-polystyrene sandwich panels just for walls and partitions.

This house convinced Long that, barring a radical breakthrough in costs, he couldn't buy these panels cheap enough to compete either with his block walls or his partitions.

He then tried making his own panels. On the basis of information that the price of urethane could drop well below that of polystyrene, Long bought a urethane foaming machine and a panel press (shown in photos at left).

After a year of experimenting with foamed urethane, Long concludes that foamed urethane sandwich panels can't compete with his concrete block until the perpound price of urethane drops to  $12\phi$  to  $15\phi$  (vs its present minimum of  $50\phi$ ).

He is now experimenting with a low-density core material found in the Arizona desert, which he says need only be ground up and mixed with a binder. Its cost: perhaps as low as  $3\phi$  a sq ft in a 3"-thick panel—a cost competitive with block.

Result: To date, no proven substitute—at present costs—for Long's block walls and shop-made partitions. But Research Project 7 will be continued and Long still believes a sandwich panel will ultimately permit much greater industrialization of his operation.

# Project 8: To find a seamless plastic surface for bathroom walls

Background: Long wanted to find a wall-sized panel that could be installed in tub and shower alcoves at low in-place cost.

Action: Ince's first idea was to use ordinary drywall, with a waterproof paint. After many tests he found a good epoxy gloss paint which was waterproof and durable (photo 1)—but it showed up the slightest imperfection in the drywall taping.

Ince's next idea was to use a large rigid sheet of prefinished material over the drywall. After experimenting with various materials and sealers, he adopted the on-themarket products shown in photo 2. Sheet



**GUN** for applying sealer to wall seams.

material is a melaminepaper-hardboard laminate which is glued to the drywall. The corners and edges are trimmed with a goldanodized aluminum extrusion (photo 2). The joints are sealed with an elastomer (applied with gun shown in inset).

Ince is now mocking up a scale model of a one-piece bath, including fixtures. Wood molds (photo 3) will be used to make a plaster female mold in which the bath will be built with a fiberglass and resin laminate.

**Result:** The system shown in photo 2 is now Long's standard. The one-piece bath is still in early stages of development.



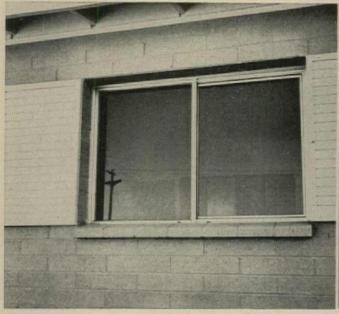
1 EPOXY GLOSS PAINT applied to drywall is watertight, but shows flaws in drywall taping.

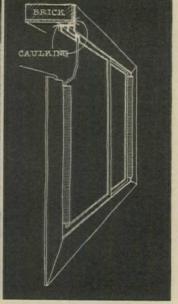


2 PLASTIC LAMINATE applied to drywall and sealed at corners is now used in Long's bathrooms.



3 MOLDS FOR ONE-PIECE BATHROOM will be used to build small-scale fiberglass-and-plastic mock-up.





Photos: H&H staff

# Project 9: To find a window that can be installed after the house is painted

**Background:** Long wanted to eliminate the \$6 to \$8 a house it costs to mask windows before spray painting the interiors.

Action: Long's research team began experimenting with a sliding aluminum window in his first research house, then started working with the research department of Trim-View Metal Supply Co, Covina, Calif. The resulting prototype window (see photo and drawing) has a wide, flat inside flange. Window is pressed into opening from inside, held in place with screws in the channels. Caulking seals out the weather.

Result: Window is now in commercial production and is standard in all Long houses.



1. NEW GRADER scrapes grade to final contour.



2. WOOD RAILS keep blades at correct depth.



4. FLOAT MEN put final finish on curbs.



5. FINISHER trowels walks and scores surface.



6. CURB AND WALK go down at 16' per min.

# Project 10: To find a way to speed finish grading for curbs and sidewalks

Background: Long builds about 35 miles of curb and sidewalk a year. Early in 1960, his research men developed a machine (photos 3 & 4) which forms curbs and sidewalks in one pass—at a 1½-mile-a-day rate. It moves along 2x4 edge forms, vibrating and forming the concrete into final shape (see H&H, Mar '60). The machine, made in Long's shop, lets four men do a job formerly done by eight. But it soon became clear that hand methods for grading the earth ahead of the machine were a new bottleneck.

Action: Researcher Ince figured that if he could guide a scraper blade on the same "rails" that guide the concrete former, he could get an accurate finish grade in one pass. In developing this idea into a shopmade, tractor-drawn machine (photos 1 & 2) the researchers added a screw conveyor which pushes excess dirt to one side. The only work that must be done ahead of the two machines: rough grade the sidewalk area with a small road scraper, and place the two edge forms.

Result: The grader works faster than the concrete former, can finish-grade two miles a day. The two machines cut Long's curb and sidewalk costs to 50¢ a linear foot (old cost: \$1.23). Both machines are patented, may soon be marketed.

# Project 11: To find a way to build multi-level houses without scaffolding

Background: Long, whose entire operation is geared to one-story construction, feels the Phoenix market may soon be demanding multi-story houses.

Action: Long figured that to keep his crew efficiency up, he would have to develop a totally new way to build multi-story houses. So, in his shop, he built and painted the entire top floor (dotted lines in photo) of an experimental split-level house. He trucked it to the site, and hoisted it with a crane into place atop the lower section.

Result: Still experimental; though cost data on this first job indicate savings.



#### H&H staff

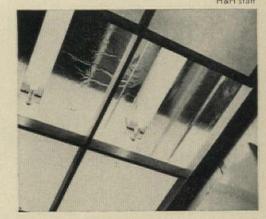
# Project 12: To find an easy-to-install luminous ceiling

Background: Long wanted the sales appeal of luminous ceilings in his kitchens.

Action: Ince analyzed the problem and set up three basic requirements: His first was a backing that would reflect light evenly. He found that foil-backed drywall, foil side down, worked well. His second requirement was a bright light source. He tried incandescents but got too much heat. He substituted three 12' fluorescents, which operate

cooler, also save \$12.50 because they require three less outlets. His third requirement was a frame to support fiberglass diffuser sheets. He tried mahogany (shown in the photos taken early last month), but he has since switched to extruded anodized aluminum to avoid warpage and eliminate finishing. Part of the grid is removable for bulk changing.

Result: Long plans to standardize on luminous ceilings in all kitchens.



LUMINOUS CEILING is mocked-up as Long, left, looks. Small photo (above right) shows foil-backed drywall and fluorescent tubes behind plastic diffuser.

/END





IEH HOMES

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Built Anywhere

1-2-3 Bedrooms

Vertically integrated manufacturers of housing—firms that bring all phases of production from raw materials to finished houses under control of a single management—have long been both hoped for and feared...and this month may be a step nearer reality.

# For the first time, a major materials producer offers a "house-package" plan

The pioneering producer is Certain-teed Products Corp—a \$40-million manufacturer of roofing, sheathing, and millwork.

The "package"—available only to "authorized builders"—contains 1) blueprints for a choice of 14 architect-designed houses; 2) Certain-teed products needed to build the houses, plus a materials list for lumber and other required materials and equipment; 3) detailed labor breakdown for the erection of the house; 4) special financing to permit sale to buyers who can not obtain mortgage money from usual sources; 5) sales and merchandising help.

Certain-teed's new venture is aimed at the "built-on-your-lot" market. Houses (none of them prefabs) are sold in four different stages of completion, at prices that start at \$1,800 and go to \$8,800. Most "authorized builders" will be lumber dealers who handle the Certain-teed line. First dealerships were in the South and Southwest, but new ones are being added now in the East and Midwest. Distribution is through a wholly owned subsidiary called the Institute for Essential Housing.

Certain-teed's IEH is invading a market which has up to now been dominated by shell-house producers. Wall Street, where shell-house stocks have been among recent favorites, greeted Certain-teed's news by boosting its stock from a December low of 13½ to an early February high of 34½.

Display center for IEH houses in Austin. Photo: Mears Photography.



55,980 MODEL has 922 sq ft of living space. Shell price: \$3,260.



\$6.110 MODEL has 864 sq ft plus carport. Shell price: \$3,510.



\$6,500 MODEL has 968 sq ft of living space. Shell price: \$3,995.



\$5,520 MODEL has 784 sq ft of living space. Shell price: \$3,080.

# Builder-dealers can give their buyers a choice of 14 architect designs like these

And buyers can take delivery of the house in any of four stages of completion:

- 1. Basic shell, with finished exterior (two coats of paint) and partition studs.
- 2. Shell, plus materials to complete it: drywall, interior trim and paint, interior doors, kitchen cabinets, rough-in plumbing, water heater, electrical fixtures.
- 3. Shell, plus installed materials (but with joints untaped, walls unpainted, floors unfinished).
  - 4. Finished house

Prices in the South (the only area where the houses are currently available) range from \$1,800 for the smallest model in basic shell form to \$8,800 for the largest house completed. Prices do not include land or water and sewage hook-up, but do include pier foundation.

"We think now that most buyers will take the shell plus finishing materials [stage 2]," says Ed Diefenbach, managing director of IEH. His reasoning: "Low-income buyers can usually get the work done, but they would have to strap themselves to buy the finishing materials separately."

Certain-teed's marketing and distribution follows traditional lumber dealer-channels. IEH has already signed up 150 retail lumber dealers as "authorized builders." It has also persuaded several shell-house producers to give up their own line of houses and join the IEH program. It expects to have 500 dealer-builders by late spring. And eventually it hopes to cover the entire country.

Certain-teed's decision to use independent sales agents (mostly lumber dealers) is in sharp contrast to the practice of most southern shell-house producers, who generate all sales through their own branch offices. Certain-teed's marketing setup is more like the northern shell producers (Main Line Lumber Co, Swift, Hilco) who—like prefabbers—usually franchise independent dealers to handle sales and building.

Here is a composite breakdown of the dealerbuilder's costs and profit (figures supplied by Certainteed, and based on the average price of several IEH models in several stages of completion):

Cash price of house	.\$4,580
IEH share (15% of cash price)\$ 6	87
Dealer's share (85% of cash price)	. 3,893
Dealer's materials cost 2,2	10
Dealer's contract labor cost 7	45
Dealer's gross profit	. 938
Salesmen's commissions 1	84
Overhead (@ 50 houses/yr) 1	70
Dealer's net profit	. 584

Certain-teed helps its builder-dealers in many ways. Its field staff will help train the dealers' new salesmen, and will supply dealers with merchandising aids and advice, just as home manufacturers do. The dealer will get sales portfolios, direct mail pieces, posters, photographs, ad mats, advice on where to locate models, and a suggested program for newspaper, TV and radio advertising. Certain-teed pays part of the dealers' ad budget, and may start a national ad campaign to promote the IEH brand name.

# Here's a quick look at the shell-house industry and some of its biggest producers

The companies whose models are shown on this and the following page produced at least half of all the shell houses built in the US last year. Their output plus that of some 50 smaller shell-house producers, lumber dealers, and prefabbers accounted for an estimated 1960 total of 60,000 units.

In recent years shell producers have uncovered this big market among people who cannot get ordinary financing for their homes—a market few builders were aware of. Buyers of shells are mostly Negroes or residents of small towns and rural areas where mortgage money is scarce and where FHA has not successfully channelled the flow of out-of-state money. Biggest market for shells is in the South where a large proportion of the population is either rural or Negro. Shell producers tapped this market by offering consumer-type financing. All shell producers report '60 sales up over '59.

In addition to the basic shell-house market, some producers report growing sales to middle-income families who want vacation houses.



#### Swift Homes, Inc Elizabeth, Pa.

Offers 80 different models in all types and sizes. Prices: \$2,570 to \$5,050. Company will finance house to completion.

Biggest shell houser in the North, Swift also claims to be the world's biggest precutter (about 5,000 houses last year). The company distributes in 14 states through franchised distributors, has its own financing company, believes all shell producers soon will have to supply and finance all the building materials for a complete house.



## Modern Homes Construction Co Valdosta, Ga.

Offers one-bedroom models at \$1,775 to three-bedroom models at \$4,650 with carports. Will supply finishing materials.

Second biggest shell producer in the South, Modern Homes is one of the few companies that has grown without equity capital from the general public, but may now offer stock to the public to get capital to grow even bigger. Modern grew from 186 units in 1956 to 4,189 in fiscal 1960, now sells in 12 southern states through 47 branch offices.



### Wise Homes, Inc Greensboro, N. C.

Prices begin at \$1,975, top four-bedroom model costs \$3,295. All use trusses, sheathing. No finishing materials supplied.

Wise, a publicly owned company, has grown spectacularly—from 1,165 shells in 1959, its first year in business, to 3,600 in 1960—now has 66 branch offices in 13 states throughout the South. Wise sponsors TV shows (Maverick) at top TV time, also sells door to door. Company has affiliated insurance, finance, supply firms.



#### Leeds Homes, Inc Knoxville, Tenn.

Offers two- and three-bedroom models at from \$1,995 to \$3,995, split-level models, no finishing materials supplied.

Third or fourth biggest producer in the country, Leeds reports over 2,000 sales last year, has 17 branch offices in 14 states served by 11 central-supply warehouses. The company expects to expand into two more states when it gets additional equity capital through public financing. Leeds started out in the home improvement business.



## Bevis Shell Homes, Inc Tampa, Fla.

Offers a broad line of models, averaging about \$3,500. Company will supply wiring, wallboard, won't install plumbing.

Oldest of the southern shell firms, Bevis has almost doubled its volume (to about 1,400 units) since becoming publicly owned last year. Firm has 21 branches in eight states in the South, buys lumber locally, supplies other materials from central warehouse. Bevis says mortgage financing is easier to get since it became publicly owned.



## Crumpton Builders, Inc Tampa, Fla.

Prices start at \$1,895, go to \$2,895, with or without carports. Buyer must put up more cash to get finishing materials.

Biggest shell builder in Florida, Crumpton claims to have made over 1,000 units last year, and to have accounted for 2% of new residential sales in the state during October, 1960—roughly 10% of the total frame-house volume in this cement-block-stucco building state. Crumpton has eight offices in Florida, expects soon to distribute throughout the south.



## Shell Homes, Inc Columbia, S. C.

Prices range from \$1,595 to \$2,895 for L-, U-, and T-shaped one-floor plans. Will finance wallboard, not its application.

Shell Homes Inc is very active in the Carolinas, sells at the rate of about 100 shells a month. Most of its branches are in South Carolina where at least 27 other shell producers operate. Firm is privately owned, offers a 15-year guarantee to buyers. "People who buy our houses also buy used cars," says Owner Winchester Graham.

Leading shell-house producers continued



## Family Shell Homes Augusta, Ga.

Models include a 792 sq ft two-bedroom model at \$3,095, a three-bedroom model at \$3,395. Firm sells finish materials.

Family Shell Homes are built by the Outdoor Development Co which recently bought two other shell producers. Most of its distribution is in Georgia but is gradually being extended to the Carolinas. The company is now privately owned but wants to get equity capital to expand distribution even more. Firm doesn't push sale of finish materials.



## U Finish Homes, Inc Memphis, Tenn.

Imperial model, left, has 1,464 sq ft, sells for \$3,495 on buyer's lot. Finish materials are not generally supplied.

Run by Holiday Inn operaters Wallace Johnson and Kemmons Wilson, U Finish is publicly owned, has 17 branches in Mississippi, Arkansas, and Tennessee. Plans call for opening three branches per month to bring total to 53 by yearend. Firm has a wholly owned financing subsidiary, Kemwall Inc, to handle all its mortgage paper.



## US Shell Homes, Inc Jacksonville, Fla.

Prices range from \$1,895 for 648 sq ft to \$3,195 for 1,056 sq ft models. The company sells finish materials for cash.

United States Shell Homes has 18 branches in five southern states, is planning more rapid expansion since getting more capital from public financing. On its board of directors are big New York Builder Janis Risbergs, George Champion Jr, son of Chase-Manhattan chief, Karl Knobloch of Kidder-Peabody, Wall St. Firm does not have a supply subsidiary.



## Main Line Homes Wayne, Pa.

Prices range from \$4,696 to \$9,631 for a wide model line, including split levels. Firm will supply most finish materials.

Owned by Big Builder Harry Madway, Main Line is the second biggest shell producer in the North, builds over 1,200 units per year through 43 franchised dealers in 14 states. The company says its business in 1960 was 30% better than in 1959. It guarantees dealers a \$1,000 profit on an average sale. "Independent dealers assure quality," says Main Line.





## Morris Homes Corp Knoxville, Tenn.

Lowest price shell is \$1,695, highest \$2,995. Some carport models. Tries not to sell finishing materials, but will.

Morris sells about 600 units a year through its 11 branches. Expansion plans call for public ownership, a financing subsidiary. Says President Morris Shagan, "Additional capital would let us set up our own financing subsidiary so we could control our own destiny. In this business financing and selling are more important than building."



#### Lee Quality Homes Jackson, Ala.

Offers a wide range of shells but average sales price is about \$3,300 per shell. Will finance finishing materials.

Growing fast as an independent, privately owned Lee Homes will soon give up its name to join the Certain-teed-IEH program. Reasons: "IEH has a solid financing set up, good time charge, and an almost unlimited source of financing." Lee has eight branch offices in Florida, Alabama, and Mississippi, is expanding into Louisiana.



## Shell Craft Homes Baton Rouge, La.

Ten models range from \$2,195 to \$4,500. Line includes two-, three-, and four-bedroom models, split levels, 1½-stories.

A division of Prefabber Hamilton Crawford's Crawford Corp, Shell Craft Homes are factory built, distributed through franchised builder-dealers in the South. Financing is through a wholly owned subsidiary. The shell units supplement Crawford's basic business in completely finished houses ranging from \$10,000 to \$40,000.



## Best Homes Co Memphis, Tenn.

Most models range from \$1,550 to \$2,995. Firm will install rough wiring, wallboard, wants cash for installing plumbing.

Producing almost 1,000 units a year, Best distributes through 14 branch offices in eight southern states. "In this business, you grow big or go broke," says President J. H. Swain. "Competition is getting keener and a lot of little producers are being shaken out." Best Homes has its own financing company. Firm also builds concrete-block shells.

### Jim Walter Corp, Tampa, Fla.

Shells include one- and two-story models and vacation cottages, priced from \$1,095 to \$2,695. Walter will finance gypsum wallboard but not the labor to install it.

Biggest by far of all shell producers, Walter built 15,000 shells last year (vs only 3,000 in 1956). The company is publicly owned, sells through 114 branch offices in the South and Southwest. Subsidiary companies handling fire, life, and title insurance, financing and materials, make Walter the most fully integrated shell-house producer in the country. It and National Homes are biggest US house producers.



PROSPECTS IN MODEL HOUSE are shown prices and mortgage terms for house in each of four stages of completion.

# The finance plan is designed to attract buyers who cannot get ordinary mortgage credits

Buyers can purchase Certain-teed's IEH houses on credit even where FHA or conventional loans are not available. This allows sales to people who are not prospects for most built-for-sale or contract builders.

Certain-teed's financing is even more liberal than is general for shell-house producers. Where loan terms seldom exceed six years without a balloon note tacked on, and where interest rates range from 11.8% up to 15%....

Certain-teed offers straight six-year terms to the shell buyer who owns his own lot.

It offers straight ten-year terms to the same buyer if he wants the shell plus finishing materials.

It offers five-year terms with two- and five-year balloon notes to buyers who need the lowest possible monthly payments.

It offers financing on completed houses, but requires either a down payment or lot ownership (or both) equal to 20% of the cash price.

It offers an effective interest rate of 9.9%. It can offer this lower rate because it makes part of each loan at no interest. The rest of the loan is advanced by a major financing company (details below).

It will finance the buyer's lot—up to 15% of the total package price if the buyer can make a down payment of 10% of the total.

It will finance up to \$500 in appliances.

It will finance water supply and sewage disposal if the buyer takes the completed house.

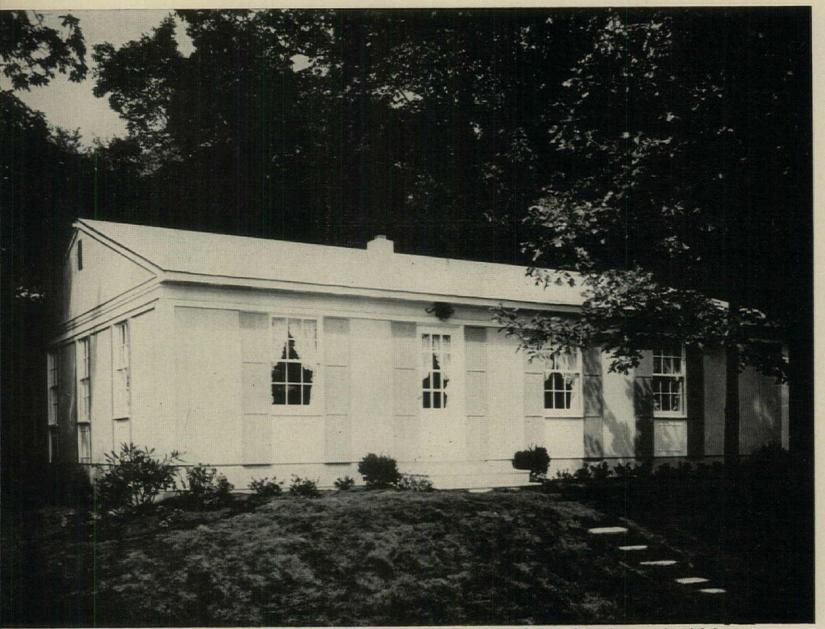
It includes \$285 in the total loan to cover credit reports, property surveys, title searches, and recording fees—and adds insurance costs into the monthly carrying charges.

To make these terms possible, Certain-teed has obtained a \$100 million commitment from New York's CIT Financial Corp to finance IEH house sales. Should borrowers default, CIT has recourse to Certain-teed (a corporation with assets of \$40,000,000).

With access to this credit, Certain-teed is better able to finance house sales than any shell house producer except the largest, the giant Jim Walter Corp (see opposite). This should minimize for Certain-teed the problem that plagues many shell producers: how to get money to finance growing sales.

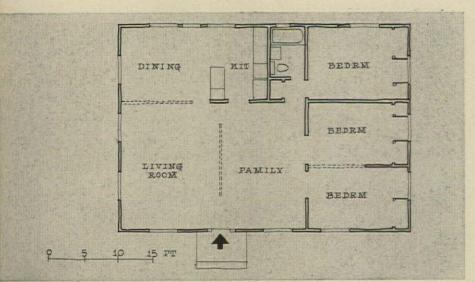
"You wake up every Monday morning needing half a million dollars in your pocket," says R. S. DeLoach, president of Modern Homes, the second largest shell producer. Says W. G. Smith of Wise Homes (which sold 1,000 homes in 1959, 3,600 last year): "We need \$1.5 million every month just to keep sales at our present levels."

Certain-teed disclaims any interest in entering the financing business: "We're manufacturers, not bankers," says Ed Diefenbach, managing director of IEH. The company will not finance other shell-house producers (many of whom already use Certain-teed products) unless they join the IEH program and share their building profits with Certain-teed.



\$6,540 MODEL has 1,120 sq ft of living space, three bedrooms, one bath. House sells for \$3,670 as shell (prices are on buyer's lot).

# Models are styled to appeal to shell house buyers



PLAN has compact bedroom wing, puts most space in living-dining area.

The architect's original renderings were market-tested and the line was then re-styled to make the houses conform more closely to market taste.

Like the model above, most of the new IEH houses look bigger from the street than they really are. Some are only one room deep, so they stretch out along the lot. And many are made to seem longer with low-pitched roofs extending out over a carport, with strong horizontal lines in the exterior treatment, and with ground-hugging foundations.

The Hickory Hill model (shown above and in living-room photo, opposite) is also skillfully planned to seem bigger inside than its 1,120 sq ft. The living room is divided from the dining-kitchen area only by bookcases which stop short of the ceiling and show space beyond—a design device repeated in many models. Other basic appeals include: floor-to-

ceiling closets, brand-name equipment, and generous kitchen cabinets (see photos).

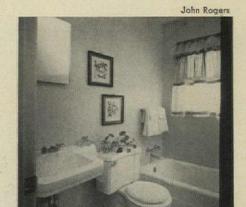
All models were designed for Certain-teed by Architect Gerald K. Geerlings.

Mears Photography

KITCHENS have basic appliances, plenty of cabinet space. Most kitchens open to dining area.



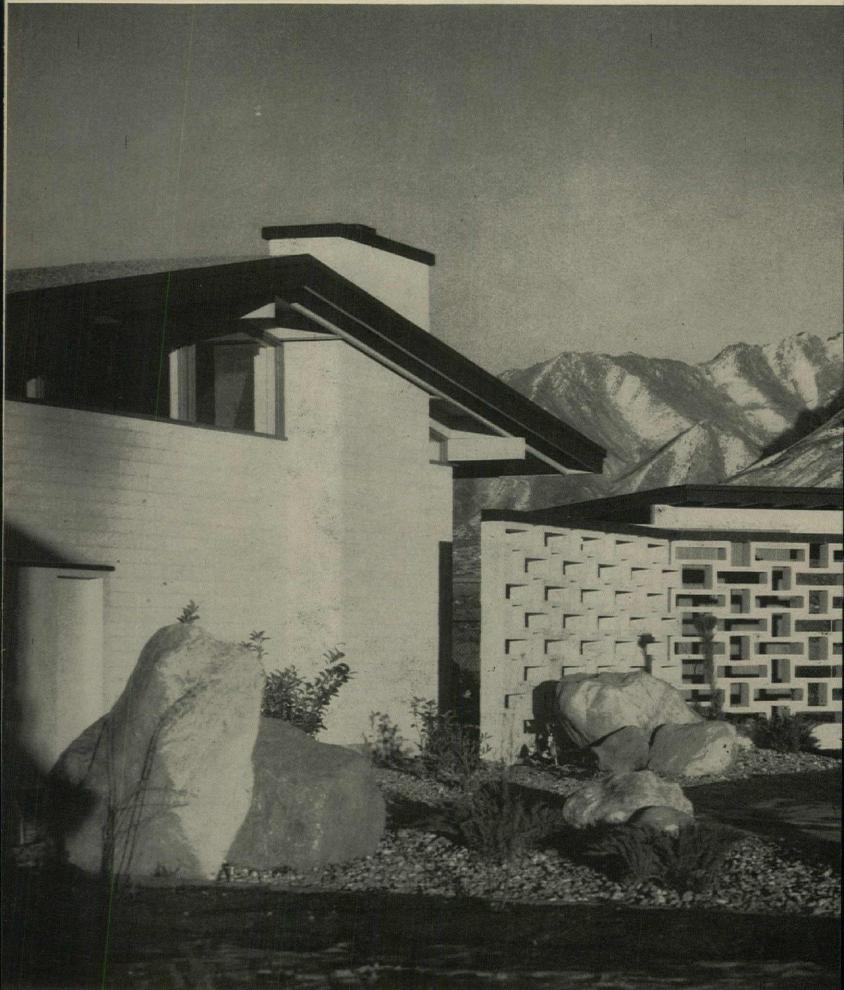
BEDROOMS in most models are good-sized, have floor-to-ceiling closets, built-in lighting.



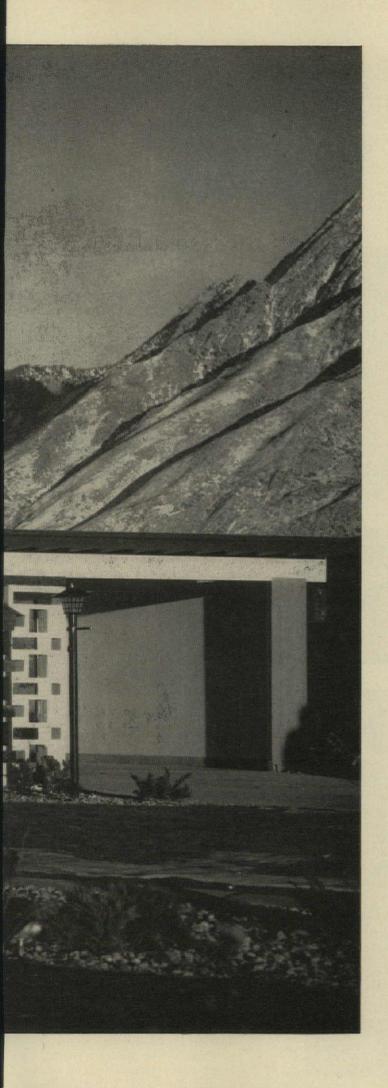
BATHS in most models are minimum size, but have brand-name fixtures, easy-to-clean surfaces.

/END





Hunt Studio



# A \$250,000 gamble on QUALITY and GLAMOR

Alan Brockbank, past president of NAHB (1952) and past chairman of the NAHB Research Institute (1960), is betting much more than a quarter of a million dollars that he can open up a big, new, volume market for houses in the \$20,000 to \$30,000 range—a market no merchant builder from Denver to Sacramento has ever before tried to tap—if he:

- goes all out for quality and glamor to offer "the kind of house you or I could be proud to live in ourselves," and
- 2. takes advantage of volume methods and volume buying to price that quality and glamor at least \$10,000 cheaper than it has ever been priced in one-at-a-time houses around Salt Lake.

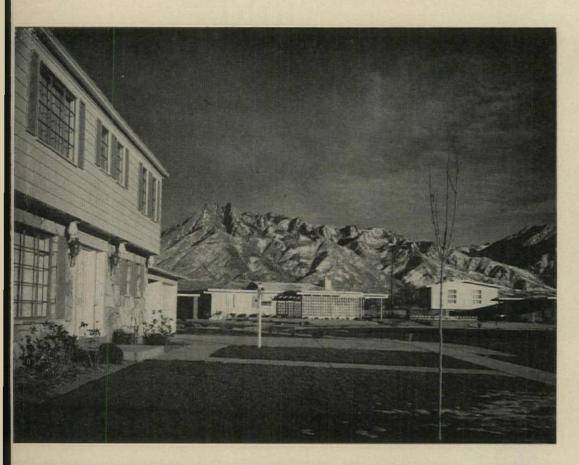
The pictures on the next five pages will show you the quality and glamor he is offering in his new project called Valley Fair. Now the question is: Do homebuyers who can afford it want this kind of home enough to pay for it?

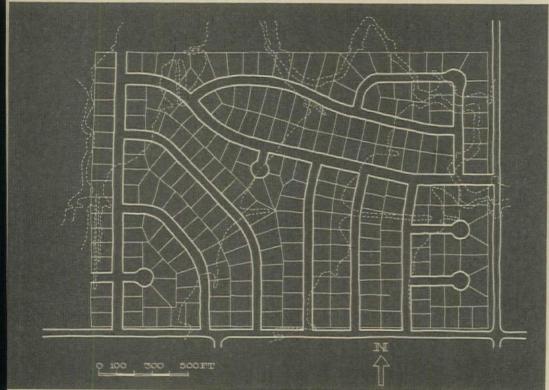
There were 11,800 households in Salt Lake County with incomes over \$10,000 in 1959, says Sales Management; ie, 11,800 who could probably qualify FHA for \$20,000-plus houses, so the untapped potential for the kind of houses Alan Brockbank wants to offer is big and clear. (For that matter, House & Home believes the untapped potential for that kind of house is big and clear almost everywhere.)

But the selling problems and headaches are also big and clear (see p 153). They are so big and clear, in fact, that most builders in Salt Lake, like most builders everywhere, are sticking to the cheaper house market, where better financing still makes it much easier to sell new houses than to re-sell existing houses (it usually takes five or six times as much cash to buy a used house than it takes to buy a new house for the same price; for example: \$2,000 to buy a used \$10,000 house vs only \$300 cash to buy a new one).

Alan Brockbank's \$250,000 gamble offers a good case study of both the potentials and the problems of the quality market; so architects, builders, lenders, and suppliers everywhere might find it well worthwhile to study and watch his venture, to profit by what goes well and to avoid what may go wrong.

# Here is what he did to give his houses \$20,000+ worth of sales appeal





1

He got the best local AIA architect he could interest in tract housing to custom-design his models, and he featured the architect's name at the entrance in letters as big as his own.

2

He worked with his architect to develop a choice of five models in five styles—two-story colonial, ranch, contemporary, split-level, and oriental.

3

He offered a wide choice of exterior finishes, including masonry and brick (which is the four-to-one favorite in Salt Lake). All the siding is aluminum with a baked-on finish in order to minimize repainting.

4

He paid \$7,500 an acre for the raw land of his 80-acre tract (obviously, this \$600,000 is not included in the \$250,000 estimate of how much he is gambling on quality and glamor).

5

He called in a top-flight land planner from Denver (Harmon, O'Donnell & Henager) to lay out his 80-acre sub-division in 10,000 sq ft lots on curving streets with no four-corner crossings.

6

He tied a dozen brand names into his promotion and built a "research house" in the display area co-sponsored by Kaiser Aluminum and Owens-Corning Fiberglas. (But he may be missing a good bet by not putting a product display in his sales area.)

7

He made his houses big (1,479 sq ft to 2,202 sq ft), and he made all his rooms big enough (the smallest bedroom in any model is 25% bigger than the FHA minimum).



He provided three times as much storage as FHA requires, with two closets in the master bedrooms, two shelves in every closet to make them usable ceiling-high, full depth shelves in the linen closets to provide twice as much usable linen storage.



He made dishwashers, disposers, ranges, range hoods, built-in ovens, and heavy-duty exhaust fans standard equipment in all his kitchens, with refrigerators, freezers, washers, and dryers optional at 40% off list price installed.

10

He doubled the pleasant-weather size of his living rooms with paved terraces outside the extra-heavy weather-tight sliding glass doors.

# 11

He offered acoustical plaster ceilings as a \$200 option to silence the inevitable racket of radios, television, appliances, and children. He was the first builder anywhere to try a new panelized plaster that had impressed him as chairman of the NAHB Research Institute.

# 12

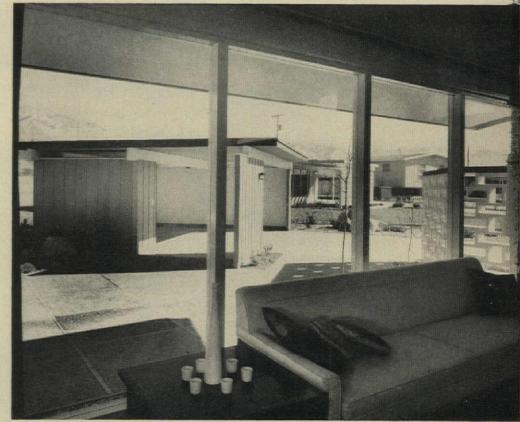
He bought quality for every use, from the front-door lock (\$15 to \$30 per house depending on which style of hardware went with the architecture) to first-line brass fittings (\$22.50 per bath extra) to a new high-sparkle sheet vinyl on the kitchen floor (\$7.50 a yard) to kiln-dried lumber (\$6.50 mbf extra largely offset by lower freight costs).

13

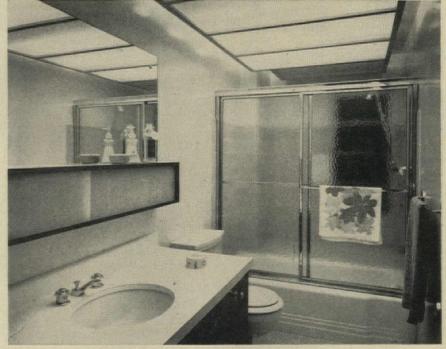
He put two glamorized baths in every house—all with luminous ceilings, sliding glass tub enclosures, ceramic tile walls, big mirrors, and big medicine cabinets, some with double vanities. (Two models have an extra lavatory besides.)

continued



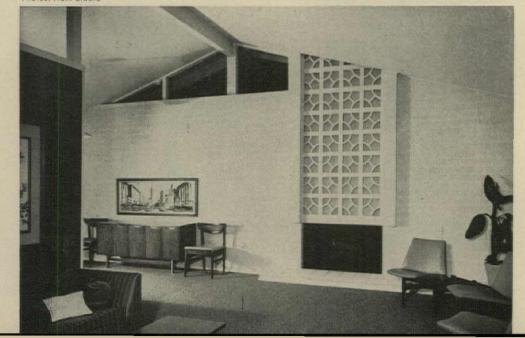


Photos: Hunt Studio





Photos: Hunt Studio



# 14

He carpeted all his models but one from wall to wall on top of the oak flooring and planned to sell the wall-to-wall carpeting as part of the house when, as, and if FHA will let him finance it under the mortgage. In the fifth house he featured the newest ideas in resilient flooring, including a new type of heavy-duty plastic-finished cork tile.

# 15

He spent \$30,000 at the most highstyle furniture store in Salt Lake to doll up his models with the same kind of furniture and draperies (selected by the same decorator) that buyers of more expensive homes would be likely to choose for themselves.

# 16

He comfort-conditioned his houses with twice as much insulation as FHA requires.

# 17

He made central air conditioning standard equipment—something no intermountain builder had ever done, though summer temperatures in Salt Lake climb high in the 90s.

# 18

He glamorized all the master bedrooms with big mirror-doors 6' wide on the closets. These make the bedrooms seem almost twice as large.

# 19

He wired his houses with 100 amp entry boxes, circuit breakers, and silent switches, and he pre-wired his kitchens for additional heavy-duty appliances.

# 20

He included a fireplace in every living room.

If Alan Brockbank's challenge in the quality market fails it will not be because his houses and his values are not good enough, nor will it be because there are not plenty of families in Salt Lake who can afford to buy them.

# The three problems he must still solve are:

#### 1. The problem of selling two houses

Most families who can afford houses priced over \$20,000 already own homes. They cannot buy again until they can sell the houses where they live today and get their money out—and getting their money out of a used house is not easy. What with commissions, discounts, mortgage charges, title searches, lawyers' fees, and closing costs, plus interest, repairs and maintenance pending resale, sellers are often lucky to realize 85% of what their homes are worth, which is another way of saying they are lucky if their expenses incident to selling don't add up to more than they paid off on the mortgage in the first ten years.

To help them, Brockbank has put \$50,000 equity money into a revolving fund to handle trade-ins, and easier money this year should make it easier to get high-percentage mortgages on used homes than it was last year.

### 2. The problem of status for a new location

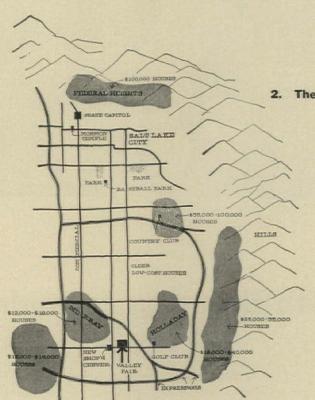
Brockbank is making his quality bet in an area where no one has ever built quality houses before. His entrance gate, in fact, is right across the street from a tract of all-alike little rectangles that sold new for \$14,000 five years ago.

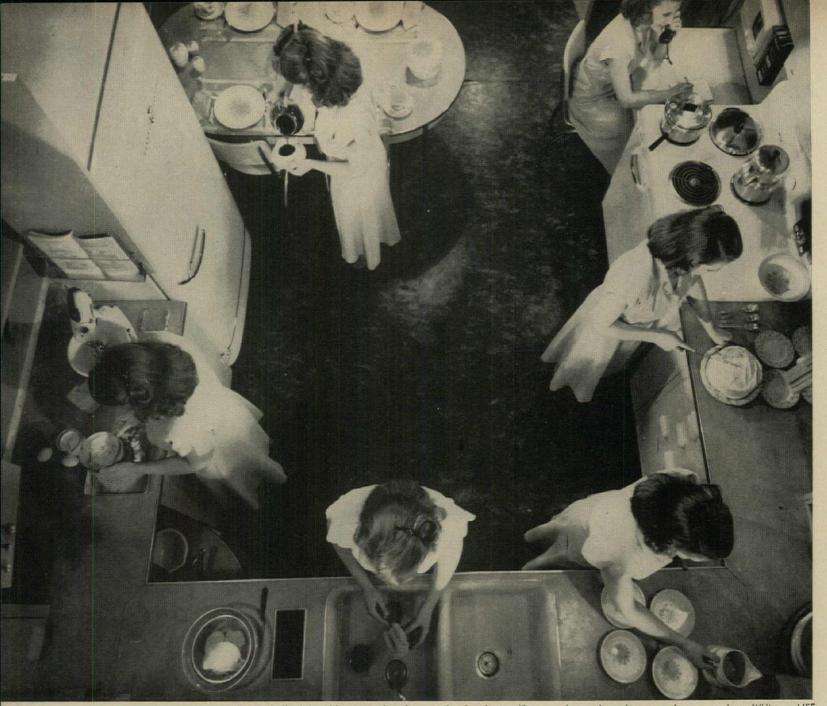
Snob-appeal location for quality houses around Salt Lake is on the lower slopes of the mountain (that is where famed California Builder John Mackey put his \$19,000 models last year and they sold much better than his \$15,000 to \$17,000 models down on the flats).

In every other respect Valley's Fair's location is fine. It is near a cloverleaf exit from a new expressway that will open late this year and bring the tract within 20 minutes of downtown Salt Lake. It is half a mile from two big regional shopping centers now being built, one 30-acres, one 60-acres. It is halfway between two nearby country clubs. Brockbank is sure these solid advantages will be more than enough to bring status-seekers to his tract, but location is still the No. 1 sales appeal and it may take time to find upper-income families with enough of the pioneer spirit to be first settlers in Valley Fair and help make it a prestige address.

#### 3. The need of very different merchandising

Like most builders, Brockbank has had little experience with the very different sales and promotion methods needed to sell upper-priced houses to upper-income buyers. When he opened his models for a preview last fall he used the same promotion plans that had worked so well for his lower-priced homes and found to his chagrin that they attracted to his more expensive models exactly the same kind of people they had always attracted to his lower-priced homes; ie, people who could not afford more than \$17,000! He and his partner, Steve Smith, realize clearly that a very different and new kind of promotion will be needed, so they have called in Merchandising Expert Stanley Edge from Washington to help them plan for the grand opening this spring.





WORK-CENTER IDEA is symbolized by this composite photograph of a housewife preparing and serving a meal.

James Whitmore, LIFE

# Kitchen planning is easy with this new formula

The formula (shown diagramatically on the opposite page) was developed by the Small Homes Council to give you an easy way to figure how much work-counter space you need—and where it should be—for any grouping of kitchen appliances.

The formula also tells you how much storage space you need—and where it should be—because it provides for base and wall cabinets below and above the work counters.

The formula will help you plan any size and shape of kitchen—U-, corridor-, or L-shaped. Wherever practicable, you should arrange work centers in this right-to-left order: 1) refrigerator, 2) sink, 3) mixing area, 4) range, and 5) serving area. On *page 156* you will see three basic kitchen layouts planned according to the formula.

On page 157 you will find a table which shows the widths required for most standard gas and electric kitchen appliances. By adding the widths of your appliances to

the formula total, you can quickly calculate the total linear footage you need for any grouping of appliances and counters. (Remember you are free to increase counter lengths to fit a particular wall space. If you *must* cut the total counter space below the formula's ten-linear-foot minimum, you should not trim a little here and a little there—you should group your work centers together into fewer separate units.)

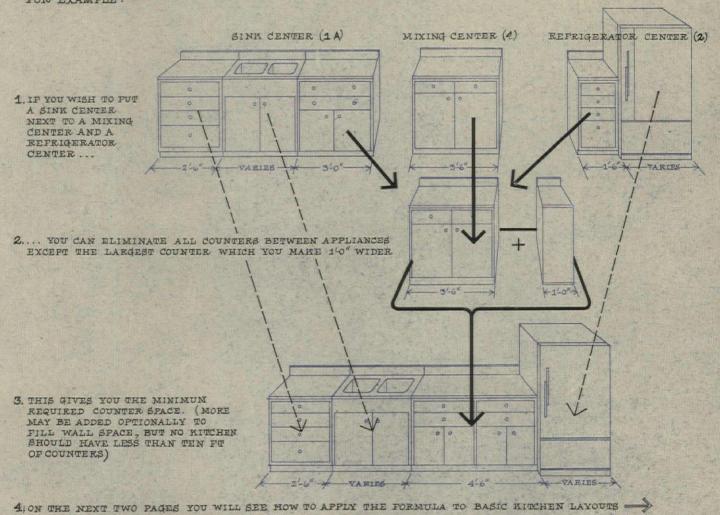
The new formula was developed for SHC by Prof William H. Kapple, Department of Architecture, and Miss Helen McCullough, Department of Home Economics, University of Illinois. They based their work on field studies of how women actually use their appliances and work space. Complete details on the formula will be included in the Proceedings of the 16th Annual Short Course, available April 1 from the Small Homes Council, University of Illinois, Urbana. Price: \$2.50.

# HERE IS SHC'S FORMULA FOR DETERMINING MINIMUM WORK SPACE REQUIRED FOR AN EFFICIENT KITCHEN

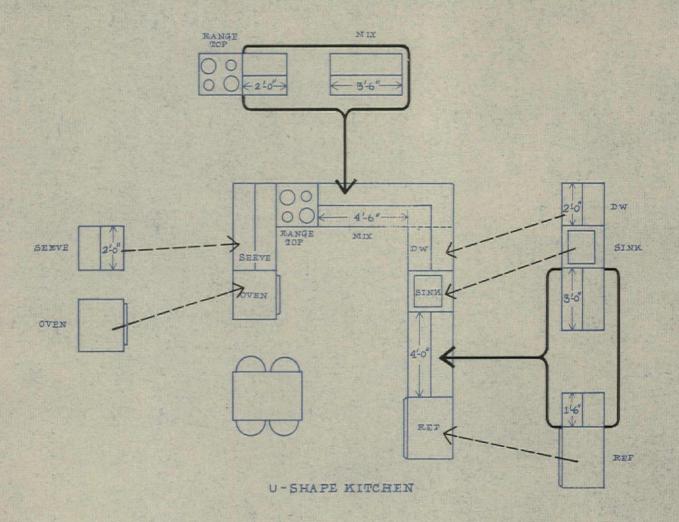
YOU NEED THESE FIVE WORK CENTERS - AND EACH SHOULD HAVE THE COUNTER WIDTH SHOWN OR VARIES \* K-1-6" 2-0" - VARIES" - 3-0 2. REFRIGERATOR CENTER NEEDS A 146 COUNTER AT LATCH SIDE OF DOOR 18. IN THIS VARIATION OF SINK CENTER, DISHWASHER SCRVES AS 2 6 COUNTER 50 COUNTER IS AT RIGHT 1A. SINK CENTER NEEDS A 2'6' COUNTER AT LEFT, 5'-0' COUNTER AT RIGHT OR \_VARIES\_ 3'-6" 3. SERVING CENTER, AT LEAST 2 -0" WIDE, IS ESSENTIAL. IT CAN BE MAIT TO RANGE, OR AS A SECOND CHOICE, BUSIDE REPRIGERATOR 5 B. IF RANGE TOP & OVEN ARE BEPARATE, 200 COUNTER BELONGS MEXT TO RANGE TOP OVEN CAN GO ANYWHERE 4. MIXING CENTER 36" 5 A. RANGE CENTER WITH INTEGRAL OVEN NIEDS A 2'0" COUNTER (EITHER SIDE) SURPACED WITH MEAT-PROOF MATERIAL

II.) BUT WHEN YOU PUT ONE WORK CENTER ALONGSIDE ANOTHER, YOU CAN ELIMINATE SOME COUNTER SPACE.
FOR EXAMPLE:

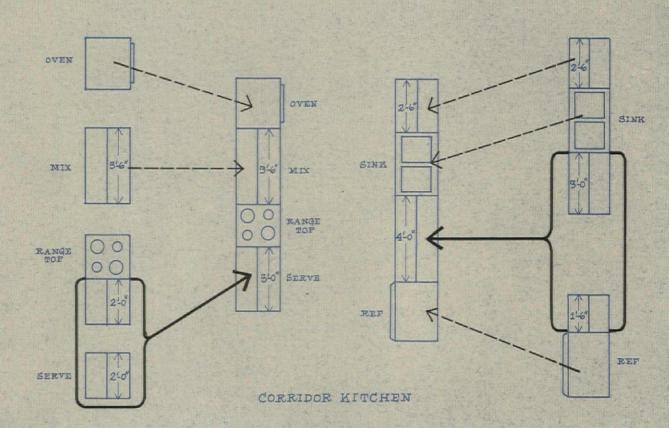
\* FOR WIDTH REQUIRED BY APPLIANCES THEMSELVES, SEE TABLE P 157

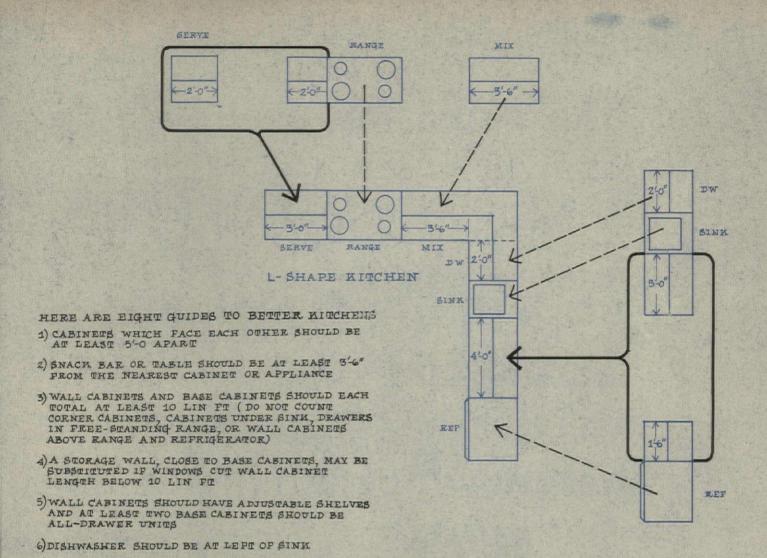


THESE THREE KITCHEN LAYOUTS SHOW HOW THE SHC'S WORK-CENTER FORMULA CAN BE APPLIED TO BASIC KITCHEN SHAPES



WORK CENTERS IN THIS KITCHEN (AND THE OTHERS ON THESE PAGES) ARE ARRANGED IN THE MOST CONVENIENT ORDER FOR MEAL PREPARATION -- FROM RIGHT TO LEFT: REFRIGERATOR, SINK, MIX, RANGE, SERVE





### THIS CHART GIVES YOU WIDTH REQUIREMENTS FOR STANDARD APPLIANCES

7) WALL OVEN SHOULD HAVE SOME COUNTER SPACE

8) REPRIGERATOR AND WALL OVEN SHOULD NOT BE PLACED IN THE MIDDLE OF A RUN OF COUNTER TOP

ON ONE SIDE

EQUIPMENT				N IN			28"	29"	50"	31"	32"	33"	34"	56"	39"	40"	41"	42"	48'
free-standing r	ANGES	E/G	G	E/G			G		E/G					E/G		E/G			1 10 10
DROP-IN AND WALL-HUNG UNIT RANGES BUILT-IN 4 BURNER RANGE TOPS BUILT-IN OVENS				E/G			E/G		E/G					E		E/G		E	EG
				E/q		G			E/G					E/G				E	E/G
				E/G								E/G							
DISHWASHERS				E			No.		E										
SINUS						V	The said		~			~		V	V			/	
REFRIGERATOR/ FREEZERS	9 CUFT			E		E						E							
	10CU FT				E		E	E				E							
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	12 CUFT						E		E	E	E/G		E						
	13 CUPT									E	E/G	E							
	14 CUFT								E	E	E/G	E							
	15 CUPT										E	Ε							
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	17 CU P1										E		E				E		
	18 CU FT									30,3	E								
	20 CU PT	100	Per la						Saletine.	4				Maj					E

NOTE: E INDICATES ELECTRIC MODEL. DATA FROM NATIONAL ELECTRICAL MANUFACTURERS ASSN.

G INDICATES GAS MODEL. DATA FROM GAS APPLIANCE MANUFACTURERS ASSN.

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Shakertown finish scientifically formulated

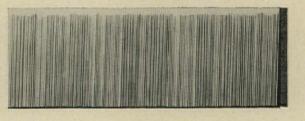


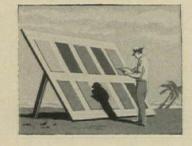
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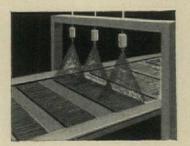


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### **New products**



**Corner sink assembly** combines two complete 16"x16" stainless-steel bowls with a center 12"x12" disposer bowl. The large bowls each have an 8" swingspout faucet and remote-control drain. Center bowl has a 9"-high faucet for

vegetable washing and dish rinsing. All have wing control handles. Also new from Elkay, two-bowl unit with one 14"x18" bowl to take roasting pans, etc.

Elkay Mfg Co, Chicago.

For details, check No. 1 on coupon, p 244



Decorative hardboard (used in cabinet doors, left) includes a mosaic of colored chips against a light blonde wood background. The panel face is factory-sealed to resist stains and abrasion. Sandalite comes in plain panels ½", 3/16", and ½" thick, 4' wide, and up to 16' long. It also comes as Forall—a Sandalite face laminated to a hardboard core—in ½" and ¾" thickness, 4'x8'; as ¼"x4'x8' random plank; as 16"x96" t&g panels; as ½", 3/16", and ¼" punched panels.

Forest Fiber Prods, Forest Grove, Ore.

For details, check No. 2 on coupon, p 244

### And on the following pages

### What the leaders are doing

Award-winning houses from Canada.
. . . Recreation center serves Sec 213
housing. . . . Gutters all-of-a-piece save
site labor. . . . Sliding bookcase makes
two rooms three. see p 187

### Technology

New ideas for factory-finished houses.
. . Central air conditioning serves a community. . . . Steel beams support improved floor system. . . . Short Course develops new header. see p 196

#### **Publications**

New handbook tells all about fireplaces.
... New guide sets ventilation standards.
... New catalogs show new wall finishes, glulam beams, laminates, hardboards, etc.

see p 233

### More

### **New products**

New mortar gives new strength and speed. . . . Flooring makers show 1961 lines . . . . New bathroom tile goes up in panels. . . . New foams, new latches, new appliances, etc. see p 201

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The plans for Delta College, now under construction in the "Golden Triangle" area of central Michigan, call for the most modern educational facilities and best construction methods. That's why masonry joints on the Delta College buildings are being reinforced with Keywall for added strength, greater crack resistance. The contractor on the job, states: "Delta College is being constructed of the finest materials available and we feel that one of the better crack-resisting reinforcement products on the market is Keywall."

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Architect's model of Delta College

Architect: Brysselbout-Dow-Wigen, Saginaw, Michigan



Lecated in a fast-growing, industrialized section bordered by Bay City,. Saginaw, and Midland, the Delta College is one of the first in the U. S. to be financed by a multiple county tax program. One of its many unique features is a closed-circuit TV studio which will originate educational programs throughout the school and neighboring communities.

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Surface units offer new Flip-Top controls, Spill-guard\* tops and thermostatic controls. Most gas models are equipped with pressure regulators. Write to Contract Sales Division, Whirlpool Corporation, St. Joseph, Michigan for all the details of these new ranges that save you time and money, plus putting new sales appeal in your kitchens. \*Imk.



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This distinctive bath-dressing room was created with American Olean crystalline glazed tile in a brand new scored design—SD-5. The effects possible with this new Scored Tile are unusually rich and decorative—providing a look of custom-design without custom costs. With Scored Tile you can give rooms a new and different look that makes homes easier to sell in today's competitive market. Send for color booklets showing many other distinctive new design ideas.

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Bathroom Illustrated: Walls: Scored Design SD-5, 335 Cr. Aqua, 365 Cr. White. Vanity Walls and Countertop: SD-5, 320 Cr. Brown, 332 Cr. Toffee. Floor: SD-5 and 4½" squares, 335 Cr. Aqua, 362 Cr. Charcoal. Plate No. 121.

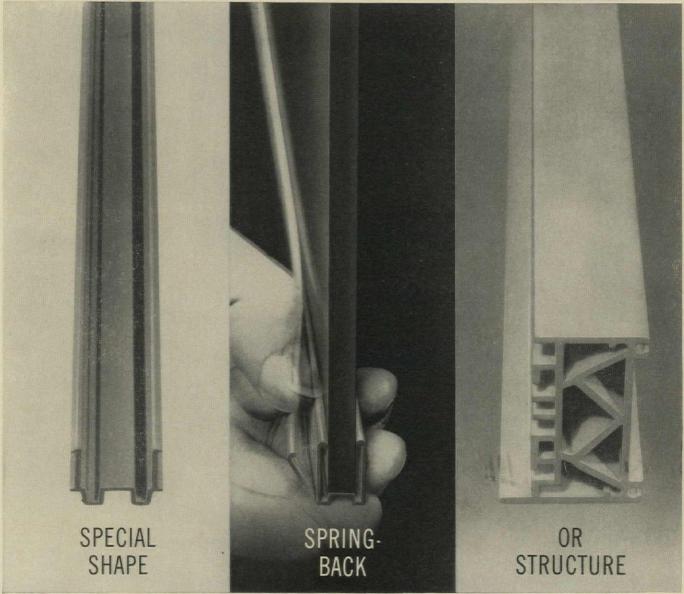


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Each of these extrusions of rigid Geon by Crane Plastics, Inc., Columbus, Ohio, is in use for various architectural applications—chiefly windows. B. F. Goodrich Chemical Company supplies the rigid Geon vinyl.





# Look how you can solve design problems with extrusions of rigid GEON vinyl

These extrusions show how the properties of rigid Geon lend themselves to solving different design problems. The special shapes show how detail can be reproduced—and it is easy to produce a long, smooth part, *straight* out of the die.

Other extrusions demonstrate how the springiness of thinner-walled extrusions gives you a spring-back characteristic for weather-stripping or rattle-proofing applications. Still others show the structural possibilities—how rigid Geon provides load-carrying strength without weight. At the same time, each extrusion brings you all the other advantages of vinyl—unusual abrasion resistance, resistance to chemicals, self-extinguishing properties and electrical advantages. In every case there's the opportunity to mold color right in.

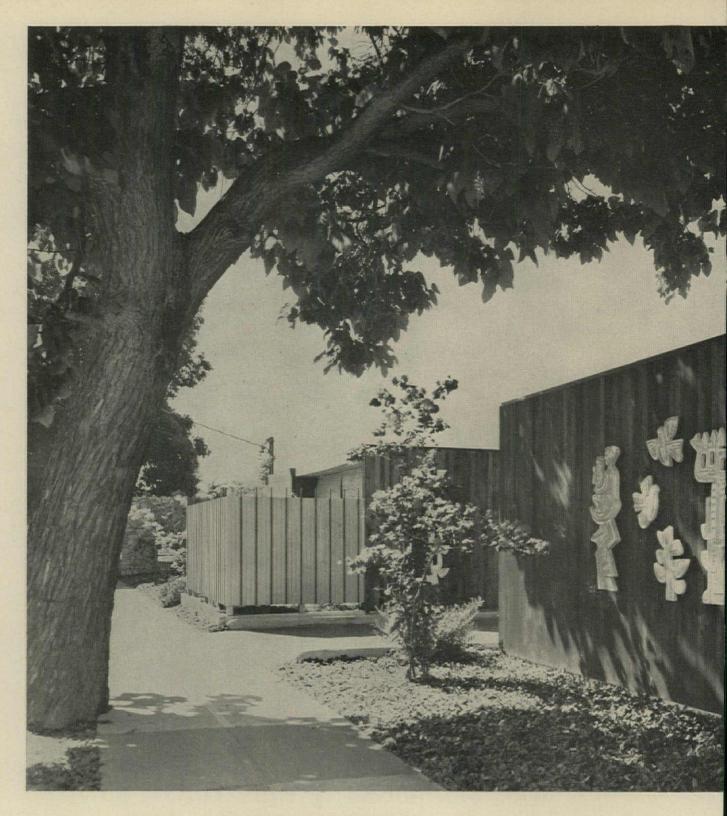
How can these extrusions solve your problems? We'd be glad to help you answer this question. Write Department NE-2, B.F.Goodrich Chemical Company, 3135 Euclid Avenue, Cleveland 15, Ohio.

In Canada: Kitchener, Ontario.

## **B.F.Goodrich Chemical Company**

a division of The B. F. Goodrich Company





"Utility grade gives me a profit on every apartment I build. As one example, I have used Utility 2x4s for laminating on-the-job roofs, with the total cost coming to about 40 cents per square foot.



"I use Utility for partitions, too. When the partitions are prefabricated in the shop, two men can frame an entire floor in minimum time. I recommend West Coast Utility grade framing lumber to any builder interested in increasing his profit without sacrificing quality."

Here is another builder taking advantage of the consistent qualities of West Coast Lumber for a profit. You will find that the right use of the right grade will make money for you, too, in the building of One and Two Living Units.\*\*

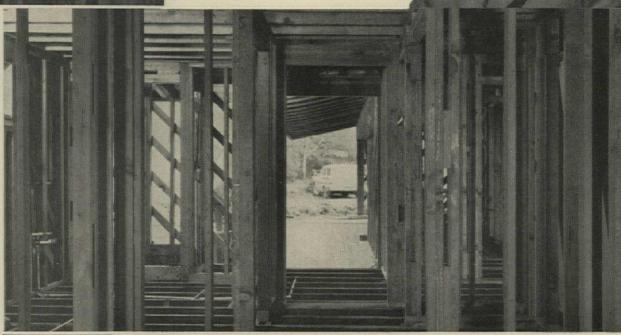


"I average a 29% saving in my lumber cost by using

UTILITY grade
WEST COAST lumber"

says T. K. WELCH

PRIZE WINNING MULTIPLE
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### FREE TECHNICAL FACTS

west Coast Lumber. Contains span tables. \* When using in accordance with FHA Minimum Property Standards for One and Two Living Units, FHA Bulletin No. 300.

## WEST COAST LUMBER

West Coast Douglas Fir . . . West Coast Hemlock . . . Western Red Cedar . . . White Fir

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# **New!** Simplicity and Flexibility

no other heating system offers



# modular electric radiant ceiling heat panels\*



SECTIONAL VIEW

Complete freedom from moving parts and maintenance. Waterproof, unbreakable.



Panels can be quickly lifted out and economically relocated to conform to any partition changes. Arvin's Electric Radiant Ceiling Heat Panels do away with the space restrictions and complex installations of other auxiliary electric heating systems. They do not use a single inch of wall or floor space, and can be efficiently located in high heat loss areas.

Arvin units were use-tested for three years without a single case of failure, breakdown or customer complaint...and performed perfectly in accelerated operation for a period equivalent to 19 years. U.L. Listed.

The exclusive Arvin unit, a modular 24" x 48" flush lay-in panel, is shipped completely assembled. Requires only normal connection into a 208/240 circuit. Textured to simulate ceiling tile or can be painted to match any color.

Provide all the benefits of clean, modern, flameless electric heat adapted to the great flexibility of an exposed grid ceiling . . . without maintenance cost worry.

Also manufacturer of ARVINYL—Vinyl | Metal Wall Coverings and Movable Partitions



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Write today for this new 4-pg. booklet containing complete specifications on Arvin Modular Electric Radiant Ceiling Panels.

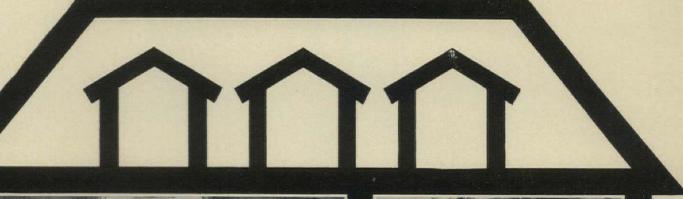


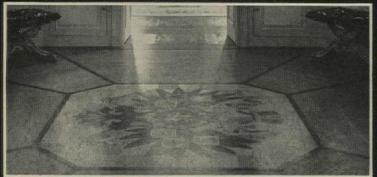


**FAUCET CORPORATION** 

INDIANA

REENSBURG









David J. Erbe, right, specializes in artistically patterned, inlaid wood floors. For the Hillwood residence of Mrs. Marjory Merriweather Post May, he created a floor of 46 woods, depicting an ancient order of knights (top left)—restored and installed antique floor of Adam design, top right.



PHOTOGRAPHS BY WENDY HILTY, REPRODUCED THROUGH THE COURTESY OF TOWN & COUNTRY MAGAZINE

At Hillwood . . .

# 3M ADHESIVE SECURELY BONDS CUSTOM INLAID FLOORS

"To secure and safeguard the intricate inlaid wood floors we design and restore, we want superior adhesive quality and the best bond available. That's why we use 3M Brand Wood Block Flooring Adhesive for all our assignments," reports David J. Erbe. His firm, Wm. J. Erbe Company, New York, fashions unusual wood floors or "transplants" and restores valuable antique floors for leading art galleries and such regal estates as Hillwood in Washington, D.C.

Mr. Erbe personally supervises each installation and likes the easy-to-use features of 3M Wood Block Adhesive. Apply it with a trowel, press flooring in place . . . the adhesive grips immediately, gains

strength rapidly to assure a bond that's tops for durability and strength.

Can 3M adhesives and sealers help you? They make up the most complete, most reliable line of construction adhesives available. For floors, walls, counters, for example, there are easy-to-use, strength-to-spare adhesives for vinyl and rubber tile, for ceramic and clay tile, for wood, laminates and other materials. In fact, there are 3M adhesives and sealers for every building need. For more information, see Sweet's Catalog, your nearby distributor, or send for new booklet that describes the entire line of 3M adhesive products for construction use. Write AC&S Division, Dept. SBAA-31, St. Paul 6, Minn.

ADHESIVES, COATINGS AND SEALERS DIVISION

MINNESOTA MINING AND MANUFACTURING COMPANY

... WHERE RESEARCH IS THE KEY TO TOMORROW





## The answer: Air condition it!

But . . . protect yourself . . . and your customers: Use equipment certified under the A.R.I. program.

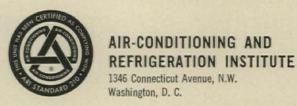
There's no doubt about it—central air conditioning improves the saleability of a home.

There's no doubt about it—the ARI Seal of Certification, backed by the combined reputations of 49 manufacturers, assures you and your home buyers of equipment rated to uniform high standards of safety and performance.

To be granted the Seal, the manufacturers listed have agreed to rate their equipment by one uniform standard, in Btuh. Misleading terms ("square feet" and "horsepower") have been dropped. This rated capacity is subject to checking and verification in an independent testing laboratory under adverse conditions, with empha-

sis on wilting heat and high humidity. Any model failing to deliver rated capacity must be brought up to standard or be withdrawn from production.

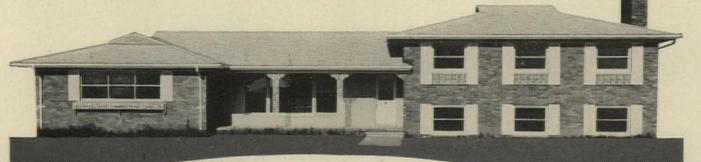
Consult your local air-conditioning contractor—and specify equipment bearing the ARI Seal of Certification for your next project. For free explanatory booklet and Directory of equipment certified, write Department R-311.



Manufacturers participating in this program as of January 1, 1961: Airtemp Division, Chrysler Corporation Albion Division, McGraw-Edison Company American-Refrigeration, Inc. American Furnace Company American-Standard Industrial Division, American Radiator and Standard Sanitary Corporation Arkla Air Conditioning Corporation Armstrong Furnace Company, Division of National Union Electric Corporation Bryant Manufacturing Company Corporation, Toridheet Division Cobell Industries Incorporated The Coleman Company, Inc. Crane Co., Air Conditioning & Refrigeration Division of Utility Appliance Corpo. General Electric Company Goettl Bros. Metal Products Inc. Holly-General Company, Division of the Siegler Corporation International Metal Products Inc. Holly-General Company, Division of the Siegler Corporation International Metal Products, Inc. The Mathes Company Janitrol Heating and Air Conditioning, A Division of Midland Ross Corporation Almar Conditioning And Corporation And Internatic Corporation Thermatic Corporation Thermatic Corporation Products, Inc. Rehem Manufacturing Company Products Inc. Products Inc. Rehem Manufacturing Company Products Inc. Rehem Rehe



# DIFFERENCE



Six-over-six R-O-W Removable Wood Windows were selected for the home in the top illustration. The builder knew the importance of harmonious, individualized styling with quality wood windows. Even in a tight local market, this speculative home sold quickly and profitably. Quality components played an important part in the sale. Because the windows are wood, this home will always be winter-warm and summer-cool.

R-O-W Removable Wood Windows are easier to install and easier to clean and paint—inside the home. They will be pressure-snug for the life of the home and, with Lif-T-Lox balances, operate easily.

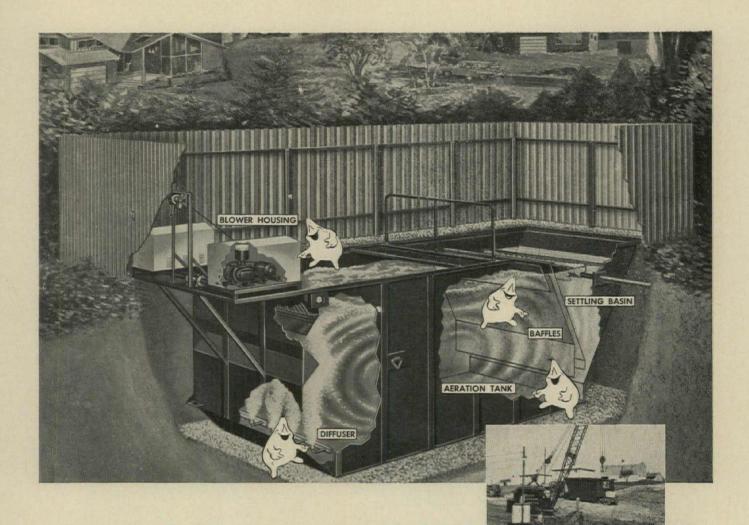


R·O·W is the trade-mark of R·O·W Window Sales Co., 1365 Academy Avenue, Ferndale

Metal windows shown in the lower illustration tend to give an industrial flavor to otherwise fine residential styling. Wood windows provide far superior weather protection. Using comparable units of test materials, wood is about seven times more efficient than glass as an insulating material. Wood is about 399 times as efficient as steel and about 1,806 times as effective as aluminum.

BUILDERS WHO USE R-O-W REMOVABLE WOOD WINDOWS ARE INVESTING WISELY FOR THEMSELVES AS WELL AS THE EVENTUAL HOME OWNERS

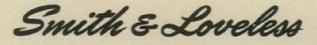
R-O-W WINDOW SALES CO. - 1365 ACADEMY AVE., DEPT. HH-361 - FERNDALE 20, MICHIGAN



Little Mike Microbe describes the operation of the Smith & Loveless factory-built "Oxigest" sewage treatment plant as "an ideal environment for the microscopic, living organisms in the sewage to consume or digest the suspended solids in the aeration tank and produce a stable, sparkling effluent."

Mike stars in a new Smith & Loveless movie on the manufacture, operation and installation of "Oxigest" sewage treatment plants for small subdivisions, motels, schools and factories in outlying areas not served by municipal sewerage systems.

To learn more about the Smith & Loveless "Oxigest" sewage treatment plant—and Mike Microbe—just write to Department 70



Delivered to the installation site on time.



. . . the treatment plant is quickly installed.



... backfilled and readied for dependable, efficient sewage treatment at the site.



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

(2783)

# **LOOK WHAT GAS IS BUILDING-IN NOW!**



## Gold Star features on MAGIC CHEF built-ins



Oven-with-a-Brain \*- Lo-Temp Oven Control-new low setting of 140° keeps food ready-to-serve for hours without overcooking. This built-in includes: automatic rotisserie, oven ready light, oven door window, panel light and automatic clock control.



Burner-with-a-Brain\* Magic Chef's surface units also include the famous Burner-with-a-Brain. Food won't overcook or burn, or boil over because the burner regulates cooking temperatures all by itself, keeps temperatures where you set them.

### This Gold Star shows you know appliances

A.G.A. awards the Gold Star to only the finest ranges. Each must be more automatic, more modern, better designed in every one of a long list of exacting specifications. It means they cook faster, cooler, cleaner than ever, automatically.



Women select homes by quality details. A built-in Gas range as wellknown as Magic Chef, with the Gold Star featured, ups your reputation for quality. People also want the convenience, dependability and economy of Gas. Proof: where natural Gas is available, it is selected to heat 8 out of 10 new homes. Keep your sales potential up-build in new

Gas appliances with the quality appeal of 2 famous names: Magic Chef and Gold Star.

AMERICAN GAS ASSOCIATION

Magic Chef.

today more people than ever are cooking with A GAS!



\*A.G.A. Mark @Am Gas Assoc., Inc.

# 66 With Transite Pipe, our first cost was the last cost.99

Say builders Sam Primack, Jordon Perlmutter and William Morrison, partners of Perl-Mack, Inc., Denver, Colorado.

"For the 2,500 homeowners in the burgeoning community of Northglenn, Colorado, we selected Transite® Pipe for water supply and distribution lines. We feel our choice insured a lifetime of trouble-free service. In addition to offering us the best value, we found real savings in installation. Lightweight Transite was moved to and distributed on the job site faster, easier and less expensively. Its long lengths and simple coupling method substantially reduced assembly time and costs.

"To keep our 18-hole golf course in top shape, we have installed Transite underground mains for the sprinkler-irrigated system. And, Northglenn telephone service is protected by an installation of over 250,000 feet of Transite Telephone Duct.

"We're still in the process of completing the initially planned 5,000 homes, recreation areas, churches, schools and shopping city. Our long-range plan is to make Northglenn a community future generations can enjoy. That's why we're using modern methods and quality materials."

Get the full Transite story by sending for our builders' "kit" of ideas for volume profits and sales. Write Johns-Manville, Box 14, HH-3, New York 16, N. Y. In Canada: Port Credit, Ontario. Offices throughout the world. Cable: Johnmanvil.



JOHNS-MANVILLE



# 16w...

# USE EFFICIENT FACTORY METHODS

on the Jobsite and in the Factory



SPOTNAIL LATH (GYPSUM OR METAL)



SPOTNAIL FLOOR SHEATHING



SPOTNAIL FLOOR UNDERLAYMENT



SPOTNAIL WALL SHEATHING



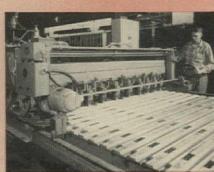
SPOTNAIL ASPHALT SHINGLES



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
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### SPOTNAILERS

Builder-Proved Finest Portable Automatic Nailers

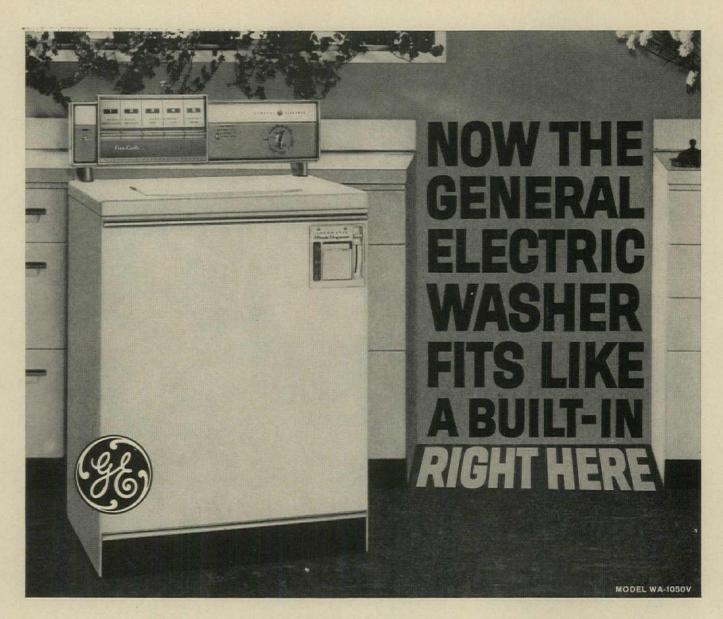
- 50% More Loading Capacity
- Uses Less Air—Requires
   Smaller Compressor
- Sturdier-Fewer Moving Parts
- · Controlled Penetration of Drive

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

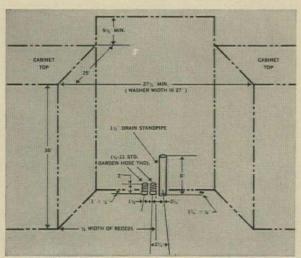


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26 Offices . . . Over 100 Representatives to Serve you.



# Install the new General Electric Filter-Flo® Washer flat against the wall...and save valuable space!



The General Electric 1961 Filter-Flo Washer may be installed flush-to-the-wall, as shown above, with special Installation Kit which is available from the General Electric Distributors. The kit contains drain hose, drain air-brake and complete, detailed directions.

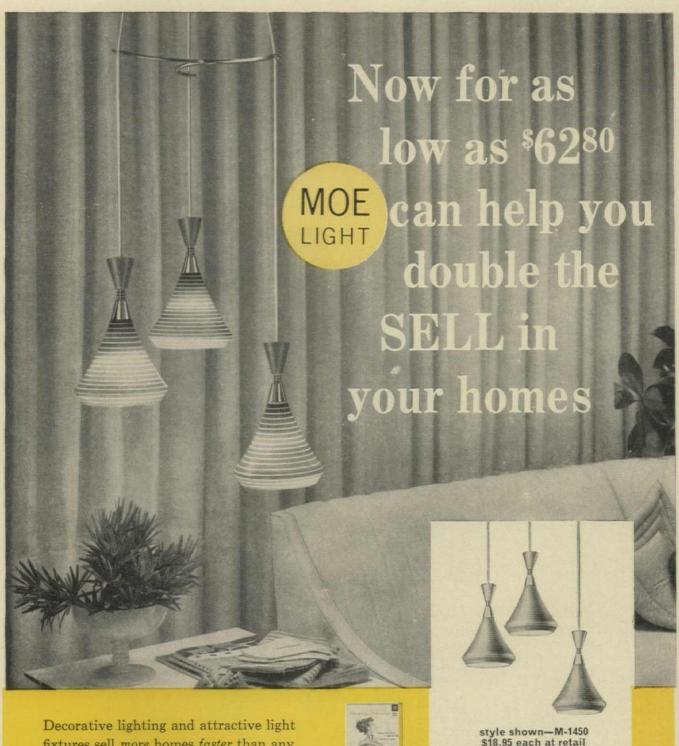
To give your kitchens or utility rooms a custom-built effect—all hose and plumbing connections are recessed—in most models in the new 1961 line. Every Filter-Flo model is counter height and depth, 36" by 25". And that's what the ladies love today!

They'll love the new 12-lb. capacity, too—20% more than in previous models and now found in every model. A typical 12-lb. load is 3 double sheets, 4 pillowcases, 3 men's shirts, 4 T-shirts, 3 heavy bath towels, 5 washcloths, 12 handkerchiefs—tablecloth. Every piece gets piece-by-piece washing action.

As always, you can promise your prospects the quality and dependability only General Electric delivers. Ask your General Electric Distributor for complete information. Or write to the General Electric Home Laundry Dept., Room 207C, Bldg. 1, Appliance Park, Louisville 1, Kentucky.

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fixtures sell more homes faster than any other one factor. For only pennies convert a bare empty house into a home of warmth and appeal with planned lighting by MOE Light. See your MOE Light representative for professional help in your lighting-for-sales plan.



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style shown—M-1450 \$18.95 each at retail plus \$5.95 for spreader.

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COMPANY STATE "Whether you build conventional... ... or with

COMPONENTS...

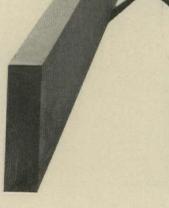
... the dependable material to use is

SOUTHERN PINE

SAYS DICK MESTAYER, Vice-President

R. F. Mestayer Lumber Company New Orleans, Louisiana







"More and more of my architect, builder and contractor customers insist upon SOUTHERN PINE. They know that quality Southern Pine offers greater strength, more versatility and real economy. The same lumber used for conventional construction is suitable for trusses, with no special grading required."

The Federal Housing & Home Finance Agency says: "The greatest need to assure the efficient use of wood in residential framing is the establishment of a full-length, all-purpose grade with established working stresses for all loads to which wood is subjected... bending, tension, compression, shear, etc. This grade should be independent of the size and length of the member and should include 1" boards for use in trusses and other light framing. This ideal grade is most nearly approached today in SOUTHERN PINE." Southern Pine, with the identifying SPA Trade-Mark, offers these advantages:

- Proper seasoning before dressing...essential for uniform size and strength.
- Uniform grading throughout the length of each piece, permitting cantilever, simple beam, continuous or tension-loading design.
- · Superior gripping power for all nails and other fastening

These high qualities that make Southern Pine the ideal stressrated material for all structural uses, including components, are yours when you insist upon grade-marked, SPA Trade-Marked



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Firm Name

# L-M Lawn-Glo Lights Add Quality, Salability To Your Model Homes



Charming, modern soft lighting will do wonders for patios, pools, grounds in your new homes. These Lawn-Glo lights are high quality, in contemporary designs, and are available in brushed aluminum or choice of six pastel colors, for fine daytime appearance.

### High Quality, Weatherproof

Lawn-Glo units are completely weatherproof, of aluminum and non-corrosive construction. Lamp socket is integral part of reflector, easily removed for washing. Takes standard household lamps up to 150 watts. Covered utility outlet in base of light. For post-top models there is a choice of black or redwood pole as an accessory. Automatic photocontrol available, provides automatic dusk to dawn lighting. Made by Line Material, leading manufacturer of outdoor lighting and other electrical products.

### For Commercial Applications

Lawn-Glos are also excellent for drive-ins, motel pools, landscaped areas -wherever soft, controlled lighting is desired. Sold only through Authorized L-M Distributors. Ask your wholesaler, or mail the coupon.

"Lawn-Glo" is a Line Material trademark.



### MAIL THIS COUPON Line Material Industries, Lighting Division, Milwaukee 1, Wisconsin Please send me information on Lawn-Glo lights for home builders. I build about homes per year. Company Address\_ State.



# Quality Outdoor Lighting



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



Have your windows at the job site when you need them





# MCO. WOOD WINDOW UNITS

Whether you specify Rimco Slide, Casement, Vent (awning), or Six-Ten (double-hung) Wood Window Units, you can be assured that the units will be at the job site on time. The network of Jobbers and Dealers stocking Rimco Units can provide the quick service you need.

Rimco windows come in complete units: set-up, fully weatherstripped and ready to install. Again . . . no time loss on the job!

You just set 'em and forget 'em.

And, when you fill those openings with Rimco Units, you are filling them with quality . . . backed by almost a century of experience.

A comprehensive program of consumer advertising and builder merchandising aids helps point up this quality.







RIMCO Wood Window Units fully comply with the applicable U.S. Department of Commerce Commercial Standard.

See our catalog in Sweet's File or write . . .

HELPING BUILD AMERICA FOR OVER 90 YEARS



ROCK ISLAND MILLWORK COMPANY
FACTORY DIVISION, P. O. BOX 97
Rock Island, Illinois

## Weyerhaeuser

# 4-SQUARE

lumber...

# solid framework for steady profits!



## Seven merchant builders win Canadian design awards

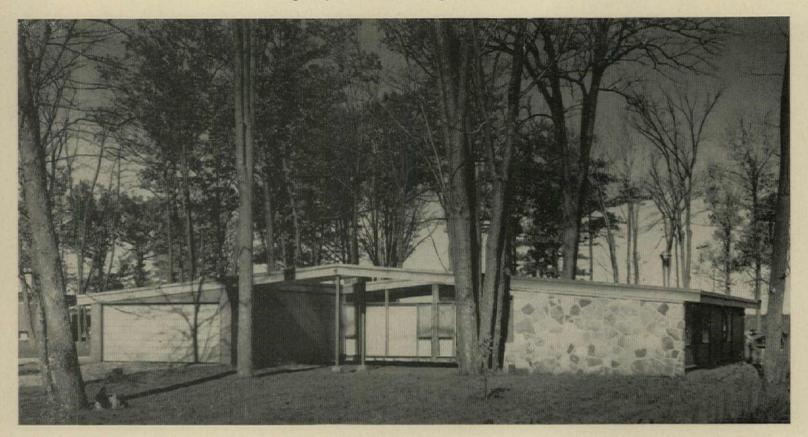
The nine houses shown here, all built last year in Canada, have won annual awards from the Canadian Housing Design Council, a government-sponsored group set up to encourage better design.

The judges—a builder, three architects, and two housewives—praised the winning designs for their "straightforward building shapes, with simple and effective massing," and said they were surprised to find "more ingenuity and taste in designs of smaller

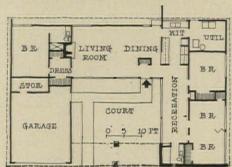
houses than in larger houses." Also noted: less open planning, more privacy in rooms, and longer walls—which make it easier to place furniture.

Judges included Campbell Holmes president, Natl House Builders Assn; Prof Eric Arthur of the University of Toronto's School of Architecture; James W. Strutt, president, Ontario Assn of Architects, and S. A. Gitterman, Ottawa architect.

House prices quoted are without land.



U-SHAPED HOUSE built by Woodview Development in Woodbridge, Ont. and designed by Architect Jerome Markson was cited for its "unusual clarity" in exterior design (particularly in the use of natural materials) and for its floor plan especially suited to a family with small children. As the plan at right shows, two of the three children's bedrooms can be opened to each other and all three open to a long sun-lighted recreation area easily supervised from the kitchen. House has an open plan yet parents enjoy complete privacy in their bedroom suite off the living room. Price is \$18,500, highest among the nine award winners.





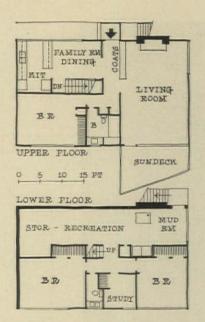
**WIDE LOOK** of \$15,000, 1,350 sq ft Woodview Development house is achieved by keeping roof line low and by aligning bottom of bedroom windows with bottom of fixed sash in living room.



RAISED FLOOR of \$10,900 ranch house designed for Cadillac Contracting, Toronto, by Lipson & Dashkin and Norman R. Stone is three steps above grade, allows good natural light in basement.

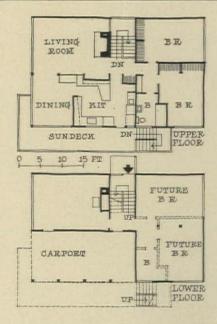


FRONT PORCH shields living room in this \$10,900 Cadillac Contracting house, which has plan almost identical with Cadillac house at left. This one also has main floor three steps above grade level.



PANELED LOOK at rear of Builder G. P. Johnson's house in Kelowna, B.C. is achieved by aligning all lower windows with windows on top floor in Architect John Woolworth's design. Front entrance is on grade at top level. Sundeck is off glass-walled living room. Price: \$13,000.





SPLIT-ENTRY HOUSE built by Taggart & Son in Port Coquitiam, B.C. has main entrance halfway between floors on side opposite carport. Wide overhang shields big sundeck which opens to kitchen and corner dining room (see plan). Lower level has family room with fireplace. Price: \$13,000.





L-PLAN HOUSE built by Teron Construction in Ottawa has wide overhang shielding glass wall of living room. Carport extending to front in foreground is built around large tree. Price: \$14,000.

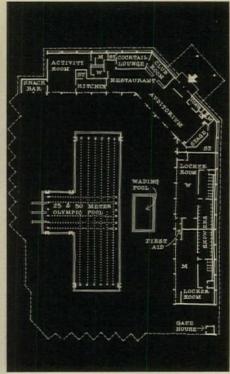


TWO-STORY HOUSE designed for G. S. Shipp & Son in Toronto by Lipson & Dashkin has four bedrooms on top floor, 1½ baths, big entry hall, and family room in basement. Price: \$16,000.



CENTER-HALL ENTRY is provided in 1,000 sq ft \$13,000 ranch designed for Builder Homer Ouellette by Critchley & Delean. Living room has big fireplace, floor-to-ceiling windows in front.





### This \$500,000 recreation center spurs sales in a co-op development

The Olympic-size swimming pool and large clubhouse above are part of a six-acre recreation center Builder Herbert Heftler has opened in his 2,000-home Sunset Park community in Miami. Other facilities include tennis, handball, and basketball courts, shuffleboard lanes, a ball diamond, and a children's playground. Heftler has invested over \$500,000 in the center—the largest built since Congress decided a year ago that builders selling co-op houses under FHA Sec 213 must provide adequate recreation facilities.

Heftler reports the center is pepping up sales in the sluggish Miami market. Buyers of his \$14,145 to \$16,970 houses automatically become members of the recreation club but must pay \$60 yearly dues to use the facilities. He expects over 1,000 buyers will keep up their dues. Restaurant and bar profits will cover the remainder of the \$100,000 annual operating costs.

Heftler plans similar centers for projects he will open in Dallas, Denver, and Puerto Rico.



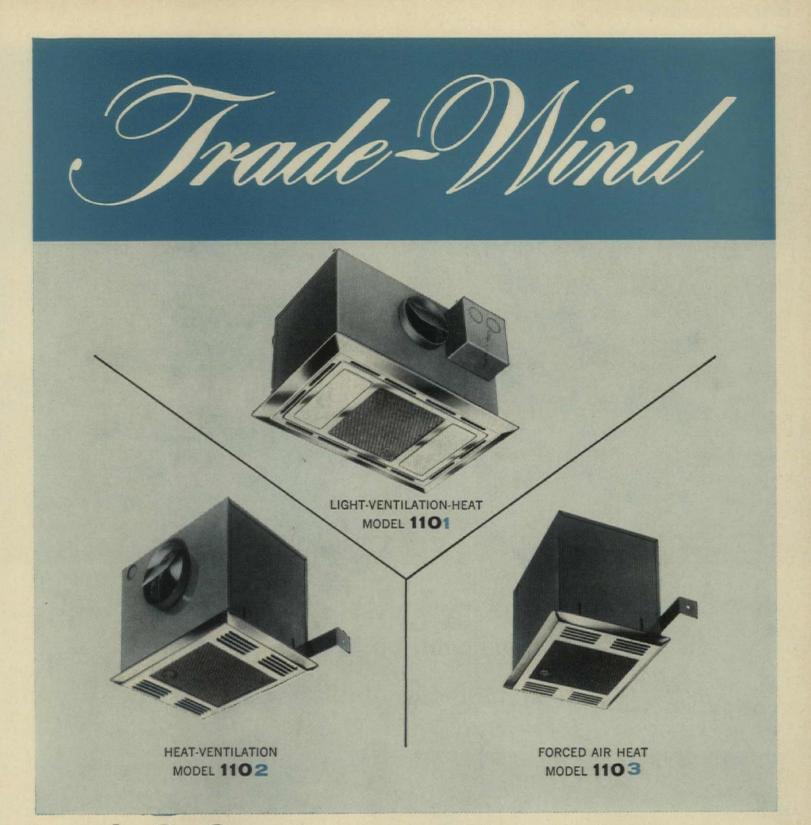
# One way to show off a big recreation room is to use it for a buyers' clinic

On Sunday afternoons, this 20'x25' room in one of Builder Arthur Stein's model houses in Gibbsboro, N.J. becomes filled with prospects who come to hear realtors, lenders, and other industry people talk about trade-ins, closing costs, and other aspects of homebuying. Says Stein: "As we expected, prospects are impressed by the clinics. And we have also found they are impressed by the room itself because they see how many people it will hold."



### You can halve the cost of your gutters by buying them as long as your house

The 45'5"-long gutter shown above is one of 500 that Builder Jack Heslop bought from a subcontractor for 250 ranch houses in Cuyahoga Falls, Ohio. By buying roof-length 26-gauge galvanized steel gutters, Heslop estimates he saved about 50% of costs involved in using regular 10' lengths and having them soldered and cut to fit. Only end caps and conductor pipe outlets had to be soldered after the sub delivered gutters on a specially rigged truck.



# 1..2..3... WAYS TO MAKE BATHROOMS SELL

#### TRADE-WIND MODEL 1101 LIGHT-VENTILATION-HEAT

Makes bathrooms completely comfortable. Remote wall switch selects any combination of light-ventilation-heat. Handsome bright chrome and glass grille. 4950 BTU instant heat, 2-60 watt light sockets, electrically reversible axial flow fan. The finest for any bathroom.

### TRADE-WIND MODEL 1102 HEAT-VENTILATION

Forced air heat or ventilation from this highly functional unit. Electrically reversible axial flow fan, gently circulates 4950 BTU's instantly or provides effective exhaust ventilation. Distinctively styled bright chrome grille. Give customers this quality performer.

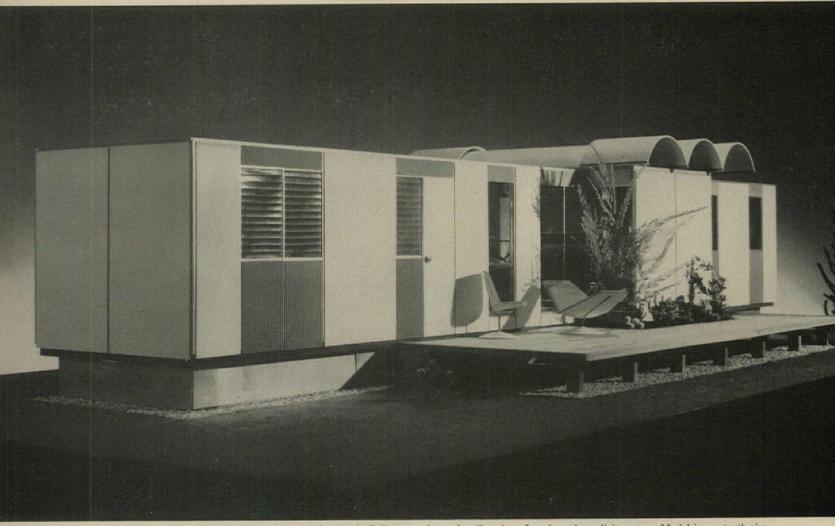
#### TRADE-WIND MODEL 1103 FORCED AIR HEAT

Every bathroom deserves this instant forced air ceiling heater. Draft-free heated air is directed through honeycomb diffusers in the stylish bright chrome grille. 4840 BTU. Quiet fan. Inexpensive.



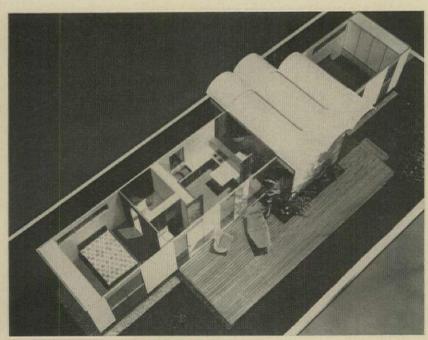


Trade Wind DIVISION OF ROBBINS & MYERS, INC. 7755 Paramount Place, Pico Rivera, Calif. Dept. HH.



SCALE MODEL of mobile home has panelized look. Pull-out sections of wall and roof vaults enlarge living room. Model is one-tenth size.

# These new designs point up new possibilities in the idea of an all-factory-built house



COMPACT PLAN has (I to r) bedroom, bath, kitchen, living room, and second bedroom.

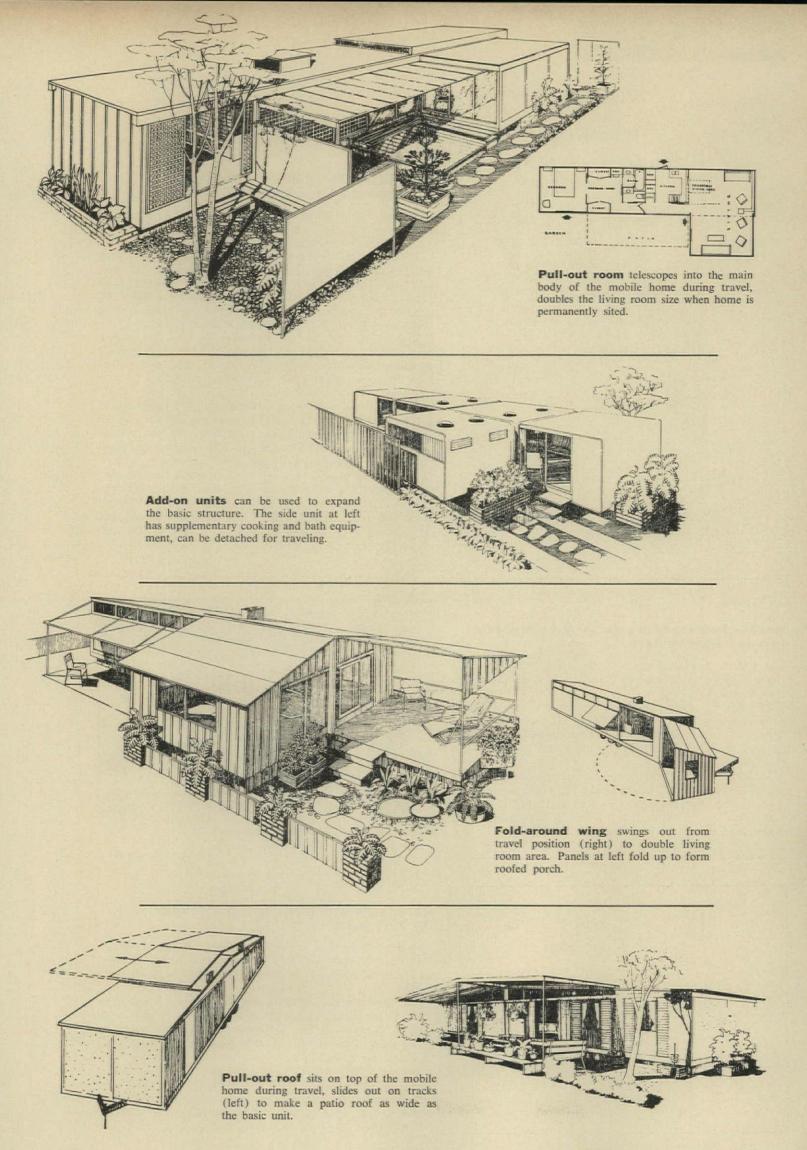
The scale model on this page and the designs opposite were developed by Kaiser Aluminum & Chemical Corp for the mobile-home industry.

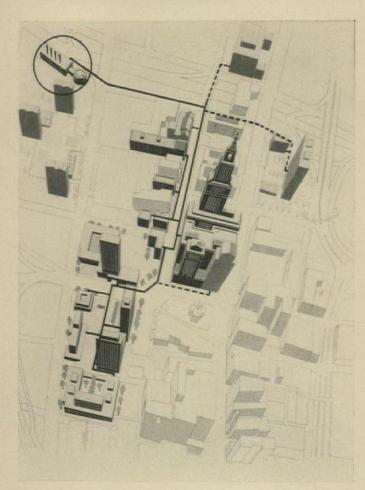
But, like many mobile-home ideas (like cutting costs by completing the home in a plant), they answer many problems for industrialized home-building in general (H&H, Aug '58) and for the all-factory-built house in particular (H&H, Dec '60, Jan '61). For instance:

1. They show how the all-factory-built house can be imaginatively designed despite certain technical limitations (eg, sections can be no more than 10' wide for over-the-road travel). Says Franklin K. Hershey, manager of Kaiser's industrial design department: "As large mobile homes are seldom moved, our design approach has been to develop lines architecturally, for a residence, rather than for movement."

2. They show how the all-factory-built house can use modern materials. The Kaiser model depicts the use of prepainted aluminum panels and preformed aluminum roof vaults with insulating cores.

3. They show how the all-factory-built house can break out of the rectangle to which it has almost always been confined (drawings, opposite).





## Here is the first public-utility system for cooling a large city area

From the plant in the drawing at left, Hartford (Conn.) Gas Co will pipe chilled water to all buildings in Constitution Plaza, a new urban redevelopment project.

The area-wide cooling system, first of its kind, will start operating in 1962 with a capacity of 6,500 tons of refrigeration and 150,000 lbs of steam for heating. But by 1964 capacity will be increased to 10,000 tons of cooling and 225,000 lbs of steam to supply other nearby areas (dotted lines), says Hartford Gas President William T. Jebb.

Jebb points out that utility-supplied heating and cooling will cut costs for builders and owners of buildings because it eliminates 1) boilers, 2) boiler rooms, 3) chillers, 4) chimneys, 5) cooling towers, 6) maintenance costs, and 7) payrolls (for licensed operators).

Hartford Gas will benefit not only from added revenue (estimated at \$1 to \$1½ million a year) but also because the gas-operated chilling equipment will level out the present difference in summer-to-winter gas consumption—"a problem that has plagued utilities for years," says Jebb.

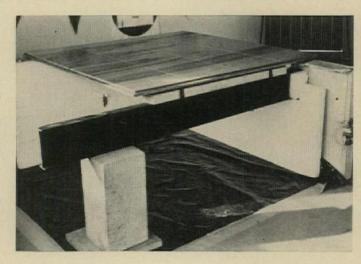
Chilling equipment, supplied by Carrier Air Conditioning Co, consists of a steam-driven, 3,000-ton centrifugal refrigeration machine, two 1,500-ton centrifugals, and a 500-ton absorption unit. Chilled water (41F) will be metered and delivered to users through 7,200' of 24" underground supply and return lines. Steam lines will be 12" in diameter.

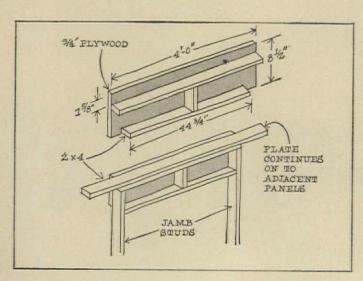
## Here is how steel beams solved a problem in a new floor system

The system, developed by South Bend Builder Andy Place (H&H April '60), uses 4'x8' laminated prefinished floor panels over beams 4' oc.

Problem: In crawl-space houses—where crawl space is used as a heating-system plenum chamber—winter-to-summer humidity changes in the crawl space caused dimensional changes in wood floor beams and opened joints between floor panels.

Solution: Place switched to light 6" steel I-beams like the one in the sales display at right. The t&g floor panels (11/8" 2.4.1 plywood with oak veneer on top) are nailed to flat 2x4 nailers which are attached to the beams with metal clips. Added cost of steel beams: less than \$40 a house.





# Here is a prebuilt loadbearing header for 7'6" walls

The new header, first shown at the Small Homes Council's 16th Annual Short Course (Jan 18 & 19), is only 8½" high, so it can be used over standard-height door (and window) openings.

The header was designed to support 24' trusses with a 50 lb load, 30' trusses with a 40 lb load, and 40' trusses with a 30 lb load. Under test, it did not fail until the load was about three times normal requirements (at that point, the plywood skin delaminated).

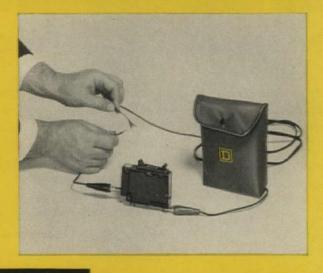
Framed with 2x4s, the header has a 34" plywood skin—glued on with casein and nailed with 8d nails. The skin extends beyond the frame at the top and sides and is nailed to a continuous 2x4 plate (used with the SHC panel system) and to the two jamb studs flanking the opening. /END

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ABOVE • Push-in terminals, a Square D exclusive, provide fast, positive connections. A standard time-saving feature on all QO TANDEM breakers. Notice how the QO TANDEM breaker shown above combines 2 full-size breakers in 1 space-saving unit.

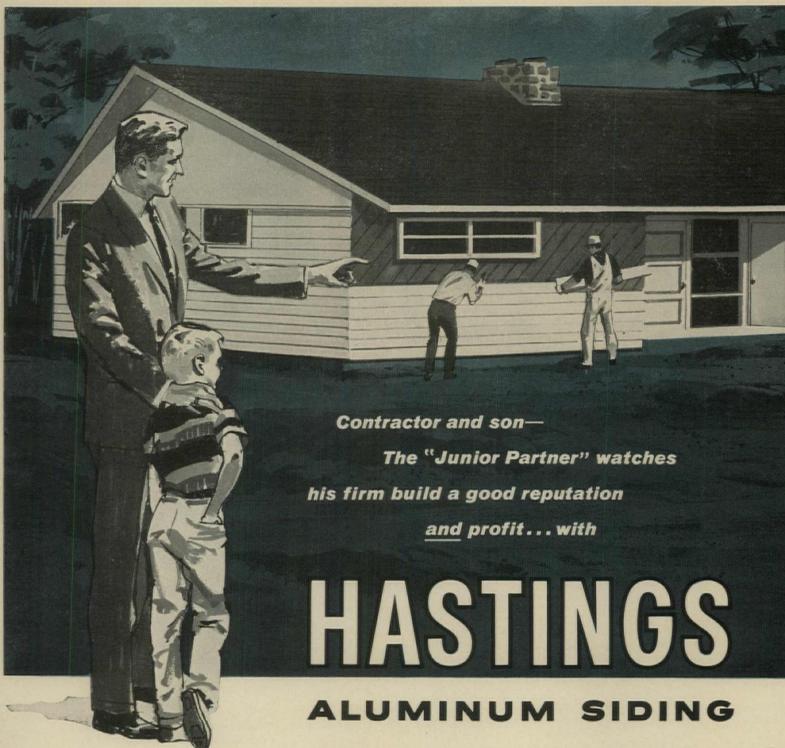
AT LEFT • The frayed cord test shows how QO breakers give positive protection against "flash" shorts. Conventional overcurrent protectors provide overload and short circuit protection for branch wiring, but don't open fast enough to protect smaller extensions from such shorts.

You put a <u>proven</u> selling feature to work for you when you install **QO** in your homes. Make a demonstration date with your Square D Field Engineer...or let us send you the complete story. Write Square D Company, Mercer Road, Lexington, Kentucky.



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is much less waste of material. There is no painting time — no weather delay — and the Hastings super-tough, pure Vinyl finish carries a ten-year factory warranty against chipping, cracking, blistering or peeling.

Hastings Aluminum Siding is an accepted, nationally advertised product.

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CAULKING GUN serves to spread a thin line of plastic mortar on the block. Pot life allows ample time; the mortar sets in 24 hours.

#### New plastic mortar may cut block wall cost up to 50%

So reports Raybestos-Manhattan Corp, makers of the new Threadline mortar. The company also claims—on the basis of laboratory and job tests—that a wall made with the mortar will be many times stronger than a conventional masonry wall.

The mortar—a compound of two synthetic resins, an elastomer, and portland cement—comes complete in a single package (no cement, lime, sand or water is added). It is mixed in a bucket, applied with an ordinary caulking gun. It sets up in 24 hours, cures in 72 hours.

Laboratory tests are being made by Thompson & Lichtner, engineering consultant, with these results so far:

1. In bond strength tests, sand-lime mortar joints failed at 11 psi. With Threadline, the lock failed at 80 psi; the joint did not fail. In compression, sand-lime mortar joint failed at 2,460 psi; Threadline joints exceeded the 50,000-psi limit of the test equipment.

2. In freeze-thaw tests with light-aggregate block and sand-concrete brick, the new mortar was still sound after 100 cycles. Both the conventional mortar and the block and brick samples failed at 40 to 50 cycles.

The manufacturer recommends that all block faces be ground (at  $3\phi$  to  $5\phi$  premium per block); edge and end faces must be exactly perpendicular so walls can be put up without leveling each course. Also, the thin (1/16'' to 1/8'') joint does not allow the variance possible with sand-lime mortar. To

compensate for the thickness of the regular mortar joints, and to maintain the module, Raybestos suggests ordering block ground to an exact 8".

Threadline will work as well with brick as with block, according to Raybestos. But because of the esthetic, modular, and labor problems involved, it is now being promoted primarily for use with block and with tile facing materials.

Retail price for Threadline has been set at \$10.17 a gallon (enough to lay 100 blocks) and is subject to the usual trade discounts. Raybestos says this higher materials cost is offset by time and labor savings: 1) Block can be laid-up in half the time required for conventional masonry. 2) Clean-up is cut—no pointing, masonry cleaning, or pick-up is needed.

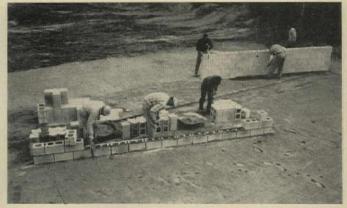
3) Work-time is extended—the new mortar can be used at temperatures as low as 22F. Warehousing is also reduced—a gallon of Threadline equals one bag of cement, a half bag of lime, 28 shovels of sand, five gallons of water.

Mason-Contractor Robert Pissander of Ansonia, Conn., who has used Threadline on test and commercial jobs, says: "We're enthused. Our men found it easy to work with. We're bidding jobs at 30% less than we have to ask with conventional mortar. All the masons I've talked to—even big union contractors—want to know where they can get it."

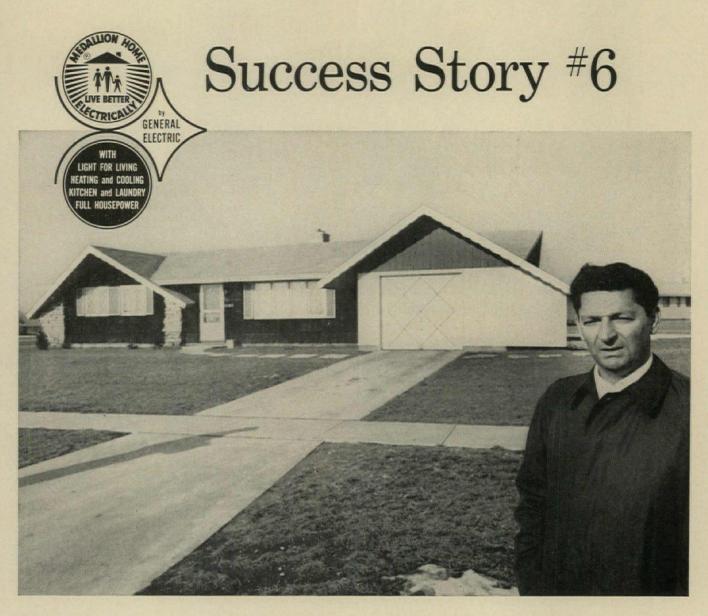
Raybestos-Manhattan, Bridgeport, Conn. For details, check No. 3 on coupon, p 244



HIGH STRENGTH is shown by tilted wall. Plastic bond resists shear load where conventional mortar, foreground, has failed at the joints.



FAST LAY-UP is shown by five-course Threadline wall, rear, being finished as second course is started on conventional wall.



#### "Sales of Medallion Homes have been tremendous",

says Mr. Alfred Campanelli, a builder of Weathersfield, Schaumburg, Illinois. Weathersfield is a Medallion project of 3,000 Modern Colonial units, priced from \$16,000 to \$22,000.

"The single feature that has helped us most with sales is the General Electric kitchen included with the price. Buyers and prospects say it's 'terrific'. In fact, one housewife, who calls it a 'woman's dream' is responsible for the sale of five other houses to friends.

"Another important selling feature is Full House-

power. Homebuyers like having all the electrical capacity they'll ever need. We're glad that we're building Medallion Homes to the award standards of the Commonwealth Edison Company."

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Fasco was first with a 21" depth hood.

Fasco was first with the slim-trim styling that added fashion and function to kitchen ventilation.

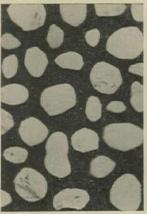
In another progressive step, Fasco offers certified performance on all ducted hoods in accordance with FHA and local codes. So check Fasco before you buy. It will pay you now and in the future.

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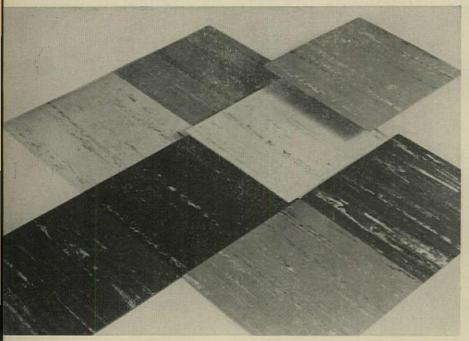


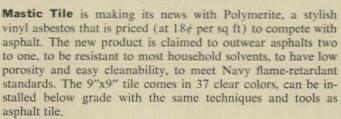


Robbins Floor Products has a 1961 line headed by two new styles priced at \$4.50 per sq ft. Grande Antique (left) is a hand-made tile in free design of combinations of opaque and translucent colors. It comes in 12"x12" and 36"x36" tiles. Italia (next right) combines agate-like translucents with a base resembling gray mortar to stimulate Fulget. It is also priced at \$4.50 to \$5. In the center above is Celebrity, a vinyl chip pattern with broad style applications. Celebrity comes in 9"x9", 12"x12" tiles and 36¾"x36¾" slabs. It is priced at about \$1.10 a sq ft. Pompeiian Pavé (right above) has random "marble" chips in a non-directional grout. Tiles are 12"x12", \$2.50 a sq ft.

Robbins Floor Products, Tuscumbia, Ala. For details, check No. 4 on coupon, p 244

#### New floorings range from 18¢ to \$4.50 a sq ft





Ruberoid Co, New York City. For details, check No. 5 on coupon, p 244



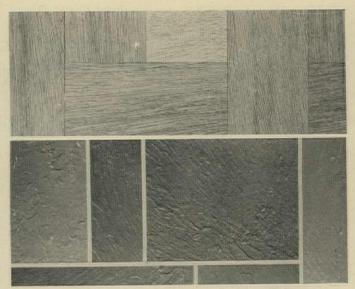
**Azrock** is introducing Vina-Lux Premiere at the winter markets. This new vinyl-asbestos tile is distinguished by the fleecy cloud effect distributed over the surface and throughout the tile. Background tones are tinted white or metallic, mottlings come in tones of gray, pink, beige, green, turquoise, and gold. Tiles come in regular 9"x9" size in 1/16" thickness at standard vinyl asbestos prices. Metallic background tints tend to run slightly higher.

Uvalde Rock Asphalt, San Antonio. For details, check No. 6 on coupon, p 244



Armstrong Cork now matches its successful Tessera flooring with Tesserette countertopping, similarly patterned in smaller scale. Also big news is a whole new linoleum line called Elegante, inlaid with pure vinyl. Elegante comes in four designs and eight patterns: geometrics, flagstones, metallics, ceramics. Aurora Vinyl Corlon, the lowest priced Armstrong sheet goods made with a Hydrocord back, meets linoleum prices. And for the low-price market, Vinyl Accolon is a new rotogravure-printed vinyl sheet goods.

Armstrong Cork, Lancaster, Pa. For details, check No. 7 on coupon, p 244



Amtico is showing new textured surfaces in its 1961 line. Two of these are shown above. At the top are Wood Vinyls, which reproduce the grain and surface of teak, oak, cherry, walnut, etc in planks 2", 4", or 6" wide, 36" long, or in 9", 12", or 36" parquet squares. Flagstone (bottom) reproduces the texture of slate in sections and colors that look like cut flagstone. Also new (but not shown): Travertine, with voids like Italian stone, and Colors Unlimited, a wide range of pure decorator colors.

American Biltrite Rubber, Trenton, N.J. For details, check No. 8 on coupon, p 244





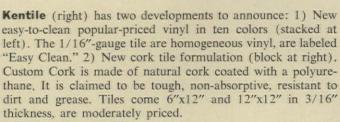




**Goodyear** is introducing a wide range of new vinyl floorings for 1961. From left to right above: Mosaic, a swirled pattern of small tile; Capella, a Roman marble effect in five tones; Galaxie, a blend of silver glitter with vinyl chips; Gold Spun, solid vinyl with a gold overmesh. All come in 9"x9" tile, the first three also in 6' roll goods, and Mosaic, Capella, and Gold Spun in a matching countertopping.

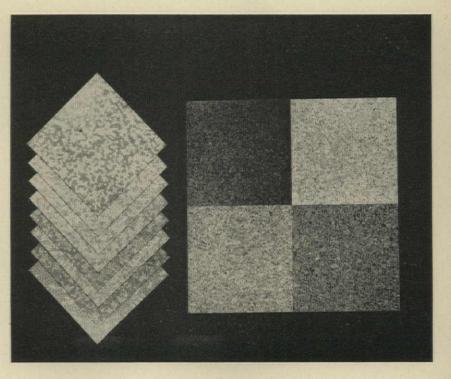
Goodyear, Akron.

For details, check No. 9 on coupon, p 244

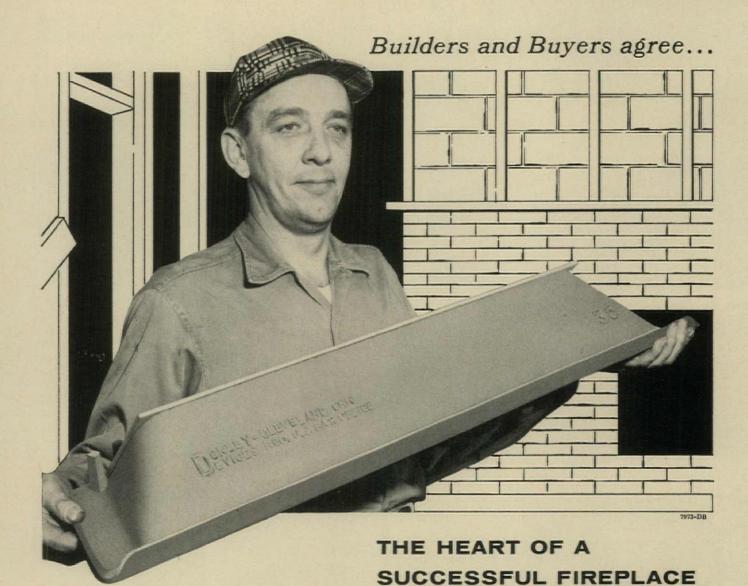


Kentile Inc, Brooklyn.

For details, check No. 10 on coupon, p 244



New Products continued on p 216



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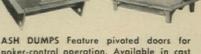
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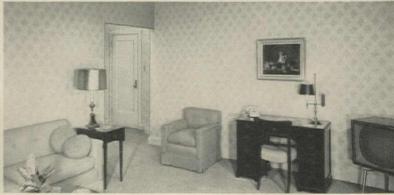
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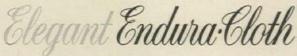
M & M Club, Merchandise Mart, Chicago

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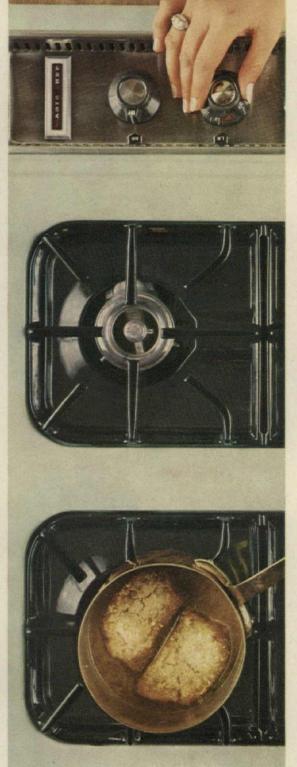
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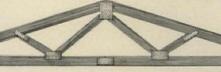
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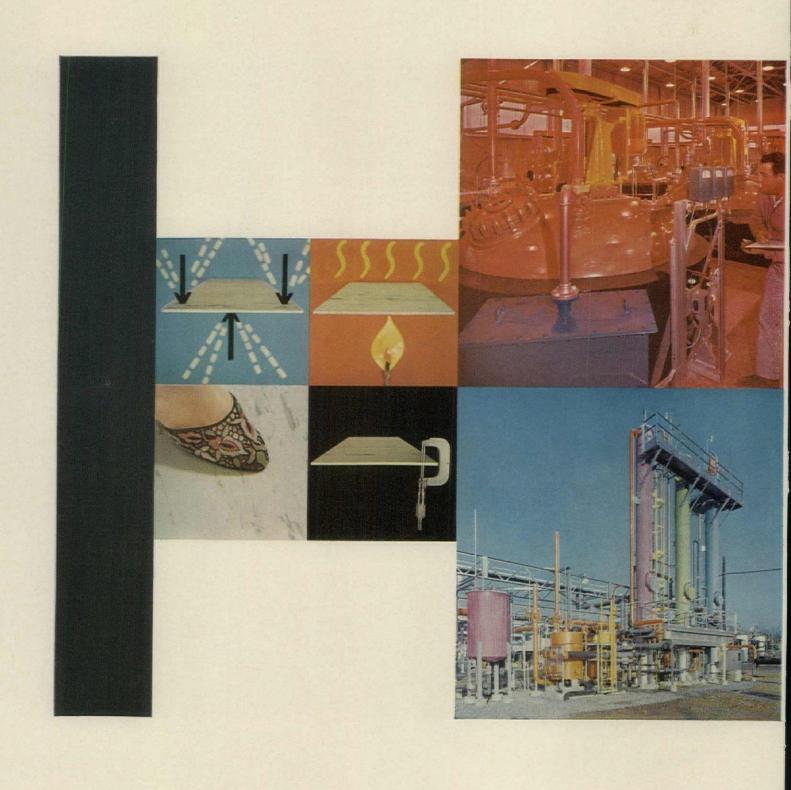
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## Announcing a breakthrough that will affect the entire building



#### world! Matico Polymerite™ Floor Tile... A New Concept in Flooring



#### GREASE RESISTANT...STAIN RESISTANT...FLAME RETARDANT ...UP TO TWICE THE WEAR...ALL AT A REMARKABLY LOW COST!

From an intensive program of research and development, Matico now proceeds to change all existing concepts of flooring with an amazing new floor tile that adds extra value at no extra cost to the homes you build. Matico Polymerite Floor Tile has the characteristics of the finest floor tile you use—all at a remarkably low cost!

This astonishingly low-cost, easy-maintenance tile is grease-resistant, stain-resistant, flame-retardant—has optimum flexibility, maximum uniformity, gauge control and appears in 32 vibrantly alive colors, every hue of which is under the most rigid technological control.

#### POWERFUL PROMOTION TO BACK NEW MATICO TILE

A major advertising and promotion campaign is being launched to create consumer preference for the houses you build with Matico Polymerite Floor Tile. Exquisite 4-color advertisements in Life Magazine—exciting advertising in Good Housekeeping—The Good Housekeeping Seal of Approval—plus intensive local advertising and promotion right in your local area—all are designed to help Matico Tile help you sell more homes—and sell them faster.

Now the sky is the limit on flooring at an astonishingly ground-level cost. Matico Polymerite Floor Tile finally opens the door to superlative flooring in all your building plans. Be sure to get the specifications on this dramatic new Matico's Polymerite Floor Tile right away. Your Matico representative will be happy to furnish them. Or, write today.



\*Matico Polymerite Tile conforms to Fed. Spec. SS-T-306b for Asphalt Tile and SS-T-307, Grease Resistant, Asphalt Tile; and the flame retardant qualities of Military Specification MIL-T-18830 (Ships).





Fashionable GOLDEN THREAD

ANNOUNCING

DRAMATIC NEW

CEILING TILE PATTERNS

New Nu-Wood Acoustical and Decorator Tiles put new verve in interior decorating schemes . . . add a new dimension to home comfort with sound conditioning.

NU-WOOD® ACOUSTICAL AND DECORATOR TILES

Produced by Wood Conversion Company, St. Paul, Minn.

Golden Web GOSSAMER

Intriguing TEMPRA

Formal FISSURED

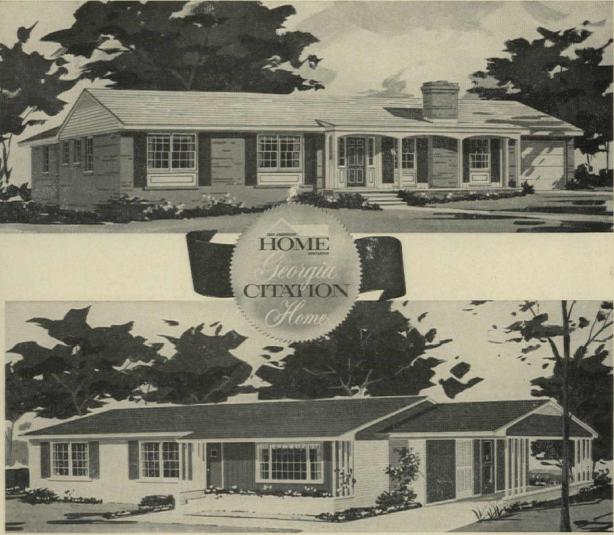
#### GEORGIA'S BEAUTIFUL

## award-winning homes

#### feature Bird Wind Seal Roofs



George E. Perkins, president Perkins Construction Co., Augusta, Ga., is a registered architect whose houses recently were given American Home's "Best Home for the Money" award by a panel of distinguished judges.



"WE USE NOTHING BUT THE BEST IN MATERIALS and top brand names," says Perkins, "because the public recognizes them and associates them with quality ... and because we can depend on the manufacturer to stand behind the products. I like Bird Wind Seal Shingles because

they are top quality and provide such a nice selection of colors."

The Perkins Construction Company expects to build 220 houses per year in a territory where the mighty Bird Wind Seal Shingle is a great favorite with builders of fine homes.



powerful seals spaced for drainage

advertised to your customers in

The Saturday Evening Post

apart or turning

• proved to hold in 125 MPH hurricanes

lay fast in the usual way - no pulling

long lasting double-surfaced construction

BIRD & SON, INC.

E. Walpole, Mass. . Chicago, Ill. . Shreveport, La. . Charleston, S. C.

## sign language



This small paper sign, printed on both sides and spot-gummed for application to windows and other glazed areas, does multiple duty. It reminds workmen and viewers of the glazing. It tells a story of quality paint above your name. Most important, it carries the obvious implication that you believe in quality. Can you think of a simpler and better way to tell your quality story?

If you would like to know more about the A-M quality story and how it can help identify you with quality, direct your inquiry to—

American-Marietta Company
101 East Ontario Street • Chicago 11, Illinois



FINISHED WALL shows clean ½"-deep edge of ViroGlas panels. Joints between panels, here visible, will disappear when panels are grouted.

#### This new wall tile installs in sheets to fit tub, shower, or fixture wall

The 8½" square plastic tile are shop-assembled in 3x7- and 4x7-tile sheets, backed with ¾s" gypsumboard and self-edged to make ½" thick panels. They are glued (or glue-nailed) to bare studs or installed drywall. Only four pieces are needed to finish a standard 5′ tub alcove. Panels are strong and rigid but easily worked to admit plumbing and fixtures. Installation can be made by one man in two hours. Typical package price for a tub enclosure is \$37.50 to \$45, depending on tile color. Ridge Plastics, Elyria, Ohio.

For details, check No. 16 on coupon, p 244



SPECIAL CAULK-GROUT retains its elasticity and whiteness. Strong flexible joints in panels stand up to rough handling in transit.



BOTTOM BACK PANEL goes in first. Waterproof tape seals edge.



SECOND PANEL is 3x7 tiles, finishes wall to 5' height above tub.



HOLES ARE DRILLED in grout line for plated nails if wall is not true.



NAIL IS HIDDEN with white grout to preserve full tiled appearance.

New Products continued on p 219

#### Rev Satin

An exceptional latex formulation for imparting a rich, low-sheen finish to walls, ceilings and woodwork. Application is extremely easy with brush, roller or spray. It dries fast with no painty odor and is completely washable. One coat covers most surfaces. 22 high-fashion colors and white, plus custom colors.



#### Artwall

This 100% alkyd flat finish has exceptional leveling properties which impart an unusually smooth and glarefree finish to interior walls and woodwork. One coat is generally sufficient on sealed surfaces. Fully washable. Suitable for brush, roller or spray. 18 colors and white.





Featured items in
A-M's complete line
of fine
interior finishes

#### Intex

A versatile interior and exterior wood finish which stains and seals in one operation. Lends quality appearance to inexpensive woods and seals the surface for protection. Traditional and modern wood color finishes.



#### Liquid Granite

Here is a super varnish for all interior work. It incorporates maximum hardness with crystal clarity. Recommended for the finest furniture and panelling, and for floors with heavy traffic. Available in Hi-Gloss or Satin Finish.





American-Marietta Company
101 East Ontario Street • Chicago 11, Illinois

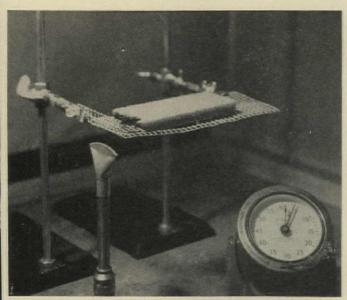
## the right flair steps out front



PLYWALL PRODUCTS COMPANY, INC.

Fort Wayne, Indiana • Corona, California

A subsidiary of Evans Products Company



**FLAME STOPS** in less than five seconds when burner is removed from new Styrofoam. ASTM standard allows 30-second flame.

#### Dow has three new foams

The three: flame-resistant Styrofoam Insulation Board; Thurane, a rigid urethane-foam board; and Tyrilfoam, a new buoyancy foam.

The new Styrofoam board will be used in Scorbord; will replace Styrofoam 33, Dow's previous flame-resistant board; and will supplement Styrofoam 22 in all construction uses. The new board, identified by its deeper blue color, is priced the same as Styrofoam 22.

Thurane board has two main virtues: low thermal conductivity (K=0.16 at 70F), equalling Styrofoam's performance in half the thickness, and high heat distortion, which allows its use on hot pipes, etc. It is also resistant to gasoline and other solvents. For equal insulation, Thurane costs 20% more than the new Styrofoam.

Tyrilfoam matches Styrofoam's buoyancy (55 lb per cu ft) but is more resistant to impact and to spilled gasoline.

Dow Chemical, Midland, Mich.

For details, check No. 17 on coupon, p 244



DIRECT HOT MOPPING for built-up roofing is possible with new Thurane. Rigid board will carry weight of wheelbarrow without indenting.

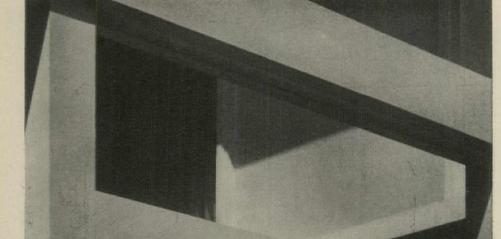
New Products continued on p 222

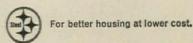
the right flair steps out front



PLYWALL PRODUCTS CO., INC. Fort Wayne, Indiana Corona, California

Distinctive! Economical!
Plywall's High-Pressure Laminex doors bring new flair to interiors. Poly-Clad protected wood-grain finishes add more beauty, more value—without extra cost. Prefinished Rock Maple or English Walnut. Complete selection of heights, widths and thicknesses.





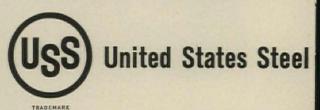
IN THE WORKS AT U.S. STEEL RESEARCH:

## A nonwarping steel door solid...tight...trouble-free

How many times have you been called back to adjust a door in the homes you've built? It's costly, time-consuming and a nuisance. It's one of the problems U. S. Steel is trying to solve for you right now.

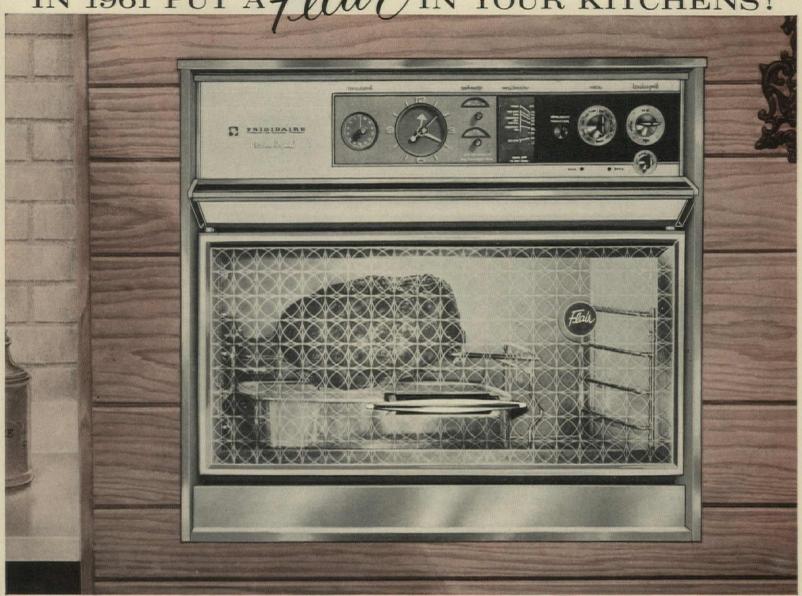
Specialists at our Research Center are working on an exterior residential door far superior to any you've ever seen. It's made of steel sheets with formed edges and its interior is filled with special insulating materials. The door is rimmed with a neoprene strip and set in a steel frame. It won't swell or warp, won't jam in the summer, won't let in cold air in the winter. You can be sure you won't be called back on this door! It will decrease your installation costs, too. Because the door will come complete with a frame, it can be hung in half an hour—faster than older installation methods.

U. S. Steel knows you have other home-building problems—and we're hard at work on them. Our research team works closely with the NAHB Research Institute so we'll know just what steel products you need to build better houses for less money.



Front entrance, NAHB Research House at Michigan State University.

IN 1961 PUT A HOW IN YOUR KITCHENS!



FEATURE DAZZLING FRIGIDAIRE Hour WALL OVENS

Stunning, daring, new-fashioned oven-cooking . . . only from Frigidaire

Here's dazzling, daring, new-fashioned oven-cooking . . . available only in Flair, and only from Frigidaire! The fascinating Flair Wall Oven looks like a picture in your kitchens-cooks like the finest Frigidaire oven ever built. The Custom Imperial offers all the top-of-the-line cooking features, including automatic Cook-Master, Meat Tender Control and Spatter-Free Broiler Grill. Lower cost DeLuxe model also offers many exclusive Frigidaire features. Both have exclusive Glide-Up Glass Door. Fit standard 33" cabinets. Just look at Frigidaire Flair ... and imagine what a lift "Kitchens with a Flair" can give your home sales! Frigidaire Division of General Motors, Dayton 1, Ohio.

#### New Frigidaire Porcelain Enamel Cooking Tops, too!

The low-priced Frigidaire Super cooking top for 24" cabinets is now available with easy-to-clean, long-lasting porcelain enamel top. Four Radiantube Cooking Units, infinite heat controls, chrome trim rings around units. In 5 Kitchen Rainbow Colors. A similar model in Satin Chrome. Easy "snap-in" installation.



FRIGIDAIRE FACTORY-TRAINED SERVICE DEALERS EVERYWHERE





If you prefer a Wall Oven for 24" cabinet





Choose one of the other good-lookin', good cookin'-and easycleaning-Frigidaire models. Drop-Leaf Door holds heaviest roasts, lowers all the way down to clean. French Doors take only 121/4" of space when open. Pull 'N Clean lower ovens. 5 colors plus Satin Chrome.

can see herself in your kitchen, she can see herself in your home!

#### NEW DUD-FAST MODEL S-763



# Powered to drive heavy staples up to 2" long

This new S-763 drives four 2" staples in less time than it takes to pound one nail.

Speeds, simplifies and cuts costs on bigger nailing jobs in the home building field.

Drives 1½" to 2", 16-gauge staples that outhold equivalent nails. Operates at 60 to 100 psi. Lightweight, easily portable, one-hand operation. Built-in safety features prevents accidental firing.

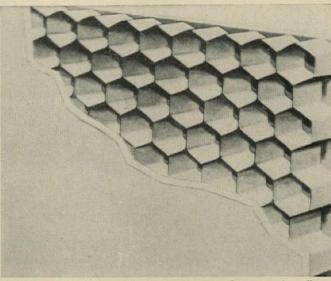
Write today for the complete story on this new S-763 Staple Nailer.

FASTENER CORPORATION, 3706-10 River Road, Franklin Park, Illinois



#### **New products**

start on p 202



PANEL CORE is phenolic-impregnated paper; faces are drywall.

#### New panels have honeycomb core

Two 3/8" gypsum-board faces are bonded to a paper-phenolic honeycomb to make this latest studiess thin-wall partition.

Hof-Kor panels are claimed to have good fire-resisting and sound-insulating qualities, to cost less than competing systems, to be ten times as strong as need be. Panels are  $2\frac{1}{2}$ " thick, 2' or 4'x8', weigh 100 lb (4'x8'). They slide in place over nominal 2" floor and ceiling plates. Openings are easily cut with carpenters' tools. Carload cost: about  $25\frac{1}{6}$  a sq ft.

Hoffman Industries, Batavia, Ill.

For details, check No. 18 on coupon, p 244



PANELS ARE FASTENED at head and sole plates. Joints are taped.

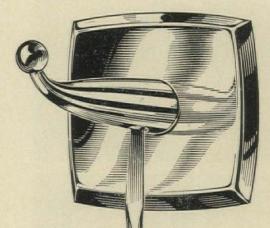


**SAW CUTS** for wiring chases or other openings are easily made.



METAL CHANNEL forms splines between panels, chase for wiring.

New Products continued on p 224



concealed mounting...but you can't hide the quality

## HALL-MACK®

#### ARISTOCROME

#### bathroom accessories

Chances are you would never know how the mounting of a Hall-Mack accessory is concealed, unless you watched the man install it. With Hall-Mack Aristocrome quality it's a different story, because some of it you can even see and feel. Surface quality

is obvious from the highly polished, heavily chromed finish that's good for a lifetime. What you can't see is the solid brass beneath the chrome . . . the very best base known for fine chromium plate.

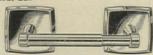
When you buy, build or remodel, make sure your bathroom accessories are Aristocrome by Hall-Mack . . . the finest obtainable anywhere.

HH 361





round or hexagonal towel bar



paper holder with square or round wall flanges

tumbler holder with removable tray

#### HALL-MACK COMPANY

division of Textron Inc.

1380 W. Washington Blvd., Los Angeles 7, Calif.

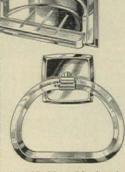
☐ Please send your free color booklet on bathroom planning.

Name\_

PLEASE PRINT

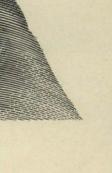
Address

\_State. City\_

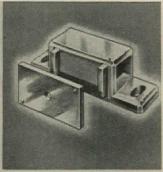


towel holder with clear lucite ring

Sold by leading plumbing, tile and hardware dealers everywhere









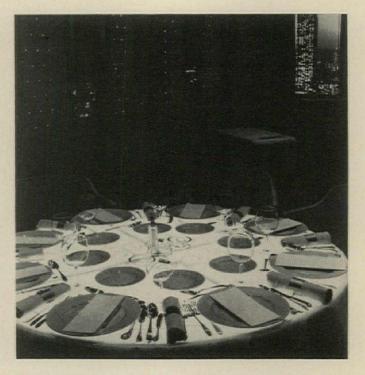


#### Here are four new magnetic catches

They serve (left to right, top to bottom) in brass to catch large doors with automatic closers; in polyethylene to catch cabinet and furniture doors; in hardware finishes to stop and hold large doors; inset in stile to catch sliding doors. Lifetime magnets are Alnico or ceramic. Mountings are designed to simplify installation. The door stop comes with or without pedestal; the sliding door catch in two strengths.

Engineered Products, Flint, Mich.

For details, check No. 19 on coupon, p 244



#### Panel light is now available for custom use

Among the uses: in table tops (above), walls, ceilings, and room dividers. Called Rayescent lamps, panels—with an electrical conductive film and a phosphor coating—glow when electricity is applied. Standard sizes run from 2"x2" to 12"x12" but lamps can be made in special sizes and shapes to 24" long. Panels may be printed with any design. Standard frequency: 60 cps; standard voltages: 120, 240, 350, 460, 600.

Westinghouse, Bloomfield, N.J.

For details, check No. 20 on coupon, p 244

continued on p 226



## AristO Kraft

## the line that offers more for better kitchen planning!

The AristOKraft line of wood cabinets is fast-growing because it offers the practical, economical solution to low-cost custom-designed kitchens. Planning attractive kitchen installations for homes and apartments is easy with a wide flexibility of arrangement that permits full use of available space. Sturdily constructed and precision engineered, in a choice of warm, rich cinnamon or exciting fruitwood factory finishes.

Here is the longest line in its price bracket . . . 54 different size wall cabinets — from 12 to 96 inches wide . . . and 27 different size base cabinets — from 12 to 96 inches wide. A full range of drawer units, base end shelves, corner cabinets, specialty units, and even bathroom cabinets . . . all the necessary units for any installation!



from the heart of
INDIANA'S TRADITIONALLY
FAMED WOODWORKING
AREA...

Provide real value for customers . . . enjoy the extra profits that the AristOKraft line will give you . . . send for complete information and prices TODAY!

UNITED

CORPORATION

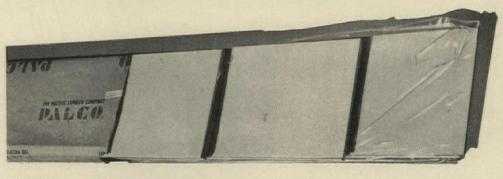
Jasper, Indiana

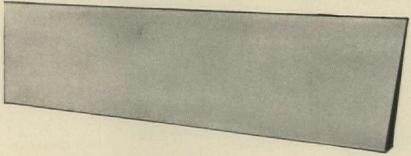


## Builders! Save up to 40% on your painting costs:

## PAINT-PRIMED REDWOOD AND DOUGLAS FIR LUMBER

This new PALCO Architectural Quality product saves you time, paint and labor costs — and gives you a superior finish job! Palcote paint-primed lumber is machine-coated at the mill with a durable exterior paint, and back sealed with Woodlife water repellent...also packaged in heavy plasticized paper for maximum protection. Available in redwood sidings, finish, and Douglas fir lumber...Order the finest, PALCO — the standard of comparison since 1869







FREE SAMPLE. Palcote brochure contains actual sample of machine-painted redwood—plus technical sheet with cost saving data.

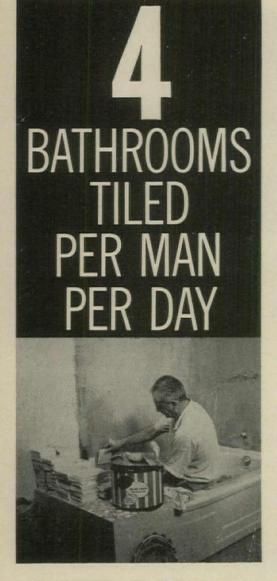
Write today...



THE PACIFIC LUMBER COMPANY

100 Bush St., San Francisco 4, Calif. 35 E. Wacker Dr., Chicago 1, III. 2185 Huntington Dr., San Marino 9, Calif.

#### INCREDIBLE BUT TRUE!



## MIRACLE CERAMIC TILE ADHESIVE

BEST FOR PRODUCTION WORK!

Right now in Levittown, as well as in developments all over the nation, one mechanic is installing tile in four bathrooms in just one day. Certainly it takes a special material to do the job. That's Miracle Ceramic Tile Adhesive. Truly the mechanic's mastic. Made by Miracle Adhesives Corporation, who introduced the 'thinset' adhesive method of setting clay tile more than 20 years ago, and has been the pacemaker to progress in setting tile ever since. And, Miracle has engineered its Ceramic Tile Adhesive in accordance with the mechanic's own specifications. All over the country tile mechanics have told us what they wanted. In economy, in coverage, in long open time and in real waterproofness. All are combined in Miracle's Ceramic Tile Adhesive, finest and most economical tile adhesive in Miracle's entire 20 year history. Really long lasting, too! Try it. You'll be delighted with the way it speeds installations

<u>.</u>

to achieve important savings.

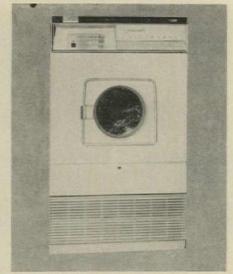
Send for latest edition of valuable, authoritative handbook "Adhesive Products for 'Thin-Set' Genuine Clay Tile." No obligation.

## MIRACLE ADHESIVES CORPORATION

250 Pettit Avenue, Bellmore, L. I., N.Y.

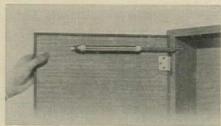
#### **New products**

start on p 202



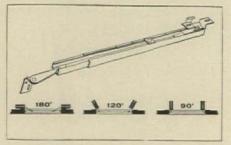
Coin-operated drycleaner for apartment laundries (or coin-op service centers) are new from Whirlpool. Each unit cleans 8 lb of clothes in 50 minutes for \$1.50 in quarters. Filtered solvent handles 12 loads, then locks out until serviced, a tenminute operation. Unit weighs 1,000 lb, is 33" wide, 48" deep, 58½" high. Machine must be bolted down, needs venting. Power is 3-wire, 120/240-v, 30 amp.

Whirlpool Corp, St Joseph, Mich. For details, check No. 21 on coupon, p 244



Cabinet door closer gives positive closure without friction catches or magnetic pulls, will handle doors up to 6 sq ft. Inconspicuous slim tube installs with only three screws. It will hold door open at 110° angle, will close quickly and firmly at a finger touch. Brushed aluminum or bronze, with white nylon caps and plated fittings.

Newell Mfg Co, Lowell, Mich. For details, check No. 22 on coupon, p 244



**Bi-fold hardware** can be installed to give 90°, 120°, or 180° opening depending on where the pivot arm is installed. One set fits two- or four-door installations of 11/8"- or 13/8"-thick doors in opening 2' to 6' wide. No track is needed. Pivot arm fastens to door, center bracket installs on head stop. As doors open or close, aluminum inner and outer channels telescope.

L. E. Johnson Products, Elkhart, Ind. For details, check No. 23 on coupon, p 244

New Products continued on p 228

#### NEW salesmaker from PHILCO



OF EXTRA COST WITH THE PURCHASE OF A

PHILCO.

ELECTRIC RANGE

Beautiful FREE Colonial spice rack with 24 spice-filled jars make an impressive sales clincher! And she'll love the Philco Miss America

Miss America range, named in honor of Miss Nancy Anne Fleming. Exclusive Tilt-Top, and the many other Philco deluxe features make it a dream to clean . . . a dream to use!



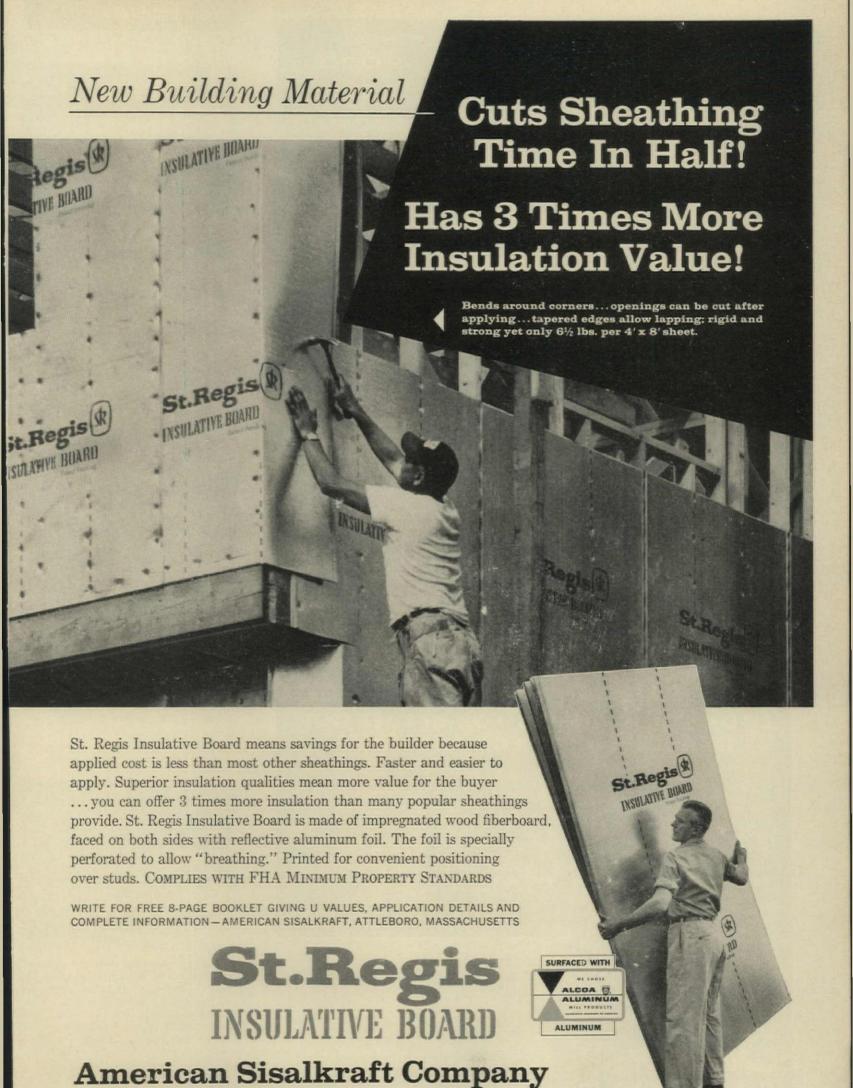
PHILCO 30SS16

See your Philo Distributor for full information on this "Spice of Life" Philo Range promotion.

FOR THE MOST ADVANCED FEATURES
IN ELECTRIC RANGES YOU NEED

PHILEO

Famous for Quality the World Over



DIVISION OF ST. REGIS PAPER COMPANY



## perfect Kitchen planning center . . . ideal for den or bedrooms, too!

Unique, so functional and budget-priced . . . just perfect for the planning center in the "perfect" kitchen! Ideal, too, for dens or bedrooms where space can sometimes be at a premium. The entire unit is only as thick as a wall with an attractive fruitwood finished door folding open to serve as a writing surface and to reveal stationary pockets, seven shelves and two drawers. Magnetic catches hold the door snugly closed. Sturdy, heavy-gauge steel surfaces are rust-pruf treated and finished in baked enamel Sandelwood brown.



An accessory wood frame is available for those who wish to mount the desk on wall surfaces instead of building it in. Rough-in dimensions—30" wide, 16" high.



#### **New products**

start on p 202



First GE hoods have just been announced. Two top models (deluxe, custom) have eye-level controls for surface units, two-speed fan, two washable filters, built-in damper, changeable front panels. Standard model has axial-flow fan, single washable filter, optional damper. All come in coppertone or aluminum.

General Electric, Louisville.

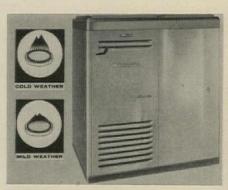
For details, check No. 24 on coupon, p 244



New hood styling —called Fashionline —is designed to go with either traditional or contemporary styling. Standardized mountings cut installation time. Modified venturi and mixed-flow power pack insure good draft. Deluxe models have enclosed lights and two-speed fan. Rated to FHA and HVI requirements.

Emerson-Pryne, St Louis.

For details, check No. 25 on coupon, p 244



Modulated heating is made possible by burner flame that adjusts automatically to changes in outside temperature. Gasaver furnace uses a two-stage burner, dual thermostats (inside and out), and automatic controls. In cold weather, both burner stages operate; in milder weather, burner cuts back. Units come in high, low, and counterflow models.

Williamson Co, Cincinnati.

For details, check No. 26 on coupon, p 244

New Products continued on p 230



## 66We proved to ourselves... Aluminum wire screening sells best!

VIC ANDERSON, President, V. E. Anderson Mfg. Co.

"We tried insect screening made with plastic coated glass fiber in our aluminum jalousie doors and found that they did not have consumer, builder or dealer acceptance. We immediately switched back to the standard of the jalousie door industry—aluminum insect wire screening. We proved to ourselves that it sells best."

#### Aluminum wire screening is a Value Improving Product

Aluminum wire screening used on aluminum windows and jalousie doors improves the value of every home on which it is installed. That's why we call it a Value Improving Product.

Value Improving Products made by customers of Kaiser Aluminum are part of an entire new program for select home builders based on the concept of added home value through the use of aluminum.

Called the V. I. P. Home program, it offers everything you need to help you sell more homes—from national TV advertising support on "Maverick" and "Hong Kong" to a complete local merchandising package.

For full details on Kaiser Aluminum's V.I.P. Home program, write: Manager, Residential Business Development, Kaiser Center, Oakland, California. See HONG KONG and MAVERICK weekly on the ABC-TV Network.



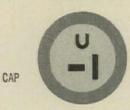
\*Trademark Kaiser Aluminum & Chemical Corp.

ALL ALUMINUM WIRE SCREENING ... BEST OF ALL!

## OUTLET HILD

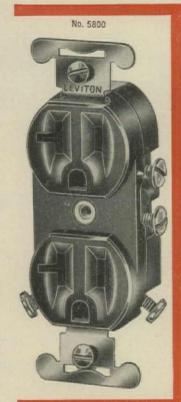
#### NEW LEVITON

5800 SERIES

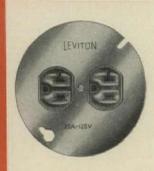


20-AMP. GROUNDING DEVICES

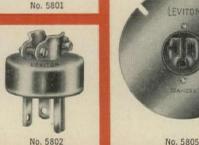
to meet latest N.E.C. CODE







No. 5803



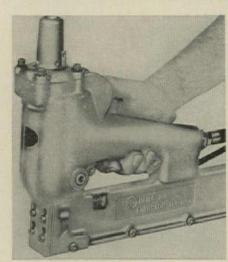
The revised N.E.C. Code requires 20-amp 125-volt grounding-type wiring devices for added safety. Now LEVITON brings you the 5800 Series of receptacles and caps to meet this new Code, and can be used for heavier rated appliances in kitchens, laundries, workshops, exteriors—as well as commercial office equipment and maintenance use. These devices provide adequate wiring for future heavy duty appliance requirements.

Receptacles in this series fit shallow boxes and accommodate standard wall plates. They accept all standard 125-volt, 15-amp and 20-amp caps, both 2-wire and 3-wire types, making these outlets universal. Every device meets applicable NEMA, ASA and Federal specifications, and is listed as standard by Underwriter's Laboratories.



at \$129.50.
Rotolite Sales Corp, Stirling, N.J.
For details, check No. 29 on coupon, p 244

Publications start on p 233

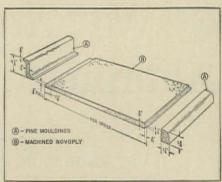


start on p 202

New Spotstapler drives 2" staple for automatic fastening of thicker materials. Divergent chisel staples have greater pull-out strength; as they drive the legs fish-hook to get a greater purchase in the wood. The maker claims up to twice the holding power of old types and up to five times the production speed.

Spotnails Inc, Evanston, III.

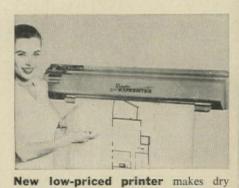
For details, check No. 27 on coupon, p 244



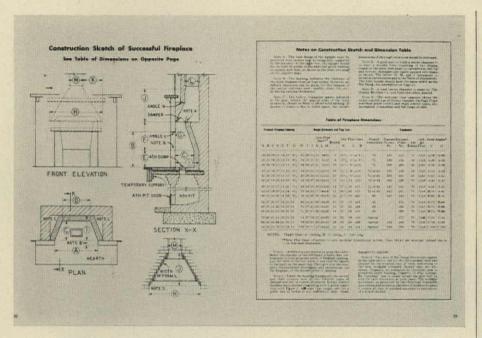
Preshaped countertop consists of carefully milled 3/4" Novoply—a three-ply resin-bonded flakeboard—and matching pine cove and nose moldings. Countertop is designed for covering with Micarta or other plastic laminate. Available in 6', 8', 10', and 12' lengths and custom widths.

US Plywood, New York City.

For details, check No. 28 on coupon, p 424



white diazo copies of any material up to 42'' wide for  $1\frac{1}{2}\psi$  a sq ft (also sepias and foils). A single lamp cuts maintenance and running costs. New speed control eliminates gear changing so anyone can operate it. Unit can be mounted on any office wall. Five models take paper any length and 18'' to 42'' wide. Prices start



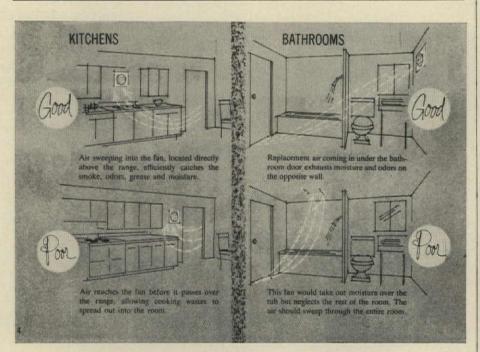
#### New handbook shows how to make a good fireplace

To make your job easier, Douley Bros, a major manufacturer of fireplace equipment, has put together 100 pages of advice on style, structure, and accessories, the 17th edition of its handbook. Over 300 photographs show many fireplace styles built over the years. Twelve pages (like those above) give construction details on traditional and contemporary, single and double, radiant and

convection types. Six pages are devoted to masonry details. One chapter discusses heatsaver fireplaces, another treats fireplace difficulties, another tells how to tend a fire. Minimal space is given to promoting Douley fireplace accessories. Price: \$1.

Douley Brothers Co, 13900 Miles Ave, Cleveland.

For copy, write direct to manufacturer



#### New guide spells out standards for home ventilation

A brand new association—Home Ventilating Institute—has just issued its first publication—Home Ventilation Guide. The new group, set up to bring order out of the vent-fan chaos, has classified ventilating equipment in terms of the kitchen, bathroom, or recreation room area it will handle. It has set up standards for the removal of odors, moisture, smoke, and heat. It has

described the nature of the ventilating problem in typical home areas. It has shown where to locate exhaust fans for the best effect (above). It has defined the types of fans used for each job. Without laying down hard and fast rules, it has indicated optimal procedures in most building situations.

Home Ventilating Inst, Cleveland. For copy, check No. 30 on coupon, p 244

#### Curtain wall finishes

More than 445,000 combinations in curtain wall panels are outlined in Erie Enameling's new catalog. The 8-page brochure charts skin and core materials, thickness, and assemblies. Cutaway views show basic panel structures, sample textures. Details show typical applications.

Erie Enameling Co, Erie, Pa.

For copy, check No. 31 on coupon, p 244

#### Ceramic tile color palettes

Two new palettes show the most popular current colors in 1) glazed wall tile and 2) ceramic mosaic patterns. The new color selection brochure shows 18 wall and floor color schemes. It also illustrates the uses with color photographs of applications.

US Ceramic Tile, Canton, Ohio.

For copy, check No. 32 on coupon, p 244

#### Glulam beam catalog

Tangent arches, radial arches, beams and purlins, tied arches, bowstring trusses, roof decking, formwork, and special products are the subject matter of a new 20-page booklet from Rilco. The new brochure is illustrated with black and white and color photographs. To supplement photographs and descriptions, the brochure includes several pages of span and load tables. Full specification guide is included.

Rilco Laminated Prods, Tacoma.

For copy, check No. 33 on coupon, p 244

#### How to sell paint

Help for builders and painting contractors is available from Minnesota Paint. Highlight of the kit is the Color Studio, a consulting service that helps plan color schemes. Other materials include: stationery, calling cards, doorknob tags, switchplate cards, yard signs.

Minnesota Paint, Minneapolis.

For copy, check No. 34 on coupon, p 244

#### Teak flooring data

Full information about the product and how to use it is included in a new AIA file folder. The 8-page booklet covers manufacture, installation, specification, merchandising, besides product descriptions, dimensions, prices, etc.

Thailand Teakwood, Chicago.

For copy, check No. 35 on coupon, p 244

#### Plastic laminate walls

Modern Formica Interiors, a 16-page, four-color brochure, shows plastic laminates in use on partitions, counters, walls, doors, etc. The center spread contains paper chips of over 80 colors and patterns. Examples show how custom inlays can be used.

Formica Corp, Cincinnati.

For copy, check No. 36 on coupon, p 244

## **New from Hotpoint**

# SPACE SAVING APPLIANCES

CK55-B

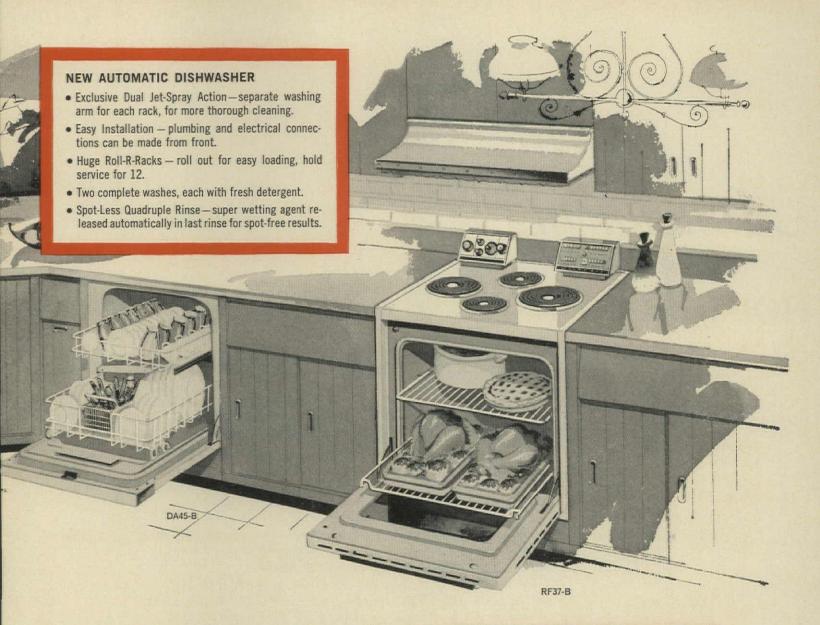
#### NEW COMPACT REFRIGERATOR-FREEZER

- Big Inside, Trim Outside—only 28" wide, yet has big-family capacity.
- True Two-Door Combination with separate 89 lb. zero-degree freezer.
- Space-Saver Hinges no side clearance needed for door.
- Roomy No-Frost Refrigerator

   has real porcelain crisper.
- . Handy Glide-Out Shelves.

BIG CAPACITY DELUXE FEATURES EASY INSTALLATION

In a wide variety of models and prices
ELECTRIC RANGES • REFRIGERATORS
AUTOMATIC WASHERS • CLOTHES
DRYERS • CUSTOMLINE® • DISHWASHERS • DISPOSALL® • WATER HEATERS
FOOD FREEZERS • AIR CONDITIONERS
ELECTRIC BASEBOARD HEATING



Today every building inch counts more than ever before! And Hotpoint takes fewer inches to give your kitchens that luxury look at low cost. For example, the Hotpoint Town and Country Range combines oven and surface section in one low-cost compact unit just 30" wide. The new Hotpoint Compact Refrigerator-Freezer is a true 2-door combination, but it's only 28" wide.

These are not stripped-down economy models. They're full capacity models loaded with deluxe features you can demonstrate and sell...yet still keep your selling price low! Contact your Hotpoint distributor and see the full line. You'll see why Hotpoint appliances are built for builders—like you.

#### **NEW TOWN AND COUNTRY RANGE**

- Low Installation Cost—slides in like a drawer, needs just one electrical connection.
- Twin Control Towers—easy to see and reach, yet away from "little fingers" and spatters.
- Automatic Oven Timer—turns oven on and off with pre-set clock control.
- "Super 2600" Speed Unit—heats so swiftly it boils a can of soup in 65 seconds.
- Removable Window Door-for easy oven cleaning.

# DOUME

A Division of General Electric Company, Chicago 44, Illinois



st Annual Directory of

- ...here is a truly new merchandising service for the housing industry:
  the first complete directory of all the sales plans, sales aids, sales programs
  and merchandising and marketing services that manufacturers of housing products
  and equipment make available to builders and their sales managers and realtors.
- ...here is a new merchandising service that ends, once and for all, the lack of communications somewhere along the distribution line between the manufacturers who spend millions of dollars a year developing selling aids and the builders and realtors who need them and want them so urgently.

  HOUSE & HOME has heard literally hundreds of builders and realtors—from coast to coast—complain about their unfamiliarity with the selling aids that manufacturers are producing for them.
- ... here is a new merchandising service that is directly aimed at solving the housing industry's No. 1 problem: the need for professional selling to attain the full potential of the sixties. Proof that builders and their sales managers and realtors are desperately reaching out for help lies in the tremendous number of inquiries from builders and their sales managers and realtors every time House & Home's editorial and advertising pages have reported any news of selling aids from producers of housing products and prefabricators.
- ... therefore House & Home feels that manufacturers and their agencies will welcome a special advertising section in the annual May Merchandising Issue in which to spotlight each and every selling aid that builders can use with their sales managers and realtors.

### HOUSE & HOME's first industry

Write for complete information on supplementary reprint distribution to leading housing professionals, including mailing to House & Home's entire Model House Builders List.

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Department M Time & Life Building Rockefeller Center New York 20, N. Y.

Please send me supplementary reprint distribution information on HOUSE & HOME's

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M-

Firm

Address\_\_\_

City, State\_

Ann.
Sellin

Annual Directory of
Selling Aids for
Builders and Realtors

MAY 1961



## Selling Aids for Builders and Realtors

If you make available any of these selling aids... here's your checklist and your one big opportunity to reach Builders and Realtors...

BRAND NAME DISPLAYS	PROMOTION AIDS	SALES EDUCATION AIDS	SERVICES
1. Cutaway section displays     2. Product performance displays     3. Product performance – action displays featuring audience participation     4. Indoor brand name signs     5. Exterior brand name site and direction signs     6. Static displays including decals and stickers     7. Warranty plaques     8. Brand name protective carpets indoor     9. Brand name directing walkways outdoor	<ul> <li>□ 1. Tape recorders and platters for model homes</li> <li>□ 2. Brochures, point-of-purchase handouts</li> <li>□ 3. Post sale guides for new purchasers</li> <li>□ 4. Goodwill gifts for new purchasers</li> <li>□ 5. Public relations guides</li> <li>□ 6. Publicity planning assistance</li> <li>□ 7. Newspaper mats and sample layouts</li> <li>□ 8. Suggested radio scripts</li> <li>□ 9. Suggested TV scripts and films</li> </ul>	<ul> <li>□ 1. Dealer-distributor and/or builder salesmen product demonstration classes</li> <li>□ 2. Product sales training films and slides for builder salesmen</li> <li>□ 3. Home office short courses on product installation and service</li> <li>□ 4. Regional clinics on market analysis aids</li> </ul>	<ul> <li>□ 1. Kitchen planning assistance</li> <li>□ 2. Home decoration and home furnishing advisory services</li> <li>□ 3. Exterior and interior color styling</li> <li>□ 4. Land planning assistance</li> <li>□ 5. Financing aids</li> <li>□ 6. How-to-sell booklets</li> <li>□ 7. Cooperative advertising</li> </ul>

## -wide service to MERCHANDISING executives

In America's biggest industry...

almost everybody who is important to your selling reads

Closing Dates

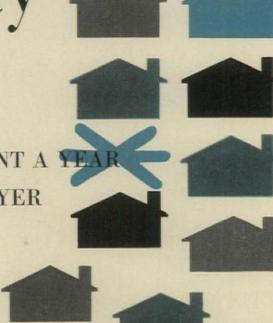
RESERVATIONS: March 20, 1961

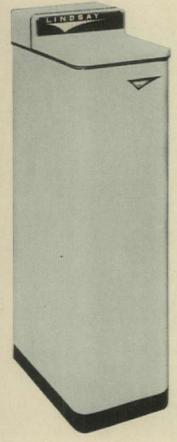
PLATES AND COPY: March 27, 1961



Lindsay
Princess

WILL SAVE A
HOUSE PAYMENT A
FOR YOUR BUYER





5 decorator colors

this Lindsay <u>water softener</u>
is as important to your sales
as any appliance you might add

Of all the fine "extras" builders can offer their potential home buyers, only the Lindsay "Princess" Water Softener can help make the house payments. Yes, it's a fact! Many well-known magazines and independent testing organizations have revealed that soft water plumbed in the home can save the average family up to \$117.00 a year! The homeowner saves on soaps and detergents, clothing, cooking, cleaning, etc.

Feature the Lindsay "Princess" in your homes; tell the savings story, and see how your prospects really appreciate it. Then, too, the "Princess" is beautiful, trim and modern, and comes in five colors to complement the interior decor of your homes.

Lindsay, America's leading water conditioning equipment manufacturer, has three profit-making plans for you to choose from . . . each designed to help you make extra money, and at the same time, help your customers save it.

For further, more detailed information, write The Lindsay Company today about this new, profitable program.



#### **Publications**

start on p 233

#### Sound absorption coefficients

The 1961 bulletin on sound absorption is available from the trade association. This year the bulletin is 18% bigger because of the growth in new materials. Data on products of all association members cover noise reduction, recommended specs, surface appearance, size, weight, thickness, flame resistance, light reflectance.

Acoustical Materials Assn, New York City

For copy, check No. 37 on coupon, p 244

#### Where to buy lumber

The 1961 directory of West Coast lumber producers is now available. It lists mill addresses, personnel, species, manufactured items for some 250 producers. Products are broken down into 55 categories. Also listed are timber fabricators, wood pipe makers, wood treating companies. Suggested uses and span tables for utility grade lumber are given on the back cover.

WCLA, Portland.

For copy, check No. 38 on coupon, p 244

#### Residential wiring components

General Electric's new Buy Log is 92-pages long, covers load centers, fuse panels, wireways, safety switches, circuit breakers, panelboards, etc. General application data are tabulated.

General Electric, Plainville, Conn.

For copy, check No. 39 on coupon, p 244

#### Concrete in colors

New formulation for colored concrete is described in a new brochure from Admixtures. The 16-page folder describes the process in question and answer form, shows available colors, suggests uses, tabulates specification detail.

Admixtures Inc, Pasadena, Calif. For copy, check No. 40 on coupon, p 244

#### Laminate architectural file

Full data on Parkwood laminates are included in the company's latest file. Physical properties, application, colors, sources of supply, technical data, are all covered.

Parkwood Laminates, Inc, Wakefield, Mass.

For copy, check No. 41 on coupon, p 244

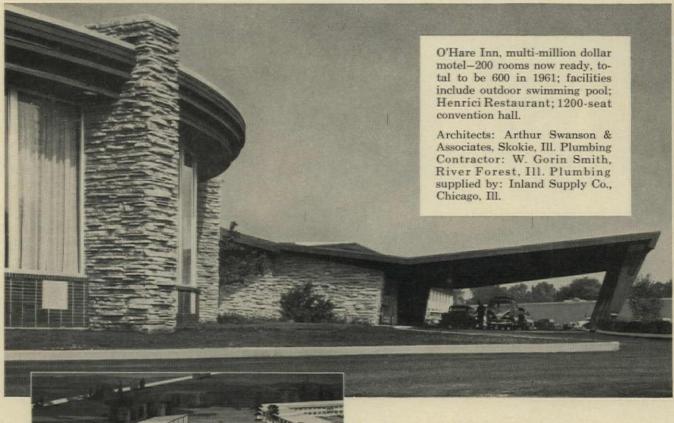
#### Hardboard manual

Masonite has a new edition of its construction manual with complete information on the company's 57 types of hardboard. Product descriptions and application data are tabulated for each material. Detail drawings show how panels are installed. Feature treatment is given Panelok, Pegboard, and the new siding materials.

Masonite Corp, Chicago.

For copy, check No. 42 on coupon, p 244

Publications continued on p 242



Artist's conception of the O'Hare Inn illustrates how this 600 room "super" motel will look when completed.



Ledgend vitreous china lavatory, K-2076-F and Welland closet, K-4270-PT.

### Specified for O'Hare Inn World's Largest Motel

### KOHLER PLUMBING FIXTURES

Accommodations on a grand scale, with superb appointments, are provided by O'Hare Inn, beside Chicago's O'Hare International Airport.

Recognized first quality where it is certain to be appreciated is assured by Kohler Plumbing Fixtures and All-Brass Fittings.

Bathroom fixtures include the Ledgend lavatory with extended, dressing table surface; the Minocqua bath, compact and comfortable; and the quiet, efficient Welland closet.

Kohler drinking fountains and service sinks are also provided—and in the public washrooms, Kohler lavatories, closets and urinals.

Kohler All-Brass Fittings with trouble-free Valvet interchangeable valve units afford the ultimate in economical maintenance and long reliable service. Brass has greatest wear and corrosion resistance, holds chrome-plating best.

In buildings of all kinds, Kohler Plumbing Fixtures and All-Brass Fittings assure the ultimate in value and satisfaction.

KOHLER Co. Established 1873 KOHLER WIS.

#### KOHLER OF KOHLER

Enameled Iron and Vitreous China Plumbing Fixtures. All-Brass Fittings
Electric Plants • Air-Cooled Engines • Precision Controls



#### Designed by Peterson to give you more sales features, more construction advantages than ever before!

BUILDERS are quick to recognize the many construction benefits and buyer features of Penguin Aluminum Rolling Windows. They are easy to install. And, even after installation and plastering, the exclusive Peterson engineered adjustable track can compensate for out-of-square construction. This means savings in building costs and a happy home owner

Builders like the specially designed weatherstripping too. Air infiltration tests show excellent performance for all Penguin windows-less than half the air infiltration of accepted standards.

BUYERS enjoy Penguin's distinctive custom appearance, super-smooth operation and ease of cleaning. New sealed-unit glazing eliminates need for storms and yet keeps fuel costs at a minimum. Exclusive Prowler-Proof Ventilation permits free circulation of air, prevents unwanted intrusion . . . a sales feature with top woman appeal.

Install Penguin Windows in your next new home program. Let Penguin features start selling for you now. For complete information, write:

## WINDOW CORPORATION

720 LIVERNOIS AVENUE . FERNDALE 20, MICHIGAN



Award-winning designs in a full range of 3-4-5 bedroom ranches, colonials, splits and 11/2 stories-led by the exciting new Comanches series (sells for \$9000 with lot-over 4500 orders in 60 days!) . . .

. . . Full range dealer services—everything from land acquisition assistance to field engineering to complete merchandising programs to full range financing services . . .

... Plus the know-how to put them together into building and selling programs that really get results . . . it's no wonder that . . .

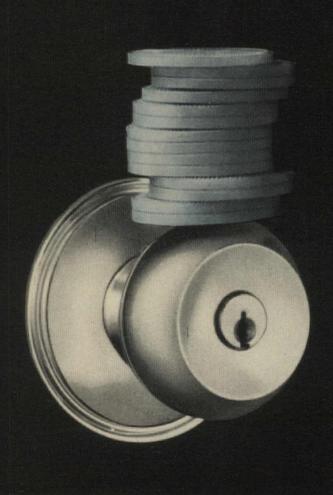


Write, wire or phone: Marc Donaldson, Vice Pres.-Sales

#### PLACE HOMES, INC.

1212 S. Walnut Street South Bend 21, Indiana AT 8-9111

60's! YOU'LL GROW FASTER WITH PLACE GROWING

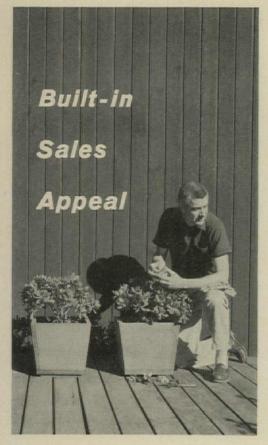


## What's a good bet in the lockset game? Choose from a wide variety of designs, functions, finishes and price ranges. Exclusive "T-Zone" construction provides extra strength in critical "twist" area. Install "2" Line

latchsets in only 25 seconds. Write for a catalog or see your building supply dealer.



New Haven 9, Conn. • In Canada: Sargent Hardware of Canada Ltd., Peterborough, Ontario



## that's California Redwood

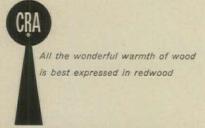
At a single glance, redwood siding tells the prospect
— and the world — that this is a quality home.

Redwood's inviting beauty and livable warmth are more than skin deep, too. When it bears the CRA trademark, you have the assurance that redwood is Certified Kiln Dried—that it will stay put and give complete satisfaction for years.



### FREE! Redwood Siding Data

Detailed descriptions, specifications, nailing and application instructions for all five basic siding styles, taken from the famed Redwood Architect's File. Write on your letterhead for "Siding Data"— CRA Builders' Service Department, 576 Sacramento Street.



#### CALIFORNIA REDWOOD ASSOCIATION 576 Sacramento Street • San Francisco 11 CRA-TRADEMARKED CERTIFIED KILN DRIED REDWOOD

The California Redwood Association coordinates the research, forest management, grading and consumer service activities of these member mills: SIMPSON TIMBER CO. • UNION LUMBER CO. • THE PACIFIC LUMBER CO. • GEORGIA-PACIFIC CORP. • WILLITS REDWOOD PRODUCTS CO. • ARCATA REDWOOD CO.

#### **Publications**

start on p 233

#### Glass for construction

Preprint of Libbey-Owens-Ford's 32-page, 1961 AIA file is now available. New manual outlines the uses, quality, and specifications of various architectural flat-glass products. Individual sections deal with types of polished plate, window, and safety glass, Vitrolux spandrel glass, bent glass, Tuf-flex doors, mirrors. Insulation is dealt with in detail. Sample pattern and wired glass styles are shown.

Libbey-Owens-Ford, Toledo.

For copy, check No. 43 on coupon, p 244

#### New booklets from K&M

Keasbey & Mattison has a 4-page folder describing acoustical ceiling panels in several patterns and colors. All styles and variations are catalogued. Installation is detailed.

For copy, check No. 44 on coupon, p 244

A second 4-page booklet describes Kamflex, a flexible asbestos-cement sheet. The brochure lists all significant physical properties, shows some of the many uses.

Keasbey & Mattison, Ambler, Pa. For copy, check No. 45 on coupon, p 244

#### Plumbing fixture catalog

Universal-Rundle has a new 40-page catalog covering its full line. Featured are new products, like the Charm and Wallborne water closets and the Met-L-Pak cartridge for top-line fittings, and U-R exclusives like the Versa-Tile lavatory, Ever-Dry tank, Uni-Tilt flush valve, Uni-Lox hanger.

Universal-Rundle, New Castle, Pa. For copy, check No. 46 on coupon, p 244

#### Paint selector

Luminall has a new dial paint selector that covers its full line of emulsion and oil-base paints. Dial covers 29 different paint jobs under three main headings—interior, exterior, and metals—and such job classifications as copper screens and gutters, acoustical tile and plaster, machinery and metal implements, masonry walls and trim, etc.

Luminall Paints, Chicago.

For copy, check No. 47 on coupon, p 244

#### Home planning center

Over 900 house designs—all designed by Richard B. Pollman—are included in a new package assembled by Home Planners Inc. Houses range in size from a 600 sq ft cottage to a 3,500 sq ft luxury residence. The plastic-bound plan book is accompanied by a full promotion kit. Glossy photos are available at cost. Construction plans of all houses are available. Price: \$5.95.

Home Planners Inc, 16310 Grand River Ave, Detroit 27.

For copy, write direct to publisher

Publications continued on p 244

## HOUSE & HOME's

1st

Annual

Directory

of Selling

Aids for

Builders and

Realtors

MAY 1961



Styling emphasis extends to every detail including special pulls.



Hinges are completely concealed, adjustable, have built-in door stops.



Beautifully-contoured drawer fronts feature bottom-edge finger pulls.



# MUCH more elegant kitchens for LITTLE more money!

\$220,000,000 worth of fine furniture-building experience taught Mengel to build wood cabinets to living-room standards of beauty.

Result: cabinets which not only are built better, and work better, but which look better. You can see the difference between Mengel Cabinets and ordinary ones—and so can your customers!

Another result of Mengel's multi-million-dollar experience (in design, wood selection, construction, and finishing) is that you can buy Mengel Cabinets for very little more than ordinary cabinets—or for considerably less than many equal-quality cabinets!

We KNOW that Mengel Cabinets look better for the same money—or cost less for equal quality. Make us prove it—send in the coupon at right!



MENGEL DIVISION Container Corporation of America 740 W. Pearl Street Union City, Indiana

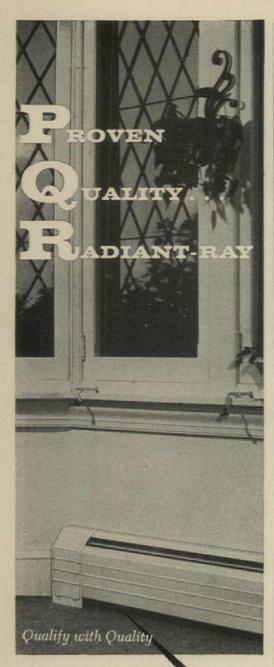
Gentlemen:

I am willing to be convinced that Mengel Cabinets can either *improve* the appearance of my customers' kitchens, at present costs, or *maintain* present standards at *lower* costs.

Name	
Firm	☐ Contractor☐ Dealer
Street	

State.

Also the Manufacturers of Famous Mengel Flush Doors



For modernization of present structures or installation in new building, specify and insist on Radiant-Ray baseboard radiation. Get all the cost-saving advantages of hydronic heating plus the proven quality of Radiant-Ray, the most complete baseboard line in the industry . . . IBR approved ratings. Buy from this one source and fulfill every heating requirement in home, apartment building or institution





#### newington, conn.

Please send me complete information, including your Free Easy Estimator

STATE

NAME	
TITLE	
COMPANY	
ADDRESS	

#### Electric heat units

Direct radiant heaters for exterior or difficult interior areas are described in a new 8-page brochure from Fostoria. It explains the basic principles, shows typical applications, outlines advantages. Electrical specs, radiation patterns, dimensions are presented graphically.

Fostoria Corp, Fostoria, Ohio.

For copy, check No. 48 on coupon below

#### Resilient flooring guide

Azrock's 1961 catalog is eight pages in four color. It includes specifications and color palettes for seven services of Vina-Lux vinyl asbestos, one line of Azphlex grease-resistant vinylized tile, five lines of Azrock asphalt tile. Other pages cover general properties and architectural specifications.

Uvalde Rock Asphalt, San Antonio. For copy, check No. 49 on coupon below

#### Foam insulation booklet

New 8-page brochure describes Uni-Crest expandable and expanded polystyrene. Uses covered include panels, refrigeration, air conditioning, flotation, packaging. One spread in the booklet outlines Uni-Crest processing.

United Cork Co, Kearny, N.J. For copy, check No. 50 on coupon below

#### Abrasive products for building

New 42-page catalog from Carborundum describes cutting wheels for masonry and concrete, grinding wheels, rubbing bricks, slip resistant and floor hardening materials, aggregates for cement and terrazzo, bonding cements, masking tapes, etc. Specs for difficult cutting or grinding jobs are included.

Carborundum Co, Niagara Falls, N.Y.

For copy, check No. 51 on coupon below

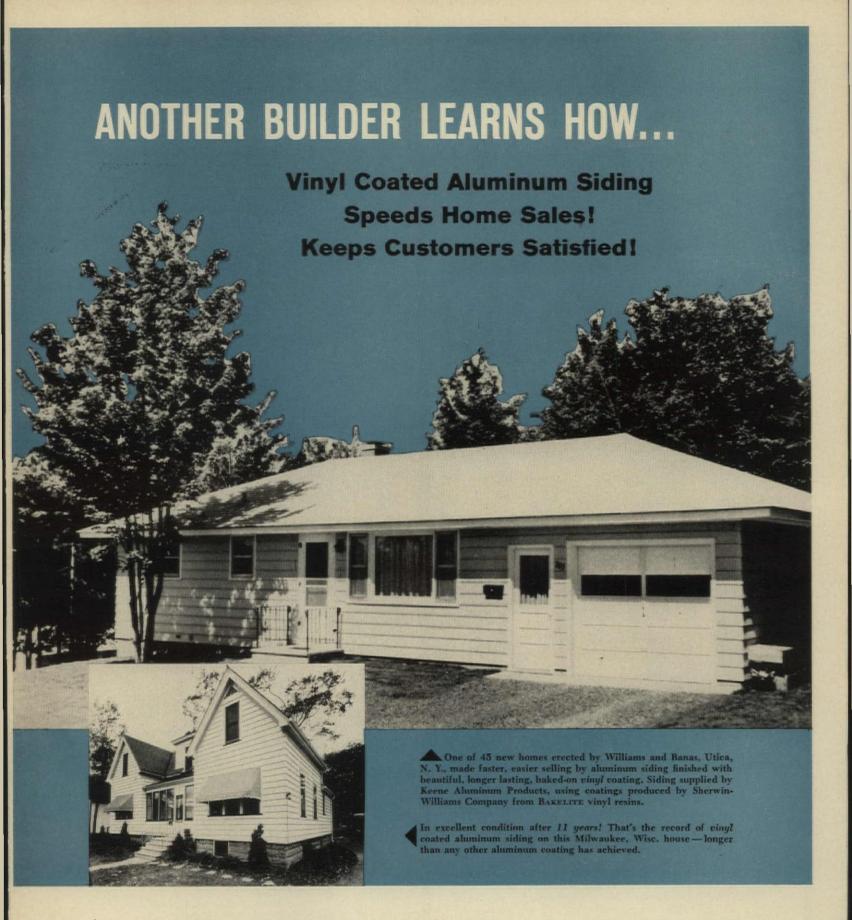
#### Want more information?

The numbers below are keyed to the items described on the New Products and Publications pages. Check the ones that interest you and mail the coupon to:

> House & Home Room 1960, Time & Life Building Rockefeller Center, New York 20, N.Y.

NEW PRODUCTS • March	PUBLICATIONS		
1. Elkay corner sink 2. Forest Fiber Sandalite 3. Raybestos Threadline mortar 4. Robbins vinyl tile 5. Mastic Polymerite tile 6. Azrock Vina Lux tile 7. Armstrong 1961 flooring 8. Amtico textured tile 9. Goodyear vinyl flooring 10. Kentile 1961 lines 16. Ridge ViroGlas tile 17. Dow's new foams 18. Hoffman honeycomb panels 19. Engineered Products magnetic catches 20. Westinghouse Rayescent lamps 21. Whirlpool dry cleaner 22. Newell door closer 22. Newell door closer 23. Johnson bifold hardware 24. General Electric hoods 25. Emerson hood 26. Williamson furnace 27. Spotnails stapler 28. US Plywood countertop 29. Rotolite white printer	30. Home Ventilation Guide 31. Erie curtain wall panels 32. US Ceramic color palettes 33. Rilco beam catalog 34. Minnesota Paint merchandiser 35. Thailand Teak flooring data 36. Fornica interiors brochure 37. Acoustical materials bulletin 38. Where to buy lumber 39. General Electric Buy Log 40. Admixtures concrete colors 41. Parkwood architectural file 42. Masonite manual 43. Libbey-Owens-Ford AIA file 44. K&M acoustical ceilings 45. K&M Kamflex booklet 46. U-R fixture catalog 47. Luminall paint selector 48. Fostoria electric heat units 49. Azrock's 1961 flooring guide 50. Uni-Crest foam insulation 51. Carborundum abrasive products		
POSITIONFIRM_			
KIND OF BUSINESS			
STREET			
CITYSTAT	TE		
IMPORTANT:			
House & Home's servicing of this coupon expires June, 1961. In addressing direct inquiries please mention HOUSE & HOME and the isssue in which you saw the product or publication.			
wish to enter a subscription to House & Hom			
□ New □ Renewal	Constitue		
	Signature		

CITY



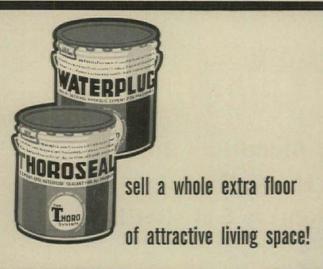
Another 45 new homes became fast sellers because the builders, Williams and Banas of Utica, N. Y., covered them with tough, weather-fighting aluminum siding coated with baked-on *vinyl* plastic.

In sparkling white, pastels, and natural grain finishes, many thousands of homes with this superior vinyl coated siding have sold faster, gotten builders' money out sooner. Customers praise the initial beauty—are delighted with the prospect of reduced maintenance. Just an occasional washing down keeps the siding looking like new. Expected savings in maintenance often permit larger mortgages, further speeding sales.

Sell your homes faster—with vinyl coated aluminum siding. Your building supply dealer has the full story. Meanwhile, you'll be interested in our vinyl coated aluminum siding advertisements currently appearing in "Better Homes & Gardens" ("New Home Idea Book" and "Home Improvement Idea Book"). Union Carbide Plastics Com-

pany, Division of Union Carbide Corporation, 270 Park Avenue, New York 17, N. Y. In Canada: Union Carbide Canada Limited, Toronto 12.





## WATERPROOF

the basement!



#### CEMENT-BASE WATERPLUG AND THOROSEAL

have been helping builders sell "extra-floor" homes since 1912. Rely on the sure protection of beautiful, lastingly waterproof sealants. Paint can't do the job right – thin, "non-breathing" film lets moisture build up, forcing it right off the wall – means costly sandblasting.

WATERPLUG — a perfect hydraulic cement — forms waterproof seal in danger spots: wall-floor joints, pipe joints, masonry faults. Stops even running water — instantly! Presses in like putty. Hardens in 3 minutes. Tunnel-tested Waterplug bonds to masonry for surest waterproofing.

THOROSEAL — best for exterior or interior walls — coats masonry or concrete with compatible-bonding, deeply penetrating seal. Blocks dampness, seepage, mildew — insures dry dry masonry, lastingly protected. Waterproof and decorate (in white or colors). the right way with Thoroseal.

 Ask about time-saving special broad, longhandled Thoro brushes. And write for "quality waterproofing" signs to display on basement doors.

STANDARD DRY WALL PRODUCTS, INC

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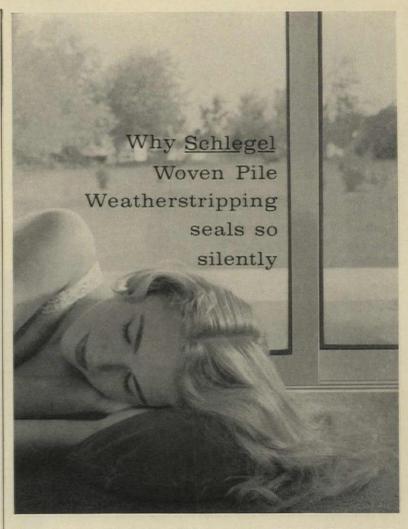
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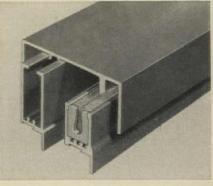
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Whirlpool Corp. Wood Conversion Co.

# What is a good basis for determining quality in aluminum windows?

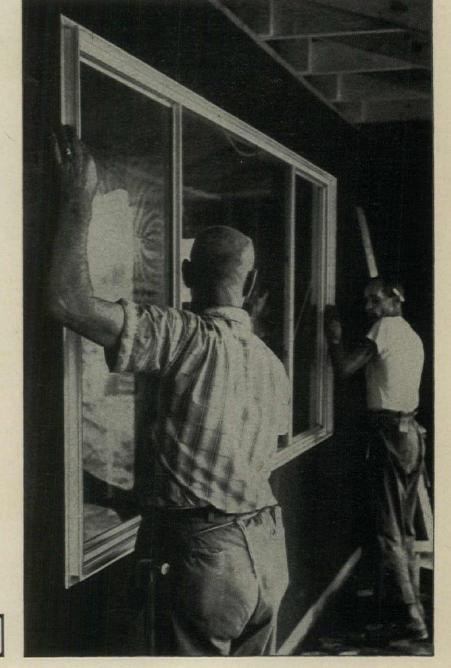
With literally hundreds of brands to select from and with so many of them looking alike, what is a good quality standard for selecting aluminum windows? Certainly it's not the mere claim of a manufacturer that his are quality windows...his are "best."

The real proof of quality in an aluminum window is found in these two questions: Does it meet the AWMA specifications (adopted by FHA) in every detail? Is it backed by an official AWMA Conformance Test Report from a responsible, independent testing laboratory?

Once you see the AWMA "Quality-Approved" seal on the window, you can be sure it's a good, dependable window,—one that satisfies FHA Minimum Property Standards in every respect.

AWMA quality standards are clearly spelled out in detailed specifications that cover the metal alloy used, wall thickness, strength of sections, size limitations, hardware, as well as performance tests for air infiltration, deflection and other physical load tests.

Don't take chances with windows of questionable quality. Before you buy or approve windows for a house, apartment or project, make sure they carry the AWMA "Quality-Approved" seal on each window. It's the safe and sensible thing to do. For the names of approved manufacturers and the types of windows they produce, write to Aluminum Window Manufacturers Assn., 630 Third Ave., New York 17, N. Y. Address Dept. HH-3.





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