ERICA'S BIGGEST INDUSTRY MONTHLY FOR AMERICA'S BIGGEST INDUSTRY

MARCH 1960 SIX DOLLARS A YEAR ONE DOLLAR & COPY

# What you can learn from the Florida boom

House

WS BEGINS ON PAGE 47 / NEW WAYS TO BUILD BETTER, PAGE 171 / COMPLETE CONTENTS, PAGE 101

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## THE SUCCESSOR TO THE KITCHEN SINK

States of the second second

C 1959, ELKAY MEG

**C**ONVENIENCES CALORE! Elkay's *Cuisine Centré* transforms the kitchen sink into a beautiful stainless steel food preparation center. Central control panel makes everything so easy-press a button to drain dishwater (no more plunging hands into greasy water); ten-inch swing spout of graceful *Tiara* faucet reaches all work areas; spray is low, out of the way. Mixer? Blender? Sharpener?...built-in with the *NuTone Food Center!* All this culinary convenience included in the package price of the Elkay *Cuisine Centré*. Available in eight models with NuTone equipment. Write for complete information.

GG

ELKAY Manufacturing Company, 1882 South 54th Avenue, Chicago 50, Illinois

#### CONVENIENT CONTROL PANEL

BASKET DROPS IN PLACE



### FREE MANUAL

CUTTING BOARD FITS FIRM

Complete kit of Elkay literature including full color Cuisine Centré catalog and all the facts on SINKronizing a home.

### FLAT BOTTOM-NOTHING



# Removability...

Some builders say it isn't half so hard to sell a home as it is to "keep it sold". Like people in general, home buyers are likely to be very vocal about complaints and very silent about the home features they like. One thing that buyers do discuss with their friends is the convenience of lift-out windows. Make salesmen out of your customers by installing balanced and immediately removable R•O•W Windows.

R·O·W SALES 1365 Academ Ferndale 20,	ny Ave., Dept. HH-360
Town and Country. beautiful exteriors designer Richard	he Home Planners book, "67 Homes for "These Convenient-Living homes feature s and practical floor plans by famous B. Pollman. Ten cents (10c) (in coin) r part of your cost.
Address	
City	State

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TJ.		Ft



makes the big

difference

in windows



 $R{\cdot}O{\cdot}W$  and LIF-T-LOX are the registered trade-marks of the R-O-W Sales Company

NDOW

Dept. HH-360 . FERNDALE 20, MICHIGAN

R.O.W SALES CO. . 1365 ACADEMY AVE.

......

# The 0 ongress on BETTER LIVING Certifies that these features recommended by

On December 31, 1959, the following telegram was received from John Long: "The result of our participation in the McCall's Magazine Certification program has been evident in our sales operation. We feel that this association with McCall's has played a definite part in helping us sell 2,577 homes this year. Aside from the valuable promotional aspects, McCall's is certainly performing a public service in providing valuable information for buyer and builder alike. The findings of the annual Congress on Better Living received the closest study by our design department and many of these ideas find their way into our homes."

John F. Long, John F. Long Home Builder, Inc., Phoenix, Arizona

Each month, McCall's editorially features the Home Certification Program to 12,700,000 readers. To those considering the purchase of a new home, the words "Certified by McCall's" give authoritative endorsement. To learn how your model homes can qualify, write: Director, Home Certification Program, 230 Park

4 P.C.

delegates to the Annual Congress in Washington, D.C. are provided by this house... The "SHALIMAR" built by *John F. Jong Home Builder, Inc* 

Ave., New York17,N.Y.

# NEXT STEP...

# THAT INSTALLS

ITSELF





America's largest selling residential locksets

KWIKSET SALES AND SERVICE COMPANY A SUBSIDIARY OF THE AMERICAN HARDWARE CORPORATION ANAHEIM, CALIFORNIA You'd think so, the way KWIKSET speeds installation time. Take the BIT-JIG with built in tools. Set in place, tighten, and drill; latch and lockset holes are precision bored in

seconds. The ROUND eliminates mortising... new KWIKSET FACE LATCH screws and just press into

place after drilling. And with the amazing SOK-IT STRIKE there's no chiseling, mortising or screws...just drill a hole, position strike and hit special staking tool with hammer... it's in to stay. "Installs itself?" Not yet. But we're getting there!

# Last chance to cash in on the MARKET BUSTER



Marketable, Profitable-970 sq. ft. of unbeatable Kingsberry value. Completed cost is about \$7,400 for brick (\$400 less for frame construction) without land.

# If you act now .... \*500 to \*3000 cash advance for your first Kingsberry model home promotion.\*

Nowhere else can you get a Market-Busting package like this—1. Model home financed by Kingsberry. 2. Cash for promotion in advance of shipments *plus* 3. Free powerful Kingsberry advertising, with Kingsberry builder listings, in Southern newspapers, Saturday Evening Post, Look, Living for Young Homemakers, already in the works!— These deadlines won't wait. That's why you must call today.

Spectacular 4-color Kingsberry advertising, in Southern newspapers and in America's most popular magazines is only part of the plus in Kingsberry's Market-Buster Program. Here are some highlights that will help you build *more* homes at *bigger* profits in 1960.

FINANCING! Kingsberry answers 1960's financing problems. Helps you sell more homes with construction financing—model home and home furnishings financing.

REDUCED PRICES! In '59 Kingsberry made news by cutting prices -upping quality. Again in 1960 prices are cut 2% more-plus new 3% savings at job site.

GUARANTEED PROFITS! Kingsberry guarantees no price increases in 1960. Unique profit control program lets you build *more* units on the *same* investment with *smaller* overhead.

LOCAL ADVERTISING! Kingsberry-paid advertising spotlights you and your development (in 4 colors where available) in leading newspapers.

COOPERATIVE ADVERTISING! Now Kingsberry offers the industry's most generous CASH contribution to your own local advertising program.

SALES AIDS! You get "News-Maker" advertising program and "Sales-Maker" merchandising program to help build traffic, close sales for your subdivision.

**NEWEST DESIGNS!** Flexible designs with varied floor plans are designed for Southern living. Unique packaged bathrooms and kitchen assemblies, "optionals" in heating and kitchen equipment, speed construction and save money for your customers.

\*For building programs that qualify for Kingsberry advertising participation. Amount depends on size of your program. Qualification is easy for builders who have developed lots ready to build on. Call or wire today for details.

# revolutionary Kingsberry PROGRAM for 1960

## FORT PAYNE (ALA.) 610

Ask for M. O. Gustafson, Marketing Vice President

CALL US TODAY!

Here's a Special Invitation for Southern builders who mean business—with land ready to go—Call or wire us today and get in on the profits of the year's most revolutionary home-building opportunity. Crack your market wide open with MARKET-BUSTING promotion and the South's Biggest Value Home —But Time's Short. You must act Now.

At present Kingsberry can serve builders only in: Kentucky, Tennessee, North and South Carolina, Georgia, Florida, Alabama, Mississippi and Louisiana.

You must <u>act NOW</u> to get in on the 1960 Profit Picture

FORT PAYNE, ALABAMA

# superior laminations...





## LAMINATED BEAMS

Laminations are a specialty at Potlatch... featuring a range of BEAMS that are produced for appearance, stiffness, strength and durability.

Exterior-type laminations that carefully conform to the architectural appearance grade are made of Douglas Fir and Larch. Moisture content is maintained at 10-12%. and all beams are wrapped for protection.

PFI Beams come in 14, 16, 18, and 20 ft. lengths. Horizontal laminations are of nominal 2-in. lumber and can be ordered in sizes from 4x4 to 6x16. Write for Architectural Bulletin #2 for complete information on load factors.

## EDGE-AND-END GLUED LUMBER

You cut labor costs and waste, speed construction and end the problem of "shorts" with PFI-and-End Glued Lumber. It is produced to desired lengths and widths ... and is uniform in grade because defects are removed during manufacture. Edgeand-End Glued is carefully selected from kiln-dried lumber ... precision machined for interlocking joints and square edges ... outstanding durability and appearance inside or outside. Available in Genuine Idaho White Pine and Inland Red Cedar in clear and common grades. Other species available on inquiry.

## LOCKDECK

Quickly, easily applied tongue-and-groove wood decking with an attractive facing, LOCKDECK offers all the high quality advantages of a laminated wood product. Developed by Potlatch, this kiln-dried roof-decking can be furnished plain or end-matched to provide for reduced installation time and is available in Cedar and Idaho White Pine facings. Other species available on inquiry. Write for Architectural Bulletin #1.

OTHER PFI CUSTOM WOOD SPECIALTIES: Lockwall Paneling Lumber Patty-O-Panel Fencing

Certified by (\* 🕒 \*) Kiln Dried since 1906

symbol

of quality

### POTLATCH **RESOURCES:**

7 productive mills. 875,000 acres of managed timberland.

### POTLATCH NORTHWEST MILLS PRODUCE:

475.000.000 feet of lumber annually.

Seven species:

- Idaho White Pine
- White Fir
- Douglas Fir
- Ponderosa Pine
- Cedar
- Larch
- Spruce

Specialty building products.

## POTLATCH SERVICE:

Unmatched quality control.

Mixed carload lot delivery.

Advanced research and development facilities.

Sales are handled through the general sales office in Lewiston, Idaho and these district offices:

Pittsburgh, Penn. 1616 Oliver Bldg. Kansas City, Mo. 2007 Bryant Bldg. Chicago, III. 20 North Wacker Drive.

Elizabeth, N. J. 720 Dowd Ave. Deer Park, Wash Deer Park Ind., Inc.

symbol of quality since 1906

DH

\*Patent Pending

POTLATCH

OTLATCH

Write General Sales Office, Lewiston, Idaho, for further information

POTLATCH FORESTS INC.

LUMBER DIVISION

## YOU SAW THIS

AD IN COLORS IN



February 15, 1960 issue



-World Leader in indoor comfort for homes, business, schools

## Boosts Builders' Business

More than 20,000,000 readers saw the ad reproduced on the opposite page. It is the second in a series especially created to make you welcome whenever you suggest Lennox heating and air conditioning equipment. It helps make Lennox, already the best known name in the industry, known even better. It helps you sell homes . . . identifies you as a builder who offers the finest.

You benefit greatly by dealing with the Lennox Comfort Craftsman. He's engineer-trained to help you solve any heating-cooling problem. He deals direct with Lennox factories throughout the U. S. and Canada. He gets faster deliveries and gears his installation to your schedule. What's more, he follows up after your customer has moved in to insure perfect performance. You'll find this remarkable Comfort Craftsman listed in the Yellow Pages.

its wonderful!



# its wonderful!



ABencit

NICEST VALENTINES EVER! A handmade heart for him—a wonderfully comfortable home for her. For he is the Lennox Comfort Craftsman, and he is installing the world's finest heating and air conditioning system. Lennox provides continuous air circulation 365 days every year (366 this year) . . . clean, fresh air—heated or cooled, humidity controlled—for *pure* comfort. Your Lennox Comfort Craftsman is a carefully selected dealer, factory trained to custom design the ideal installation for your home. He will make a survey without obligation. You'll find his name in the Yellow Pages. There is no finer Valentine for your home than Lennox.





# When competition is stiff Long-Bell gives more home for the money!

Long-Bell's high quality Dutch Doors and new 4-way units give you the selling edge needed to clinch more sales. This Dutch Door is made of high altitude Western Ponderosa Pine and has the popular heavy raised panels. Long-Bell offers many other popular designs of panel and sash doors, in both Western Ponderosa Pine and California Fir.

**Convertible 4-way unit** may be installed as hopper-type window, awning-type window, stationary window or casement window. All wood is Toxic and Water repellent treated. Excellent sill drainage in all positions. Tightly

#### WRITE / WIRE / PHONE

Your Nearby Long-Bell Supplier or ...

weather-stripped. Both sides of operating sash may be cleaned from inside without removing sash. Designed for screens and storm panels.

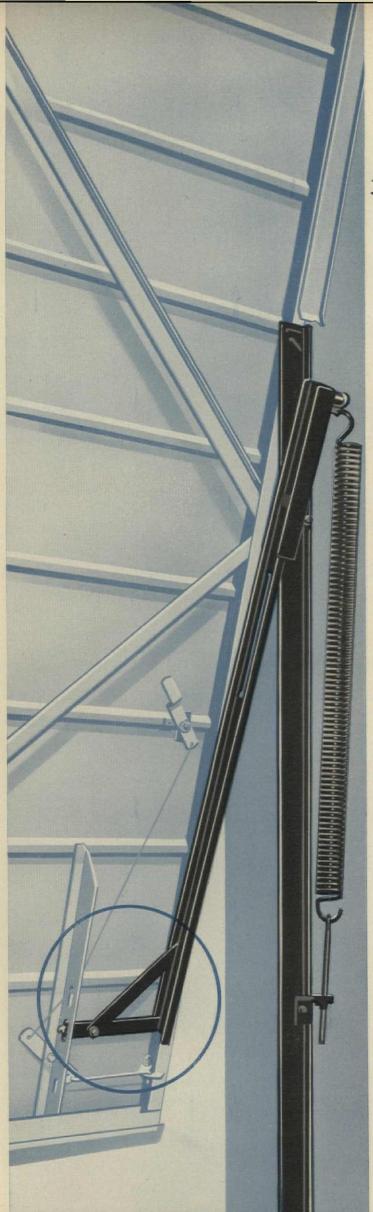
Low-Cost Flakewood ® Paneling speeds construction and cuts costs. Fast selling Pine, Maple, Cedar and Philippine Mahogany Flakewood panels may be stained, lacquered or varnished to fit any color scheme. Available in  $48'' \ge 96''$  panels,  $12'' \ge 96''$  and  $16'' \le 96''$ planks and  $16'' \ge 16''$  and  $12'' \ge 12''$  tiles. Planks and tiles feature tongue and grooved edges for hidden nailing. All  $\frac{1}{4}''$  thick.



Longview, Wash.

Produced in Volume... For Lower Unit Cost

Kansas City, Mo.



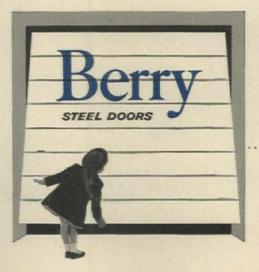
At least twice a day,

# Berry's anti-sway feature

protects your reputation as a quality builder

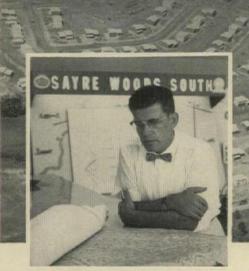
Along with features like climate-proof weather seal • adjustable track hangers • diamond grid construction • safety lock tracks • rugged lifting arm • Paintloksteel that won't swell, shrink, check, peel, rust

And only the Berry steel garage door offers you all these features to maintain the name you've established. At least twice a day, when the customer opens the door and when he closes it, your high standards are revealed. The anti-sway feature, for instance, eliminates binding at the jambs. It assures that the door will open – at a nudge, every time, in all kinds of weather. And Berry's quality cuts down those costly and annoying callbacks. What's more, the world's largest manufacturer of residential garage doors makes the price right and installation easy. Choose from one-piece and sectional models. Window lites optional. See your distributor or write: Berry Door Corp., 2400 E. Lincoln, Birmingham, Michigan. In Canada: Berry Door Co., Limited, Wingham, Ontario.



... full five-year guarantee

# "Community water and sewer systems help us sell 25 homes every weekend....'



Says Saul Cantor of Cantor & Goldman, Builders Sayre Woods South Community of 2000 Homes, Madison Township, N. J.

"... We couldn't be more enthusiastic about the sales advantages of TRANSITE for our community water and sewer systems," says Mr. Cantor. "Modern plants, too, for these facilities operate right in the community to give home owners complete assurance of one responsibility for service!

"Buyers are quick to recognize what community facilities mean—value added to their new home and property through up-to-date conveniences. No future outlay for converting from private to public facilities later. The surprisingly slight extra cost for this doesn't seem to be a factor in their buying decision—especially if they are 'second-home' buyers with experience in private facilities. And obviously TRANSITE PIPE is well known for its dependable long-term service."

JOHNS-MANVILLE



The Sayre Woods South water and sewer systems were installed by Guy Villa & Sons, Inc., Clark, N. J.

## Why builder-installed Water and Sewer Mains are the industry's newest profit idea!

IN EVERY PART of the country—builders are turning to Transite<sup>®</sup> sewer and water mains for increased profit!

Builders are finding that sewer and water mains result in higher appraisals . . . faster, easier selling . . . and greater unit profit on every home they build. As for cost—they find that buyers are eager to pay the nominal premium for this lifetime convenience.

To learn about the profit opportunities Transite Pipe offers in community water and sewer systems, send the coupon for the "Builder's Kit" of facts and data on Transite Pipe.

i .	Johns-Manville, Box 14-HH, New York Gentlemen: Kindly send me the "Builde Pipe for community water and sewer ma	er's Kit" of facts on Transite
i	Name	
VILLE	Firm	<u></u>
Л	Street	
CT S	City	State

# can see herself in your kitchen she can see herself in your home!



# **Frigidaire** Dishwashers

## with Swirling Water Washing Action, help sell housewives, save installation costs

Frigidaire Built-In Dishwashers do help sell the kitchen that helps sell her the home... they're designed with a woman's special wants in mind. For example, you can point out such features as: Easy front-loading Roll-to-You Racks; Swirling Water Washing Action; single dial simplicity of use, Sheer Look styling; and feminized Kitchen Rainbow Colors. Mrs. Prospect will readily welcome a "Holiday from Apron Strings" to rid her

of hand-dishwashing, get her out of the kitchen quicker, give her more time for other duties, other pleasures. She'll find it easier to picture herself in your home! Take advantage of Frigidaire quality features and workmanship to sell the overall quality throughout your home. Get the facts on Frigidaire Dishwashers from your Frigidaire Representative or write Frigidaire Division, General Motors Corporation, Dayton 1, Ohio.

When she

## Give her a "Holiday from Apron Strings"! Build with Frigidaire Appliances!



Swirling Water Washing Action forces hot water over every dish surface from between the racks.

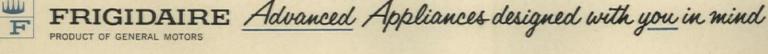


Front-Loading Roll-to-You Racks hold a day's dishes, pots and pans for an average family of four.



Installs from the Front—FAST! Access panel snaps off. Plumbing on the left, wiring on the right. Flexible drain connector speeds hook-up.





Whatever the job you're working on ...

# Size is no problem with CONSOWELD Laminated Plastic

144"

-51-

Consoweld's giant-size panels and cutting program offer you the broadest range of sizes in the industry!

Consoweld can fully meet your laminated plastic requirements with an absolute minimum of waste. Two things make this possible. First, the Consoweld distributor has a master manufacturing inventory of large-size panels (up to  $51'' \ge 144''$ for patterns and woodgrains; up to  $60'' \ge 144''$  in solid colors). Secondly, he has a carefully thought out cutting program designed to supply your needs for smaller sizes.

You get prompt service without being forced to buy more than your job requirements indicate. And, it is important to note that you get a greater selection of sizes from Consoweld than from any other source.

Have your dealer or fabricator contact your Consoweld distributor for complete details of the wide range of Consoweld panel sizes that are available.

Find CONSOWELD IN THE Yellow Pages	Look under Plas- tics in the Yellow Pages of your tele- phone directory.	CONSOWELD LAMINATED PLASTIC		
	weld Corporation, Dept nsin Rapids, Wisconsin			
	I'm interested in using Consoweld's laminated plastic products. Please send me name of my nearest distributor for dealer contact.			
NAME_				
ADDRES	S			
CITY & Z		STATE		



# **"Quiet Revolution"** in residential ductwork

Cost-conscious builders switch to "prefab" G-B DUCT: noise-conscious home buyers impressed

There's a "quiet revolution" afoot, sparked by new G-B DUCT, the round prefabricated glass fiber duct that virtually eliminates the homeowner's number one complaint about his heating and air conditioning system — "too noisy!" Every foot of this 100% glass fiber duct acts as a sound trap, putting an end to the "whooshing" noises usually associated with residential furnaces and air conditioning systems. Fast replacing conventional metal duct on many residential jobs, only G-B DUCT offers you all the advantages of an insulation lined metal duct plus the important money saving extras of a prefabricated duct.

### HIGH IN QUALITY & PERFORMANCE

Because G-B DUCT is made 100% of glass fiber insulation, maximum thermal protection and sound absorption are "built-in" features. Its uniformly thick walls are covered with an air-tight vapor barrier sleeve that positively prevents sweating and moisture build-up. G-B DUCT carries an Underwriters' Laboratories label as an air conditioning and heating duct, and therefore meets all FHA requirements. As permanent as glass itself, this new duct will never rust, corrode or deteriorate.

### ECONOMICAL, PERMANENT INSTALLATION

Although somewhat higher in initial cost, G-B DUCT can be applied so simply and quickly that completed costs soon come in line with - AND USUALLY

UNDERCUT - those for conventional metal ducts. The key lies in no preassembly work. There's no scoring, no folding. G-B DUCT comes in 6' ready-to-use sections, in standard sizes up to 18" in diameter. Sections fits snugly and permanently together with standard metal sleeves and vapor barrier tape. Elbows and T fittings are also easily fabricated with a knife and factory-supplied templates.

### WINS ENTHUSIASTIC APPROVAL

G-B DUCT has been approved by air conditioning manufacturers and local building codes for both air conditioning and heating application. Builders and air conditioning contractors have also been quick to put their stamp of approval on the new duct. "Pleased to report G-B DUCT is living up to our expectations and performing very satisfactorily," says the contractor on an 800-unit project. "Comparative cost studies show that G-B DUCT literally doubles our manpower output," reports another on a 300-home development.

#### HELPS SELL HOMES

G-B DUCT gives you an additional and appealing "talking point" for your homes-such as lower utility bills and quieter heating and air conditioning systems. Gustin-Bacon furnishes lawn and window signs and consumer brochures to help you make the most of this added sales feature. Write today for complete information on the product and merchandising aids and we will show how you, too, can cash in on the duct that is causing a "quiet revolution" in the building industry.



# LOOK FOR THIS SEAL WHEN YOU CHOOSE CENTRAL AIR-CONDITIONING



It's your assurance of equipment that delivers rated performance and will continue to deliver ample cooling capacity under adverse conditions.

> Forty-six manufacturers, producing more than 90% of all central air-conditioning equipment sold, now support an industry-wide testing, rating and certification program symbolized by the ARI Seal. This Seal on air-conditioning equipment tells you—and your home buyers—that it meets published standards of performance.

> NEW SAFEGUARD FOR HOME BUILDERS: To be granted this Seal by the Air-Conditioning and Refrigeration Institute, these manufacturers have agreed to rate their equipment by one uniform standard, in B.T.U.'s per hour —misleading terms such as "tons" and "horsepower" have been dropped. This rated capacity is subject to checking and verification in an independent testing laboratory under adverse conditions, with emphasis on wilting heat and high humidity. Any model failing to deliver rated capacity must be brought up to standard or be withdrawn from sale.

> What does this mean to you? When you install ARI-certified central airconditioning equipment in your new homes, you can have complete confidence in its performance. Simply look for the ARI Seal: It assures you of flexible design, laboratory ratings, reliable performance and the best chance for complete customer satisfaction.

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

For free explanatory booklet and Directory of participating manufacturers, write to: Chief Engineer, R-301, Air-Conditioning and Refrigeration Institute, 1346 Connecticut Ave., N.W., Washington, D.C.

Manufacturers participating in the program: • Airtemp Division, Chrysler Corporation • Amana Refrigeration, Incorporated • American Furnace Company • American-Standard Industrial Division American Radiator and Standard Sanitary Corporation • Arkla Air Conditioning Corporation • Armstrong Furnace Company, Division of National Union Electric Corporation • Bryant Manufacturing Company • Carrier Corporation • Cleveland Steel Products Corporation • Cobell Industries Incorporated • Continental Manufacturing Company • Contractor Division, McGraw-Goison Company • Carrier Corporation • Cleveland Steel Products Corporation • Cobell Industries Incorporated • Continental Manufacturing Company • Contractor Division, McGraw-Goison Company • Cruits Manufacturing Company • Day and Night Manufacturing Company • Florida Warren Corporation • Fraeer and Johnston Company • Friedrich Refrigerators, Inc. • Gaffers & Sattler, Division of Utility Appliance Corporation • General Electric Company • Goettl Bros, Metal Products Inc. • Holly-General Company • International Heater Company • Janitrol Heating and Air Conditioning, A Division of Midland-Ross Corporation • Laurel Products Corporation • Lenox Industries Inc. • Lincoln Air Control Products, Inc. • The Mathes Company, Division of Glen Alden Corporation • Maini Products, Inc. • Maeller Climatrol, Division of Worthington Corporation • National Union Provintion • National-U. S. Radiator Corporation • The Payne Company • Peerless Corporation • Perfection Industries Company • The Trane Company • Typhoon Air Conditioning Company, Division of Hupp Corporation • Southwest Manufacturing Company • Thera-Air Manufacturing Company • Control referencompany • Derival • Air Manufacturing Comp

According to the FHA: "Within a few years, any house that is not air conditioned will probably be obsolescent." In many areas, air conditioning is already as important as central heat. It provides more than comfort: *central* air conditioning makes any home cleaner and healthier, helps cut laundry and housecleaning bills. It silently suggests that the builder has omitted nothing to provide the finest home for the money. As the FHA suggests, central air conditioning will add increased resale value to your homes—a persuasive selling feature for your prospects.

## **GRADE WISE IS PROFIT WISE...**

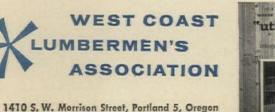


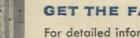
## "I SAVED OVER \$250 per home with the proper use of Utility grade West Coast framing lumber."-says Larry Koch, builder of custom homes.

Like builder Larry Koch, you, too, can find important economies in materials costs . . . with no reduction of quality . . . by using the right grades of framing lumber. "Utility" grade West Coast dimension lumber and boards are profit builders for One and Two Living Units, when used in accordance with FHA standards. Equally important, you have the traditional advantages of quality when you build with West Coast lumber.

Use West Coast "Utility" grade lumber for: solid roof boards\*, sheathing\*, rafters\*, ceiling joists\*, floor joists\*, bridging\*, studs\* for single-story or top level of multi-story construction.

\* When used in accordance with FHA Minimum Property Standards for One and Two Living Units, FHA Bulletin No. 300.





**GET THE FACTS** 

CHECK THESE USES for "Utility" grade West Coast

Lumber (In accordance with FHA Minimum Property Standards):

in place) Douglas Fir Size S 2x6 1 2x8 1 2x10 1

2×6 2×8

2x10 2x12

CEILING JOISTS (no attic storage)

2x6 2x8

FLOOR JOISTS

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

RAFTERS FOR LIGHT ROOFING (Roof slope over 3 in 12) (Weighing less than 4 lbs. per sq. ft. in place)

Spacing 16" o.c. 16" o.c. 16" o.c.

16" o.c. 16" o.c. 16" o.c. 16" o.c.

16" o.c. 16" o.c.

 2x6
 16" o.c.
 7'-2

 2x8
 16" o.c.
 10'-8

 2x10
 16" o.c.
 14'-8

 2x12
 16" o.c.
 7'-0"

 \*sleeping rooms only
 \*other than sleeping rooms

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

West Coast Hemlock

Maximum Span 9'-8" 14'-4" 19'-8"

7'-8" 11'-6" 15'-8" 18'-2"

11'-8" 17'-6"

40 lb

6'-4"

30 lb. live load\*

7'-2" 10'-8" 14'-8" 7'-0"

For detailed information about correct span tables for each dimension, write for your free copy of "WHERE TO USE 'UTILITY GRADE' " today!



and

FORMICA<sup>®</sup>...joined together to create the most exciting shower news in years!

# wonderwall commodore

FIAT has taken colorful, easy-cleaning Gold Sequin FORMICA right into the shower with the most advanced *complete* shower cabinet ever made. Here's built-in consumer appeal with an extra builder-bonus. For Wonderwall Commodore supports itself . . . no masonry or tiling . . . plumbing contractor makes complete installation in minutes. Wonderwall Commodore package is *complete*—sparkling Wonderwall panels, famous

Fiat PreCast terrazzo floor, genuine factory-glazed crystal-grade glass doors and panels, gleaming anodized aluminum frames, and choice of plumbing trim. Simple, quick, economical installation! Send coupon for full details.

## the inside story!

## **Revolutionary WONDERWALL**

Pace setting Wonderwall panels contain a full inch of light weight sound-deadening Styrofoam insulation, reinforced by two sheets of rustproofed metal and surfaced with genuine FORMICA. Built-in strength of full panel structural Wonderwalls replace masonry construction, tiling, time consuming piece-by-piece assembly. There is no stronger, quicker or more economical method of quality shower construction.



FIAT ... FIRST IN QUALITY SINCE 1922 ... PACKAGED SHOWERS . FLOORS . DOORS / TOILET ROOM ENCLOSURES







strategically located plants for fast delivery at lower cost! Plainview, Long Island, New York; Franklin Park, Illinois; Los Angeles, Calif. Albany, Georgia; Orillia, Ontario, Canada Get the facts about these new time and costcutting products —send today for details!



FIAT 93

METAL MANUFACTURING CO. 9301 Belmont Avenue, Franklin Park, Illinois

Please send me your folder, the new "Wonderwall" Commodore.

Contraction of the

Address\_\_\_\_

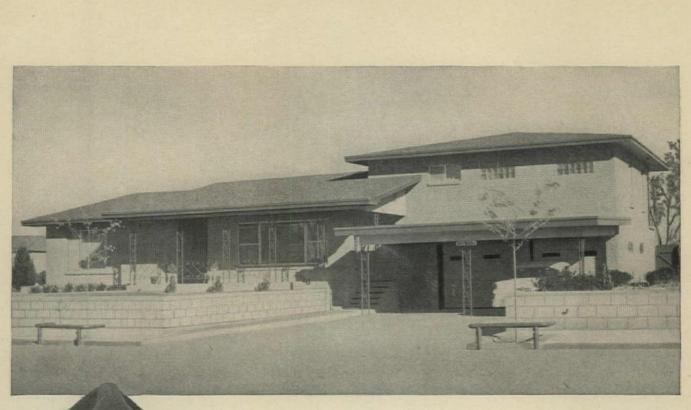
Name\_\_\_\_

Company\_

City\_\_\_\_\_

\_\_\_\_Zone\_\_\_\_State\_\_\_

\_\_\_Position\_\_\_





"8 out of 10 of my prospects want Air-conditioning. The **SUN VALLEY**" **All-Year**" saves them money, saves me service headaches—because it's Gas!"

states Kenneth Cass, Carlsbad, New Mexico, contractor.

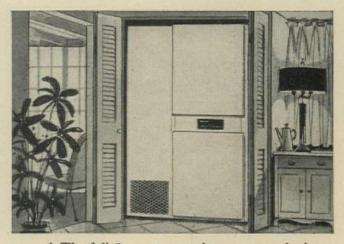
Give prospects the air-conditioning they want, make it practical with Gas, and you'll be tacking up "Sold" signs fast and profitably.

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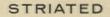
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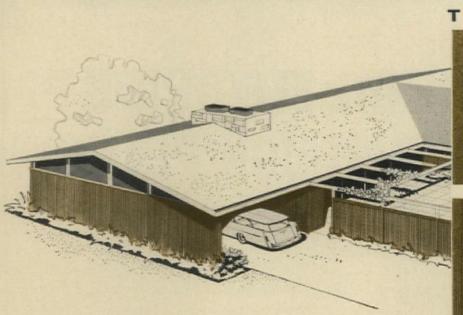


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# for rich interior designs



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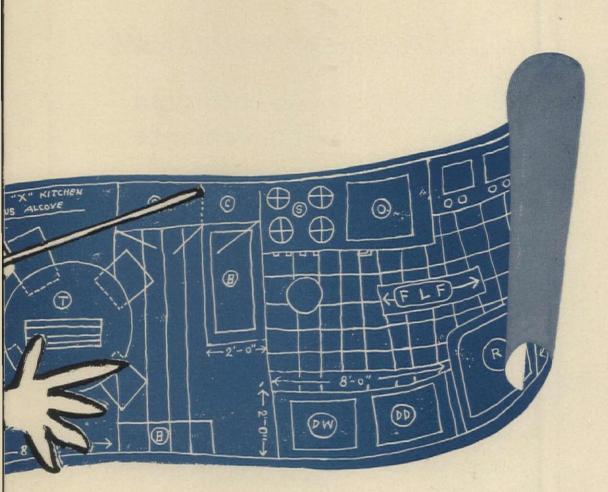
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# The Golden Value Line of the 60's



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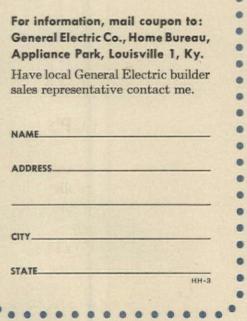


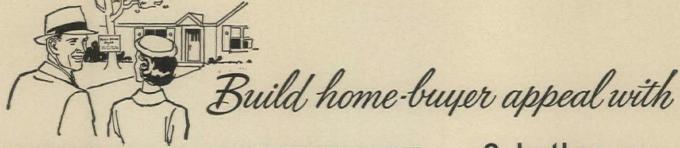
GENERAL %6

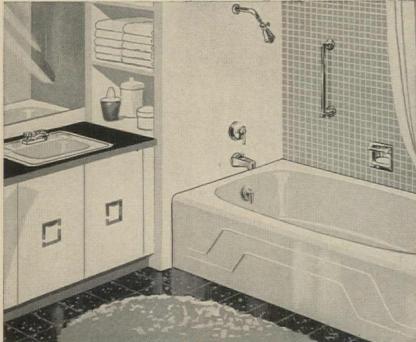
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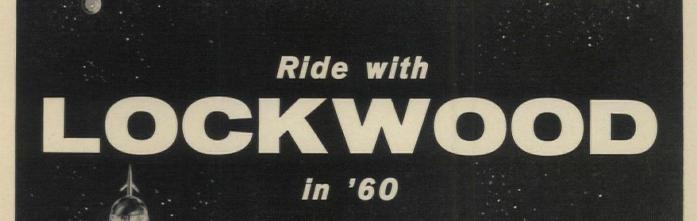
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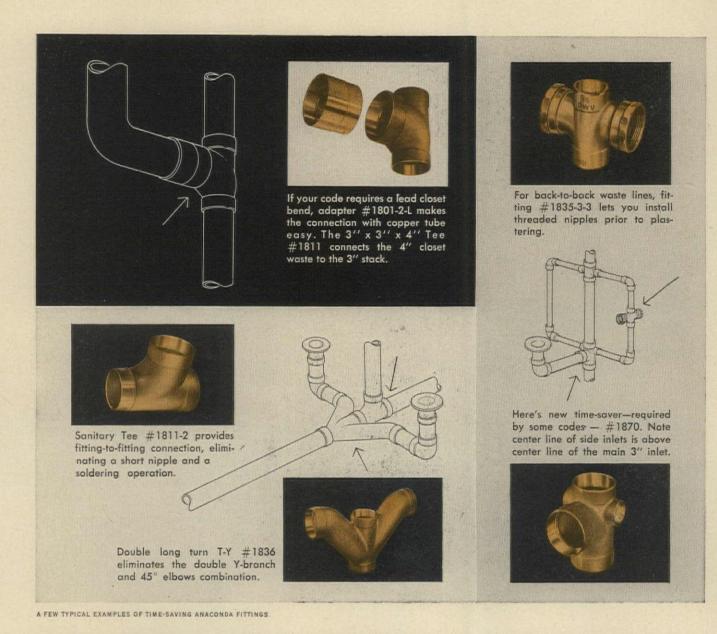
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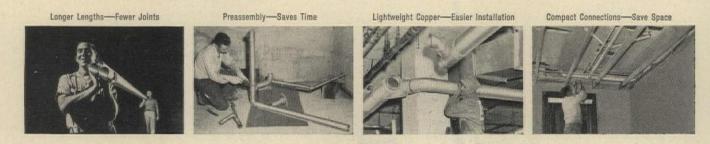
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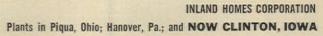
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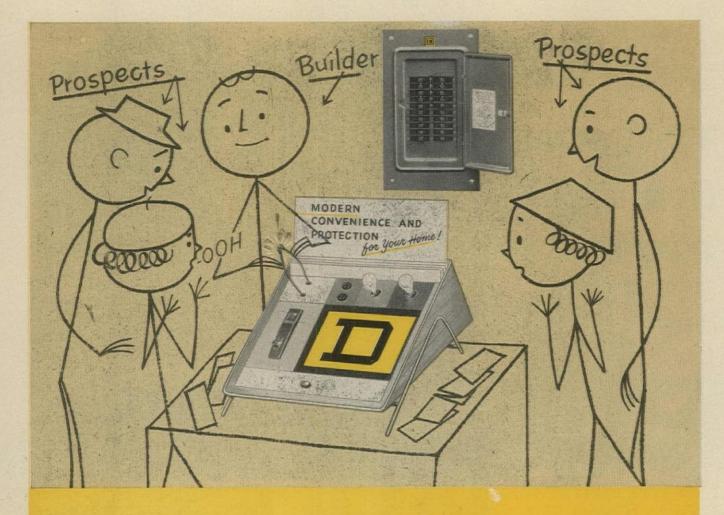
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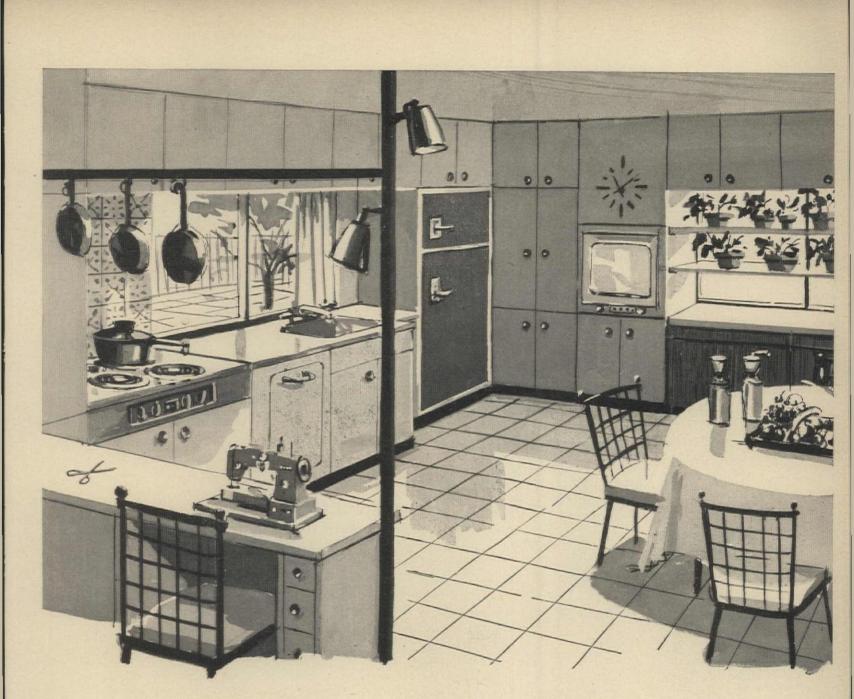
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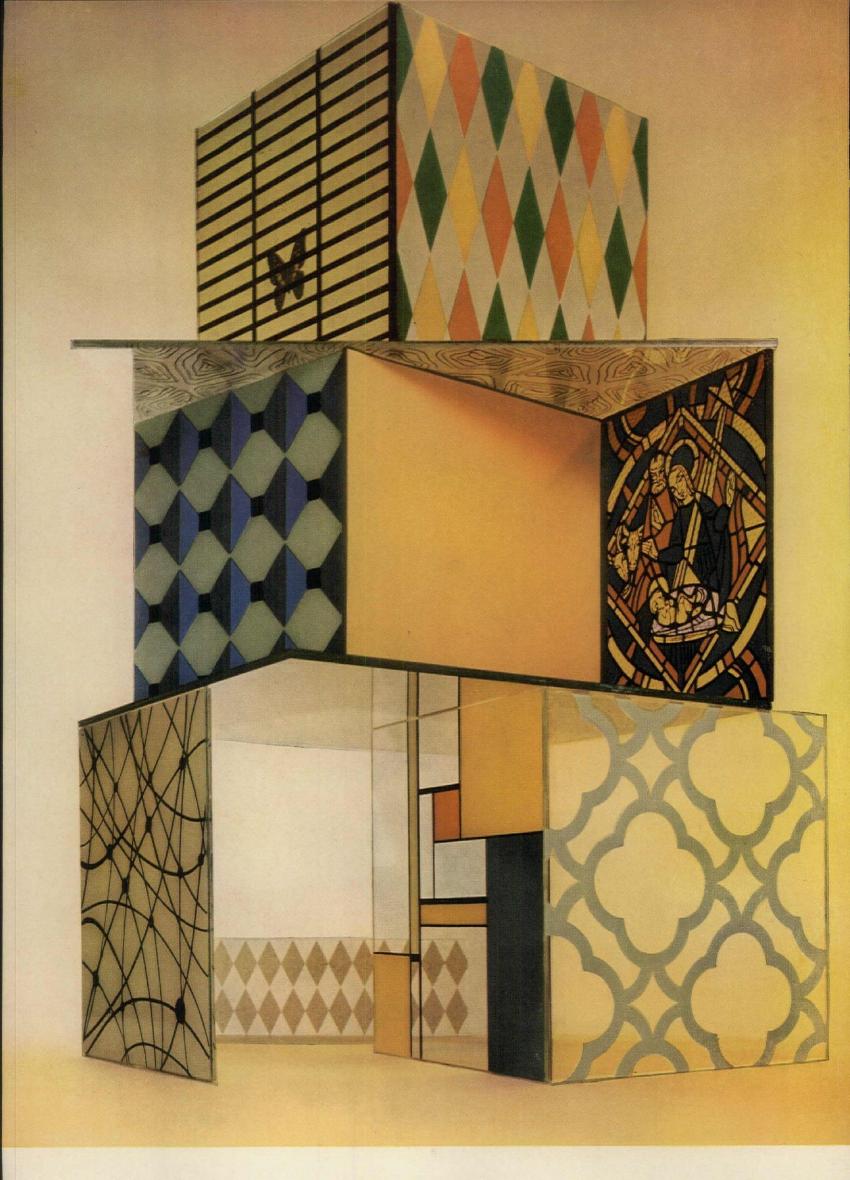
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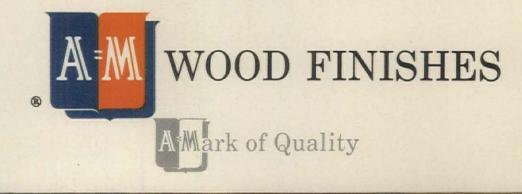
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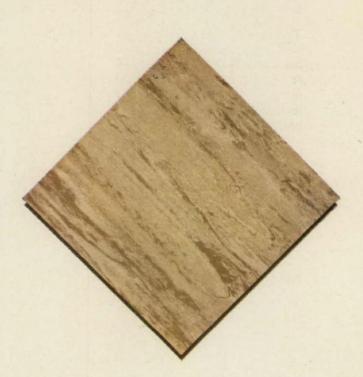
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#### Will FHA again become a hostage for welfare housing?

The Administration is getting skittish that FHA may run out of insuring authorization, after all, before the end of this year. President Eisenhower, in his budget message in mid-January (see p 48), asked Congress for no more authorization at this session on the basis that the \$8 billion Congress voted last year would keep the agency going at least until January 1961. If so, this would give the White House leverage to resist a catch-all housing law pumping up costly and controversial programs like public housing and urban renewal.

But now FHA Commissioner Julian Zimmerman has told the Senate housing subcommittee: "I am less certain than I was several months ago" that FHA's insuring authority will last. Democratic housing leaders piously urged him to ask for more authorization. Chairman John Sparkman (D, Ala.) warns that FHA "would be taking a good deal of a chance by not asking for sufficient money [ie authorization] now." Behind such talk lies the familiar fact that if more authorization for FHA insurance is included in this year's housing legislation, spenders will have better leverage to force the Administration to accept spending programs it doesn't like.

#### Industry leaders look for a way to cut land costs

Skyrocketing land costs at last are beginning to get serious attention from housing leaders.

"Land suited to modern housing's development is becoming too expensive," declares HHFAdministrator Norman P. Mason. "We should try to find ways and means of decreasing the cost to home buyers."

NAHB has teamed up with the Urban Land Institute, will spend \$9,500 on a six-month study of land planning & developing. This will aim at better land *use* to cut the cost per house. The brilliant young Denver firm of Harmon, O'Donnell & Henninger Associates will be consultants. (For one of its ideas, see p 62.)

But all this only nibbles at the symptoms of the problem. One cause is that federal and local tax laws are rigged to encourage speculation in land. Change them? Easier said than done. Yet if the nation decides to do something significant about land costs that's probably what will have to be done.

#### Can co-ops help renewal produce more mid-income housing?

"Urban renewal is on the brink of stagnation because of the failure to produce housing for moderate income people."

This accusation comes from a man who should really know, former HHFAdministrator Albert M. Cole. As US housing chief, Cole was responsible for urban renewal from 1953 until he resigned a year ago to become executive vice president of a Reynolds Metals subsidiary. Complains Cole: "Because of the high cost of both land and construction, the monthly carrying charges are often so high as to price many middle-income families out of the rental or sale market for new [intown] units. . . . We do not have a routine method of building the kind of massive town housing required in urban renewal areas."

Cole's solution is co-operative housing in urban renewal areas—an approach Reynolds is currently trying to work out with builders in both Cincinnati and Washington, D.C. If this involves FHA co-operatives, some formidable hurdles still stand in the way. Sample: up to mid-month, FHA still had not written regulations telling its local offices how to process a Sec 220 rehabilitation loan for co-ops.

Cole aired his views before the Third Natl Conference on Co-operatives. Another speaker, Ira Robbins, a New York City public housing commissioner, plugged for cities to sell tax-exempt bonds to provide cheap mortgage money so co-ops can be built in town for middle-income families. This, of course, is just another kind of subsidy. Reason: the more tax-free bonds compete for investable funds, the more regular mortgage borrowers may have to pay for *their* loans.

Neither Cole nor Robbins laid much stress on ways of getting at the root cause: those high land and building costs.

**WASHINGTON INSIDE:** Another realtor, Bruce C. Savage of Indianapolis, had the inside track at mid-month to succeed Charles E. Slusser as public housing commissioner. Savage, 53, entered realty in 1940, has built up one of the largest firms in Indiana dealing chiefly in luxury homes. He was a member of Eisenhower's famed housing policy advisory committee which did the spadework for the 1954 Housing Act . . . FHA braintrusters are trying to work out a new setup for rehabilitation loans so builders won't have to tie up their money so much longer in fixup work than in new construc-

tion. One possibility: a firm forward commitment based not on the acquisition cost of a rundown house but its prospective value after renovation. If this works, it could open a really big market . . . Some S&L leaders figure the American Bankers Assn would be smart to stop fighting to boost taxes for savings banks and S&Ls and, instead, ask the latter institutions to help them get the same reserve allowance for their mortgage investments that S&Ls and mutual banks already enjoy. This would encourage commercial banks to invest more in mortgages, and so help capital-shy housing. *NEWS cont'd on p 48* 

#### HOUSING POLICY:

## **Outlook: not much legislation this year**

Widening schism between the Administration and Congress foreshadows a long stalemate

This year shapes up as one for much talk and little action on the housing legislative front.

The fact that 1960 is a Presidential election year will make it harder than ever for the Republican Administration and the Demccrat-controlled Congress to compromise. President Eisenhower has made it clear he would again veto any housing bill he considers inflationary. And he so regards most of the schemes being talked up in Congress-notably Rep Albert M. Rains' bill to fire Fanny May \$1 billion of special assistance mortgage money to buy FHA and VA loans up to \$14,500 at above-market prices (ie par).

But some kind of a 1960 housing law seems certain to emerge, anyway. Too many popular programs are expiring to suggest that the policy schism between Congress and the Executive Branch will lead to no legislation at all. In that kind of stalemate, everybody would lose.

In his late January budget message, the President opened the bidding on housing legislation modestly. Here's what he asked-and predictions as to what legislators may do about it, item by item:

FHA: the President asks no more insuring authority on the basis that the \$8 billion increase voted by Congress last year will keep FHA going at least until January 1961. At that time, however, he expects the agency to need another \$3,108,812,476 increase to get through the fiscal year ending June 31, 1961. Congress is likely to vote FHA more insuring authority now, anyway, particularly since FHA Commissioner Julian Zimmerman is having afterthoughts about whether he can get by or not.

The President asked Congress to give FHA power to spend up to 15% above its appropriated budget if its business picks up above the basis of the budget estimates. This is designed to prevent frustrating delays in processing that crop up chronically when FHA business spurts. What Congress will do looks like a tossup; it has refused similar suggestions before but FHA has a good case-especially since it operates at a profit.

FHA repair loans: the President asked legislators to extend the program, which expires Sept 30, permanently and to abolish its \$1.6 billion insuring authority ceiling. There is no chance Congress will do either, although it will vote to extend the program. FHA has disclosed that it expects the repair loan insuring authority to be exhausted in June or July.

VA: The President wants VA to get the same interest flexibility as FHA (ie up to 6%) in place of VA's Congressionally-

H&H staff



#### Eisenhower praises realtors' government-economy drive

President Eisenhower made one of his rare appearances at a housing industry function last month when he spoke to a realtor breakfast in Washington. He said not a word about housing as such, but lauded NAREB's drive to get government costs cut 5% at all levels-federal, state and local.

"One of the reasons I was anxious to come is because I know of your work in the great effort to prevent the debasement of our currency," the Chief Executive said in a 9 min, off-the-cuff talk to some 1,100 realtors and their wives in the Mayflower Hotel. "If we indulge in

fiscal irresponsibility and irresponsible debt management, you know what it means." He added the "hope" that realtors would "go deeper" and help spread understanding of other basic problems like the need for the mutual security program and its importance in helping other peoples around the world preserve their own freedom, dignity and security.

Breakfasting, the President was flanked by Incoming NAREB President Armel Nutter (1) and Outgoing President James Udall (r). And he found time to shake hands with Donald Arnheim, 9, of Pittsburgh (extreme r).



RAINS BILL-Rep Albert Rains' plan to give housing a \$1 billion shot-in-the-arm with subsidized Fanny May mortgages (Feb., News)looks dead. The still-booming economy makes the scheme look inflationary to the Administration, whose housing leaders, FHA Chief Julian HHFAdministrator Norman Zimmerman (1), Mason (r) and FNMA President Stanley Baughman (r) testified against it. Many housing trade groups (eg NAREB, NRLDA) agree. Builders support the general idea, as do labor and public housers.

On Capitol Hill you can get even money the bill won't pass the House, even though Rains' House housing subcommittee reported it out to the full banking & currency committee by a 7-3 vote. Cries Rep William B. Widnall (R, N.J.), a member of the Rains' subcommittee: "It's a beautiful piece of election-year maneuvering. But nothing in the hearings substantiates with facts and figures the emergency need that is proclaimed in the bill."

frozen 51/4 % rate ceiling. There seems to be no chance whatever Congress will vote it even though this condemns the program to uselessness. Eisenhower has not asked Congress to extend the July 25 expiration of eligibility for World War 2 veterans, but Congress may well do so anyway.

VA direct loans: the President would let them die on schedule July 25. Congress may go along, but is likely to substitute a plan by Rep Olin Teague (D, Tex.), chairman of the House veterans committee, to tap Natl Service Life Insurance reserves to buy VA mortgages (which the Administration opposes).

Fanny May: Eisenhower would make its controversial special assistance programs subject to Congressional appropriation from now on. The House might go along; conservative Southerners there like the idea. But it will almost surely fail in the Senate. Eisenhower seems sure to get the \$150 million more he asks to buy FHA and VA loans under Special assistance, largely for renewal, displacees and housing the elderly.

Routine Congressional approval is also probable for Ike's request for \$50 million for the Treasury to buy Fanny May preferred stock under its secondary market program. This would have the effect of adding \$500 million to Fanny May's mortgage-buying resources.

Urban renewal: Congress must give the President a requested \$50 million supplemental appropriation for the expiring fiscal year to pay capital grants for projects nearing completion. And it may well vote renewal new obligational authority to commit the US to pay land-write down for clearance

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projects—even though the President seeks none this year (he says the \$300 million Congress voted last year for fiscal 1961 is enough).

The President, like many others, is critical of renewal's slow pace. In ten years, he notes, only 26 federal projects have been completed though planning has begun on 647 projects in 385 communities. But the program is gaining momentum: 65 projects are scheduled for completion this year and next.

**Public housing:** Gen Eisenhower wants no more units authorized this year because the 37,000 Congress voted last year are about all PHA can handle. Acting PHA Commissioner Lawrence Davern may have crossed the White House up when he told the Senate housing subcommittee: "There is a phenomenal need for low rent housing," but insisted nonetheless that PHA needs only the 37,000 units. On balance, chances are Congress may vote a token additional authorization, but the final outcome of this may well rest in whether a Presidential veto looms.

Federal S&L Insurance Corp: The president says insured savings and loan accounts, which have increased 5 fold in a decade, are growing so fast that insurance premiums must be boosted from 1/12 to 1/8 of 1% of S&L share capital plus borrowings—their pre-1949 level. He would have the higher premium remain until FSLIC reserves get back to 1% of S&L accounts plus borrowings. S&L's expect to persuade Congress to pigeonhole the boost.

**Public facilities loans:** The President wants HHFA to be allowed to borrow \$20 million more from the Treasury for loans to communities because its already-borrowed \$100 million will be used early in '61. Congress is likely to give him even more. Eisenhower wants to make the loan subject to appropriations, too. Congress will probably refuse.

**College housing:** Eisenhower is asking Congress to kill this controversial program under which HHFA lends money at less than it costs the Treasury to borrow it, and enact a much broader plan to help colleges finance construction not only of housing but also of classrooms and other facilities. He wants the US to guarantee \$1 billion in taxable bonds and provide federal 20-year grants equal to 25% of the principal of \$2 billion of bonds. This would have the effect of wiping out the hidden subsidy via interest rates, substituting a visible subsidy.

### HHFA study urges big changes in renewal, public housing

Sweeping proposals to reshape the nation's approach to public housing and urban renewal have been advanced by Prof. Ernest M. Fisher, Columbia University's expert on urban land economics.

The recommendations, made in a report to HHFAdministrator Norman P. Mason, would, if adopted down the line, turn the federal program for subsidizing housing inside out. Pinpointed in Prof. Fisher's report is the heavy cost to taxpayers of bootleg slum profiteering. *Here is what Prof. Fisher proposes:* 

#### Merge HHFA and its subagencies into a single organization.

Prof. Fisher says that the present division of responsibilities leads to fragmentary (and often contradictory) results. A single agency

would eliminate duplication of effort, simplify the work of local authorities by giving them one Washington bureaucracy to deal with and hence one approval, one clearance, one audit. Grants could then be made to communities in one lump sum instead of piecemeal. Similar integration on the local level would let communities



FISHER

work out comprehensive programs and eliminate "projectitis" which impells them to advance here-and-there projects just to get a share of federal funds.

Many in the housing industry will not agree with Prof. Fisher that unification is a good idea. They would oppose tying self-supporting activities like FHA and FNMA to public housing, fearing that the social welfare agencies would become even more entrenched and lend their color to all the rest.

#### · Eliminate profiteering by slumlords.

Says Fisher: "Slum landlords all too frequently welcome condemnation by public authority. They are able to capitalize the income they receive—often flowing from the violation itself—and secure large rewards." He urges revisions of laws and procedures that result in excessive condemnation awards, points out that rigid enforcement of building and housing codes would achieve this. "When an object becomes a menace to public interest, private property rights in that object cease and its destruction deprives no one of property." Sums up Prof. Fisher: "There must be ways in which slum properties can be eliminated and individual private property protected, while the public is relieved from the burden of underwriting the antisocial and illegal practices of greedy or ignorant landlords and property managers."

#### Improve housekeeping standards.

A comprehensive program of housing must include education of "troubled and troublesome" families — the handicapped, aged, ignorant or broken families—he points out. He places the burden on local agencies to provide competent counseling and to help set up social groups like tenant associations. In substance, Prof. Fisher says that it is vital that the recipients of public housing be taught to keep house.

### • Reduce federal supervision of local housing agencies.

When the public housing program was established, few local bodies existed. Federal agencies took the lead in staff training, project design, development, and management. But now, notes Prof. Fisher, local groups have gained experience and "chafe at the tight reins" which they feel restrict originality and the adaptation of general rules to peculiar community situations. With lump sum grants, the communities would have greater latitude in mapping projects.

#### More use of existing structures in urban renewal areas.

Repairing and improving buildings, points out Prof. Fisher, is often cheaper than putting up new ones. He suggests that local agencies be allowed to buy an inventory of graded dwellings of all types. Low-income families could be housed in these via rent subsidies. Financial aid could go to needy homeowners in renewal areas through repair subsidies. If private contractors are unwilling to take the risk, public construction crews could be used. If private financing is unavailable, public agencies could make home-improvement loans themselves, consolidate them with any existing mortgage on property. Where landlords get financial aid, the mortgage contract could limit rent increases to tenants and provide that property be maintained properly. "If rent increases had to be so great as to cause the probable dislocation of some of the tenants, the local public agency might wish continued on p 50

#### A BOOST FOR RESEARCH

Government agencies are already collecting data which could—with a little more expense —become a treasure trove of now-missing statistics to guide the housing industry.

statistics to guide the housing industry. So says Dr. Fisher in another segment of his report to HHFA. He calls it "the pressing need for study and research" lest "permanent and flagrant mistakes" be made in new housing programs. Items:

• FHA files could yield much better figures on costs of new and used housing, *including land*, than today's "scanty and scattered" data. Moreover, the industry needs to know much more about the effect of financing terms and profits on house prices. With better indexes, "the whole problem of reducing costs can be more effectively attacked," says Fisher.

· Census should make an annual survey comparable to the 1956 national housing invenbecause, between decennial censuses tory 'radical changes" can occur undetected in the US housing stock while the industry makes costly decisions from a "shaky and often deceptive base." This is particularly important to improve data on demolitions, repairs and rehabilitation. So quarterly or monthly reports on these fuzzy areas should be made by such agencies as URA, PHA, the General Services Administration and Bureau of Public Roads. • Census should step up its "widely ac-claimed" vacancy reports from quarterly to monthly. And it should correlate this information with characteristics of the whole US housing stock, new and old. This should be supplemented by regular vacancy reports from both FHA and PHA, broken down by location, project-size and duration of vacancy.

• FHA and PHA should publish annual operating cost statistics on multi-family rental properties to supplement the "beginning" made in the 1950 Census. This would give rental managers a yardstick to judge their own efficiency by.

 URA should "probably" provide monthly breakdowns—by localities—of renewal demolitions, relocation loads, rehabilitation and new construction.

• Fanny May could issue monthly data on purchases and sales of FHA and VA loans, including its own operations, to help provide "a new and accurate view of the mortgage credit situation."

All this, Fisher concedes, would cost money, but "only a trifle" compared to the benefit to industry and public. to subsidize their rent in lieu of seeing them dispossessed."

In 61 pages that cost US taxpayers a bargain \$3,000, Prof. Fisher, for six years director of FHA's economics and statistics division, does not offer an answer to the really big question: how much can the US afford to spend to subsidize housing for low income citizens. But he offers a lot of

suggestions for making the money do more good for more people than via today's methods.

HHFA's Mason, facing Democratic election-year pressure to pump more money down the same old drains, called the report "penetrating" and "thought provoking." But he issued it without endorsement. Presumably he will look further for alternatives.

## **New FHA trade-in regulations** promise to unlock giant market

After five months of painstaking study and huddles with housing industry leaders, FHA has issued regulations to let builders, realtors and the US public take advantage of the new trade-in tools in the 1959 Housing Act.

The trade-in regulations follow quickly on the heels of FHA's new credit regulations permitting a buyer to qualify with lower income for a house where quality materials and equipment mean lower maintenance and operating costs (see p 138). Taken together, the two new directives should open up a big new market for builders and realtors. The market: families who will trade up to a newer, better equipped house now that it is much easier for them to get equity out of their old one.

Don't expect the new rules to produce a spurt of FHA trading right away. The regulations are complex. Training realtors, builders and local FHA officials in how they work will take months at least.

But FHA has taken a giant step forward by recognizing in its rules-and official examples-that trading can only achieve its potential for raising US housing standards if FHA agrees that a property may have a value higher than a realtor's or builder's acquisition cost.

Predicts President Armel Nutter of NAREB: "The big sell in 1960 will be the quality home and trade-in sales program resulting from it." He adds: "Syndicates will be formed to buy trade-in homes just as the auto dealer approaches used cars. The houses will be reconditioned and improved and then put on the market for resale This process will raise the standard of living of many families of America."

Says Realtor Mal Sherman of Baltimore, one of the trading experts who advised FHA on how to write the new rules: "We're very excited about how it turned out."

#### What FHA permits

The '59 law authorized FHA to let builders and realtors have the same loan-to-value ratio as owner-occupants under Secs 203 and 220 (for one- and two-family homes)-provided that 15% of the mortgage is held in escrow to reduce the loan if the property is not sold in 18 months. FHA (as reported in these columns a month ago) will let this new tool be used not only for trade-ins, but also for new housing, in four ways.

1. Operative builder's escrow commitment: this is much like the familiar builder's firm commitment covering new construction but now the builder can have 18 months instead of eight before he has to close in his own name. The escrow commitment will cover new homes. A builder gets the same loan-tovalue ratio loan as an owner-occupant but puts 15% in escrow (instead of getting only 85% of the loan available to an owneroccupant in the first place.) When the builder sells the house, the buyer assumes the mortgage-and the builder may absorb the closing costs he has already paid.

2. Two-party deal: this involves trading an existing house for another one. There will

be only a few of these direct deals between a buyer and a seller, experts forecast.

3. Three-party deal: this involves a) owner who wants to sell one house and buy another one from b) some one else and c) a realtor or builder who buys the first house from the owner. The third-party realtor becomes the mortgagor. He files the usual FHA application plus a copy of a contract to buy the house. And he certifies that the owner who sold it planned to use the money to buy another home.

4. Refinancing deal (including mortgaging unencumbered property): here the mortgagor certifies that he plans to use the money to buy another house for his own occupancy. The saving is closing costs. In all four types of deals the 15% escrow withholding applies.

#### How FHA balks windfalls

If a realtor's acquisition cost is so much below the FHA valuation that the realtor might mortgage out despite the 15% escrow, FHA will require a bigger escrow. The agency's own announcement of the trade-in rules gives this example:

"Assume a property with an FHA appraisal value of \$21,500. Under the escrow commitment procedure, the mortgage would be \$19,000. The minimum escrow would be \$2,850, which is 15% of \$19,000. If the mortgagor's actual acquisition cost for the property was \$17,000, the escrow would be \$3,080, computed as follows: .\$19,000

Maximum mortgage amount. Acquisition cost (\$17,000) 97% x \$13,500 85% x 2,500 70% x 1,000

15,920

Escrow required .... .\$ 3,080 If the mortgagor's acquisition cost was \$17,329 or more, the minimum amount of escrow of \$2,850 would be required."

FHA has imposed three more rules to prevent abuses like speculation in used houses under the new setup:

· Builders must promise not to rent homes built under escrow commitments for less than 30 nor more than 60 days. Nor may they sell them except by paying off the entire FHA loan.

• If a house goes unsold 18 months, thus requiring the 15% in escrow to be applied to reduce the mortgage, FHA will treat this as a mandatory prepayment. It will be in addition to the 18th amortization payment. And the 19th and subsequent payments still will be due on the original schedule.

Trade-in firm commitments to builders will be limited to 20 year loans up to \$19,100 for a one-family house and \$21,200 for a two-family house.

#### Problem: tight money

Some problems still remain to be solved. No. 1 is reluctance of lenders to make FHA loans on existing homes. Realtor Sherman says 85% of Baltimore lenders won't do so currently. The other 15% are extra strict about both buyer credit and the property itself. His solution: let lenders charge 1 or 2 points more discount on such loans.

No. 2 problem is title insurance. Even though the trade-in rules let buyers and sellers dodge double closing costs, title companies still could impose their full fee twice (and it is often a third of the total closing tab). In Baltimore, for example, a guaranteed title policy on a \$10,000 house costs \$115. Realtors hope title concerns will agree to get one full fee in trade-in deals, take only a fraction of it to bring the policy up to date (perhaps \$20) when a traded house is re-sold.

#### FHA shakeup in Chicago brings in new chief

Chicago's FHA office, long plagued with bottlenecks that made builders call it the "worst in the country," may be set for an overhaul. But it took a major explosion in Washington to do it.

Trouble, say local builders, centers in processing of multi-unit projects. The office has never processed a Sec 207 rental loan and has balked for months over Sec 220 co-ops.

The trouble came to a head last month, with resignation of Administrator Fred Heubenthal, 66, and appointment of John L. Waner, 45, to replace him. Builders say Heubenthal, primarily a realtor and teacher, was unfamiliar with their problems and hampered by two serious illnesses since his appointment in 1958. But the real trouble, they say, is reluctance of FHA's career bureaucrats to try new ideas.

One example: efforts of Julian Levi, executive director of the South East Chicago Commission, to use 220 co-ops in the Hyde Park-Kenwood urban renewal area resulted in the lone 220 ap-proval, "and that's just a lousy six-flat." In the time it took (11 months), he says local banks and S&Ls loaned \$1.5 to \$2 million conventionally on similar deals. One big obstacle: six years after 220s were authorized in the 1954 Housing Act, FHA in Washington has yet to issue regulations on 220 co-ops for local offices.

The shakeup followed rejection by FHA of the powerful Chicago Flat Janitors Union application for a multi-million dollar apartment project on the Chicago River. William McFetridge, president of the union, screamed to Secretary of Labor Mitchell, who took it to the White House. From there it went to Sen Everett Dirksen, whose patronage includes the Chicago FHA post.

Says a Dirksen staffer who investigated, prescribed the remedy: "These FHA guys have just been sitting on their hands. Singlefamily stuff is easy to handle and multifamily is hard. So they just handled singlefamily. . . . They just need some new blood.

Builders hope Waner, owner of City & Suburban Heating and biggest new-house installer of plumbing and heating, can supply it.

# Builder's multiple corporate setup rejected by Tax Court in test case

For years, tax experts have cautioned homebuilders that the multiple corporation setups many use to cut their income taxes are loaded with traps. Now the US Tax Court has shown the housing industry just how right the experts have been. And in so doing, it has given IRS ammunition that tax experts fear may lead many builders whose multiple corporation setups are sound to pay more taxes than they need to.

The Tax Court decision upholds an IRS tax deficiency finding of \$102,748.90 against Aldon Homes Inc of California, a now-dissolved firm owned by Big Builders Willard Woodrow and the late Donald Metz and Ira Oberndorfer. It agrees with IRS that 16 other corporations, set up to build and sell Aldon's 237-lot Braircliffe Estate development in the Los Angeles suburb of Downey, were only shams formed to cut taxes (by keeping the income of each under \$25,000 a year and thus taxable at 30% instead of 52%).

The decision is a landmark because it is the first court ruling on multiple corporation setups in housing. But, say tax experts, it doesn't necessarily set a precedent for disallowing tax savings by all multiple setups, or even the 1,800 cases that IRS says are now in dispute or before the court—most of them building firms.

#### Half a precedent?

"Every case has to be considered on its own set of facts," says Tax Lawyer Sylvanus Felix. "This doesn't mean that all are lost." What it does mean, says Felix, is that "it gives internal revenue agents ammunition with which to blackmail taxpayers into making substantial deficiency settlements. And in view of the inexperience of builders I fear that literally thousands of them will be vulnerable." The Aldon case itself, he says, "is a perfect example of hindsight on the part of a group of taxpayers who, after starting a project, decided to save taxes by setting up a multiple-entity operation."

What happened in the Aldon case:

**1.** Woodrow, Metz, and Obendorfer organized Aldon Homes June 15, 1950 to buy and develop the Downey tract. They got \$300,000 from investors with a promise of half the profits, used

### **New rules loom for syndicates**

Real estate syndicators may have an easier time organizing for the best tax break soon.

A new set of rules for taxing partnerships proposed by Internal Revenue Service is the key. Experts say it should give the best guide yet to setting up syndicates so they will be taxed as partnerships instead of associations (ie, same as corporations).

Syndicates began to boom some four years ago when realty men found them sure-fire for attracting the vast reservoir of small equity money available from newly prosperous doctors, lawyers, and other middle-class investors. The reason: if classed as partnerships by IRS, syndicates could pass their profits to members with only one tax bite as individual income. Thus yields as much as double those on equivalent investments in corporate securities were possible.

By last year, investments were flowing into syndicates at an estimated \$3 billion a year about a third of it in housing, mostly rental. most of it to buy land and start construction. Aldon, or Aldon Construction Co, a partnership of the builders, obtained subdivision approval, arranged construction and permanent financing.

2. In December 1950, 16 additional corporations were formed each controlled by one or more of the builders. They were called Adlon, Barca, Carab, Dolan, Efton, Fonte, Grail, Hajon, Ilgar, Johan, Kiltor, Londa, Mishap, Nadle, Olang, and Pewang Each of these "alphabet corporations" acquired title 'o 14 or 15 lots in the development, and gave an unsecured note to Aldon for the price. But Aldon continued to make outlays to develop the tract.

**3.** Each "alphabet corporation" then contracted with Donna Homes, another builder-controlled company, to act as general contractor for construction of its homes in the tract.

**4.** In March 1951, the alphabet corporations issued bonds and notes to the Aldon investors totalling \$300,000, with provision that bonds not redeemed prior to Dec 15, 1951 would have to be redeemed at \$168 apiece instead of the \$100 issue price. On March 29, 1951, Aldon wrote checks to the investors totaling \$300,000, which they then endorsed over (or made new checks) to the alphabet corporations in payment for the bonds and notes. The alphabet corporations then wrote checks to Aldon totaling \$300,000 in payment of its notes.

5. By Dec 1, 1951, the development was completed, all houses sold.

6. On Dec 7, 1951, the alphabet corporations redeemed some 60% of the outstanding bonds.

**7.** On Dec 14, the corporation redeemed the remainder of the bonds and notes effective Dec 24 at the penalty rate, resulting in a distribution of 49.5% of the profits to the investors.

Viewing this sequence, IRS held that the alphabet corporations were not "business entities worthy of recognition for tax purposes" and that their income should be attributed to Aldon. The court agreed, remarking that the case raises "the familiar problem of form versus substance the alleged business purposes [for forming the alphabet corporations] impressed us simply as a lawyer's marshaling of possible business reasons that might conceivably have motivated the adoption of the forms here employed, but which in fact played no part whatever [in it]."

The alphabet corporations, said the court, "were but the mechanical instruments which amplified the tune, the melody, and lyrics of which had been composed and written by Aldon. And it was Aldon, through its controlling stockholders, which controlled the tempo and the finale—the distribution of profits."

In going beyond the forms, the court observed that the "circular checkwriting" operation of March 29 resulted in nobody being any the richer; that the bond redemption was "obviously a device to split profits."

#### What it all means

Tax traps illustrated by the case, says Consultant Felix, include:

**1.** The companies were formed after the operation started, so evidently could do nothing Aldon was not already doing perfectly well.

2. They all performed the same operation, instead of following the "natural divisions of the industry" (eg, a roofing company, a siding company, a paving company, etc) and could show little reason for existing in the manufacturing of a mass-produced tract of houses.

**3.** They all had substantially the same owners with substantially the same interest. Hence even if IRS were reversed on its stand that the corporations were shams, it could still disallow them under a section of the code which says the commissioner may redistribute income of two or more companies with substantially the same ownership to prevent tax evasion.

"This case is going to be thrown at everyone under examination," predicts Felix. "And a builder faced with it should get expert counsel."

In another area, IRS has gone ahead over strenuous objections of trade and public service groups to put into effect its ruling that funds used for lobbying—obtaining passage of laws—may not be deducted from income as a business expense. Purpose, say observers, is mainly to go after big spenders, not little ones (eg, union members).

Enthusiasm ran so high that some realty men began to warn investors against marginal managements and properties that were joining the bonanza. But enthusiasm was dampened when IRS began ruling some syndicates were more like corporations than partnerships. It began taxing their income once as syndicate income and again when distributed to members, thus cancelling the advantage.

Tax men say the new rules won't change IRS policy: syndicates that are more like corporations than partnerships will still be taxed like corporations, with a double bite. What the new rules do is set up much more definite guides for telling how much like a corporation a syndicate is. IRS would look at six points of corporate character in making up its mind:

1. Are there associates in the organization?

**2.** Is it set up to conduct a business and divide the profits from it?

3. Does it continue after death, insanity, bank-

ruptcy, retirement, resignation, or expulsion of a member?

4. Is management centralized?

5. Is liability of members limited?

6. Is an individual's interest transferable without consent of other members?

Since the first two are commonly found in both partnerships and corporations, they won't be counted in the determination. According to examples in the proposed rules, answers of "yes" to three or more of the last four points would result in taxation like a corporation.

Foxy as always, IRS will not rely on a simple numerical rule. The *nature* of the transferability of interest, limitation of liability, or other attributes, might affect their weight in the determination. And if an overall look beyond the formal setup revealed other factors as significant, IRS would consider them.

The new rules are still subject to hearing and change. Realty men hope they can persuade IRS to be even more specific in the final version. But even if they fail the new rules are better than nothing, they say.

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HOUSE & HOME

# Short-term money easing, but it looks temporary to mortgage men

The mortgage market has reached a plateau. For three months now, FHA and VA discounts have been relatively stable. Most mortgage men look for money to become more available in the next few months. Few see hope of easing in prices until late in the year—if then.

Short-term money has eased surprisingly. US Treasury bill yields dropped to a six-month low in February. The average rate on 91 day bills went down to 3.563%, first time it had gone below 4% since September. This, coupled with



below-expectation auto sales and a slump in the stock market, has prompted speculation that the boom will not become a super boom and so pressure for money will slack off. But the Treasury still must refund a record \$92 billion in debt. The bulk of this will have to be in the inflationary short-term market since Congress shows no sign of removing the 42-yearold  $4\frac{1}{4}$ % ceiling on long-term government bonds.

Consensus of mortgage men and government economists: the easing in short-term rates is probably only temporary, a seasonal counterreaction to the strong tightening in December.

Raymond Rodgers, New York University banking professor, predicts that barring a major break in business activity or the stock market, money will remain tight and long-term interest rates high until at least fall, perhaps longer. Vice President C. A. Bacon of Mortgage Invest tent Co, Denver, agrees: "A price easing will come in the last three months of the year—if it comes at all."

#### Discounts on FHAs and VAs are still creeping up fractionally.

Boston savings banks are paying  $94\frac{1}{2}$ - $95\frac{1}{2}$ for FHA minimum downs, as they have for two months, but the  $95\frac{1}{2}$  is weakening and most business is at 95. In Detroit, FHA minimum downs dropped  $\frac{1}{2}$  point to  $96-96\frac{1}{2}$ . In California, Metropolitan Life cut its price from  $96\frac{1}{2}$  to  $95\frac{1}{2}$ . This is still enough above what other out-of-state lenders will pay to earn the Met the nickname "little FNMA," for its bol-

stering influence on prices. Bank of America will make 15-year FHA loans at par to established depositors (up to \$20,000, 25% down). Conventional loans, steady at around 6% in most of the country, edged up in California from a bottom of 6.6 to 6¾. (The top is a whopping 7½, usurious in many states.) Prudential and Met, buying FHAs at 96½ in Texas, helped boost the market ½ point to 95½-96.

#### Mortgage originating remains sluggish.

So short are immediate-delivery loans in some areas that mortgage bankers are scrambling for business. Some, gambling that discounts will shrink by the time today's deals result in completed houses, are giving builders commitments above market prices. Says President Stanley M. Earp of Citizens Mortgage Co, Detroit: "Everyone I've talked to is pretty well cleaned up on mortgages. There is no carryover. That should help ease discounts." Adds Executive Vice President Donald McGregor of giant T. J. Bettes: "We could get all the business we wanted if we'd commit for nine months or a year on the basis of current FNMA prices. But we haven't had the nerve to do it so far."

Says MBA President B. B. Bass: "Most builders are customers of one or two mortgage bankers. The fact that they are not calling shows they have all the financing they need now. When we do have an easing in prices we're going to have to work to find mortgages." Prudential has been offering 97 in Oklahoma for choice immediate FHA minimum downs, finds it can't fill its needs overnight.

## Savings banks have not recovered yet from the loss of deposits caused last fall by the Treasury's celebrated Magic 5s.

Expected deposit increases did not materialize in January. (In New York State, 229 S&Ls actually suffered a \$16 million net loss.) Some banks now will do business only with longstanding customers. Research Director Saul Klaman of the National Assn of Mutual Savings Banks predicts that the banks will invest 10% less in mortgages this year (probably around \$3.8 billion) than in '59. Moreover, for the first time since '47 they will buy US securities because 1) they need liquidity and 2) short-term rates are so attractive.

"Savings banks are terribly depressed by the Long Island builders, by their fight with Arthur Roth (president of the Franklin Natl Bank of Long Island) and by the possibility of more Tragic 5s," says a western mortgage banker. (In January, N.Y. homebuilders adopted a resolution asking state savings institutions to meet *all* mortgage financing needs in the state before lending money elsewhere. Roth has also sounded off against out-of-state mortgage lending even though his own bank has done a brish trade in standbys for California tracts.

#### Should mortgage men seek a law to let them become 'little Fanny May' outfits?

When FHA was born in 1934, its creators envisaged formation of local and regional mortgage associations akin to Fanny May to originate, sell, and hold FHA mortgages. But depression-scared investors spurned the chance. Fanny May was the only association formed—with RFC money. A decade later, Congress repealed the authority.

Now, some forward-looking mortgage men wonder if they missed the boat. Fanny May has proved profitable. And mortgage bankers, in their now traditional role of middle-men between builders and permanent institutional lenders like insurance companies, savings banks, and pension funds, are caught in profit-squeezing competition which emerges as servicing concessions, reluctant positiontaking in the market. and stiffer competition with institutions doing their own origination and servicing.

Last month, MBA Vice President Robert Tharpe broached a plan for mortgage bankers to seek federal legislation to let them become "a new kind of investment company" underwriting securities sold directly to the public. What kind of company? "The XYZ Federal



Mortgage Corp . . . would have many aspects of the secondary market part of Fanny May," suggested Tharpe in a talk to the Southern California MBA in Los Angeles. "In effect, it would be one of a number of private Fan-May's operating, ny however, directly in the rather market than through intermediaries. It would originate mort-

THARPE

gages, hold mortgages, service mortgages, and trade in mortgages with other investors. It would have a broad base of private capital, supplemented by issuance of debentures secured by a portfolio of FHA and VA loans. It would have fiduciary powers and responsibilities. It would be comparable in many ways to the regulated investment companies in the securities field; and it should have comparable tax treatment, with special recognition of the need to maintain reserves..."

Such a company, predicted Tharpe, would be able to offer stock or debentures that could be tailored to attract investors from private individuals to giant institutions, thus making it easier to get pension fund money into mortgage loans. "We would still serve our same institutional investors, and we would be better servants just as we are better servants to insurance companies today because of having added the mutual savings banks to our operations."

Tharpe urged the lending fraternity to get behind his idea rather than the Central Mortgage Bank proposal advocated by builders. Reason: the latter, in its present form, "differs little from the present FNMA type of secondary market with entirely too much direct dependence on the US Treasury."

But he warned mortgage men against standing pat atop their huge post-war growth and prosperity. "I doubt that the mortgage company can survive forever being essentially an ancillary institution," he said.

NEWS continued on p 55

# Why put on a roof that can bounce back at you

## INSTALL THE SHINGLE THAT DOESN'T KICK BACK BECAUSE IT CAN'T RIP LOOSE....THE MIGHTY

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#### MORTGAGE BRIEFS

#### Foreclosure law eased

Wisconsin has amended its obsolete mortgage foreclosure law, cutting the redemption period from a year to six months.

The change, result of a two-and-a-half year battle by lenders, provides that the shorter period must be by agreement between borrower and lender and that it applies only to properties three acres or less. The three-acre limit, mortgage men say, was the key to getting the amendment past traditionally hostile rural legislators whose farmer-constituents want foreclosure kept difficult even though this drives up the cost of mortgage borrowing for everybody. Long redemption periods are relics from the days when farmers demanded protection from a bad crop year.

William W. Bunge, board chairman of Mortgage Associates Inc. Milwaukee, who headed the campaign to revise the old law, sees a doublebarreled benefit: 1) more money from out-of-state investors who fear states with long, costly foreclosure procedures and 2) more willingness by local lenders to go up to the permissible 90% loan-value ratio. He sees the second as the most important but he also cites three local lenders who had stopped doing business in the state but are now coming back.

Senior Vice President Harry Held of the Bowery Savings Bank, New York, puts the case for out-of-state money: "All other things being equal now, I would pick Wisconsin over, say, Illinois, for investing."

Other states that have eased foreclosure laws in the last three years: Idaho, Indiana, Nebraska, New Mexico, Oregon.

#### **FNMA** swaps more mortgages

For the second time in five months, Fanny May is exchanging GI mortgages for US Treasury bonds.

In the latest exchange, \$200 million 4% mortgages are offered for non-marketable 23/4 % Series B bonds maturing 1975-1980. The mortgages have an average unexpired term of 14 years and an average unpaid principal of \$5,300. Deadline for bids on them is March 8.

When \$188 million in GI mortgages was offered last October, bondholders bid an average of \$102.03 face value of bonds for each \$100 of unpaid mortgage principal.

The Treasury retires the bonds and credits the amount against the money Fanny May borrowed from the Treasury to buy mortgages. The two swaps will cut net Fanny May outlays for the fiscal year ending in June to about \$55 million.

Congressional Democrats have opposed the swaps on the grounds that Fanny May-loses millions in interest income. But without the \$388 reduction in federal outlays the swaps achieve, the \$200 million budget surplus foreseen by President Eisenhower would turn to a deficit.

#### PHA bonds take \$102 million

The money squeeze was pulled a little tighter for mortgage men last month when tax-exempt Public Housing Authority bonds came on the market for \$102,830,000.

The bonds, sold by PHA for 18 local authorities, went at bids which set the net interest rate at 3.822%, slightly lower than the 3.861% drawn by a \$102,145,000 sale last October. The latest issue had 17 bonds with a 37/8 % coupon and one with 33/4 %.

Because the interest is tax-free, the housing authorities were able to attract money at half of what it costs private builders.

Since it began doing so in 1951, PHA has floated \$2.8 billion of tax-exempt 40 year bonds to finance subsidized public housing.

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#### MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to House & Home the week ending Feb. 12, '60.

HA	53/45 (Se	ec 203)	(a)		1		VA 5	/43				All new shares in the state of	ntional ans	
NMA icdry Ikt ×y	Minimum 30 year	States and the second states of the states of	uction Onl 10% or m 20-25 year Immed	ore down	Existing = Min Down 25 year Immed	City	Contraction of the local sectors in the local secto	No down 30 year 1mmed	ew Constr Fut	uction On 5% or mo 20-25 yea Immed	ore down	Comm. banks, Insurance Cos.	Savings banks, S & Ls	Construction loans * Inter est + fee
96	96-97	95-97	97	97	95-96 1/2	Atlanta	92	91 b	91 b	91 b	91 b	6-61/4	6-7	$6-6\frac{1}{2}+2\frac{1}{2}$
97	parm	parm	parm	parm	parm	Boston local	93	97-98 <sup>b</sup>	97-98 b	97-98 <sup>b</sup> ,	97-98 <sup>b</sup>	51/2-6	51/2-6	51/2-6
_	941/2-951/2	941/2-951/2	в		-	out-of-st.		901/2-91 1/2	901/2-911/2	- <b>a</b>		-	-	-
96	96-97 b	96-97 b	96-97b	96-97b	96-97 b	Chicago	92	90-92 <sup>b</sup>	90-92 <sup>b</sup>	90-92 <sup>b</sup>	90-92 <sup>b</sup>	6-61/2	61/4-61/2	6-61/2 + 11/2-21/2
96	96-97	95 <sup>b</sup>	961/2-97	951/2-96	96-97	Cleveland	92	91	B	92	- a	6-61/2	6-61/2	61/2 + 1-11/2
951/2	95-97	941/2-97	96-98	96-97 1/2	95-97	Denver	91 1/2	92-93 <sup>b</sup>	91-93 в	91-93 <sup>b</sup>	90-93 <sup>b</sup>	6-61/2	6-63/4	61/2 + 1-21/2
9516	95-961/2	96	9616-97	96 1/2	88-95 bn	Detroit	91 1/2	92-921/2	92	921/2-93b	921/2	6-61/4	6-61/4	61/2 + 11/2
96	9516-96	94-95 <sup>b</sup>	9612-97	961/2-97	96	Houston	92	911/2-92		913-92k		53/4-61/2 °	6-61/2	61/2-7 + 11/2-2
96	95-96	95-96	96-97	96-97	94-95	Jacksonville	92	91-92	91-92	92-93 b		6-61/4	6-61/2	61/2 + 11/2
951/2	94	94	96 hf	96 bf	96 bg	Los Angeles	91 1/2	90 b	90 b	a	<b>n</b>	61/4-61/2	6.6-7.2	6+11/2-20
961/2	961/2	96	97	97	961/2	Newark	921/2	a	14	B.		6	6	6 + 11/2
97	97b	97b	97b	97b	97ь	New York	93	93 <sup>b</sup>	93ъ	93 <sup>b</sup>	93 <sup>b</sup>	<b>6</b> b	6 <sup>b</sup>	6 +2 <sup>b</sup>
951/2	95-96	94-95 <sup>b</sup>	97-971/2	B	95-961	Okla. City	9112	91½-92b	90 <sup>b</sup>	9112-92b	ñ	6-6 1/2	614-61/2	$6^{1/2} + 1 - 2$
961/2	97-98	97-98	97-98	97-98	97-98	Philadelphia	921/2	н	n	n	<b>B</b>	5 3/4-6	5 3/4-6	6 + 1-2
951/2	94-951/2 k	94-951/2 k	97L	8	94-951/2	San. Fran.	911/2	901/2-911/2	90	n	a	614-614	63/4-71/2	6-61/2+11/2-21/21
96	93-97	921/2-97	94-971/2	931/2-97	911/2-97	St. Louis	92	n	a	а	a	534-61/2	6-7	6-61/2 + 1-21/2
961/2	96 <sup>b</sup>	96 <sup>b</sup>	97ъ	97b	96-97ь	Wash., D.C.	921/2	91 b	91 ь	92 <sup>b</sup>	92 <sup>b</sup>	6 b	6 <sup>b</sup>	6 + 11/2-20

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delivery in 3 to 12 months.

design, location, and construction.

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wol-bach, 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, Stanley M. Earp, pres, Citizens Mortgage Corp; Houston, Donald Me-Gregor, exec vice pres, T.J. Bettes Co; Jacksonville, George Dickerson, vice pres, Stockton, Whatley, Davin & Co; Los Angeles, Chris Gebhardt, asst vice pres, The Colwell Co; Newark, William F. Haas, vice pres, Franklin Capital Corp; New York, John Halperin, pres, J. Halperin & Co; Oklahoma City, B.B. Bass, pres, American Mortgage & Investment Co; Philadelphia, Robert S. Irving, exec vice pres, W.A. Clarke Mortgage Co; St Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington, D.C., Hector Hollister, exec vice pres, Frederick W. Berens Inc.

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

#### FHA 53/45

Immediates: 94-95

#### VA 51/45

Immediates: 90-91 Futures: 90-91

Futures: 94-95 Prices for out-of-state loans, as reported the week ending Feb. 19, by Thomas P. Coogan, president, Housing Securities Inc.

FHA 53/4 spot loans (On homes of varying age and condition) Immediates: 90-921/2

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

#### **FNMA STOCK**

Quotations refer to prices in metropolitan areas; discounts may run slightly

higher in surrounding small towns or rural zones. Quotations refer to houses of typical average local quality with respect to

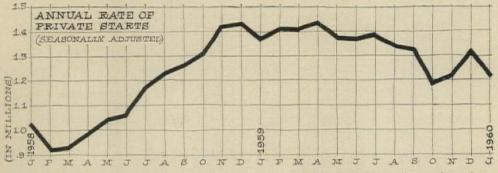
Footnotes: a-no activity. b-very limited activity. c-commercial banks do very little mortgage lending in Texas. d-FNMA eligible. e-S&Ls charging 7% plus 4 to 5 point fces. f-5% loans are at 95½. g-10% down only: most going to FNMA. h-S&Ls charging up to 4 points. j-for better quality loans only.

to FNMA. h—S&Ls charging up to 4 points. J—for better quality loans only. k—top price from life companies only, m—some at 5½, some at 5½, n—some companies refuse to deal at such big discounts. w—six months construction loans unless otherwise noted. x—FNMA pays ½ point more for loans with 10% or more down. y—FNMA net price after ½ point purchase and marketing fee plus 2% stock purchase figured at sale for 50¢ on the \$1. z—on houses more than 30-years old of average quality in a good neighborhood.

		N	lonth's	Month's
	Jan 14	Feb 16	low	high
Bid	551/2	551/2	533/4	563/4
Asked	571/2	571/2	553/4	58%

Quotations supplied by C. F. Childs & Co.

#### HOUSING MARKET:



LONG TERM TREND of starts shows up in figures on seasonally adjusted annual rate for private housing. Starting from February '58, housing gained momentum through December, stayed at a level above 1.37 million a year through July of '59. Last fall's slide bottomed out in October, but some experts think the sharp December bounce-back may have been a freak because of expiring FHA agreements to insure.

### Do unit starts really measure how well housing is doing?

"Our problem is basically quite simple," says Charlie V/ellman, executive vice president of Glendale (Calif.) First Federal S&L. "We cannot have a housing boom when the rest of the economy is booming. Unfortunately, there are important segments of our society which either do not understand or do not wish to accept the realism of this fact."

As senators who have listened raptly at housing committee hearings know, Wellman has a knack for reducing economic complexities to a charming simplicity. In his way, he has done it again. For it has become industry dogma in the last few months that housing—because it is so heavily dependent on longterm mortgage credit—cannot compete for all the money it wants when money is scarce and therefore expensive.

But there remain many who would quarrel with Wellman's forecast that 1960 will "probably" produce only 1.1 million starts. FHA Commissioner Julian Zimmerman, for example, is now cheerfully raising *his* forecast above 1.2 million. Starts, he told newsmen in Washington at mid-month, "should approach 1.3 million and should be a heavy 1.2 million." HOUSE & HOME still figures 1.2 million—give or take a few thousand is a safer bet. But 1960 could well get off to a slow spring and develop a surprising peak in private volume during the fall especially if mortgage money eases a little.

In any event, starts are losing their potency as a housing yardstick. In the first place, the figures themselves (lately taken over by Census from the Bureau of Labor Statistics) are subject to great question on the count of accuracy. Census now has a fulldress revision of starts statistics in the works. The result, say insiders, is that 1959 may turn up with 1.6 million starts instead of the 1,378,500 the preliminary reports now list.

Moreover, any unit-count of new housing —however accurate—means less and less as houses get bigger and costlier.

As Economist Albert Matamoros of Armstrong Cork notes, even if housing does dip this year, it doesn't mean that builders must net less profit. Matamoros predicts that builders who build and sell quality may make as much or more money as they did last year. Reason: quality houses are "horses of quite a different color than mere shelter" and "the demand for housing will be at least as great and possibly greater than the available supply due to the mortgage market."

Sales of new houses across the nation seem to be holding up well, HOUSE & HOME's regular 16-city check indicates.

The overall US economy is now showing faint signs of weakening. But that should help cut the demand from other quarters for loans, and so—in time—ease up on mortgage stringency.

### Stock market: everybody's in the act

Last year's rush to the stock market by housing and land development companies is becoming this year's stampede. Latest developments:

• Stock of Northern Properties Inc, which floated a \$750,000 offer in November to finance speculative land development in New York suburbs, jumped quickly from the \$5 issue price to 11 bid, 11<sup>3</sup>/4 asked.

• Shares of Levitt & Son, offered by Big Builder Bill Levitt at \$10 apiece in February, fared less well, dropping to 8 /2 bid, 83/4 asked.

• More Canadian capital will flow into the Florida boom, if Cockshutt Farm Equipment Ltd completes its plan to trade \$9.1 million worth of stock for outstanding shares of N. K. Winston-Sanson Corp. Winston-Sanson owns 21,200 acres near Tampa, Bradenton, Orlando and Daytona Beach.

• The SEC suspended trading in Consolidated Development Corp of Delaware, a Cuban oil development company with realty interests in Florida, because of confusion with Consolidated Development Corp of Florida which also plans a stock offering, is also in the real estate development business.

New or proposed issues:

• Lefcourt Realty Corp is seeking registration of \$2 million subordinated debentures and warrants for 300,000 shares of stock at \$5 each so that the holders can trade them. The shares and debentures were issued to investors who loaned the company \$2 million last December.

 Growing market in second mortgages is sending Mason Mortgage & Investment Corp (Edward Mason, president) to the market with plans to sell \$6 million worth of contracts to invest in second mortgages. The Washington firm will use the proceeds to buy more second mortgages, for similar resale.

• Kratter Corp (Marvin Kratter, president and chairman) will use part of a proposed \$26 million preferred offering to develop its Ebbets Field housing project in Brooklyn, and part to buy the Americana Hotel, Bal Harbour, Fla.

• Brothers Lester, Alvin and Darryl Dworman of New York City will sell out holdings of eight real estate development, investment and construction companies they own to the Dworman Corp, if a proposed issue of 300,000 shares of common stock at \$10 each is approved. They currently own the Dworman Corp through Dworman Associates, a copartnership

• Expansion plans and seed money for a subsidiary to make builders' loans will be financed by a proposed issue of Pacific Panel Co stock. the firm (Robert T. Kordisch, president) makes prefabricated house components, millwork and cabinets in Vancouver, Washington. It will offer 100,000 shares class A common at \$4.50 each.

• Realty Equities Corp (Morris Karp, president) seeks further investment capital for its realty operations in the New York area through issuance of 150,000 shares common at \$5.25 each.

 Mobilife Corp (Sydney Adler, president) seeks to expand its activities in the booming market for trailer parks with \$1 million of common stock. The company now operates Trailer Estates in Manatee County, Fla. where it sells sites and services to trailer-living retirees.

• Cinerama Productions, which last August got out of the wide-screen movie business, now proposes to acquire the stock of 21 Florida real estate and construction companies in exchange for 425,000 Cinerama shares. If approved by stockholders, the deal will put A. Parker Bryant, Messmore Kendall Jr, Joseph N. Osborn and Ivan E. Osborn, owners of the Florida companies, in control of Cinerama. If the proposal goes through, the four will buy stock of Cinerama shareholders (215,000 shares outstanding) at \$3 a share.

Florida land development companies have formed an association to argue with the Real Estate Commission about its rules for protecting out-of-state and out-of-sight buyers from overly rosy promotions. One measure of Florida Land Developers' Assn's stature: none of the five top land developers in the state are members.

#### LOCAL MARKETS:

**Denver:** Home building is expected to remain fairly firm, with a drop of 5% at most from last year, says President Gib Egan of the Home Builders Assn. The most popular house is still the ranch-type, although Egan notes some trend toward the traditional two-story and split-levels. Best sellers are in the \$15,000 bracket.

Seattle: Sales are "sticky" but not alarmingly so, realtors say. Despite continuing layoffs at Boeing circraft plant, Seattle's largest employer, sales have reached the danger level in only a few low-priced developments. Bankers note that the market began to slide last August. Builders have adopted a wait-and-see attitude but have cut starts.

San Jose: A heavy overhang of unsold houses (estimated between 2,000 to 3,000) has some mortgage men worried, but not builders. Processing of subdivisions is as high or higher than ever, Santa Clara County officials report. Most of the unsold houses are in the \$15-\$20,000 bracket. One explanation comes from President Raymond H. Lapin of Bankers Mortgage Co of California: "Builders have grown sophisticated enough to see when the market is poised for worsening. They



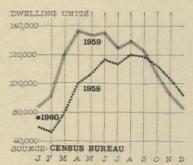
rush to get covered with commitments." Many of the houses now coming on the market were planned about a year ago just before the mortgage market tightened.

**Omaha:** Nine out of ten builders plan to equal or better last year's construction, second best to record 1956. Increases in the cost of labor and materials worry some, but most feel there are plenty of buyers for good houses under \$20,000. Most developers can sell houses before completion; a few still have houses unsold a month or two after. Most popular: 3- or 4-bedroom split-levels of traditional, not contemporary, design.

San Antonio: Builders' fourth annual survey shows the largest unsold overhang in its history—with 1,511 units under construction, completed. Most significant: among homes completed over 30 days, the too-cheap houses sold the worst. Those in the \$7,000-\$10,000 bracket showed a 100% increase over 1958, and in the \$10,000-\$13,000 bracket there was a 400% increase unsold. As a result, starts dropped 48% and 10% in each category respectively, with overall starts down 20%. Sales continue on the "shaky" level that has prevailed for 90 days.

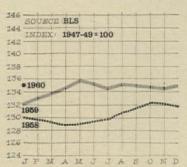
Sacramento: A whopping unsold overhang of 800 houses out of 10,000 completed during the past year has given builders reason to proceed with caution, but hasn't created any panic yet. Builders reason it is largely due to the second fall and early winter in a row when weather was no bar to construction and building went on in a normally slack season. Says FHA Director E. P. Green, whose office tallied the overhang: "As of now, the situation is not alarming." But he says if the situation continues (on the basis of another survey in six months) his office will begin exercising caution on commitments. Houses affected include both conventional and FHA and quality of work seems to be no factor. Hardest hit are those \$18,000 and above; next, \$14,000-\$18,000; and least, \$13,500 and under.

#### STATISTICS:

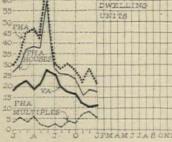


**HOUSING STARTS** in January fell to 75,900 (74,800 private and 1,100 public)—9.3% off December's 83,-700. The seasonally adjusted annual rate of 1.21 million represents some decline from the 1.33 in December but is exactly the same as November's rate, when the first upturn occurred after six months of decline.

January's starts, however, were 12.8% below the 87,000 in January '59, when the seasonally adjusted annual rate was 1,364,000.

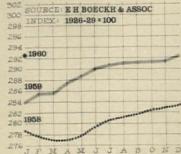


**MATERIALS PRICES** rose 0.3 point in January to 135.2. This put BLS' index 2.1% higher than in January 1959. Contributing to the gain are price advances in lumber and wood products, plumbing equipment, building paper and board.



1960

FHA APPLICATIONS on new units dropped to 21,988 in January—down 18% from December and 23.5% from January 1959. Of the total, 16,268 were 1- to 4-family homes, down 10.4% from December and 36.3% from January '59. Project-unit applications totalled 5,720, down 35.7% from December but up 77% from January '59. VA appraisal requests on new units rose to 11,166 —up 0.9% from December but down 37.7% from January '59.



**RESIDENTIAL BUILDING COSTS** rose 0.4 point from December to 292.6 in January on Boeckh's index. The increase, says Col E. H. Boeckh, again is due to rises in labor rates. Materials prices are stable.

NEWS continued on p 58

## I'll never talk to another salesman

". . . unless he's the Man from Midwest Houses. Here's one guy who knows the building business - and he's backed by a team of prefabrication pros. You look for land. They help you find it. You need money. They know where to get it. You build the house, and they see that you sell it. The point is this: From footing to closing, you're better off as a Midwest Builder." Midwest Houses, Inc., Mansfield 5, Ohio.

#### **MIDWEST HOUSES**

DON'T BUILD ANOTHER HOUSE until you check into Midwest's complete *Profit-Builder* program: site selection, architectural service, market evaluation, construction and consumer financing, plot planning, time-table expediting, construction coordination, sales promotion, advertising preparation, model home management, Urban Renewal assistance. Over 50 models in a variety of styles, priced from \$10,000 to \$30,000.

#### MATERIALS & PRICES:

### New study shows how components make cash go further

In the data-shy housing industry, Reynolds Metals Co has just equipped the Lumber Dealers Research Council with a formidably fact-laden argument in behalf of component building.

It is a cash-flow analysis of component vs conventional construction, demonstrating how fewer on-site operations make it possible to turn over money faster, use the same capital to produce many more houses in the same period of time.

The analysis is based on a \$30,000 survey of the books and operations of 15 LuReCo builders and 78 conventional builders. It was made by Henry French, Reynolds' senior industrial engineer. It assumes these equal conditions imposed on two builders, one LuReCo, the other conventional:

 House price
 \$15,000

 Cost of lot
 2,500

 Cost of construction
 11,000

 Profit to builder
 1,500

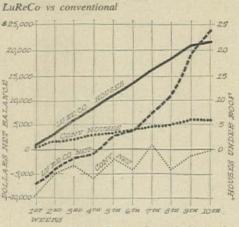
 Five-man carpenter crew @ \$17.55/hr
 1,500

 Lot paid for prior to construction.
 1

Builder's draw schedule: <sup>1</sup>/<sub>3</sub> each when house is a) under roof; b) whitewall finished; c) completed.

Whitewall finish assumed 14 days, completion assumed 28 days after house under roof.

#### CASH FLOW ANALYSIS



Source: Reynolds Metals Co

On this basis, French finds that in a 49-day working period, the accelerated draw schedule of a LuReCo builder lets him take in \$225,000 cash vs outlays of \$201,032, have eight houses completed, seven two-thirds finished, seven more under roof. The conventional builder, who must spend more time getting under roof, hence draws more slowly, has only three houses completed, two two-thirds finished, two under roof. He has paid out only \$75,255, but has taken in only \$75,000.

Because of the accelerated draw schedule, the LuReCo builder is in the black after 17 days while his conventional competitor is still \$255 in the red at the end of the period.

Inspiration for the study came, say Reynolds officials, from "House of Ease" Builder Larry Behymer of St Louis, who found his capital turnover let him expand from 50 to nearly 500 houses a year when he shifted from conventional to component (but not LuReCo) methods. "The same thing holds for any component system," says French.

Excluded from the comparison were savings shown by LuReCo dealers in the survey of an average \$381 per house on pilferage, scrap, other inefficiencies.

How impartial are the findings? "We sell to all kinds—conventional builders, big prefabbers, LuReCo dealers," says Reynolds. "We love 'em all. But we wanted to find out just what the facts are." Only preference, they contend, is handing the findings to LuReCo for promotional use, part of a continuing close cooperation that began last year (May, News et seq) with an agreement for distribution of Reynolds building products by LuReCo to its dealers.

## Aluminum, no longer a novelty, pushes harder for housing markets

Aluminum continues its growth as the big new material in housing. Producers see overall use of the metal growing from 6.2 billion lbs in '60 to 8.4 billion lbs in '65. They expect residential uses at least to maintain their current better-than-10% share of this. Confident the metal has proven itself, they are moving to take it out of the housing novelty class and establish it as a standard material with markets rivaling older products.\*

Among the latest moves:

• Alcoa, which broke a 72-year precedent in November by getting into building endproducts (rain-carrying equipment) is expanding that activity with introduction of a deluxe siding under its own brand. Distribution is by five major building materials producers (Barrett Div of Allhed Chemical Corp; Bird & Son Inc; Flintkote Co; Mastic Corp; Philip Carey Mfg Co), in what insiders say is an effort to shake off gyp operators many fabricators sell to.

Alcoa also gives a broad hint of its next end-product venture with acquisition of Cupples Products Corp of St. Louis, makers of aluminum doors, windows.

Biggest move: reorganization of building products sales into a single unit including design and promotion. Head of the new unit is M. C. Schoetz, former architectural sales manager.

• Reynolds Metals Corp announces a double-barrelled attack on markets by 1)

starting a new "Easy Living" house campaign to broaden its quality "House of Ease" program (\$18,000 and up) to the mass market in homes as low as \$10,000, and 2) getting into urban renewal as financier and technical adviser in a program headed by Albert M Cole, former HHFAdministrator.

Reynolds has already earmarked \$750,000 to finance a proposal for Philadelphia's big Eastwick redevelopment project, is working on plans for low-price row houses for Kansas City, Kan. and Mo. Other projects are perking in Cincinnati and Washington. At NAHB's Chicago meeting, Executive Vice President David P. Reynolds forecast 45,000 aluminum-heavy home starts in '60, and a 10% share—150,000—of starts by '65. "By the end of the decade, well over a million aluminum homes will have been built and aluminum in housing will no longer be news," he predicts.

• Kaiser Aluminum & Chemical Corp is concentrating on research and development of new items for its fabricators. It is working on structural wall and roof panels, a cheap, complete rehung exterior door system (but a Reynolds fabricator, Manitou Mfg Co of Houston, announced a unit complete except for the door itself last month).

One development boosting aluminum's prospects was FHA approval of easier financing for houses using low-maintenance materials. But another struck a sour note: the Natl Paint, Varnish & Lacquer Assn officially objected to aluminum siding makers' claims for "indefinite" life of finishes its members make for aluminum siding, recommended Federal Trade Commission action to outlaw them.

#### MATERIALS BRIEFS

#### Kefauver sets materials' probe

Building materials' prices will be investigated by the Senate subcommittee on antitrust and monopoly this year.

Contends Sen Estes Kefauver (D, Tenn.), chairman of the subcommittee which has already looked into the cost of autos, steel and drugs: "High prices of building materials are undoubtedly an important contributing cause" to the anticipated decline in new house starts.

He says glass, plumbing fixtures, asbestos and gypsum products are among "highly concentrated" industries whose prices may be "administratively" fixed by leaders. No date has been set for the probe.

Meanwhile, the Federal Trade Commission has begun action to break up the 1956 merger of Simpson Timber Co and M & M Woodworking Co on the ground it tends to create a monopoly in redwood. It was the last of three mergers that FTC says gave Simpson 11% of redwood production. The company denies the charge that this tends to damage competition.

#### Ply producers claim lax testing

A fight over plywood testing standards may be in the offing.

Some producers grumble that their competitors, who use different testing services, enjoy lax supervision that lets inferior materials through in "substantial quantities."

In some cases, such failure means little more than a competitive edge and the possibility some consumers will learn years later that they didn't get what they paid for.

But the producers say a more serious issue is at stake: structural properties are also involved, and with them danger of a disaster that could discredit the whole plywood testing setup.

<sup>\*</sup> One example: when Alcoa officials broached the idea of making aluminum privies, they were flooded with mail queries, including one for quantity prices from the US Forest Service.

#### LABOR:

FHA grade-marking of lumber, effective April 1, continues to stir up a storm among home builders.

They argue it 1) is unnecessary for framing lumber, "foolish" for boards; 2) adds to the cost of the house (from a few cents to \$12/ mbf depending on who estimates); and 3) will force small mills without inspection services to sell to big ones who have them, thus restricting competition.

FHA Commissioner Julian Zimmerman remains firm in his stand that FHA "can't do an adequate job without this kind of quality identificaton," points out 12 FHA offices already require it. Lumber manufacturers and dealers, who generally support the rule, say the problems are not great, that price increases will be "negligible."

The rule requires all houses built FHA under commitments issued after April 1 to use only framing and boards grade-stamped by a species association or FHA-recognized agency. It does not apply to outstanding commitments, extended ones, or expired ones which are reopened within the 60-day reconsideration period—if they were first issued before April 1.

Canadian lumber with stamps of Canada's nine major producing associations will be accepted until Sept. 1. After that, Canadian lumber must be stamped under uniform standards similar to those of the American Lumber Standards Committee.

Unmarked lumber unused by the deadline may in some cases be grade-marked by association inspectors in lumber yards, say industry spokesmen.

#### Prices: plywood, steel slip

Plywood producers are striving to hold list prices in hopes they will stick when spring housing production picks up.

But they are having a harder and harder time of it. Key  $\frac{1}{4}$  sanded stock has slipped from  $\frac{72}{m}$  sq ft in December, to \$68. Some mills are contemplating deals at \$64. US Plywood is struggling to hold a February boost in  $\frac{5}{6}$  sheathing from \$94 to \$98 made in February.

One big reason for the plywood problems: more and more imports, a problem other industries face too. Says Walter Hoadley, chief economist for Armstrong Cork Co: "This year will be one of increasing competition, and we have the new element of international competition . . . stronger than ever." Two other industries—paint and wallpaper—would like to raise prices but feel they can't.

Steel prices, which tended to go "over the book" during inventory building after the strike, now show some easing. In St Louis, a US Steel warehouse subsidiary cut some prices "to meet competition" locally. But fabricators, notably appliances, are still urging customers to buy "before the steel price increase."

#### US ply to build components

The trend toward producers getting into—or close to—actual building grows another notch with announcement that US Plywood Corp will make prefabricated components.

It has acquired Panelbild Systems Inc of Seattle to move into "new fields we believe will open profitable new markets." Because of shipping costs, plans include additional producing facilities coordinated with USP's 124 branch sales warehouses, says USP President Gene C. Brewer. Panelbild has specialized in stressed-skin components. Plans for a court of appeals to hear construction industry labor-management disputes and hopefully end strikes seem to have a good chance for adoption soon.

The plan was proposed by the Construction Industry Joint Conference, and circulated among the 18 construction unions at their Miami Beach meeting last month. No official action was taken but union leaders favor the idea. Management groups are studying it now.

The proposal is vital to homebuilders who operate where unions are strong—mostly in big-city suburbs—and who suffer costly delays and waste from dispute-inspired work stoppages.

Both management and labor spokesmen on the Joint Conference say the plan is given urgency by the likelihood of more disputes than ever this spring as both sides sit down to negotiate on the basis of the new Landrum-Griffith labor reform law. In 1958, the last year tallied, some 850 strikes hiked costs as much as 50% on affected jobs.

The new plan would set up a national joint labor-management board to which contractors and local unions would bring disputes they cannot settle. Appeal to the board would be voluntary unless the parties agreed in advance to make it mandatory. The board would offer arbitration or merely recommend settlement terms, again at the option of the parties. The board would operate through panels with membership evenly balanced between unions and management, with an impartial, nonvoting chairman. It would make decisions in 30 days—a cooling-off period during which both sides would be pledged to avoid strikes or lockouts.

Although the machinery would be completely voluntary, under the plan both unions and management groups would urge local affiliates to include provisions for using it as part of collective bargaining agreements. Sponsors of the plan figure use of the board's services would eliminate virtually all construction strikes.

But if construction unions and contractors were seeking better relations, the merged AFL-CIO was having less success in quieting jurisdictional competition between the building trades and rival industrial unions. Auto Workers President Walter Reuther charged at the meeting that building-trades craft unions had entered into "union busting" pacts with the expelled Teamsters Union in competing with former CIO production unions for jurisdiction over plant maintenance.

#### Builders fight to save secondary boycott ban

Home builders are gravely concerned that Congress may soon let unions picket—and possibly close down—their job sites to keep them from doing business with struck or nonunion employers.

The prospect is contained in a proposed amendment to the Taft-Hartley Act that would kill the law's ban on secondary boycott picketing of construction sites.

If passed, the amendment would allow picketing of a site where, for example, products made by a struck manufacturer were used. It would mean, warns NAHB's *Washington Letter*, that "open shop areas may expect to become quickly embroiled in intensive union organizational campaigns. Builders in union shop areas, even though not directly involved in a dispute, could have their jobs completely closed down . . . "

The amendment has bipartisan support in Congress and Administration backing. It is strongly opposed by the Associated General Contractors, the US Chamber of Commerce, and the Natl Assn of Manufacturers. It was left out of last year's Landrum-Griffith labor reform bill only after Sen John Kennedy (D, Mass.), chairman of Senate conferees, promised building trades leaders to take it up early this year (*Oct, News*).

Currently, unions can picket construction sites only if the employer they are picketing against actually is working on the job, and the grievance is a "legitimate" one. They cannot tie up the whole job.

Under the Landrum-Griffith law, unions can demand that an employer not deal with nonunion contractors, but union officials cannot order men off the site if the demand is refused. The men must walk off "of their own accord."

In Chicago, Local 134 of the International Brotherhood of Electrical Workers is trying a way around the law. Michael J. Kennedy, business manager, says all members will wear identification buttons while working. They are ordered to police job sites for nonunion workers, and if they find them, are under orders to walk off "voluntarily." Industry observers are watching with interest for the first test of this gambit. They contend it comes close to "concerted action" prohibited by the law.

## Unions win 16¢ pay boosts in '59 bargaining

Union building trades racked up average wage increases of  $15.6\phi$  more an hour in 1959 only  $\frac{1}{2}\phi$  less than the all-time record hikes they won at the bargaining table in 1957, and  $1.1\phi$  more than they gained in 1958.

Average hourly rate by the end of the year was 3.54 /hr with only  $1.7\phi$  coming in the last quarter, compared with  $2.4\phi$  in the corresponding quarter of '58.

Biggest advance was by electricians, who gained  $18.2\phi$  on the average during the year, to an average hourly rate of \$3.90—still under the top average of \$4.07 held by bricklayers, who average  $15\phi$  an hour increase during the year.

BLS' tabulation by trades, Jan '59 to Jan '60:

TRADE	CHAN	GE '59-'60	RATE LEVELS			
	Pct	Cents	Avg	Range		
Bricklayers	.3.8	15	\$4.07	\$2.75-\$4.70		
Carpenters	.4.5	15.7	3.65	2.25- 4.40		
Electricians .	.4.9	18.2	3.90	2.63- 4.60		
Painters	.4.3	14.2	3.44	1.75- 3.85		
Plasterers	.4.4	16.3	3.94	2.63- 4.70		
Plumbers	.4.2	15.8	3.92	2.90- 4.45		
Laborers	.5.9	14.9	2.68	1.20- 3.65		
ALL TRADES .	.4.7	15.6	3.54			
			and the second	1 00		

NEWS continued on p 60

#### NAHB CONVENTION:

## Directors split over cures for tight money

Opponents of special assistance are drowned out by distress cries from hard-hit fellows

How much can housing be subsidized and still call itself free enterprise? Is the tight-money crisis bad enough to justify a "shot in the arm" of special assistance.

NAHB directors, hammering out an election-year policy in Chicago, split violently on these vexing questions. Striving to "talk tough," but divided on how tough to talk, they threw one policy statement back to committee for a rewrite, adopted a watered-down demand for special assistance, but flatly rejected selective credit controls. In the end, they avoided outright allegiance to \$1 billion special assistance. But their final statement was so critical of Administration policy that some observers wondered if the builders, like farmers, aren't getting hooked on the federal handout habit after all.

Trigger for the great debate was a sulphurous public statement suggested by the builders' emergency housing policy committee. The 22-man group was formed at last fall's directors meeting to find solutions to the looming mortgage crisis, map out an NAHB stance toward government housing policy that many feel slights them.

The statement, like the report that accompanied it, endorsed the goal of a sound dollar but condemned tight money as a way of achieving it. The only ones controlled, it said, are "the moderate income families who only a short time ago could have bought homes ..." It proclaimed builders' willingness to

accept selective credit controls in the econo-

my if needed to distribute credit equally. And it said if nothing else were done to prevent a severe drop in starts in '60 there would be "no alternative" to Fanny May special-assistance—at par—a scheme already put before Congress by NAHB's legislator-friend, Rep Albert M. Rains (D, Ala.), chairman of the House subcommittee on housing.

#### The trouble with amputation

The statement was in trouble even before it reached the floor of the directors' meeting in the ornately mirrored Waldorf room of the Hilton Hotel. For one thing, First Vice President Martin Bartling's legislative policy com-

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**NEW OFFICERS** elected in Chicago are (*from left*): Secretary William Blackfield of San Francisco; Treasurer W. Evans Buchanan of Washington, D. C.; President Martin Bartling of Knoxville; Second Vice President Leonard Frank of Hicksville, N. Y.; and First Vice President E. J. Burke of San Antonio. Burke, second vice president in '59, was absent recovering from a heart attack.





**FANNY MAY SUBSIDY** via special assistance mortgage loans, proposed by Rep Albert M. Rains (1) (D, Ala), was No. 1 topic of the convention. Rains defended his idea in a speech, a press conference and corridor huddles.



**OUTGOING PRESIDENT** Carl T. Mitnick (here surrounded by a knot of builders), predicted a 200,000-unit drop in housing starts for this year to something between 1.1 to 1.15 million. He blamed tight money.

mittee, and Dale Bellamah's mortgage finance committee had jointly trimmed off the reference to special assistance before approving the rest of the statement by a razor-thin 31-29 margin.

On the floor, the statement drew immediate fire from dissident members of the committee that drafted it. "Too strongly worded," said Kimball Hill of Chicago. Others were alarmed at usurping the resolution committee's job of writing the 1960 policy statement.

Seaborn Collins of Las Cruces, N.M., a past national commander of the American Legion, objected to the "negative approach . . . a serious mistake [to] recommend selective credit controls on any other segment of industry."

But the real blockbuster was delivered by past president Earl Smith, another dissident committeeman, who took the floor as it became evident some directors would try to restore the special assistance part of the statement.

"I don't think we know what the hell we're doing," he said bluntly. Then, in an eloquent speech, he revealed that some elder NAHB figures, alarmed at the tone and content of the committee draft, had been quietly at work on a substitute. It had received the blessing of the executive committee in special session. It was not, he said, a flat rejection of special assistance.

H&H staff



HOUSE & HOME BREAKFAST drew 700 who heard of need for 16 million quality homes.

H&H staff



**TECHNICAL SESSION** heard Asst FHA Commissioner Beverley Mason (r) promise that Washington will review any case where a builder thinks a local FHA office is being too stiff about a would-be buyer's mortgage credit risk.

News

"It was the sense of at least some of us that opposition to special assistance must recognize something must be done . . . We have men from the South and West who are in desperate straits in spite of high starts. Intellectual honesty demands there must be a common middle ground." The middle ground: a more moderately worded resolution asking 1) action by Congress or the Administration to assure that home building "receives a fair share of available credit;" 2) lacking that, investment of National Service Life Insurance Fund money in FNMA debentures, and use of the funds by FNMA to buy veterans' mortgages at or near par in areas hard hit by tight money; 3) "as a last resort," special assistance plain and simple, but with safeguards to prevent a few builders from hogging it.

The directors applauded the substitute, but it still drew opposition. Kimball Hill led the attack.

"I guess I could be classed as rabid on special assistance," he said. "We in areas with no money problems realize those of you in other parts of the country can have serious trouble. We would like to see help for you. But we can't fully endorse [the substitute] . . . It's still too broad and still has too much special in the assistance."

#### Subsidy's tangled skein

With two proposals before it, the meeting developed a parliamentary tangle of Gordian dimensions. Debate became so involved that when one director arose simply to complain, "Mr. President, I'm confused," Chairman Carl Mitnick responded: "So am I."

The problem was solved by NAHB General Counsel Herb Colton, who suggested the directors not formally adopt the alternate, but refer it as an expression of their wishes to the resolutions committee. The board agreed and turned its attention to the rest of the statement.

Seaborn Collins renewed his attack on the question of credit controls, moved to strike all reference to them. He was backed up by Arthur Wright of Los Angeles, who said, "I think we're really asking for it . . . we've already taken a position opposed to credit controls."

Dale Bellamah took the rostrum to "give a little background" on reasons for writing the statement as it was.

"Your committee deliberated a long time," he said. "And it seemed every time we attacked the problem, we found home building was the first industry always to be hurt by a tight money policy.

"We had lunch with Dr. Saulnier [Raymond Saulnier, chairman of the President's council of economic advisers]. While he was very careful not to make any definite statement, he let us know in a roundabout way that he could see no solution . . . as long as this Administration is in office, and it looks as if that will be another eight years—" Here a resounding "No" from the floor interrupted Bellamah. He smiled.

"All right," he said. "I'm not a Republican myself. Let's say it has a 50-50 chance . . . " Again the directors chorused, "No."

"Okay," said Bellamah. "Anyhow, he let us know there will be more and more tight money problems." So, he said, the committee had decided if credit controls were the only way, they had better be ready for them.

Debate heightened as a vote on the Collins amendment drew closer. Alex Fineberg of New Jersey thundered that the draft was the work of "good, willing, clear-thinking men. I accuse you of hiding your heads in the sand like ostriches. If you are against credit controls, say so. But say, if they have to be, let them be fairly applied."

#### First farming, then housing?

Predicted Abe Silver of Staten Island: "The next thing we're going to do is ask the government to take the surplus off our hands just as they do for the farmers. I've been in this business 33 years, and I know of no industry that's been successful by depending on the government for help."

Nathan Manilow called credit controls "A wild departure ... I ask you to consider it carefully."

The vote, on a show of hands, was 118 to drop reference to them, 79 against. But the statement was still what one director called later "a slashing attack on the Administration—and in an election year, too." Conservatives on the board rose to try and kill it entirely.

Said Ralph Finitzo of Chicago: "I, too, respect the gentlemen who prepared this statement. But I do not subscribe to the idea they can do no wrong. I've never read anything so wrong in my life."

But it was the parliamentary skill of Past President Rodney Lockwood that won-temporarily, as it turned out-for the conservatives.

"I would never have believed," he said, "that we would come full circle to a view diametrically opposed to that which led us in dire necessity to form NAHB." That necessity, he said, was to "prevent government control of private housing, and government subsidy of public housing . . . Now we are asking for government controls and a subsidy."

"If there is a division of the board on these questions—and there continued on p 62

### Let's look at installation costs of gas heaters... labor, that is!

A sealed Safti-Vent gas heater is installed and ready to operate in less than one man hour! Figure your own hourly rate, but we estimate this at \$7.50.

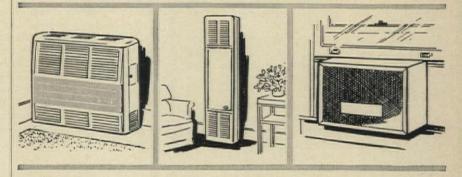
A vented, unsealed gas heater takes about 8 man hours to install. At the same hourly labor cost of \$7.50, this comes to \$60.00.

Yes, factory-assembled Safti-Vent, complete with vent, will naturally cost you a bit more than an unsealed gas heater without flue. But here's what you get:

- Around \$52.00 labor savings in installation, because sealed Safti-Vent is factory-assembled, requiring from you only a 7¼" opening thru-thewall, thru which is inserted exclusive Tele-vent that telescopes to exact wall thickness, needing no cutting.
- Complete elimination of flues and chimney.
- Sealed heat, in which the silent gas flame burns in a chamber totally

sealed away from room air, absolutely eliminating hazard of suffocation from oxygen deficiency and carbon monoxide poisoning. (1250 such deaths were reported last year by the National Safety Council.)

• And for your customer, operating savings in fuel adding up to 3 days *free heat* out of every ten. That's a bonus your customer enjoys; and we suggest you take some credit when you tell him about it.



Now you can get Safti-Vent sealed heat 3 ways. Cabinet (flush against the wall); recessed-in-wall; installed-in-window. Each gives the safety and economy of Safti-Vent *sealed* heat.



evidently is—we need better consideration of these matters, not this mad rush to pass something, cut off debate. I move we table this and throw the whole matter back to the legislative committee to draft a more consistent statement."

The motion was carried on a voice vote, and the floor was opened to discussion. But it was the voice of distress that was heard loudest.

The policy statement, as approved with no changes and little debate at an executive session the next day, gave the answer a good many of the builders had backed: subsidies, however objectionable, were preferable to fewer starts, smaller profits. The statement lambasted federal monetary and housing policy (and ignored the fact that the Federal Reserve, which holds the reins on credit, is independent of the Administration). It asked equitable credit controls (but not selective ones), and special assistance to tight money areas 1) by use of veterans insurance funds by FNMA or 2) as a last resort, by appropriation. It demanded cabinet rank for housing and suggested a study of the Federal Reserve system to see if it is really suited to meeting the demands of today's credit structure. It suggested a similar study of FHA, whose "impractical" regulations and pro-

#### CONVENTION SIDELIGHTS

#### **Quotable quotes**

Pithy observations on housing's problems and prospects from the 1960 convention:

"We think there's one answer to tight money's problems, and that's learn how to sell,"—DAVID FOX, NAHB merchandising chairman.

"With conditions as they are, there is no need to push the panic button,"-HHFAdministrator NORMAN MASON.

"I see no prospect for any immediate easing of the mortgage tightness."—NAHB Economist NAT Rogg.

"Go back and look at discarded land and so-called run-down land. With this land you can enter the low-cost housing market and it is very profitable."—Virginia Builder WILLIAM WITT.

"If you want to go into the building business, don't bother studying building in college. You'd be best off going to law school." —Wilmington Builder LEON WEINER.



market more now than it would if raised from 4¼4%, said Treasury Under-secretary Fred C. Scribner. He said most long-term money would come from "pension funds and other long-term savers . . . not major sources of mortgage funds." And advance refunding could be used extensively. cedures are, it said, accelerating the already strong trend away from FHA financing.

In other policy actions, the directors:

• Supported provisions of the Rains bill to 1) authorize FHA acceptance of individuals as approved mortgagees; 2) reduce FHA's insurance premium from  $\frac{1}{2}$ % to  $\frac{1}{4}$ %; 3) require FNMA to buy any FHA-VA mortgage offered to it (but not, as the Rains' bill proposes, to stop FNMA from selling mortgages for a year); 4) cut FNMA's secondary market stock purchases requirement from 2% to 1%.

• Opposed FHA's new grade-marking regulation for house framing lumber (see p. 58).

 Approved a legislative campaign aimed at giving hometown builders priority in bidding on urban renewal projects, and applauded the growing emphasis on rehabilitation (see p 69).

• Approved plans for a survey of tax harassment of builders by IRS to see if legislative remedies should be sought.

• Opposed legislation to lift secondary boycott bans of the Taft-Hartley act (see p. 59).

• Asked the same favorable partnership tax treatment for real estate rental corporations as given to other small corporations in 1958.

"I suggest we are at the point where we can dismiss from our minds the concept that urban renewal is a bulldozer program for high-rise building,"—Urban Renewal Commissioner DAVID WALKER.

#### **Public housing study set**

For the first ten years of its existence, NAHB used opposition to public housing as its main recruiting point. And though the tune has been muted in recent years, a strong conservative element still aims at its abolition in favor of private contractors.

Now, instead of just denouncing public housing, NAHB is launching an ambitiouslyfinanced study to find out how poor families could be housed better. Plans shaped up at Chicago call for a \$40,000, year-long project headed by Joseph P. McMurray, former New York State housing commissioner, and for five years staff head of the Senate banking committee—a post where he earned respect of senators of both parties, wrote a good deal of present housing law, became known as a supporter of public housing. Can builders force cities to pay utilities costs?

Builders, fighting a growing trend by municipalities to make them (and their buyers) foot the entire bill for sewers, water installations and park facilities in new subdivisions, are looking with sharp interest—and envy at two Texas plans.

In Austin, an NAHB panel was told, a plan has worked successfully whereby the city repays builders 90% of the cost of water and sewer installations. And in Fort Worth, the Home Builders Assn has come forward with a plan for the city to refund 100% of the cost.

John J. Terrell, Austin builder, explained his city's plan, in use now for six years:

The builder is repaid over a maximum period of 25 years in amounts equal to three-fourths of the city's income from sales of water in the subdivision. The city also pays 3% interest on the total to be refunded—and the interest is tax free.

If water bills are heavy, a builder may get his money back in less than 25 years. Some have been reimbursed in as little as six years. (But the contract expires automatically after 25 years; so a builder who does not complete his development loses any unpaid balance.)

How it works: if the cost of installing water and sewer lines is \$2,000, the builder is entitled to \$1,800 back. Interest at 3% would raise the amount to \$1,854 after one year. If the water income totals \$200, the city pays the builder \$150, leaving an unpaid balance of \$1,704 for the next year.

Fort Worth Home Builders asserted that requiring a new home buyer to pay for revenue-producing capital assets (sewer and water lines) of the city and the unequal assessment of property taxes on new homes are the two big reasons that the suburbs are growing much faster than the city.

The report questioned whether a city, in operating a public utility, can legally require someone else to buy its capital equipment. It cited a 1958 Kentucky case (Associated Home Builders of Louisville vs the Louisville Water Co). The state court of appeals ruled that the water company could not charge for tapping its mains, for furnishing and installing a service line from a main to a customer curb line or for extending mains 50' or less for a customer who would contract to use water for at least one year. The court ordered rebates to builders of meter charges and fees for water main service lines and tap-ins. They came to \$200 to \$300 a lot. NEWS continued on p 67

H&H staff



**URBAN RENEWAL** is attracting "a new force . . . building materials manufacturers" who may nudge local builders out of the way if they don't begin taking an interest in this big potential market, warned Philadelphia Builder Joseph Singer. He cited competition from Reynolds Metals for his town's Eastwick project, also bid by local men.



News-Ac

**MORTGAGE OUTLOOK** shows money a problem in '60, but not "as serious a one as in the latter part 1959," said MBA President B. B. Bass. He reminded builders that '59's near record in starts, all-time high dollar outlays for housing (even allowing for inflation) involved 40,000 units built with Fanny May special assistance.



LAND DEVELOPMENT panel heard Robert M. O'Donnell, Denver planner, describe a 500-acre subdivision with 500 circular lots (75' diameter each). Whole tract is a "multipleutility conservation district" which taxes owners for utilities and upkeep of forest covering much of area. Savings: \$1,000 a lot over traditional subdividing.

#### PUBLIC HOUSING:

#### Crime wave brings dogs as guards in St Louis

Private guards armed with revolvers and accompanied by fierce German shepherd dogs have been hired to patrol public housing projects in St Louis.

Their mission is to stamp out a crime wave that grew serious enough to produce a grand jury investigation. Their cost: \$68,500 a year.

The jury found that in three of the city's seven projects, the rate of crimes like rape, robbery, and assault and battery was 250% above the city average. Insurance and bill collectors were being robbed so often it was almost routine. Many more crimes, the jury said, were not reported to police because the victims feared retaliation from the hoodlums.

The troublesome projects are high-rise complexes in a longtime Negro slum area. The Negro population in the projects is between 95 and 100%. The jury noted that the other four public housing developments, two of them low rise, had no unusual crime problems. Their Negro occupancy ranges from 21 to 100%.

Public housing per se does not breed crime, the jury concluded. Instead, it blamed 1) high-rise construction with automatic elevators that can be jammed easily to trap victims or delay pursuit, 2) inadequate protection (five guards were policing 43 buildings in two projects which house almost 12,000 people) and 3) failure to screen out undesirable tenants.

For a month after the guards began their rounds in mid-January, things were quiet. Then robbers took \$800 from two insurance collectors on a project stairway.

#### SEGREGATION:

#### Levitt loses in Jersey; must sell to Negroes

New Jersey's Supreme Court has ruled that Big Builder Bill Levitt must sell his Levittown, N. J. houses to Negroes and whites alike.

The court's sweeping reasoning: by its very existence, FHA has created the mass market for operations like Levittown. So such developments are "publicly assisted" within the meaning of the state's law against discrimination—even though FHA insurance goes to the lender, not the builder.

"Just as ownership of housing and its concomitant benefits attributable to an FHA insured loan is said by the statute to be publicly assisted, by the same reasoning the advantages which accrue to the developers in question from the FHA commitments is plainly the result of public assistance," the court rules. "The very existence of the development can be attributed to the FHA commitment. The mass market opened by FHA and other government insured purchase money housing loans accounts for the prospect of sufficient buyers to purchase the housing in question. Without such a mass market, it is inconceivable that the developments would have been built . . Thus the very fact that there are houses with which to discriminate in the development in question is primarily attributable to public assistance."

Levitt's lawyers promise an appeal to the US Supreme Court because "the present decision involves serious questions of constitutional law."



**CODELESS HOUSE PROJECT**—at least so its planners hope—is shown in scale model at critique session in Alcoa building by its designers (1 to r): Pittsburgh Architect Kenneth Johnstone, Carl Koch, Norman Fletcher and Jose L. Sert.

# First plans are unveiled in Pittsburgh for housing technology breakthrough

Pittsburgh has assembled the biggest concentration of brains and money in years to attempt a demonstration breakthrough to the industrialized house. If it succeeds, Pittsburgh's effort should point a way to the long overdue revolution in housing technology for the whole nation:

Progress so far made impressive listening late in January for the 700 assorted housers\* who gathered at the new Pittsburgh Hilton for a conference jointly sponsored by two groups in the forefront of the breakthrough effort: national Action Inc and Action-Housing Inc of Pittsburgh.

Before the main show, 58 top housing figures spent a whole day studying and critiquing plans for the 1,680-unit experimental subdivision that Action-Housing is going to build to show what new materials and techniques can achieve in moderate-priced housing minus the usual shackles of local codes, zoning and makework rules. Action-Housing has already bought the 130-acre site at the edge of Pittsburgh with a \$300,000 foundation grant. It plans to sell sites to local builders who will agree to follow its plans.

To design East Hills, Executive Director Bernard Loshbough of Action-Housing picked three famous names: Dean Jose Sert of Harvard's graduate design school; Bauhausfounder Walter Gropius' The Architects Collaborative; and Carl Koch, designer of the Techbuilt house. To this brainpower, Action-Housing added the critical suggestions of such architectural elite as George Matsumoto, Hideo Sasaki, Robert McLaughlin,

\*The session drew a startling 400 visitors from 69 cities in 25 states, plus some 300 Pittsburghers.



**GOVERNOR** David L. Lawrence called Action "the most striking innovation" yet to rally citizen aid for city rebuilding



FINANCIER Richard K. Mellon urged businessmen to be "as productive" in rehousing Pittsburgh as in reshaping downtown.

Quincy Jones, Vernon deMars, James T. Lendrum, Oscar Stonorov, Richard Pollman, Chloethiel Smith; mortgage experts like Fred Kramer and Tom Coogan; redevelopers like Bill Slayton.

At the formal conference next day, MIT's Burnham Kelly, who co-authored a study suggesting the project, summed up its significance. "The 130 acres of fresh approaches is big enough to catch the public eye and dispel myths, big enough to show an entire living pattern, not just models, big enough to offer a full development test of innovations."

The theme running through many another talk was one where Pittsburgh is also beginning to set a good example for the rest of the nation: business leaders must give more attention to housing and renewal problems if cities are to reverse their declining status as good places to live. Items:

• "The big danger in housing is that businessmen—ignoring civic responsibility and baffled by housing's complexity—will continue to turn their backs on the problem," warned LIFE Publisher Andrew Heiskell, who is Action's executive committee chairman.

• "It is a national disgrace that so far we have been more successful in putting one monkey into outer space than we have been putting all Americans in decent housing," said Roy W. Johnson, Action chairman and former director of the Defense Dept Advanced Research Projects Agency. "The requirements for both are essentially the same: a firmly-held goal, efficient organization and management, a high level of technological innovation, skill and money."

NEWS continued on p 69



**ARCHITECTS** critique of East Hills' plans is offered by Vernon deMars of Berkeley, Calif. Like most other invited critics, he questioned plans for traffic circulation, wondered if a Radburn-style loop-and-finger scheme wouldn't work better. Hilly site gives the planners a tough problem.



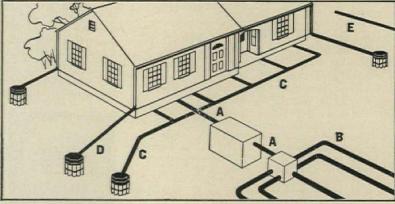
Mortgage experts predict "tighter money" for 1960 ...

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#### News

#### URBAN RENEWAL

### Big swing to rehabilitation shown at renewal officials code parley

The nation's urban renewal officials, who five years ago generally scoffed at rehabilitation as a realtor-touted fraud, have now decided to make it one of their major concerns.

The change was abundantly evident at NAHRO's second conference or housing code enforcement in Washington last month, attended by some 143 members. One sign was HHFAdministrator Norman Mason's choice of the meeting as a forum to announce new requirements for cities' workable programs to combat blight (which are prerequisites to Federal aid for renewal and public housing).

And if some officials still were a little new at rehabilitation (NAHRO President Charles Farris suggested FHA Secs 220 and 221 would work better if they had "some kind of a gimmick like FNMA to supply direct mortgage credit"—which it already does) there were also a good many sophisticated insights on the handling of knotty problems in the field. *Some samples:* 

• A timesaving and highly effective enforcement gambit developed by Oakland, Calif: shutting off gas and electric service where code violations are found and not corrected. Owners can't keep going without utilities, says enforcement man Russell Wells. "It hauls them up short when they realize they'll miss their favorite TV programs."

• A central relocation and compliance information center for displacees, to help them use Sec 221 to solve their problems, was suggested by John H. Haas, director of Washington's Metropolitan Assn of Improvement Contractors.

• Inspection personnel should be rated highest on their ability to get along with people and good judgment, said William K. Marsh, director of rehabilitation for Columbia, S. C. Applicants should have at least a year of college so they can match the education level of most of the people they must deal with. And top inspectors should come from out of town in a small-town situation. Otherwise they will be handicapped in dealing with friends and neighbors.

• Better public understanding of rehabilitation can be achieved by expanding the citizen's advisory base of the program, said Col. Malcolm D. Jones, director of Atlanta's department of urban renewal. His suggestion followed queries from some officials who said citizens objected to the "stigma" of having their neighborhood designated for renewal. In Atlanta, the board was expanded from nine to 90 to meet the problem, he said. It did.

### How new workable programs work

The federal government, after five years' experience with the "workable program" requirement of the 1954 Housing Act, has decided that cities just can't be trusted to keep their programs to eliminate slums and blight workable by themselves.

So it has set up new workable program regulations that provide for annual review of progress for the cities to retain their eligibility for federal urban renewal aids.

The new rules spell out much more specifically the steps which cities must take to qualify under each of the seven key points of the workable program (codes, community planning, neighborhood analysis, administration, finance, relocation, citizen support). In most cases, first step is establishment of definite machinery for action on each point (instead of mere evidence it is being worked on) and timetables for accomplishment in each area.

But a deadline for action is also set up by a second list of requirements that cities must fulfill in three years (e g, code studies begun under the first set must result in actual adoption of adequate building and housing codes).

Among new points required of cities are a committee on minority housing problems, a citizen's advisory committee on slum clearance, definite appropriations to finance the program, and continuous review of each phase.

Ben Perry, special assistant to HHFAdministrator Norman Mason, says the rules were inspired by some southern cities which scrapped their programs after certification but it's likely they will cause some discomfort

out it's intely

**MARCH 1960** 

in northern cities that have been dragging their feet, too.

New applicants will have a year from this month to comply with basic requirements of the new rules. Cities now certified will have varying periods to meet the three-year goals (e g, Washington D. C. must meet them by May 1961).

#### Richheimer starts national remodeling franchise plan

Another step toward a national remodeling industry is being taken by Big Remodeler Herbert Richheimer.

Already the nation's first "mobile remodeler" (*Feb*, *News*), Richheimer is now launching a national system of franchised operators. He plans to stand behind the quality of their workmanship and materials.

On April 4, the first pilot group of 15 remodelers will begin a two-week cram course at Richheimer's Hicksville, Long Island office. Thereafter, he expects to train as many as 25 a month with a goal of 100 franchises in 1960, hopes for 1,000 by 1965.

Members of Richheimer Remodeling Systems Inc, will pay \$2,000 plus 2% of their gross for their franchises. In return, they get full details of Richheimer's notably successful estimating, cost control, accounting, merchandising, and management systems. By 1962, they will share in national advertising campaigns, says Richheimer. Each will retain his local identity, but will tie-in with national ads, and receive local ad service, emphasizing his affiliation with the Richheimer label. At the end of their course, they will have the help of a Richheimer specialist (initially, Richheimer himself) in putting what they have learned to work back home.

Richheimer predicts that his members will quickly reach a sales volume of \$750,000 a year each. But the benefits to the industry, he says, will be even greater. "Everyone in the home-improvement business," he says, "knows that it has tremendous problems. Suede-shoe boys—even the sloppy management of ethical people—have frightened off millions of potential customers. We will give homeowners one reliable and efficient source."

#### FBI jails 23 for fraud in FHA repair racket

An alleged "multimillion dollar" racket in fraudulent FHA Title I loans has been uncovered by the FBI on Long Island.

In its first strike, agents arrested a home improvement contractor, 19 of his employees and three real estate brokers on charges of obtaining \$1.8 million in phony loans for homeowners, keeping \$500,000 as "service charges."

Kingpin of the operation, agents charge, is Nathan Schikler, 45, president of Kem Home Improvement Corp of Freeport, L. I. Agents said that the phony loans were part of a \$4 million loan volume. The rest apparently went for actual improvements.

The government charges that Kem salesmen soliciting home improvement business would offer to get cash for homeowners if they didn't want any work done. For poor credit risks, said the FBI, fake employer and mortgage information would be supplied. When a loan was made, Kem would keep a chunk, hand the rest over to the borrower who was then saddled with the full amount of the loan, the government contends.

The real estate brokers were involved when they verified the fake credit information to the three banks used by Kem: County Federal S&L of Rockville Center; State Bank of Long Beach and Reliance Federal S&L of Queens Village. Sometimes, said the agents, a loan would be obtained for more than the value of the work, and the balance given the homeowner. Some 400 borrowers are involved, says the FBI. The money paid for funerals, weddings, even air trips.

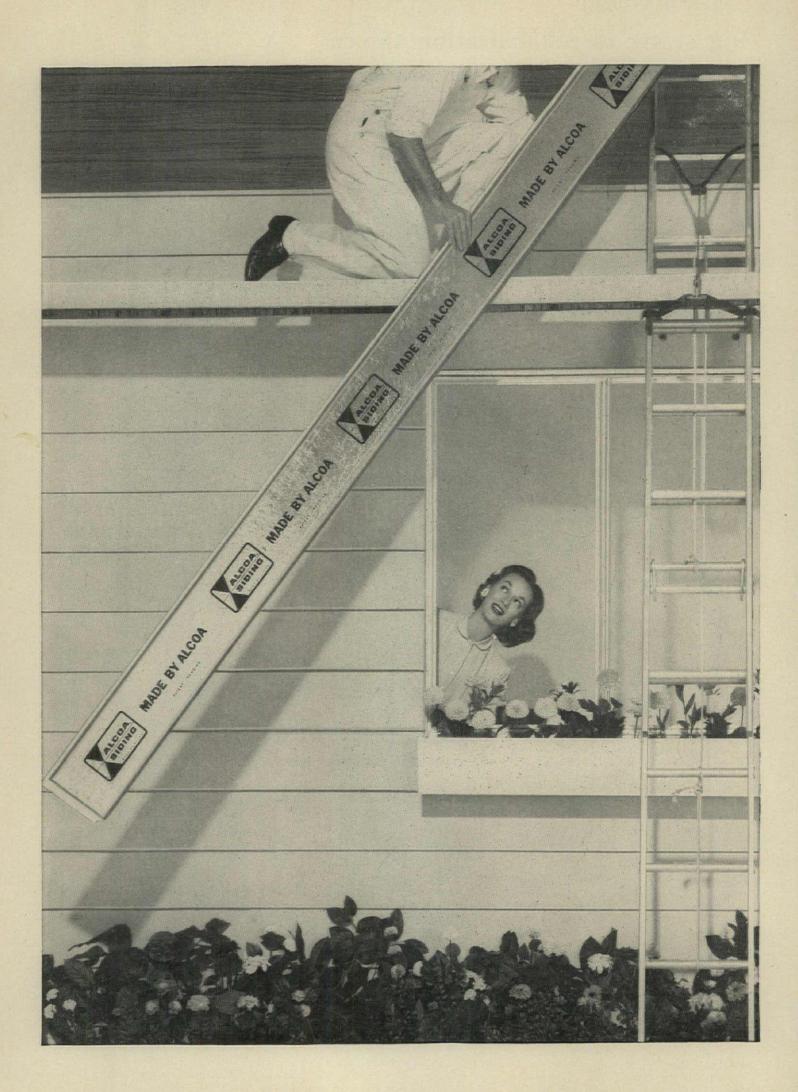
Confident other companies are involved in similar frauds, the FBI has appealed to home owners for help in finding them.

#### Chicago building dept hit by bribe charges

Chicago's headline-grabbing police scandals, which resulted in arrest of 15 officers and disclosures of corruption high in the department, have finally spilled over into housing.

Two plumbing contractors, in housing court for failure to obtain a permit for their work, have charged that they were solicited for bribes by city plumbing inspectors. Result—a big new grand jury investigation (among others in the past year, beside the police scandals: one in traffic court fixes and another in municipal court bail bonds).

The real import of the charges was underlined by the Chicago *Tribune* in an editorial that said police scandals were bad enough, "but if the city's building inspectors are crooked, the fight against the growth of slums is hopeless and all the tax funds being spent on 'renewal' and 'conservation' will be wasted."





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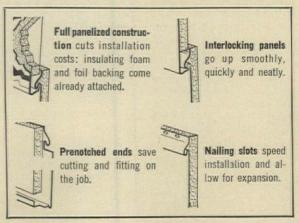
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#### PEOPLE.

### Gray quits as building trades chief

Crusty, conservative **Richard J. Gray**, 73, has finally stepped down as head of the AFL-CIO Building and Construction Trades Department.

A fourth-generation bricklayer and veteran union executive, he headed the 18-union, 3-million-man department since 1943, but in recent years he was

recent years he was notably out of step with other labor leaders. He supported President Eisenhower for election in 1952 and 1956 (the only major unionist to do so), supported the anti - Communist campaign of the late Sen Joseph McCarthy, and in 1958 started real talk of replacing him by proposing a moratorium on wage hikes\* which



GRAY

was promptly repudiated by most unions.

Since then, rumors of his resignation popped up often. But when he finally resigned the move caught his fellow union executives by surprise. Gray gave ill health as his reason, but associates say he has been increasingly miffed at a tendency by presidents of his 18 unions to work with industry and on legislative aims without him. The final straw, some say, was his inability under the merged AFL-CIO to fight jurisdictional encroachments of CIO unions on his own. Gray helped lead opposition to the rise of industrial unions that led to formation of CIO in the '30s.

Prominently mentioned as possible successors are James McDevitt, former head of the Pennsylvania Federation of Labor, and now director of AFL-CIO committee on political education (formed to fight right-to-work laws), and Lloyd Mashburn, former Undersecretary of Labor and now general president of the Lathers Union.

#### FHA's Zimmerman bows out of race for Kansas governor

For a few days last month, FHA Commissioner Julian Zimmerman looked like a likely candidate for governor of Kansas. Lawyer Zimmerman, who was staff director for Gov Edward F. Arn for a year, makes no state secret of his hope to get into Kansas politics sooner or later.

But it took housing circles by surprise when he abruptly flew to Kansas in late January just as his home town of Wichita endorsed him for governor. Zimmerman took himself out of the race, however, in a luncheon talk at Topeka. Sedgwick County, he remarked, was a long way from being the whole state. And while he discovered lots of friends, he said, he also discovered he wasn't well known throughout Kansas. His announcement he would not seek the Republican nomination, left five other candidates in the field. Democratic incumbent Gov **George Docking** has given no hint yet as to his third term plans.

BUILDERS: Named to NAHB's 1960 executive committee by President Martin L. Bartling: Lloyd E. Clark, Des Moines; Vondal S. Gravlee, Birmingham, Ala.; William D. Coffman, Minncapolis, Edward W. Pratt, Royal Oak, Mich.; Larry Blackmon, Mineral Wells, Tex.; Perry E. Willits, Miami; Melvin E. Kimmey, Dayton, Ohio; Sylvanus G. Felix, Oklahoma City; Milton J. Brock, Jr., Los Angeles; Martin H. Braun, Westchester, Ill. and Alexander Feinberg, Camden, N.J.

The Natl Housing Center trustees elected immediate past president Carl T. Mitnick, chairman He succeeds Nathan Manilow, Chicago.

#### Ballplayer Jackie Jensen joins homebuilder ranks

Star Boston Red Sox Outfielder Jackie Jensen has turned his back on a long and successful (salary: around \$50,000 a year) career in the major leagues to go to the minors—as a homebuilder.

Jensen, 32, has teamed up with another ex-ballplayer, Ray Ehlers (who pitched in

the minors), to build homes around Lake Tahoe To date, they

have built seven homes

(average price: \$35,000)

at Crystal Bay, Nev.

The homes, put up on

order, were sold with a

minimum of financing.

Explains Jensen: "The

people we have dealt

with paid cash, usually

A fiery baseball com-

within 30 to 60 days.'

petitor, Jensen (who



JENSEN

also owns a successful restaurant in Oakland) says he's in no hurry to move into homebuilding's big leagues. The partnership plans no speculative building. In fact, Jensen says they're not sure what they'll do this year, if anything. He has put on the market five lots he owns in Tahoe City, does not intend to build on them.

LENDERS: Emil J. Seliga, 42, one of the savings and loan industry's rising leaders, has resigned abruptly as president, managing officer, and a director of Talman Federal S&L (assets: \$300 million), Chicago's second largest. His posts were assumed by Ben F.



VISITING RUSSIANS Vladmir Kucherenko, Soviet minister of construction (2d from r), and Vladmir Ermolenko, deputy minister of public relations (1), say they do not approve of US single-family detached housing. The Russians, ending a tour of this country, were guests at a luncheon given by Past NAHB President Thomas Coogan (2d from 1) in New York With them is co-host Raymond T. O'Keefe (r), vice president of Chase Manhattan Bank. Said the Russians: single homes are too expensive to build, too wasteful of land, are less satisfactory than their high-rise communities which house up to 14,000 people. But they admitted: US materials are better, more varied, and finish and decoration are superior here.

**Bohac**, 67, Talman chairman and founder. Asked why he quit, Seliga told newsmen. "You can't have two cooks in the kitchen."

Milford Vieser, stepped up from financial vice president to executive vice president of Mutual Benefit Life Insurance Co. (assets \$1.8 billion), the nation's 13th largest. He will continue to supervise its investments, including more than \$700 million in mortgages.

William H. Cline Jr, former vice president of Franklin Natl Bank, L.I. became executive vice president of Bankers Mortgage Co. of Calif., in charge of its new New York office

CONGRATULATIONS: To HHFAdministrator Norman P. Mason, for becoming first winner of the F. Stuart Fitzpatrick award for "outstanding individual achievement in unification of the building industry." Fitzpatrick, who died in 1956, worked 25 years as manager of the construction and civic development department of the US Chamber of Commerce to try to bring building industry factions closer together.

To Realtor **Boyd T. Barnard** of Philadelphia, on his election as president of the Urban Land Institute. He succeeds Builder **David D. Bohannon** of San Mateo.

PRODUCERS: Earl C. Swanson, 48, is the new president of the Andersen Corp of Bayport, Minn., big wood window manufacturers He succeeds Fred C. Andersen, son of the company founder, who becomes board chairman after 45 years as president. James D. Rowland, sales head since 1930, moves up to vice chairman and sales director.

Bird & Son Inc, East Walpole, Mass., major floor and wall covering, roofing and siding manufacturers, has elected **Ralph A. Wilkins** executive vice president. **A. H. Anderson**, president since 1946, is retiring after 42 years' service.

Howard Holtzendorff, executive director of the Los Angeles Housing Authority, must stand trial on 21 felony charges of embezzling public funds, a California appeals court has ruled.

The charges stem from his support of Los Angeles Mayor Fletcher Bowron for reelection in 1953 (Bowron lost). Holtzendorff is accused of misusing \$3,400 by having housing authority stenographers work overtime typing Bowron's campaign literature.

The charges were dismissed in 1958 by a superior judge who ruled them groundless. But the district attorney appealed, specifying only 21 of the original 52 counts.

#### Dwight Townsend quits as FHA co-operative aide

**Dwight D. Townsend,** top US co-operative housing official, is leaving FHA to become Washington representative of the Cooperative League of the USA, a federation of consumer, service, and purchasing co-ops representing 14 million families.

Townsend, 55, a veteran of 30 years in a gamut of co-op work, will succeed **Wallace Campbell**, who has been named director of public affairs of Nationwide Insurance Co of Columbus, Ohio. The \$360 million concern, a member of the Cooperative League, has a big portfolio of co-operative mortgage loans, also owns the Tectum Co of Newark, Ohio, makers of wood fiber board.

Townsend joined FHA as special assistant to the commissioner for co-operative housing

<sup>\*</sup>Because, warned Gray, building labor is pricing itself out of work by demanding higher and higher pay for no more productivity.

#### News



TOWNSEND & CAMPBELL New lineup for co-op housing

in October 1955 when the \$13,300-a-year job was created by Congress. Since then, FHA has nearly doubled its co-op business. Comparative figures:

Oct 31,	'55	Jan 31, '60
Mortgages insured .	304	1,100
Units insured 33	,150	56,593
Dollar volume\$309,219	,883	\$620,996,221
Outstanding com- mitments	13	237

But most of FHA's co-op housing remains concentrated in a few states: New York, California, Arizona, Michigan, Florida, Nevada, and Pennsylvania.

Arthur J. Benline, 58, who has guided the technical life of New York State's model building code for the past eight years, has left to head New York City's anti-smog battle.

In 1952, Benline became technical director of the New York State Building Code Commission, which produced one of the best performance building codes in the country. When the commission was abolished in an economy drive last year (April, News), its functions were transferred to the State Division of Housing, where Benline became chief of the bureau of state building codes.

Benline, an architect and engineer, was Manhattan buildings superintendent for 12 years. A close friend of Mayor Wagner, he replaces Dr. Leonard Greenburg, who quit as \$20,000-a-year air pollution control chief to join the medical staff of Yeshiva University.

Life of the code bureau (and the continual updating of its performance requirements to accommodate new technology that made it so valuable) depends on action by the state legislature this year. But insiders say it will be continued, and there is provision for it in Gov Nelson Rockefeller's budget.

#### Ludwig Mies van der Rohe to get AIA's Gold Medal

The American Institute of Architects has tapped Ludwig Mies van der Rohe to receive this year's Gold Medal, highest AIA honor.

For the aging (73) one-time German stonemason who escaped a formal architectural education, it is fitting



MIES

tion in modern design. Mies (pronounced Meece) will receive the medal at the AIA's convention in San Francisco April 21. Mies' recognition comes late in life. Despite his international

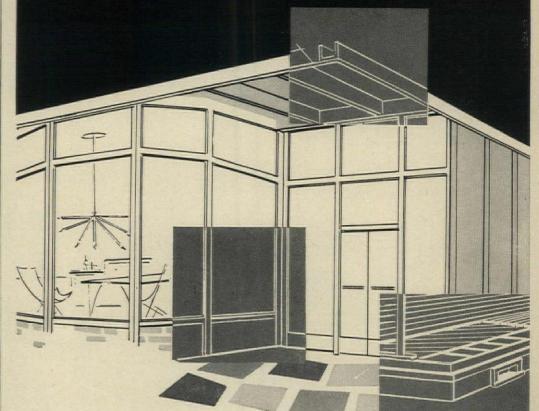
recognition of his role

in fostering the spare,

square, disciplined metal

skin-and-glass revolu-

influence on architecture going back more than 30 years, he was, until recently, little known outside of continued on p 75 for assured protection against termites and decay





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Send for bulletin on Wolmanized pressure-treated lumber which gives complete details and speci-fications and supply sources.

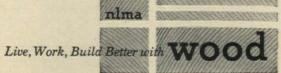
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- HOUSE & HOME

#### News

Chicago where he lived after leaving Germany in 1938. While head of the Illinois Institute of Technology's department of architecture (he retired last year), Mies designed the school's new campus, drew acclaim (and an unsuccessful lawsuit over the cost) for his spectacular \$74,045 glass-box Farnsworth House (Aug '58, News).

Despite his passion for economy of design, Mies is not a subscriber to the classic dictum: form follows function. Says he: "We do the opposite. We make a practical and satisfying shape and then fit the functions into it."

Others named to receive AIA awards this year are Thomas Hart Benton, Kansas City painter and muralist, Fine Arts Medal; William L. DeMotteo, Williamsburg, Va. silversmith, Craftsmanship Medal; Naval Architect Francis Gibbs, who designed the US Line's Constitu-tion, Allied Professions Medal; Philip D. Creer, Austin, Tex., Kemper Award for service as chairman of the AIA's judiciary committee, and Roger Sturtevant, San Francisco, who will be the first to win the new annual award for architectural photography. Many of his pictures have appeared in HOUSE & HOME.

#### **Colbert heads Columbia architecture school**

"The land between buildings is just as important as the buildings themselves." This observation by New Orleans Architect Charles R. Colbert may foreshadow changes for the Columbia University school of architecture when he takes over as dean April 1.

Frank Lotz Miller

Says Colbert: "We can unite architecture and urban planning so thoroughly they will be inseparable. We may have to give less drawing, less architectural history, and substitute more social planning."



Oklahoman Chuck Colbert, who is succeeding retired Dean Leopold Arnaud, is your (38) but he has a lot of experience. He studied architecture at the University of Texas, graduate naval architecture at the University of Michigan, got his master's degree from Columbia. After three years in the Navy in World War 2, he became assistant professor of architecture at Tulane in 1947. He resigned in 1949 to become supervising architect and director of planning for the New Orleans school board. He led a successful-and sometimes bitter-campaign to

overcome die-hard determination to continue putting up 1890-type buildings. Contemporary designs he instigated won not only awards but also a reputation for him as an architect who could keep costs down.

He set up private practice in 1952, took off ten months in 1956-57 to reorganize Texas A&M's division of architecture.

His design of the first motel on stilts was chosen by the State Dept for exhibit abroad. His home in Metairie, La. was cited by the AIA (H&H, June '59). Married, with five children, he plans to continue his connection with firm of Colbert, Lowrey Assoc.

ARCHITECTS: Nomination for AIA offices have produced two contests: James M. Hunter, Boulder, Colo. and I. Lloyd Roark, Kansas City are running for second vice president and Gerson T. Hirsch, Pleasantville, N.Y. is contesting the re-election of Raymond S. Kastendieck, Gary, Ind. for treasurer. Unopposed are Phillip Will Jr., Chicago, for president, Henry L. Wright, Los Angeles, for 1st vice president, and J. Roy Carroll Jr., Philadelphia, for re-election as secretary.

A. Quincy Jones, one of the nation's leading designers of modern. speculative tract homes, became president of AIA's southern California chapter, second largest in the US, succeeding Maynard Lyndon.

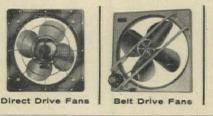
DIED: Clarence E. Pullman, 66, executive vice president of Bell & Gossett Co, heating systems firm, Jan 8 in Evanston, Ill.; Peter C. Scampini, 57, Sacramento builder and realtor, Jan 13 in an auto accident in Sacramento; Frank F. Moloney, 42, member of Newark firm of Candeub, Fleissig & Assoc, city planning and urban renewal consultants, Jan 21 at Bayonne, N.J.; Ivor B. Clark Sr., 69, board chairman of Ivor B. Clark, Inc, mortgage financing firm that arranged financing for scores of big buildings and apartments (including Chrysler, Look and Woolworth buildings), Jan 22 in New York City; Mrs Shirley Hart, 72, who joined FHA in its first year and became first woman research director ('40-'50), of a heart attack Feb 1 in Washington; John E. Menz, 51, vice president in charge of marketing for Kaiser Aluminum and Chemical Co, Feb 14 in Lafayette, Calif.; Fred Tuke, 97, prominent Cincinnati realtor for 60 years and former president of the Eagle S&L, Feb 16 in Cincinnati.

NEWS continued on p 77



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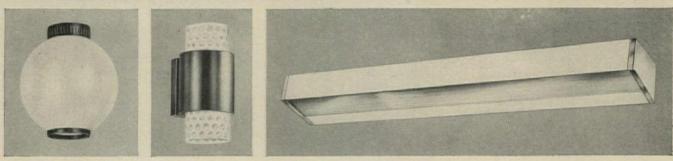
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#### BOOKS:

#### News

## Interracial housing can be stable, profitable contend authors of a new, exhaustive study

PRIVATELY DEVELOPED INTERRACIAL HOUSING, An Analysis Of Experience, by Eunice and George Grier. 272 pp, \$6. University of California Press.

Is public acceptance of unsegregated housing closer than most people think?

Social Researchers Eunice and George Grier contend it may well be. They base their view on a study of nearly 50 privately developed interracial housing projects from all over the country. The study upsets a good many widespread notions about integrated housing, and leads the Griers to some striking conclusions. Among them:

• Such housing can be sold commercially even to persons who are fearful of Negro neighbors.

• Open-occupancy developments need not go "all black" even where developers impose no racial quotas.

• Despite difficulties, many open-occupancy developments are profitable; and more and more builders are expressing interest in interracial housing (even though few have dared the plunge).

The Grier study was originally made for the Commission on Race & Housing. It leans heavily on a more detailed study which the couple Watter Datas, made in 1956 for the Univer-



made in 1956 for the University of Pennsylvania, of Concord Park, Morris Milgram's pioneer interracial housing development outside Philadelphia (H&H, Apr '55 et seq). But it also includes every such project the authors found in a national survey, which met their strict criteria for privately produced new rental, sale or co-op housing that was interracial from the outset. The picture they give ("... both successes and fail-...") should be a handbook

AUTHORS GRIER

ures were considered equally interesting . . .") should for builders who contemplate entering the field.

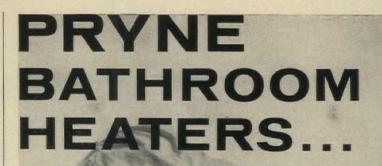
No. 1 problem for open-occupancy builders, say the Griers, is neither financing (though it once was) nor sales, but site selection and acquisition. Most attractive sites, vital to housing that will attract white buyers, are close to existing or planned white communities. Builders who locate on them risk crippling opposition, face at least a hard fight to complete their developments.

"The experience of the pioneers indicates that no community can be counted upon, by nature of its social structure or history, to be hospitable to an interracial tract. Neither can any community be counted upon to be too small or unsophisticated to devise ways of keeping out unwanted minorities," advise the Griers (who wrote long before Chicago's Deerfield Park struggle—*Feb*, *News*). Yet sites selected to avoid community opposition tend to be too far from other housing for convenience, or less attractive for other reasons. "The problem of community opposition in desirable sites is the only remaining obstacle to private interracial housing which shows little hope of a break-through now or in the near future."

FHA comes in for a roasting from the authors for its role in making financing difficult for interracial housing. Doubts of many lenders about soundness of such projects, they say, seem to be a carry-over of FHA's policy of discouraging interracial housing prior to 1948, in spite of its more-and-more-liberal policies since then. But as lenders' experience with nonwhite borrowers grows, and interracial housing spreads, the Griers find financing, while still difficult, "by no means impossible."

#### How do you sell integrated housing?

"Whether or not whites 'want' interracial housing does not appear to be the important question," the Griers contend. "Rather the question seems to be: "How much inducement do they need to accept it?" In a good many cases, the study shows, builders have been able to provide enough in the form of attractive price, easy terms, or better houses. In Concord Park, nearly 40% of buyers recalled having doubts before they bought. Many other developers "felt they had acquired a substantial proportion . . . who were not at all interested in "interracial living' but solely in housing value." Furthermore, say the Griers, members of groups devoted to interracial harmony are a disappointing market (only 16% of white sales in Concord Park came from them), and white buyers overall fit *no* socio-economic pattern. "Commercial developers have found, by and large, that their best source of white *continued on p 79* 



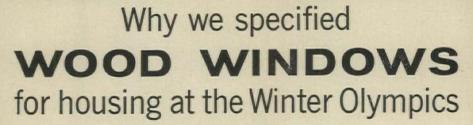
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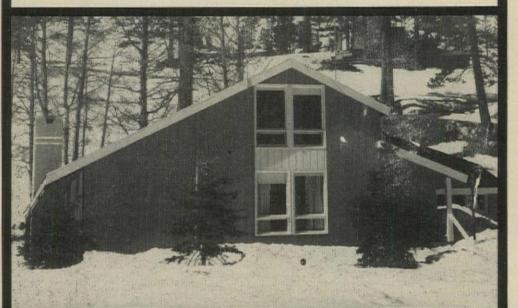
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#### News

prospects was the general market for housing." One West Coast project was so successful in using classified ads to sell in-migrant workers that they threatened to squeeze out the former Negro majority.

In this connection, the Griers say, the theory that once Negroes make up a certain percentage (from 25 to 40%) in an uncontrolled neighborhood, it will "go black" does not seem to apply to new integrated housing. In 31 of their 50 developments, Negroes made up half or fewer of the occupants. "In only a small number of the 31 was the Negro percentage limited by quotas . . . In most it was the result of market forces. Several developers have made strenuous efforts to entice more Negro applicants." And where Negro occupancy increased, it seemed to be following the trend of the surrounding area.

Other "widespread assumptions" about the interracial market that the Griers found denied by their evidence:

• White families willing to live in open occupancy are themselves likely to be members of persecuted minorities (eg Jews).

• Whites with children shun interracial developments (they average more children per family than Negroes, in reporting developments).

• The fewer Negroes in the area, the less reluctant whites are to buy. Although only 8,000 units of interracial housing have been discovered by the Griers since World War 2, (against some 10 million total starts) they find that the rate of building has increased steadily. Exactly half were built for individual ownership, 32% is co-op, 18% for rental. Single homes accounted for 60% of units. Price range was from \$5,500 to \$60,000, and developments ranged from under 25 units (40%) to 1,600 units, with 36% having 100 or more units. Half were begun for profit, and only "a few" resulted in a loss, mainly because they did not reach completion. Most lie near the urban complexes of the East Coast, Midwest, and Far West. But some are in "virtually all major geographical regions of the United States.

"The spontaneous origin of this number of interracial communities in many parts of the country, the bulk of them within the postwar years, strongly suggests that they grew out of basic social and economic forces," say the Griers. "In the course of field work for this study the authors have learned of literally dozens of builders who have expressed an interest in building interracial developments in the near future . . . whether or not (interracial housing) will ever become the rule rather than the exception is impossible to say, but the evidence to date gives no reason to believe that it is a transitory phenomenon on the American scene."

#### Do nonwhites really lower property values?

PROPERTY VALUES AND RACE, by Luigi Laurenti. 256 pp, \$6. University of California Press.

For years, many housing opinion-makers took as axiomatic the proposition that when nonwhite families move into a white neighborhood property values drop. More and more students of housing have questioned this notion recently. But Luigi Laurenti's study is the first book to knock sizeable holes in the doctrine even if it does not completely demolish it.

Chances are about four to one that houses in an area entered by nonwhites will match or surpass prices in comparable all-white areas, says Laurenti. His finding is buttressed by an impressive statistical survey of tens of thousands of individual house sales in seven cities.

Laurenti's book was originally written as a special report to the Commission on Race and Housing. Its basic data comes from San



Francisco, Oakland, and Philadelphia. There, "a total of 5,417 individual sales prices was collected from 20 formerly all-white neighborhoods which underwent some degree of nonwhite entry during the time of observation. Another 4,495 sales prices were gathered from 19 closely comparable neighborhoods which remained all-white over the same period. Neighborhoods were deliberately selected to give as much diversity as possible in price class, degree of nonwhite occupancy, and other factors."

LAURENTI

The findings: Prices for test (ie, nonwhiteentered) areas remained within 5% of control areas during the observation period in 41% of the cases—a span Laurenti considers insignificant.

In 44% of the cases, test areas showed price increases from 5% to 26% higher than control areas. In only 15% of the cases, control areas ended with prices higher than the comparable test areas, and then only from 5% to 9% higher. Neither price class of the neighborhood nor percentage of nonwhite occupancy seemed to have any regular relationship to price movements.

Prices generally will fall, Laurenti says, where whites move out so quickly the housing market is glutted. But nonwhites moving in may continued on p 81

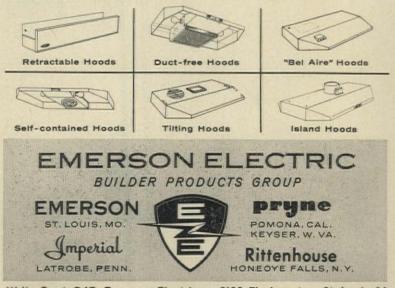


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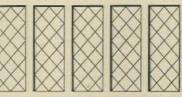


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### News

push the prices up again. And in a tight nonwhite housing marketpressure from nonwhites may keep prices at a premium level.

Laurenti points out that while his conclusions are based on observations in a period of generally rising prices and strong demand for housing, "particularly by nonwhites who had been making relatively large gains in personal income, these conditions seem likely to continue . . . and therefore the main findings . . . may be valid for many neighborhoods certain to experience the entry of nonwhites."

In other cities studied—Chicago, Kansas City, Detroit, and Portland —research tends generally to support his findings, Laurenti reports. Do financing arrangements distort the data? For instance, is the selling price of houses where the seller must take back a second mortgage higher to offset the 40-50% discounts on second mortgage? Laurenti makes a special analysis of San Francisco, finds that 1) only half as many nonwhites pay all cash as whites; 2) almost as many nonwhites as whites bought for cash plus a first mortgage without secondary financing (48.4 vs 53.6%); 3) almost as many whites as nonwhites take secondary financing—two out of five nonwhites vs two out of six whites; 4) overall, first mortgages for nonwhites are as large as for whites, involved the same loan/value ratio; 5) recorded interest rates are the same for both groups.

Author Laurenti is an economist currently directing studies for private industry. His studies of the economics of race and housing began in 1951 at the University of California, where he taught for two years. He has written articles on the subject for the *Bay Area Real Estate Report* and *The Appraisal Journal*. He has also directed a study of and reported on "Fiscal Problems of Urban Growth in California" for a committee of the State Senate.

### What every realty salesman should know

REAL ESTATE PRINCIPLES AND PRACTICES by Preston Martin. 434 pp, \$9. Macmillan.

The average real estate salesman seldom distinguishes himself by his depth of knowledge or his insight into the basic precepts of his business. Too often, especially in the case of the house salesman, he knows only the contents of a brochure and some of what he heard in a two-week cram course that won him a salesman's license.

If this were *not* true then Preston Martin's book would not be nearly so noteworthy. For he has neatly packaged an excellent review of basic principles and practices which every urban broker and salesman should know. It is *not* a book on how to sell. It *is* a well written, readable text which takes the reader from the creation of urban development to its restoration from blight.

Martin, an associate professor of real estate and finance at the University of Southern California, puts primary emphasis on the changing aspects of urban real estate, its finance and development, particularly as affected by federal housing policy.

The book may not teach smart realtors any more about their business. It may not teach mortgage bankers any more about the mortgage market. But to the *average* real estate salesman it can give a clear understanding of his business as well as practical help in making himself a better merchandiser.—J.S.

### Top appraisers write on their specialties

ENCYCLOPEDIA OF REAL ESTATE APPRAISING edited by Edith J. Friedman. 890 pp, \$22.50. Prentice-Hall Inc.

Editor Friedman, an attorney who has edited and written other realty texts,\* has compiled what she believes is a "co-ordinated, comprehensive, practical, and authoritative study" of modern real estate appraisal. Contributors are 25 of the nation's top appraisers, each writing on a subject in which he has made special studies.

### Planners' compendium from ASPO

PLANNING 1959, selected papers from the 25th National Planning Conference (Minneapolis, 1959), 189 pp, \$5, published by the American Society of Planning Officials, Chicago.

ASPO has brought together the best speeches at its 25th annual convention, and wisely included a wide selection ranging from data processing problems to the danger of radioactivity. Other topics: metropolitan government; community relations; past, present and future of planning; planning and super highways; schools; urban renewal and planning legislation.

\* "Handbook of Real Estate Forms" and "Encyclopedic Dictionary of Real Estate Practice."

## EMERSON ELECTRIC...

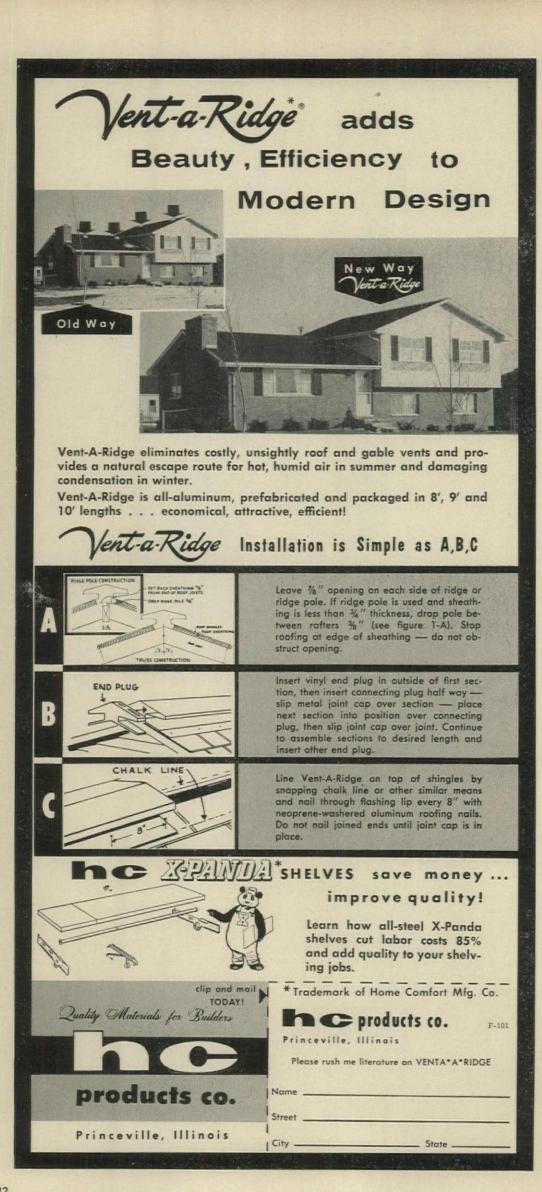


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### Letters

#### **Tight money Round Table**

I want to congratulate you on the obviously high level of the conference and the report (H&H, Jan). I was particularly impressed by the section dealing with the effects on costs of the instability in housing starts. You will be interested to know in that connection that the Cabinet Committee on Price Stability for Economic Growth is studying the effects of high interest rates on the economy in general. RICHARD NIXON, vice president

United States of America

Congratulations on your excellent Round Table report on tight money. I hope you can persuade every member of Congress to read it.

OSCAR R. KREUTZ, president First Federal S&L Assn St Petersburg.

H&H is always doing good, interesting, constructive, and sometimes provocative things. One of the best is the Round Table report on tight money.

AKSEL NIELSEN, president Title Guaranty Co Denver.

#### January issue

Your January issue is, without doubt, the best forward-looking commentary on housing that I have seen published. Naturally, I was particularly delighted with the coverage you gave the experimental houses and while some of the ideas may be mere novelties, there are others that are practical and ready for use today. Similarly, the section on the industrial revolution in housing was an excellent presentation of some of the fundamentals that we have been trying to teach for the last few years.

JAMES T. LENDRUM, head Department of Architecture College of Architecture & Fine Arts University of Florida

#### Land planning

We have become strong supporters of the approach in the H&H Sept '59 article titled "Is this new idea for subdivision layouts a good answer to big lot zoning." The homeowner would have all the advantages of large lot zoning with small lot maintenance. This method of development also has advantages over the short cul-desac street. They are:

1. Service vehicles can move through such an area with ease.

2. Cities not permitting access to major streets should be inclined to approve such a plan because the configuration of many of the clusters' lot lines can be arranged to provide a buffer between the property line and the street right-of-way.

3. The cluster affords an excellent traffic movement pattern on divided streets by the nature of ingress and egress.

4. If the common was dedicated as public land, utilities could be located in the common and maintained safely. Practically speaking, high voltage transmission lines could be located in the common without endangering private property and such lines would not be obtrusive through proper landscaping.

PETER CUTHBERT, land planner Freeland, Evenson, Christensen & Boas San Diego.

## How can you qualify more buyers for your homes without lowering the selling price?

Successful builders are finding the answer...

# More buyers qualify for your to "Comfort-Conditioned"

When full Fiberglas\* Insulation is used, the homeowner saves on monthly heating costs. This reduces total monthly housing expense and means that a prospect who has lower effective monthly income can qualify for FHA insured mortgages. *This* means more prospects for your houses.

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When you make out FHA Form 2005, "Description of Materials," clearly point out on Page 4, Item 26, that you have used more insulation than FHA minimum requirements.

Prominently show the total calculated heat loss of the dwelling on the heating system layout.

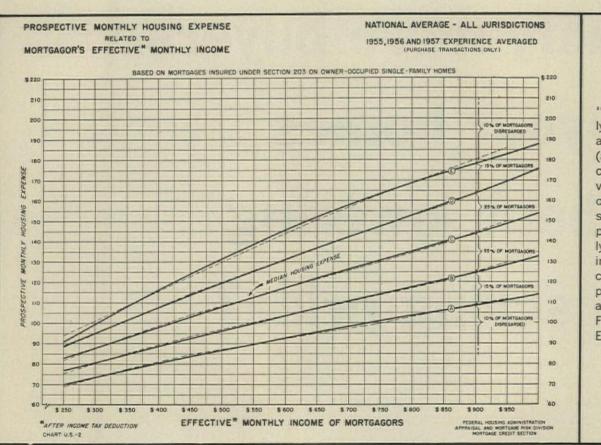
In line with its announced policy of encouraging the use of money-saving quality products,

### FHA will then:

Give full recognition for the added insulation. The added insulation will contribute toward a higher rating of physical security as reflected in Item 41 on Form 2017 (Architectural Report).

Estimate the annual cost of heating (Item 15 on Form 2017) to reflect fuel savings resulting from extra insulation which will reduce the estimate of monthly housing expense.

B Determine the reduction in net income requirements from a Housing Expense Chart (sample below) which shows how savings in monthly housing expense reduce net income requirements.



"Mortgagor's Effective Monthly Income: The estimate of the amount of dependable income (after deduction of Federal Income Tax) that is likely to prevail through the first one-third of the mortgage terms." "Prospective Monthly Housing Expense: This includes ... monthly payments to principal and interest . . . FHA's estimated cost of maintenance and repair, heating, air conditioning, and other utility costs."-from FHA 136821-P, "The Housing Expense Chart."

# FHA homes when you insulate standards—here's how:

A letter dated January 1960 to all FHA Field Office Directors from Deputy Commissioner C. B. Sweet, will assist in their properly estimating operating expense. This is important because over-estimating can exclude a significant number of prospects. He states:

"It is particularly important to recognize the effect which . . . insulation . . . and other construction features may have on annual heating and cooling costs.

"Builders should be encouraged to take advantage of this to reduce total monthly housing expense.

"The addition of insulation alone over and above the FHA minimum can produce (these) results ... "

Typical savings and lower income requirements for a selection of cities are shown at the right  $\rightarrow$ 



EXAMPLES OF APPROXIMATE SAVINGS AND LOWER INCOME REQUIREMENTS BY CITIES

City	Estimated Annual Heating Operating Savings in \$	Estimated Amount (\$) by which Annual Gross Income can be reduced to qualify
Albany	63	490
Baltimore	44	360
Boise, Idaho	56	480
Boston	93	1,240
Buffalo	47	410
Chicago	54	540
Cincinnati	23	190
Cleveland	31	250
Columbus	33	370
Des Moines	31	390
Detroit	56	480
Grand Rapids	60	490
Hartford	96	900
Indianapolis	34	320
Kansas City	22	210
Milwaukee	63	580
Minneapolis	50	430
New York (Jamaica)	55	440
Omaha	38	440
Philadelphia	45	510
Pittsburgh	26	150
Portland, Oregon	28	130
Richmond	26	140
Salt Lake City	26	240
Seattle	31	210
Spokane	61	640
Springfield, III.	30	350
St. Louis	29	240
Washington, D. C.	48	320

Note: Figures in table are based on these Conditions :

1. 30' x 40' ranch house over vented crawl space.

2. Windows and doors 20% of gross wall area.

 Comparison made between 40 Btuh/sq. ft. heat loss in +20F. and warmer winter design temperature areas; 50 Btuh/sq. ft. in colder areas and 6" Fiberglas in ceilings, 3" in walls and floors.

4. Reduction in required income estimated from Median Housing Expense line on appropriate chart for each city.

5. Mortgagor's effective monthly income taken as \$450.

 The added cost of the extra insulation at 534% interest on a 20-year mortgage was taken into account in computing the above figures.

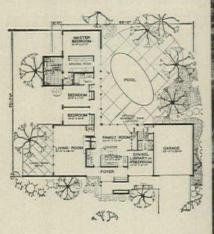
Now in its third successful year, the Comfort-Conditioned Home Program includes over 1100 builders and 90,000 homes. For complete details on the Comfort-Conditioned Home, and how its advertising and merchandising program can help you, call your nearest Fiberglas representative. Or write, Owens-Corning Fiberglas Corporation, Dept. 67-C, Toledo 1, Ohio.

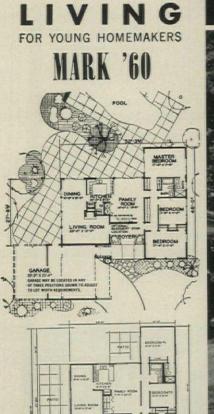


\*T-M. (Reg. U.S. Pat. Off.) O-C.F. Corp.

## THE SCHOLZ MARK '60 "HOUSE OF THE YEAR"

## House & Garden MARK '60





-----

Designed to generate interest and stimulate sales in your operation . . . you can draw on the tremendous impact of this program by building a Mark '60 in your community.

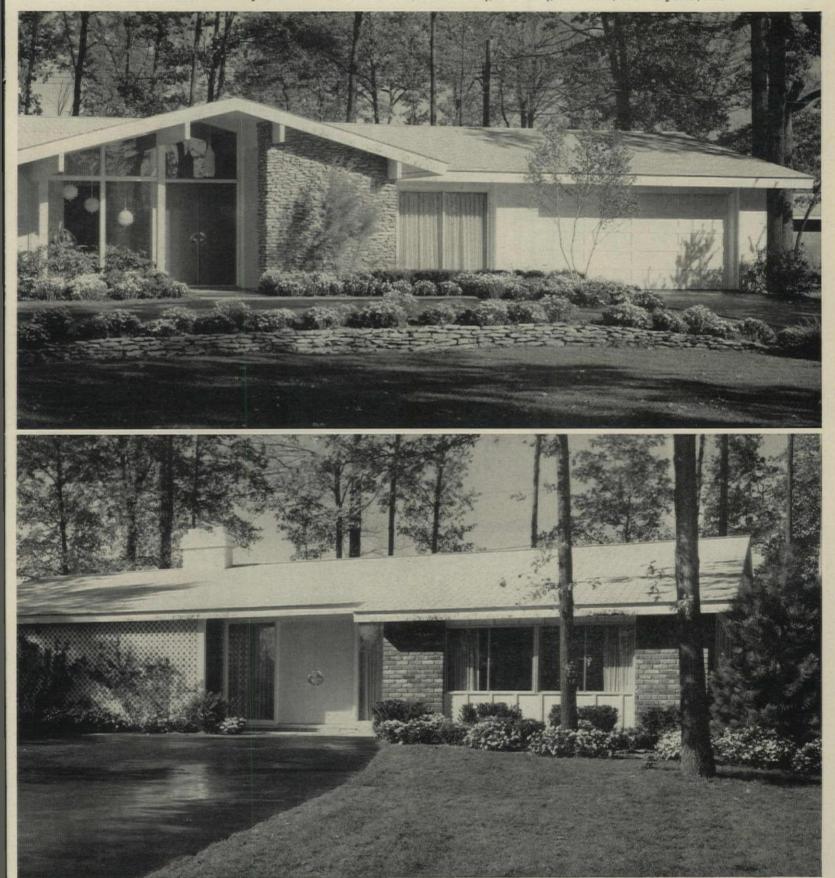
The most outstanding homes Don Scholz has ever designed ... available in three models ranging from \$20,000 to \$60,000 including land ... to be featured in both House and Garden and Living magazines ... coupled with a million dollar advertising fund ... part of which will be spent locally on your model.

Your model will be listed in the magazine stories, featured in national advertising, share in many effective promotional programs and you will participate in direct advertising assistance.

Most of all ... you will share in the reputation-flattering glory of the outstanding glamour house of the post war era.

The Mark '60 "House of the Year" program is for builders everywhere. The promotion begins in June . . . time is of the essence . . . call or write today.

SCHOLZ HOMES, INC. • 2001 N. Westwood • Toledo 7, Ohio • Phone: JE 1-1601 PLANTS: Toledo, Ohio • Wilmington, Del. • Durham, N. C. • Palm Beach, Fla. • Kansas City, Kans. • Greely, Col. • Houston, Texas • Long Beach, Calif.

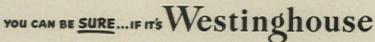






### OVER 8,000 VISITORS IN LESS THAN 8 HOURS! LOOK WHAT HAPPENS WHEN BUILDERS OPEN A NEW TOTAL ELECTRIC HOME!

Thanks to powerful promotions on Total Electric Living, Total Electric Home openings have created record-shattering crowds and more excitement than builders have seen in a decade! In California, 30 homes were sold on opening day! In Pittsburgh, the model home was sold before it even opened! In Augusta, Ga., 3 homes were sold . . . 5000 came out in the rain opening day! And here's the biggest news of all: more than a million dollars in Total Electric Homes were sold in just two weeks—proof that the Big Idea in building *pays off big*, too!



## **OUT OF THESE PAGES JUMPS THE**



## IN BUILDING TODAY

## TOTAL ELECTRIC gold medallion HOMES

Now! 16 sales getting designs from 5 of America's leading architects...announced on the Westinghouse Desilu Playhouse...promoted on the biggest TV and radio event of the year, <u>exclusive</u> Westinghouse/CBS coverage of both political conventions and the election returns!

These are the homes people will be talking about! All 16 of them have been created expressly for Westinghouse by five of America's top architects, known from coast to coast as leaders in home design. To tell the story of the biggest building idea in a decade, Westinghouse has planned the biggest TV and radio promotion in home-building history! After its first announcement in March over the popular Westinghouse Desilu Playhouse, the program quickly gathers in speed and intensity. Dramatic Total Electric Home commercials will appear during the political conventions, and continue right through election night—making these the best-known, most-wanted homes in America!

Westinghouse will help you build and promote your own Total Electric Homes in *any* size, style, or price range, from \$10,000 to \$80,000! You can build "as is" from the detailed floor plans, blueprints, and specifications available from Westinghouse, or simply adapt them to your own needs. Total Electric Homes will be read about, talked about, and attract more crowds than any homes in the last 20 years! Find out how you can cash in. Mail the coupon at right for a *free* booklet of 16 home plans!

CONTACT YOUR NEAREST WESTINGHOUSE DISTRIBUTOR FOR COMPLETE DETAILS ON HOW YOU CAN BUILD A TOTAL ELECTRIC HOME AND SHARE IN THIS MULTI-MILLION DOLLAR BUILDING PROGRAM!

### DESIGNED BY 5 OF AMERICA'S TOP ARCHITECTS!

Robert A. Little & George F. Dalton & Associates, Cleveland, O. Bassetti and Morse, Seattle, Wash. Jones and Emmons, Los Angeles, Calif.

Satterlee & Smith, Washington, D.C. George Matsumoto, Raleigh, N.C.

### 24-PAGE PLANS BOOK! Includes sketches, floor plans, and complete

Includes sketches, floor plans, and complete details for all 16 Total Electric Homes, designed by 5 top architects.

Total Electric Home Department, Box 1212, Mansfield, Ohio Gentlemen:

Westinghouse Electric Cornoration.

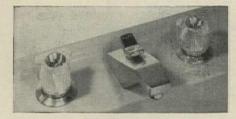
Please send me, without cost or obligation, a copy of your Total Electric Home Plans Book (B-7869) and a copy of your Builder's Guide (B-7894).

Name.

City.....State.....

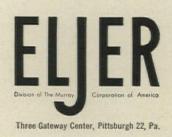


### BUILDER SPECIFIED for greater home sales



NEW LUXURY BRASS FITTINGS Sparkling new brushed chrome fittings with plastic prism handles add beauty to any bath . . . another popular new salesmaker from Eljer. "Attractive appearance . . . choice of colors . . . choice of genuine, hand-rubbed wood cabinets . . . ample storage area . . ." These were some of the features specified by builders throughout the country when we asked them what they wanted most in a completely new, first-quality lavatory.

You will find all these features (and many more) in this beautiful new *Brent* lavatory-cabinet combination. That's why we call it *builder specified*... it was designed for *you*—to help sell more of *your* homes. Send today for complete specifications.





1,850,000 CONSUMERS WILL SEE THIS AD! More than 1,850,000 prospective homeowners will be presold on the new *Brent* lavatory and *Luxury Brass* fittings when they see this fullpage, four-color ad appearing in current issues of leading consumer magazines.

## Textolite Laminated Surfacing

The front of a way of a second

### ... stepping stones to model home sales

In spite of all you do, if the kitchen doesn't please her, you don't make the sale. General Electric Textolite gives you the opportunity to add a spark of beautiful, practical color that is sure to catch her eye.

G-E Textolite offers a complete line of counter top patterns, including the *original* Spungold, as well as a wide range of Woodgrains in both conventional and new textured finishes for cabinet front applications.

For free samples and merchandising displays, contact your G-E Textolite representative or distributor ... you'll find them listed in the Yellow Pages under PLASTICS. Or write, *General Electric Company*, *Coshocton*, *Ohio*.

## Coshocton, Ohio () Please send mission () Please send display information.

( ) Please have your representative call. Name\_\_\_\_\_

City.

Address\_\_\_\_\_\_

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

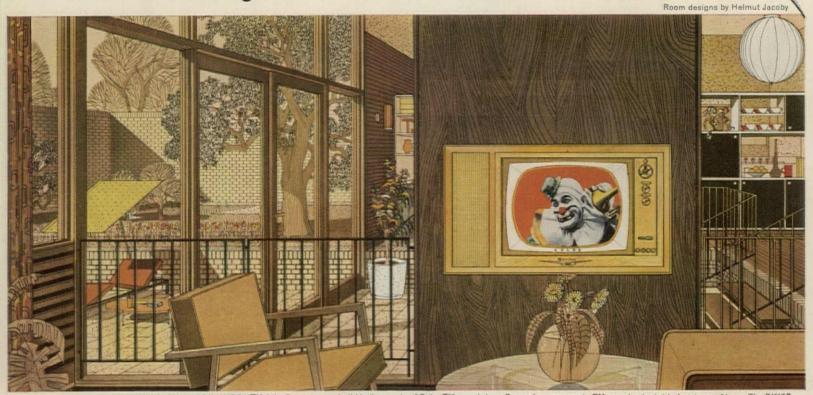
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Patterns Shown:

- 1. Green Spungold TX-4705
- 2. Canary Ming TX-2034
- 3. White Gold TX-4500
- 4. Spice Cherry TX-9103
- 5. Yellow Crackle TX-3334
- 6. Pink Travara Marble TX-2462
- 7. Wood-White Heyday TX-2932

ANOTHER WAY RCA SERVES YOU THROUGH ELECTRONICS

### A hit at the Chicago show ... a hit everywhere since!



"LIVING COLOR" MURALTV. Like 2 sets in one, build in the magic of Color TV and get superb B&W reception too. Simplified color-quick tuning, mirror-sharp

picture, 3-speaker panoramic FM sound, adaptable for stereo. Above, The DK107 Frame for rear ventilation. Front ventilation design also available.

## Here's how RCAVICTOR Built-in TV and Stereo sell homes!

Many hundreds of builders (their wives too!) stopped at the RCA Victor display at the Coliseum during the Home Builders' Show in Chicago. They left with a big new home-selling idea!

Built-ins can sell houses. That goes for home entertainment just as certainly as it has for kitchen equipment. It makes all kinds of sense. It's the one *new* practical idea that answers the big question: "What can I show that other local builders are not offering?"

Built-in Mural TV and Stereo equipment clear the floor for living... get the picture and sound literally in the walls, in permanent dividing units, or in cabinets and closets. Home buyers love this feature!

All models in this complete line are designed specifically to make homes more complete, more functional and more salable.



RCA Victor sales engineers are prepared to discuss plans, models and costs with you. Write for complete information to RCA Sales Corp., Box 1226-N, Philadelphia 5, Pa.





The most trusted name in Home Entertainment

**B&W MURAL TV...Another Newsmaker!** The custom TV look plus the convenience of "wireless wizard" remote control. Full feature monochrome performance – 25% brighter picture. 3-speaker Panoramic Sound. Above, The DK103 designed for front ventilation, rear ventilation type available.



PUSH BUTTON RADIO-VICTROLA®... High Fidelity Stereo. Monaural and stereo 4speed record changer that slides out for easy loading, stereo AM-FM Tuner, visual Stereo Balance Control, 2 in 1 supercharged chassis with 58 watts of power. Above, the BK2 shown with DK109 Panoramic Sound, 3-speaker units. (®RCA Trade Mark for Record Players)



Honeywell announces A NEW DIAMOND JUBILEE PARADE of PRODUCTS

House Beautiful

Sunser

## New ideas to drum-up interest in your homes!

On the following pages you'll find just what it takes to spotlight your homes as outstanding values! You'll find a new Weather Station that gives you—for the first time, *visual evidence* of the finest in year-round air conditioning. There's a new Honeywell Round; proof that only Honeywell could improve the world's finest thermostat. And with interest in electric heating increasing so fast, you'll want to know all about Honeywell's new line of electric heating controls.

Here are handy talking points you can use to create a good, lasting impression. Turn the page, and see the sensational 5-page, 4-color ad that will launch these exciting new products! And this ad, scheduled for the April issue of Better Homes & Gardens, is only the beginning of the pre-selling job we'll be doing in House Beautiful and Sunset as well, throughout 1960! For information, call your nearest Honeywell office. Or, write Minneapolis-Honeywell, Minneapolis 8, Minn.







## The most exciting advance since HONEYWELL'S

At last, a smart <u>master</u> control for your year-round air conditioning system right at your fingertips—in <u>any</u> room you prefer!

For the first time, you can control indoor comfort and check outside weather conditions at a *single* central location! Here at last is a complete, precision instrument that's completely reliable. A panel so handsome, so dramatic, you'll want it mounted where *everyone* will see it! **Really handy!** You'll pre-set day and nighttime temperatures to change whenever you please. At a glance, you'll check indoor humidity and *both* indoor and outdoor temperatures. The barometer will forewarn you of weather changes. Warning lights will signal "clogged filter" and similar disorders you can correct yourself. Your own personal weather station will keep you *fully* informed. And you'll have good reason to be proud, as it marks the very finest in home comfort. Get the full story from your heating and air conditioning dealer today!



Eliminate nuisance

service calls



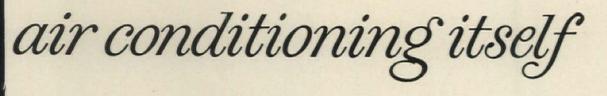
Be your own weather man



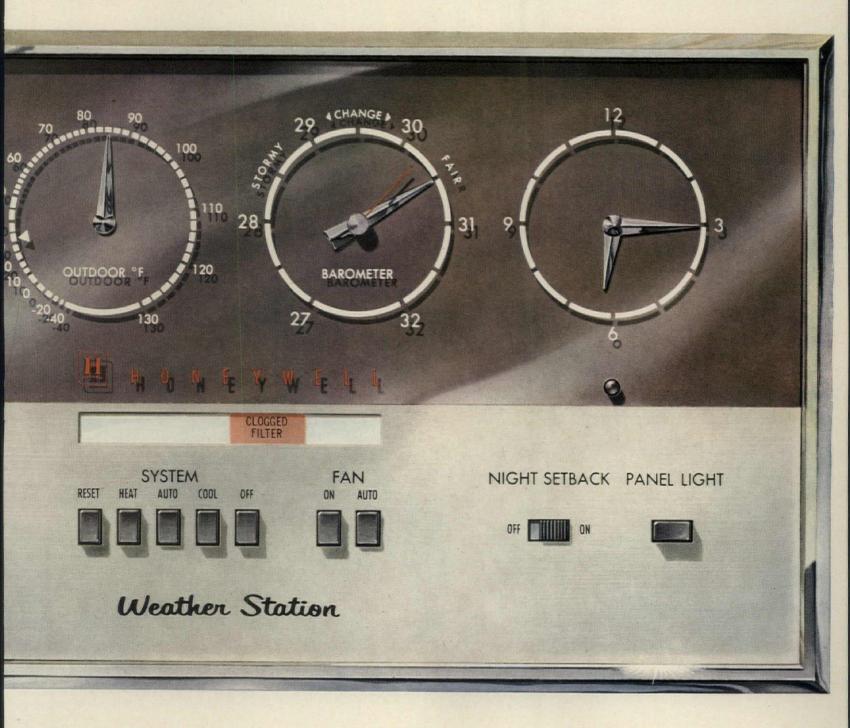


In any room you choose—Honeywell's new Weather Station does wonderful things for you, says wonderful things about you! You're in complete command, and you enjoy every minute of it!

No more trips to the basement



## **NEW WEATHER STATION!**

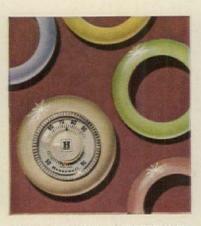








NEW COMFORT-ZONE You can tell at a glance when the temperature slips into a discomfort area.



**NEW DIAMOND-LUSTRE FINISH** Dramatic new silver-grey finish blends with any decor. Ring slips off for painting.



NEW PICTURE WINDOW DIAL Forty per cent larger window for easier reading, more attractive appearance.



**NEW EYE-SAVING NUMERALS** 

*Big* numbers make it easy to see and set the exact temperature you want.



### Presenting the New Diamond Jubilee model of the world-famous Honeywell Round Thermostat!

Honeywell has done it again! The craftsmen who designed the world's most wanted thermostat now make it even easier on your eyes. Easier to read, easier to set, and more attractive than ever in every way!

You'll find new king-size numerals you can read at a glance! And a new picture-window dial. Another eye-saver is the new comfort-zone thermometer, now separated from the temperature dial. Yes, this new Honeywell Round is easier to use and prettier by far. But we couldn't improve Honeywell's traditional dependability. Proven features, such as the dust-free mercury switch, remain to assure you of the utmost in economical indoor comfort. Your heating and air conditioning dealer has this new Honeywell Round thermostat. Ask him about it today!



ANOTHER IN HONEYWELL'S DIAMOND JUBILEE PARADE OF PRODUCTS

4 out of 5 homeowners prefer Honeywell Thermostats for Gas and Oil Heating...

## Now in a gracious new design, Honeywell's 1960 Thermostats for Electric Heating





#### New Honeywell Weather Station

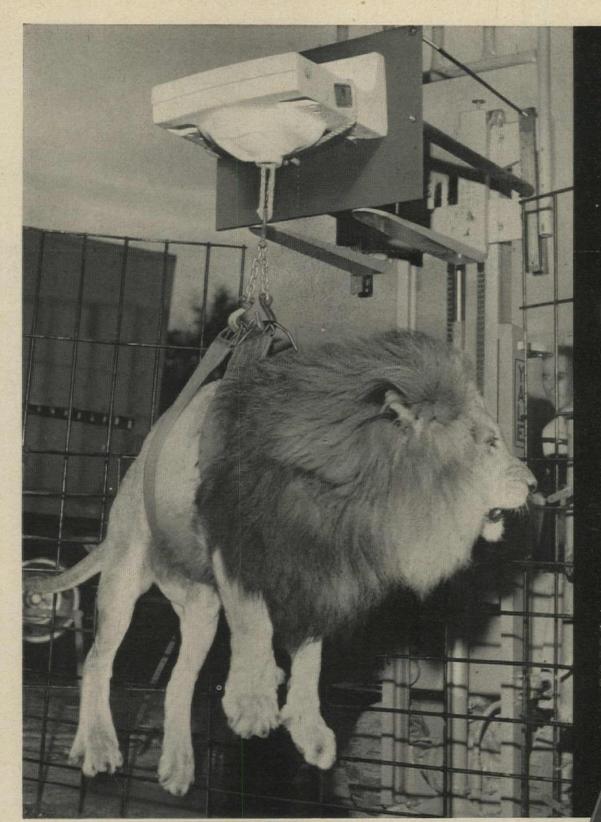
Now—right from your armchair, control zone temperatures throughout the house...check humidity, barometer, indoor-outdoor temperatures; handsome clock provides automatic night set-back, morning pick-up.



#### New Honeywell Round Thermostat

World'sfinest electric heating thermostat. Provides greater sensitivity, quicker response, through low voltage control. Allnew eye-saving numerals, picture window dial, comfortzone indicator and diamond-lustre finish. Your eye for beauty tells you it will look attractive in your home. You'll also find this beauty most practical. For this is a line voltage thermostat, which means that it's highly responsive—direct acting. Signals for temperature changes are answered promptly! Compare! Here is a *Honeywell* thermostat, beautifully engineered to give you maximum performance at lowest cost. Smart design features a cover that snaps off for easy painting. This is the electric heating value you *must* see and discuss with your heating contractor or dealer!





## NO GROWLS FOR YOU!

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

### YES, this Vitreous China Lavatory with Uni-Lox<sup>®</sup> Hanger Supports a Lion

You don't have to go into the lion's den to prove that the exclusive Uni-Lox hanger is the most permanent and satisfactory way to install china lavatories in your homes. **All you have to do** is tell your Plumbing Contractor to order Universal-Rundle vitreous china lavatories from the nearest U/R wholesaler. Uni-Lox Hangers are furnished free.

**Growls from customers** – about lavatories coming off or starting to come off the hanger—are ended for good. You can have complete confidence that U/R china lavatories will "stay put" during your guarantee period. In actual use, with over two million installations, we have never heard of a failure.

Besides, you save money because no legs are needed. Floor is clear for easier cleaning. And lavatory installations with the Exclusive, patented Uni-Lox hanger is furnished free with U/R vitreous china lavatories

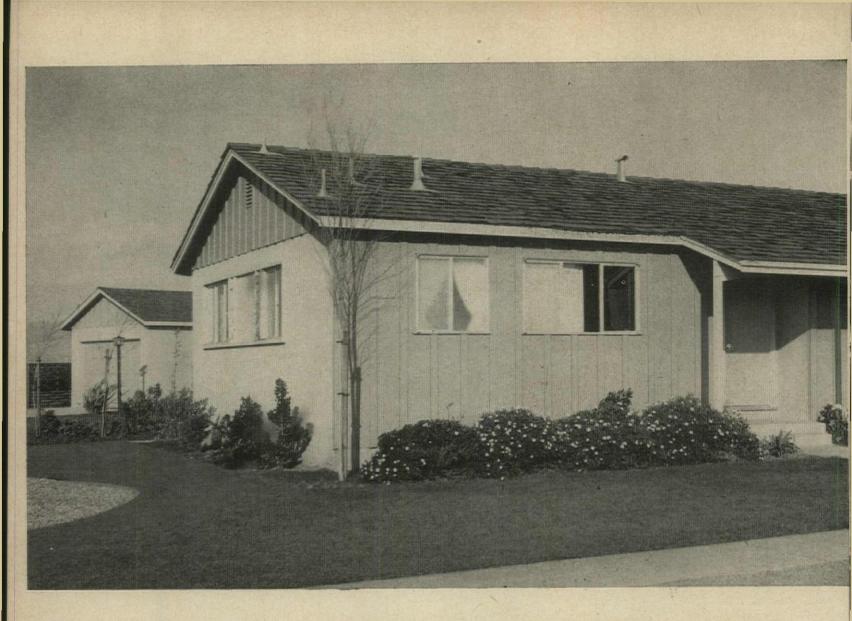
Uni-Lox hanger take less of the Plumbing Contractor's time.

**Give your homes** the sales appeal of U/R quality plumbing fixtures. Write for catalog to Universal-Rundle Corp., 614 River Road, New Castle, Pa.



MAKER OF THE WORLD'S FINEST PLUMBING FIXTURES

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



### Schlage and California Locks help sell

\*California Lock brand interior locks manufactured by the Schlage Lock Company



"This Schlage display in our salesroom shows our prospects, before they even visit the house, the wide range of beautiful designs available. We use our salesroom to sell homebuyers on the quality of the brand-name products we use. We believe that quality products like Schlage make the selling job much easier."

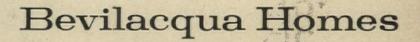


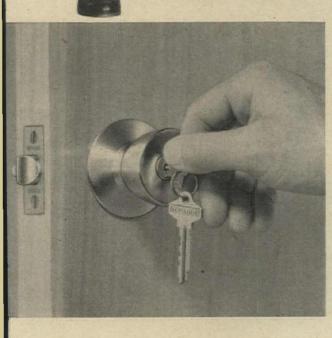
"First impressions count. That's why we dress up each entranceway with a goodlooking Schlage lock and escutcheon. Our salesmen point out the rugged construction of locks manufactured by Schlage as they show the homes."

"Perfect solution" for builders of low-cost homes

"The combination of the Schlage key lock on exterior doors with the California line on interior doors is a perfect solution for our \$13,900-\$14,500 homes. They fit the needs of volume builders like us who want to use quality brand name products in a low-priced home. On our higher priced homes we use the famous Schlage cylindrical locks throughout."

> Ed and Tom Bevilacqua Bevilacqua Homes San Leandro, California





"Another sales point is convenient onehand unlocking with Schlage's key-in-knob feature. As an added convenience we can have all the locks in a home keyed alike so that one key will open all doors." "We know that these California-line locks on every interior door will give our buyers years of good service - and, incidentally, reduce our callbacks to an absolute minimum. We base our selling story on quality and we expect to sell 3000 homes in this development. We can't afford to use secondrate components."

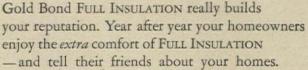




Schlage Lock Company Display Rooms in San Francisco—2201 Bayshore Chicago—Merchandise Mart Los Angeles—3467 W. 8th St. New York—Empire State Bldg. Vancouver, B.C., 1290 Marine Drive



## Full Insulation turns your customers into salesmen!



Gold Bond FULL INSULATION saves you money, too. The extra thickness (6" in cap, 3" in sidewalls and 2" Twinsulation under floor) means you install smaller, less expensive heating and cooling equipment. And customers can save \$25 a year or more in heat bills and air conditioning costs.

Ask your Gold Bond<sup>®</sup> Representative about FULL INSULATION—it costs only a few dollars more than FHA minimum. Write Dept. HH-360 for free samples and literature. NATIONAL GYPSUM COMPANY, BUFFALO 13, NEW YORK

.. a step ahead of tomorrow



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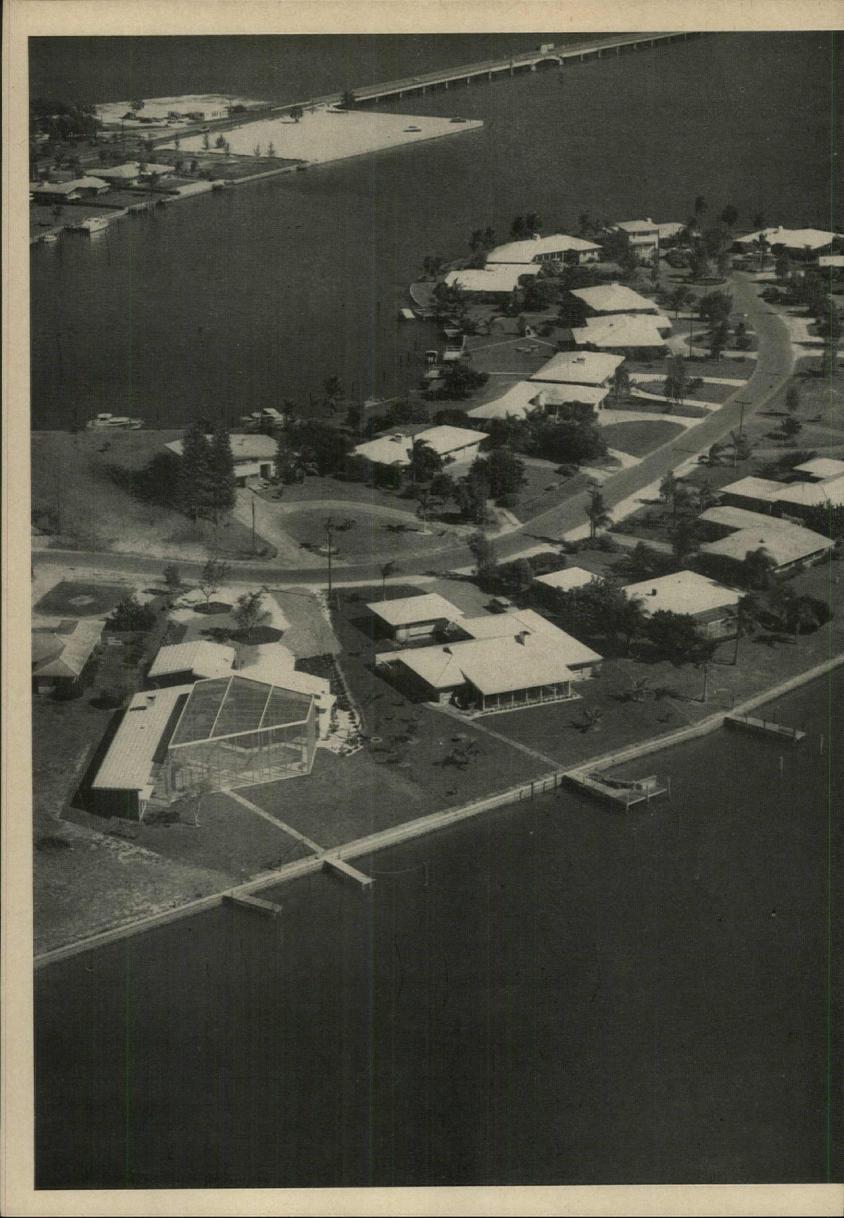
80 Letters to the editor 297 Advertising index

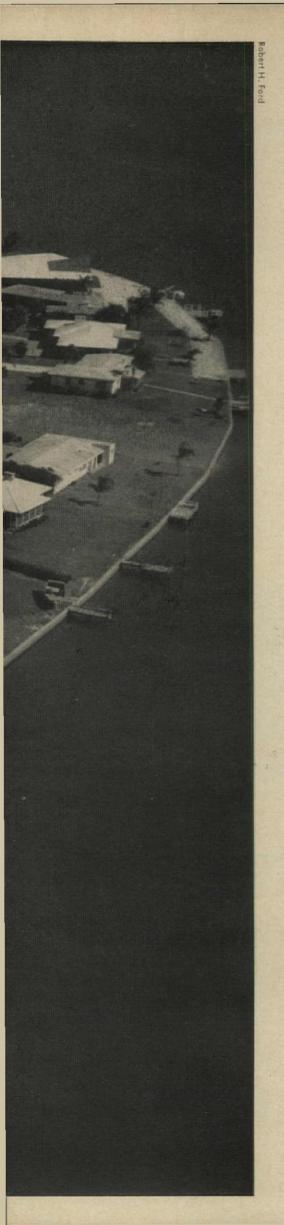
#### COVER

Aerial view of Coral Ridge near Ft Lauderdale Photo: Carroll Seghers, Black Star, FORTUNE

### COMING NEXT MONTH

Electrical living in the quality house Why all of Seattle's builders use realtors Good ideas file: carports, garages, and baths When does it pay most to use modular components?





## The Florida boom is popularizing a new kind of house

If you were returning to Florida after a long absence, the change that would hit you hardest is the big change in "the Florida house."

For the new Florida house is a different house—almost totally different from the Florida house of, say, ten years ago.

It is different in the way it works. It opens to the breeze, even when it also has air conditioning. It has no hard and fast boundary between indoors and outdoors, so the outdoors is much nearer and easier to enjoy. It puts screening over large parts of the outdoors, sometimes enclosing grass, and sometimes trees, and sometimes swimming pools. It spreads a big roof for protection against hot sun and steamy rains.

After you have seen this new house, you realize it would be hard to get the most out of living in Florida unless you could live in the free and leisurely way this kind of house makes possible.

The new Florida house is so different because it began in freedom from fixed ideas about what a house should be.

It was designed to suit the specific demands of a special climate and a special place and a special way of life. The new Florida house is more than a break with old styles; it is a break with old ways of thinking, old ways of living, and old ways of building.

Not every house being built in Florida today makes the total break with the past, but most of them include many, if not all, of today's new ideas (photo, opposite). And the new ideas are spreading fast—in both custom and built-for-sale houses. Even so, the most important thing about the new Florida house is not how widespread its ideas are, but how radical an approach these ideas represent.

Will this radical approach work only in Florida? No—the same kind of thinking will work anywhere.

And used anywhere, it will produce really exciting houses, really, contemporary houses—houses that fit their environment and change the way of life of the people who live in them.

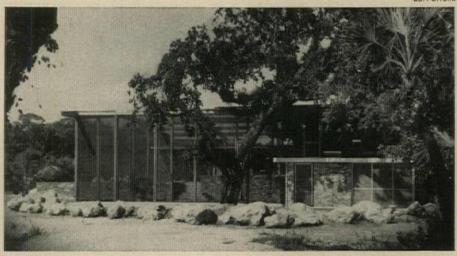
### Here's how the new Florida house is breaking with convention

Designers of the new Florida house began with facts about the Florida climate and geography and the way people in Florida like to live. In designing houses to suit those facts, they also got answers to situations not restricted to Florida: hot weather, bright sun, heavy rains, leisure spent outdoors, and informal living.

Many of the answers—adapted rather than copied—will work in other places than Florida (see H&H, Feb '59), because Florida is not the only state that has hot weather, or a lot of rain, or insects. And plenty of people in other states now have more leisure and spend more of it outdoors whenever the weather is good enough.

Here and on the following pages you can compare the new house with conventional Florida houses. These examples are almost a primer of the ways the new house breaks with convention.

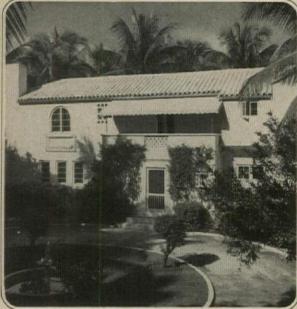
Earl Strunk



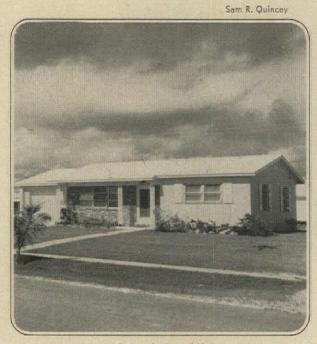
 New Florida house bears no resemblance to older styles. Custom houses are often big (above), but huge screened cages and low-pitched or flat roofs completely change their appearance. Merchant-built houses (like that below) repeat these changes on a smaller scale. Above: at Miami —Polevitsky, Johnson & Assoc, architects. Below: at Tampa—Sunstate Builders, Betty Wild, designer.



LIFE: Edward Clark



**CONVENTIONAL** high fashion always uses older, adapted styles, often with higher-pitched roof and wide variety of odd-shaped windows as in this house.



**CONVENTIONAL** house looks as if it could be anywhere. This one, with small, shuttered windows, shallow overhang, and wrought-iron columns has nothing that is designed especially to suit the site, could be in Saskatchewan, Oskaloosa, or Kalamazoo.



2. New Florida house has a Florida look. The one above includes screened outdoor living and a deeper overhang, especially at the entrance. The columns are flat and wide, like wrought-iron ones, but here they pick up the horizontal lines of louvered windows and ventilating units. This three-bedroom, two-bath model sells for \$24,000 on a waterfront lot. At Vero Shores—Mackle Co, builders.

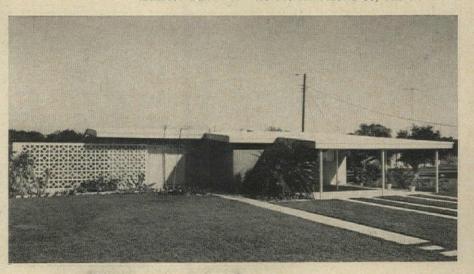


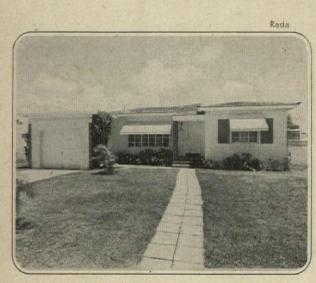
Lawrence Welletts



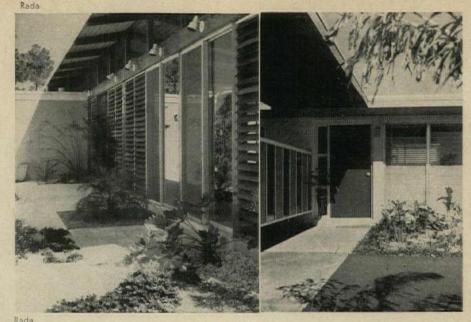
**CONVENTIONAL** house is bare of texture or decoration to break effect of hot, bright sun. This one also has only a small overhang, so walls are unprotected.

**3.** New Florida house has sun protection. Decorative screens and textured materials (stone, above; vertical siding, below) break the smooth exterior surfaces and give relief from the glare of Florida's bright sun. Big overhangs keep the sun off the walls (a big help to air conditioning). The house above has part of its overhang left open so the exposed framing adds a shadow pattern to the walls. Above: at Boca Raton—Paul R. John, architect. Below: at Vero Shores—Mackle Co, builders.





**CONVENTIONAL** house needs awnings over small, multi-paned windows because windows are set low in wall and overhangs are inadequate. Entrance has only slightly more protection.



**4.** New Florida house has big overhangs. They protect it from the sun, make larger glass areas possible, let windows and ventilating units stand open when it rains, and shelter entrances. The custom house (above, left) has an entrance court. In the builder house (above right) the fence hides an outdoor patio from street view. (For more on this house, see page 109.) Above left; at Miami —James Deen, architect, Right: at Winter Park—Clifford Wright, architect; Masterbuilders Corp.



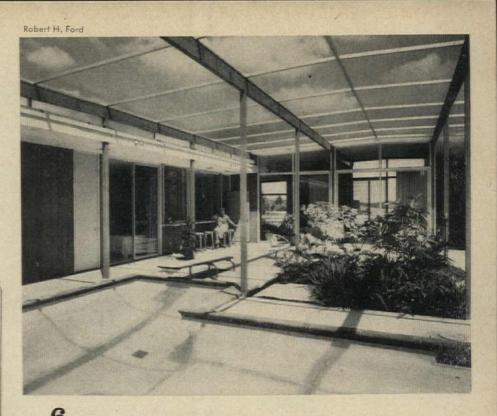
New Florida house has big screened living areas. And just as important: sliding doors open the houses up so indoor-outdoor access is easy and inviting. The patio above is partly roofed, partly screened, so it can be used rain or shine. Above: at Bal Harbour—Russell Pancoast, architect; Coogan & Beatty, builders. Below: at Winter Park—Clifford Wright, architect; Masterbuilders Corp.



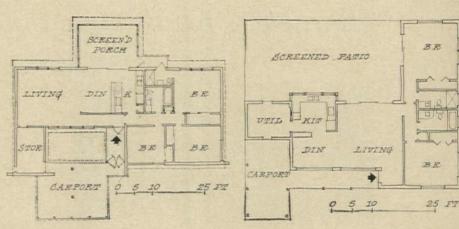
Charthe Studio



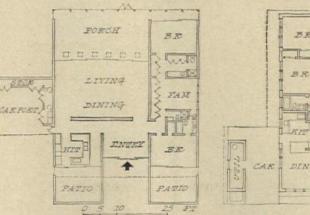
**CONVENTIONAL** outdoor living space is walled and paved, has an overhead trellis, but lacks screening for insect protection, and only a conventional door leads to it from house.

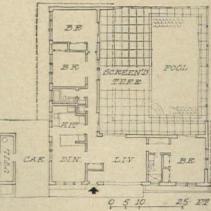






7. New Florida house has a plan for outdoor living. Also important: it keeps the house only one room deep wherever possible so there is plenty of chance to benefit from Florida's breezes. Even with air conditioning for the humid days, a house that can be opened up is important to Florida living. Above left: at Tampa—Sunstate Builders. Right: at Boca Raton—Boca Harbour Homes, builders. Below left: at Sarasota—Philip Hiss, Inc, designers and builders. Right: at Ft Lauderdale—Gerald West, architect; Perry Willits, builder.

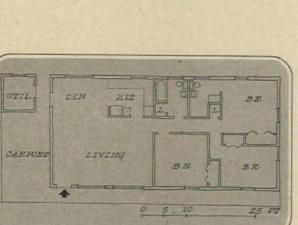




continued



**CONVENTIONAL** swimming pools were big, ornate, unscreened, and not related to the house. This pool is reached from house only by crossing the entrance drive.



**CONVENTIONAL** plan of a Florida house is not bad, but it completely omits provision for outdoor living and easy access to the outdoors. Also, because rooms open off a central hall, cross ventilation is cut to a minimum.

MARCH 1960



OPEN LIVING ROOM has complete privacy because of grille wall that breaks sun, blocks view but not breeze.

### The new Florida house is open to the outside



WALLED ENTRANCE COURT decorates house.



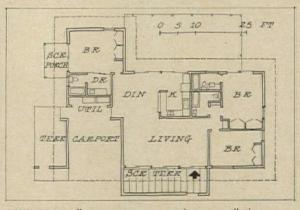
SPACIOUS REAR PATIO opens off dining and kitchen.

Five of the six rooms in this built-for-sale house open to screened outdoor areas, and there is even a terrace off the carport, to use as play yard, service yard, or for sunbathing.

The living room has one long (25') wall that opens to its own screened terrace. This terrace doubles as the entrance court, is given privacy by a concrete-block grille wall. The dining room, kitchen, and one bedroom open to the large screened patio at the rear of the house, while the master bedroom, located apart from the other bedrooms, has its own private screened porch. Location of the kitchen near the rear patio makes it easy to serve meals or snacks outdoors.

This three-bedroom, three-bath house sells for \$23,000, including lot and landscaping, and is available with air conditioning.

DESIGNERS-BUILDERS: Shannon & Gailbreath LOCATION: St Petersburg



OPEN PLAN allows most rooms maximum ventilation.



WIDE OVERHANGS and screened outdoor living areas on house at left are also available on rest of models (shown at right).

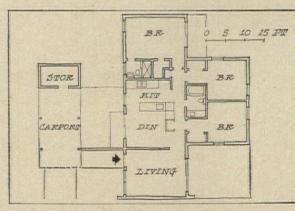
### The new Florida house works with its climate

And the built-for-sale house pictured on this page shows you how. Big overhangs keep the sun off walls and windows. Screened outdoor living keeps out insects. And a well located fence makes outdoor living private and protected against wind.

This house has three separate outdoor living areas (see plan). Taken together, they triple the amount of living space. (Living rooms in the new Florida house can be small—and family rooms sometimes omitted—because so much time is spent outdoors all year around.)

All these advantages are not luxuries, as the price of this three-bedroom, two-bath house shows: \$13,840. This price includes ceramic tile baths and stainless steel kitchen equipment, as well as lot and landscaping. Other models run as low as \$10,900.

#### ARCHITECT: Clifford Wright BUILDERS: Masterbuilders Corp LOCATION: Winter Park



T-SHAPED PLAN ties outdoor areas to house.



**ENTRANCE** to house is this side of fence (see also  $p \ 106$ ).

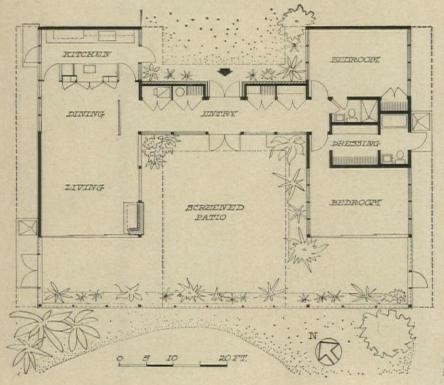


MASTER BEDROOM has a private screened outdoor area.



SCREENED PATIO fits right into the overall appearance of the house, is not an afterthought or an addition. Overhang shading side wall projects 4'.

### The new Florida house brings the outdoors inside



In fact, the huge screened patio is so much a part of this house that it becomes a real outdoor living room.

The indoor living room, as well as the master bedroom, are opened up to the patio by customsized sliding glass doors. One exception: the side wall of the master bedroom, facing into the patio, has operable wood louvers.

The house is so open that its rear wall is really the long screened rear wall of the patio. Not all the screened patio is open overhead, however. The roof extends out from both the living room and the master bedroom, to make a ceiling over parts of the patio (see plan). An ample 4' overhang runs along most of the other walls.

The house also fits Florida living because it is so easy to maintain. The brick exterior walls, the prefinished plywood interior walls, and the terrazzo floors need virtually no care.

**H-SHAPED HOUSE** is actually just part of a square plan. Bridge of H is the large entrance hall, lined with storage on streetside.

DESIGNER-BUILDER: Philip H. Hiss FURNISHING: Phil Hall LANDSCAPE: E. S. Reasoner LOCATION: Sarasota

LIVING ROOM opens two sides to screened patio. Fireplace is on view-side of room, so room can be focused in just one direction.





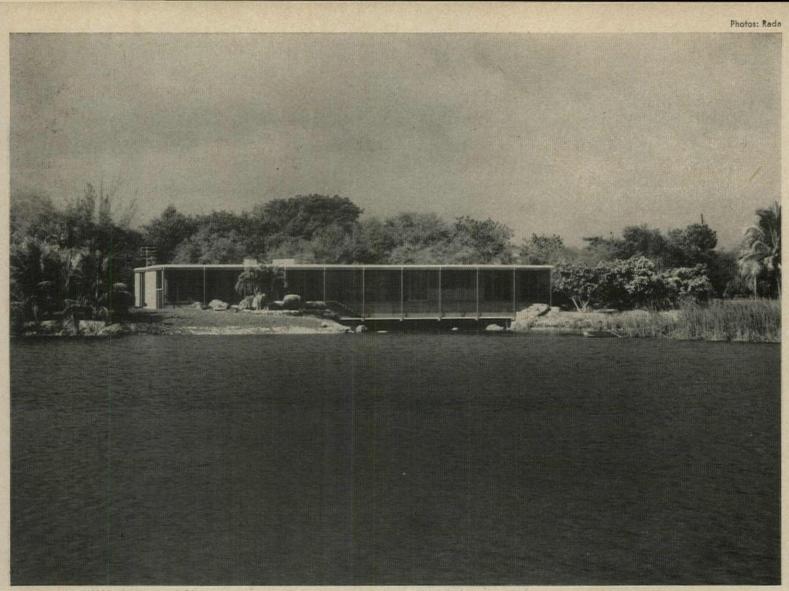


ENTRANCE FOYER also opens directly to patio. Distant view is of Gulf of Mexico.

LARGE PATIO was landscaped with grass, flowers, and tropical plants to conform with outside plantings and to screen the bedroom.

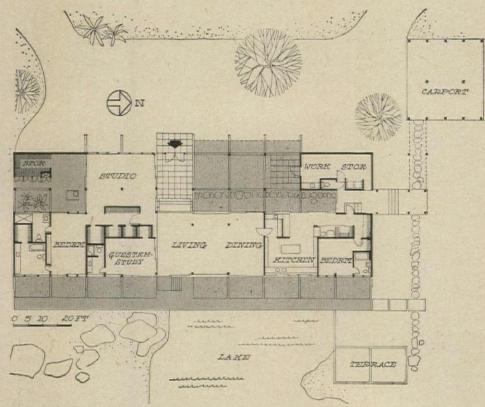


**MASTER BEDROOM** can be entirely opened along wall that faces Gulf. Louvers are on side toward patio, to give privacy but still let the breezes through.



LONG HOUSE (120') appears to bridge water but actually stops at water's edge. Glass walls, 12' behind screening, open house to breeze.

### The new Florida house means a new way of life



PLAN shows studio for owner's wife but room could be fourth bedroom.

This house is an excellent example of the way the new approach to planning and design can affect everyday living—physically and psychologically.

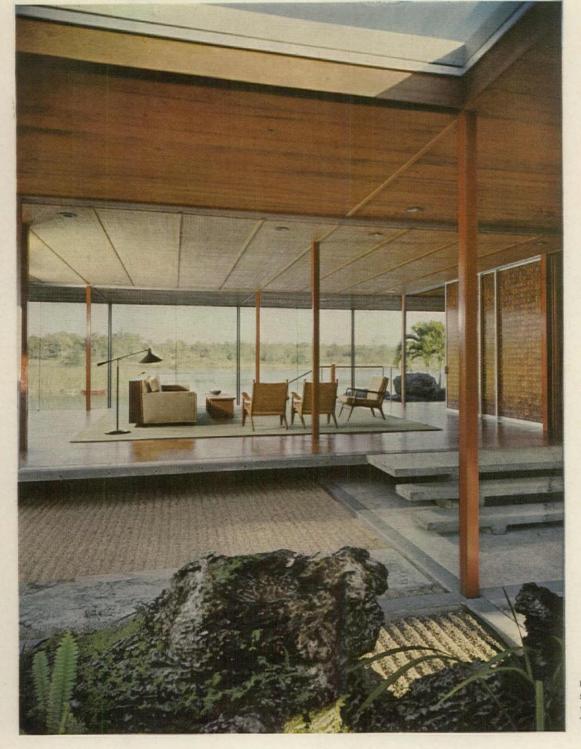
Though the house is basically a simple rectangle, its actual boundaries change from opaque wall to transparent screen to patterned fencing in such a subtle way that the house has no real stopping point between indoors and out. To emphasize this characteristic the architect calls one of the spaces "engawa"—a Japanese word meaning an uncluttered space belonging to inside and outside.

For all its simplicity of space and line, the house is rich in color and materials and textures. For example, some interior walls are Cemesto panels with aluminum battens; other walls are cypress. Imported matting decorates the living room ceiling; other ceilings are cypress. Textured materials and decorative colors work well in this house because its basic spaces are so simple, so easy to live in.

**SCREENED WALK**, the "engawa" shown on plan, is 12' wide, 120' long, protected by an overhang for its full size.



The new Florida house



ARCHITECT: Russell Pancoast Pancoast, Ferendino, Skeels & Burnham BUILDER: Ben Mevers LOCATION: Miami

**LARGE LIVING AREA** is on a platform that seems to float above the ground. Ceiling is woven pandamus matting from Philippines. This view is from the entrance court.



**LIVING SPACE** opens to take in guestroomstudy in background. Sliding panels to close it off are custom made, of translucent plastic cored with walnut blocks.

**ENTRANCE COURT**, in background, is almost part of living area. Court is screened, has privacy fence of asbestos cement board. Hanging garden at right is for air-plants.



MASTER BEDROOM (below) opens to "engawa" (background) and outdoor work space behind camera. Ceiling is cypress, as are operable louvers. /END



# How to succeed in spite of a boom

A report from Florida by Carl Norcross

You may think business is easy in a boom area, but in booming Florida I heard more stories about builders in trouble than I've heard anywhere in the last year.

The reason? As Builder Paul Martin of Miami put it: "Business is very good if you're one of the builders for whom it's very good."

Behind Martin's remark is the fact that competition is the key characteristic of any boom area: everybody crowds in and does his best to make the most of a good thing. All of which is fine for the homebuyer, but a real nightmare for most builders.

The biggest builder migration in history has helped to make homebuilding Florida's biggest business. Desire to get in on the boom has caused more builders to move to Florida in the past few years than to any other state.

Other boom areas like Arizona and California have never drawn even 10% as many builders as Florida. When the California boom began in '47 and '48, homebuilding was so good everywhere that a builder didn't need to migrate. Later, word went around that California was a tricky market and "you'd better watch your step." Arizona's boom was first reported by H&H, and when builders read about it, they also read about the unparalleled value in Phoenix houses and the low profits taken by John Long and other Phoenix builders. So only a few out-of-towners were bold enough to tackle the Phoenix competition.

The Florida boom has been different. It began about 1952 after many other housing markets had slowed up and after thousands of builders had gained both experience and fat bank accounts in northern cities. And where Arizona had only two major market areas and California only three, Florida has 20 or more. With thousands of retirees flocking into the state, the feeling spread that every builder could be his own Levitt and build a whole new community. To builders, Florida seemed foolproof.

No one knows exactly how many of Florida's homebuilders have migrated there. But when I asked a local expert—Lew Williams, executive of the St Petersburg homebuilders association—he thought a minute and then said, "Why, nearly everyone." Of course, there are builders (good ones, too) who learned their business locally, but I'd guess a rollcall of the state's 50 biggest builders would show that more than 40 came from out of state.

Wherever I went in Florida, I saw fresh evidence of the housing boom. From the air I saw thousands of new white roofs, hundreds of dredges and earth movers, and thousands of square miles of land being readied for subdivisions. From my car I saw more billboards promoting houses than any other product. In the Sunday newspapers, I found the thickest real-estate sections in the country, more and larger ads for homes than I have ever seen before.

The key question: when there's a boom, must there always be a bust?

This is the question that outsiders are asking —the one that worries Floridians who went through the bust of 1926. The answer in general: not if the boom doesn't run ahead of real growth. The answer in Florida: a cautious no.

Says FORTUNE in its January report on the Florida boom: "Unlike the one that collapsed in 1926, the current boom is broadly based and possesses the sort of strength that can arrest a slump before the good has been swept away with the bad. . . . Though today's boom is also based on plenty of speculation, it is at bottom based on putting the land to *use*. Moreover, the whole Florida economy is itself booming, giving the residential real-estate market the sort of solid underpinning that was absent in the mid-Twenties."

Here are three significant signs of Florida's booming economy:

1. More than 2,300 new manufacturing plants and major plant expansions were announced from 1956 through the first half of last year.

Cash receipts from farm marketings rose 46% from '50 through '58 (national average: 16.5%).
 Bank deposits grew at three times the national

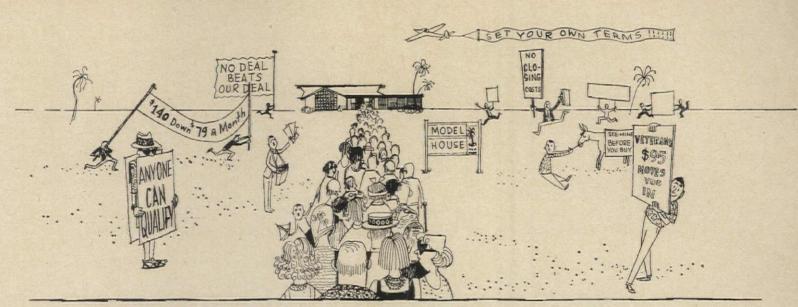
rate from '50 through '58. "But," says FORTUNE, "the paramount difference

between the current boom and its unlamented predecessor is in the base of the demand for land."

This unprecedented demand for land has been caused by Florida's growing population—up 63% from 1950 to 1958 (compared with California's 35% and Arizona's 57%). Migration from other states has boosted Florida's population growth to about five times the national rate.

In St Petersburg, the telephone book is reprinted twice a year, and, I was told, each edition is 12% thicker than the one before it.

New housing is keeping pace with Florida's exploding population. Starts jumped 77% from 1954 to 1958 (from 51,200 to 90,700). Last year dollar volume was up 14% over 1958, according to F.W. Dodge.



MIGRATORY BUILDERS are flocking to Florida to battle for housing boom profits.

Despite the good signs, there are just enough bad signs to worry some economists.

Reinhold Wolff, University of Miami economist, warns that while Florida builders can expect to build some 80,000 houses a year through 1964, many times that number of lots are planned for development. He says house sales are running only 2% to 4% of lot sales: "If we continue to complete many times more lots than houses, this can eventually lead only to a land crash." (For what one big firm is doing to change this ratio, see p 132.)

"The real-estate boom has simply outgrown everything else, including the state's ebullient economy," says FORTUNE. "Home sites are being developed so much faster than actual construction that Florida already has enough land to last until 1980."

FORTUNE's conclusion: "Things have gone so far so fast that what Florida may need now is not more boom, but a little bust."

#### But what looks like a bad sign may be just what's needed to sustain the housing boom.

The land now being developed by Florida's big builders was bought at relatively low prices. It has not passed through five or six speculators, each of whom would normally take a fat profit. So lot costs are low—and will stay low for several years.

Result: house prices will stay low, too (it's an old axiom that lot cost determines house price). And that's what is needed to keep the housing boom going in Florida, where people's incomes are not as high as in the industrial north or on the West Coast (see p 118). Right now, for example,

a low-income family or a retirement family can buy a good house for the money at from \$10,000 to \$13,990.

Last year I was in California three times and the thing that impressed me most was the staggering price of land. Builders who used to put their houses on land that cost \$4,000 or \$5,000 an acre are now paying \$9,000 or more. Who can retire to California and buy a house on that kind of land? Long after West Coast builders are paying \$10,000 or \$12,000 an acre, Florida builders will still be putting houses on land bought for a few hundred dollars an acre.

The low-priced house on low-priced land should be a stabilizing factor in Florida's growth.

# Advice to builders: before you plunge into a boom area, stop, look, and listen.

Success is not a certainty for freshmen builders even those with a lot of experience elsewhere. There was a time—in boom cities like Los Angeles and Phoenix—when the homebuilders sharing the boom grew wise together, learning as they went. You could "luck your way up" if you were reasonably smart. But not today, as Florida shows.

The state is full of tough-minded builders who learned their lessons elsewhere and who have taken a post-graduate course in the rough-and-tumble Florida school for the past few years. Figuratively rubbing his wounds, one big, rich, and presumably experienced builder told me: "These other guys aren't fooling. They play for keeps. And they play rough."

So I wasn't surprised to find that half of the out-of-state builders who move to Florida try it for a year and then either go into permanent retirement there or go back home. Florida is booming, all right, but it takes a pro to capitalize on the boom.

### Competition is as keen as anywhere in the country

In other boom areas—Phoenix, San Diego, San Jose, and Chicago, for example—the builders are efficient, aggressive, and knowledgeable. But nowhere are they more competitive than in Florida.

"Competition isn't just keen," comments one Miami builder. "I'd say it's vicious." Whether it's keen or vicious depends on whom you talk with. Here are facts and opinions from three other areas:

Orlando: "Competition here is greater today than ever," says Gene Fisher of F&R Builders. "There are more builders today and it's so hard to stay in business I'd guess no more than half of them last a year."

Says another builder who tried Orlando and quit: "Competition is really rugged. It beats you with better financing, with full page ads, with low profit margins per house, with facilities like beach clubs, country clubs, or marinas."

Tampa: Out-of-staters who have moved in and tried to outsell local builders call Tampa one of the roughest cities in Florida for a new builder.

In the under-\$14,000 market, newcomers have to match wits and houses with builders like Mel Larsen and Abe Johns, who build so efficiently that their costs are low and in such volume that they can take a small profit. And they have to compete with merchandising-minded Town & Country Park which, for \$10,350, offers buyers a built-in stereo hi-fi, a choice of two GE appliances (including air conditioning), a sodded lawn, and a community playground. St Petersburg-Clearwater: More than 700 builders are well entrenched in this fast-growing area. They know local politics, local land conditions, local suppliers and local pecularities.

"There is blood on the sand from out-of-town builders who tried to get into the big \$11,000 to \$14,000 market here," says Realtor Lynn Clarke.

"The lower price bracket is a real rat race," says s&L official John Wahlman. "New builders think this is a juicy proposition but they find out differently."

### Five different groups of buyers make up the housing market

In Group 1 are retired couples—mostly people with a monthly income of \$150 to \$300 and a nest egg of around \$10,000. A few retirees are in the higher-income brackets, can afford \$20,000-and-up houses in choice locations.

Cities like Clearwater, St Petersburg, Ft Myers, and Port Charlotte are retirement centers. Builders like James Rosati in St Petersburg and Dave Edmunds in Clearwater sell two-thirds of their houses to retired couples.

(For some of the things retirees want when they buy a new house, see box below.)

 to Florida. They are a steadily growing market.

In Group 3 are executives from out-of-state who move to Florida to open new businesses and manage new industries. This is a small group but important in the over-\$20,000 market.

In Group 4 are US servicemen assigned to Florida bases for anywhere from two to ten years. Many of them buy houses.

In Group 5 are long-time Florida residents either buying a first house or upgrading to a better one. Despite the influx of out-of-staters, this group still forms the biggest market in Miami, Tampa, and Jacksonville.

### People's incomes are rising, but are still lower than you think

In four key counties, the average weekly earnings of factory workers range from \$71 to \$80, according to the Florida Development Commission.

The four counties—where housing sales are booming even more than in the rest of the state—are Dade, Orange, Pinellas, and Hillsborough.

Says a St Petersburg (Pinellas County) builder: "Whatever your price, if you can qualify one family in three for FHA mortgages, you're lucky. We had some \$8,250 houses and had to sell everyone of them twice because people with low incomes couldn't qualify."

Says an Orlando (Orange County) builder: "Last year we had some \$18,500 houses. People wanted them but couldn't qualify for them."

The source of people's income complicates matters in Miami (Dade County). Says one builder: "Thousands of Miami families seem to depend on tips for most of their income. But tips don't count with FHA, so these people can't qualify."

#### Planning to enter the retirement market?

### You may be surprised by what retired people want

In and around St Petersburg, James Rosati and his sons, James Jr. and Joseph, have sold 4,500 homes to retirees since 1950. Here, the Rosatis say, are some of the things retirees look for when they buy a new house:

1. They look for a builder with a sound reputation: "If they hear a bad word about you or distrust your salesmen, you've had it. They are almost panicky about being taken."

2. They look for top value: "Retirees are the most thorough shoppers in the world. They have nothing but time, and they spend all day every day comparing. This may be their last important decision and they are determined not to make a mistake."

3. They look for at least two bedrooms: "One-bedroom houses don't go. We've sold less than 100-mostly to widows, widowers, or single people. Some retired couples want separate bedrooms. Others want the extra room for guests."

4. They look for the best possible terms—but not for the reason you'd think: "They invariably have the cash, but they don't want to tie up their life savings until they've sampled the house and the community. Quite often they make the lowest down payment they can, then pay off the whole mortgage at the end of the first year."

5. They look for community recreation facilities: "Two swimming pools are a must. Older people love to swim, but they don't like noise and splashing. The only answer: one pool for adults and another for visiting grandchildren."

6. They look for an ample heating system—even in Florida: "Our engineers said 22,000 Btu was adequate for a small home, but we found we needed 45,000."

7. They look for lots of storage space: Many of our buyers are hobbyists and collectors; they want space for equipment—roomy closets and a large utility room. They also want big medicine cabinets because they're apt to have more drugs and prescriptions than younger families."

8. They look for a lawn that's neither too large nor too small: "An oversize lot may discourage them because of the maintenance involved. On the other hand, our buyers spend up to 50% of their time in their yards, and gardening is the No. 1 hobby. A popular, practical lot size:  $60' \times 100'$ ."

9. They look for public transportation: "Most of our buyers have cars. But they prefer buses to go to town. They have plenty of time, and they meet more people on the bus. Also, they avoid parking problems and other confusion."

### Houses are selling best at under \$14,000-and are a lot for the money

The Sunday real-estate sections of Florida newspapers come as a shock to out-of-state visitors. They show the big price bracket is from \$10,000 to \$14,000.

Of 21 builders' display ads in a recent edition of the St Petersburg *Times*, 18 were for houses under \$14,000. Says Realtor Walter Fuller: "80% to 90% of all the sales here are for \$13,500 or less."

In Miami, even with its more expensive land, the ads dominating the Sunday papers are for houses of \$8,250 to \$15,000. The biggest builder in town, Herbert Heftler, sells mostly at \$13,990.

In West Palm Beach, Perini-Westward—a big Boston group—opened last December with most models priced well over \$14,000. Sales were slow, so new models will be brought out at lower prices. Says Sales Manager Joe Webber: "The volume market here is \$11,500 to \$14,500."

There are three big reasons why houses are selling so well at under \$14,000:

1. Many Florida houses are exceptional buys at \$14,000 or below. Says ex-New Yorker Mandell Shimberg who is now building in Tampa: "We build a better house here for \$14,000 than we did in West-chester County for \$20,000."

2. The peculiar Florida homestead exemption law gives homeowners a tax exemption on the first \$5,000 of appraised value. Since houses are appraised an average of 45% of market value, this means there is almost no tax on a \$10,000 or \$11,000 house. It also means that owners of houses priced at \$15,000, \$20,000 and up pay enough taxes to support their neighbors who live in more modestly priced houses.

3. Personal incomes in Florida are relatively low (see above). Comments FORTUNE: "This, if not a poor man's boom, is one made by people who count the pennies."

But in nearly every community some homes are selling well at over \$20,000.

Most of these higher-priced houses are along canals, rivers, or in small groups on higher wooded sites. In St Petersburg, Maximo Moorings, a waterfront community, started slowly but is now one of the city's success stories. In Tampa, Matt Jetton's brand-new Carrollwood is already selling well. Also in Tampa, Mel Larsen, a leader at \$10,000 to \$13,000, is building a new group of houses at around \$25,000. In several locations, General Development Corp has communities of luxury houses at \$18,000 to \$30,000.

### Buildable land is still plentiful—at a price or at a distance

"Land is the easiest thing to get," says Orlando Builder George Martin.

"There's no shortage of good lots here," says Clearwater Builder Dave Edmunds.

"There are plenty of lots—both for the large developer, who buys big tracts and for the 10-to-15 house builder," says St Petersburg Lender John Wahlman (executive vice president, First Federal Savings & Loan).

Land prices have gone up fast. Example: Tampa Builder Matt Jetton says land that sold for \$600 an acre two years ago now brings \$2,500 to \$3,000.

But, with some exceptions, land is still relatively inexpensive. The most frequently quoted price: \$3,500 an acre. It is lower if you are in the market for a large tract far out from town. Example: Mobridge Investment Co recently bought 4,400 acres 14 miles northeast of Tampa for \$397 an acre.

The exceptions to generally reasonable prices: orange-grove land (\$4,500 an acre in St Petersburg); waterfront lots with seawalls (\$10,000 a lot in St Petersburg); high dry land in the high-cost Miami area (\$9,000 to \$10,000 an acre).

Despite reasonable land costs many newcomers are running into land trouble.

"Too many northerners plunge in before they have a true picture of land values and development problems," says Lew Williams, executive officer of St Petersburg's HBA.

"Many of them look at the land in the winter," Williams adds. "They don't see it under the summer rains. So they aren't aware of drainage problems, and they can't study summer breezes to learn where it is cool and where the bugs are blown." Most Florida builders and developers face two tough land problems.

Problem No. 1 is drainage. Says FORTUNE in its January report on the Florida land boom: "During the recent torrential rains, hundreds of houses were flooded, septic tanks backed up, wells were threatened by contamination for lack of adequately planned drainage."

Wary of bad drainage, many municipal officials now insist on careful grading, oversize storm drains, sewers instead of septic tanks, plenty of catch basins in streets, and top-quality paving that won't wash out. Result: higher development costs. ("One builder here had to resize all his storm drains," says Leroy Gylnquist, Pensacola HBA president.)

Some builders and developers are buying low, unusable land, then building it up. The cost: anywhere from \$400 to \$1,500 an acre for each foot the land is raised.

Problem No. 2 is location. Isolated rural land may be cheap. But isolated rural developments—far from places of employment, far from stores, far from schools, and far from other urban facilities—fail to attract homebuyers.

Case in point: Haven Green, planned as a city of 50,000 homes. Two hundred houses have been built. Only five are occupied—all by employees of the investor. Says an experienced Florida builder: "There was nothing to hold it [Haven Green] together or make people want to live there—no stores, no facilities, nothing."

Comments FORTUNE: "Rural developments are being built on the premise that industry will move in to provide residents with jobs, although the record shows industry's clear preference for metropolitan locations."

### The big builders are establishing the money pattern

In towns where FHA financing is the rule (eg, Miami and Orlando), big builders offer FHA 213 mortgages --3% down (until recently, 1%), 40 years to pay.

Just a year ago only one Miami builder was promoting 213 financing. Now more than half a dozen are using it, and the number is growing fast.

In towns where conventional financing is the rule (eg, St Petersburg), the big builders have enough cash to take a 15% or 18% second mortgage.

"If you don't have 213, you have to offer a second mortgage to compete," says one builder.

"In this market, down payment and monthly payments are everything."

So says Fred Sherman, Miami Herald real estate editor. Check the builders' ads in any Florida newspaper and you'll agree. Almost every ad features statements like these: "No closing costs—no deal beats our deal—\$290 down," or "Anyone can qualify—\$495 down—as low as \$57 a month," or \$140 down—no closing costs—\$79 a month," or "Veterans—\$95 moves you in—nothing down—no closing costs." One St Petersburg builder brazenly advertises: "Set your own terms."

#### As in other states remote from the Eastern money markets, money is available at a price.

Best source of conventional funds: S&Ls in retirement cities. Says President Oscar Kreutz of St Petersburg's First Federal S&L: "We have a great supply of mortgage dollars because when retirees move here, they move their savings too. We will loan as much in 1960 as we did last year." Says his executive vice president, John Wahlman. "We have not turned down a single loan because of a dollar shortage. Every month we have about \$5 million to invest. Most of our loans are 80% loan-to-value ratio and 24 years at 6½%. The builder pays a 4% discount. I'd say 70% of our loans on houses up to \$13,500 have a second mortgage."

### Successful builders' profits are surprisingly low

"Some builders make only \$400 to \$500 before taxes on \$8,500 to \$12,500 houses—and they're lucky to make that," says Lender John Wahlman.

Says a spokesman for Town & Country Builders, Tampa: "Builders in Tampa now make 10% on the house and land, but that profit margin is going down. Miami builders make less." Says Gene Fisher of Miami and Orlando: "Few builders make even 10% on the house and lot. Many build houses just to sell land."

Says Charles Cheezmen, St Petersburg: "Out-ofstate builders are often too high priced. They want to make \$800 on a house and \$1,100 on the lot. That can't be done here."

### The builders who pace the market go in for big-scale merchandising

"I've never seen such promotion-minded builders," says Gus Gustafson, sales manager of Kingsberry Homes.

The builders setting sales records in Florida are big users of newspaper advertising, billboards, furnished models, and elaborate brochures. To compete with them, small builders have to advertise and merchandise far more than they would in other states.

Here are three indications of the emphasis on merchandising:

1. The Miami *Herald* carries more builder advertising than any newspaper in the country. On a typical Sunday (Jan 17), there were display ads by more than 50 builders. Of these, two were doublepage and eight were full-page ads. 2. General Development Corp has 52 furnished models at Port Charlotte alone—and at least 100 more in its other subdivisions. In West Palm Beach, Perini-Westward has a group of the most elaborately landscaped models in the US (see p 124).

3. To lure prospects to Margate near Fort Lauderdale (see  $p \ 130$ ) New York Realtor Irving Kern (Margate's northern sales manager) offers a free week at a Margate motel.

"If there is a weak link in our sales chain, it is the salesman," admits one builder. Says another: "It's hard to get good salesmen down here. Even the go-getter from the North gets sand in his shoes after he's been here a while. And no one wants to work when the fishing is good."

### 99% of today's Florida houses are concrete block

Some have stucco on the outside, but many are just painted. Here are other construction characteristics of Florida houses:

1. Most are built on slabs.

2. Most have terrazzo floors (a few have resilient tile).

3. Many have cement-tile (instead of built-up) roofs.

4. Many are built with components—roof trusses, roof panels, interior partitions, and window lintels of precast concrete, for example. Florida uses more roof trusses than any other state, and most builders buy them ready-made. But the use of roof panels is growing too (H&H, Jan).

5. Some have extra-rugged construction. In the hurricane belt along the east coast, local codes require reinforced steel tie beams around the top of walls.

6. Most have drywall interiors, but in some areas (eg, Miami) the market demands lath and plaster.

Despite the dominance of concrete block, frame construction is beginning to make headway, especially in the northern part of the state. In Pensacola, for example, buyers now accept frame if it's covered with brick veneer. At least one big builder—Tampa's Abe Johns—is planning to use wall panels (H&H, Jan). A key factor in the growth of frame construction is promotion by large prefabbers (Knox, Kingsberry, Thyer, Scholz) now entering the Florida market.

Florida also demands different designs and planning (see p 102)—a fact that some builders from out of state don't recognize soon enough. Says a spokesman for Orlando's F&R Builders: "You can't bring your northern designs down here and expect them to sell."

#### **Planning a trip to Florida?**

### Here is where to go and what to see

Almost any place you go in Florida you can see new houses, both built-for-sale and custom. The whole state seems to be booming, but the ten hottest cities, ranked in order are St Petersburg, Miami, Tampa, Jacksonville, Fort Lauderdale, Orlando, Miami Beach, Hollywood, West Palm Beach, and Hialeah.

Beach, and Hialeah. To learn where builders are, see the Sunday papers. There are local NAHB chapters in 15 cities, and a visit will bring you good advice. There are local AIA chapters in five or six cities.

As a starter, here are some suggestions (of course, no listing can include all the good builders and subdivisions in any one area):

Jacksonville is a big commercial city which last year stood fourth in homebuilding. When I drove around, the subdivisions were so spread out I needed a map and the Sunday papers to find my way. Subdivisions to see include those by Arling Inc, William Cesery, Coward Bros, Demetree Builders, Pierce Uible, Hercules, Joseph Shaffer, and Universal. Also see Isle of Palms. Fulton Development has some well designed houses and an experimental house with a new Bermuda roof by Alcoa. There are some good custom houses here by architects Robert Broward and Hardwick & Lee. George Rumpel is executive officer of the HBA.

Mid-East Coast, south of Cocoa, includes the boomtowns around Cape Canaveral. As you drive south, you will see General Development's Port Malabar, Sebastian Highlands, Vero Shores, Vero Beach Highlands, and big Port St Lucie. The furnished models and the merchandising at each are impressive.

Daytona Beach is where you can drive your car on the beach if you want to, but looking at houses is more profitable. You can learn what buyers want by seeing Sun Acres, Magnolia Terrace, or Sherwood Forest. In nearby Ormond Beach, Forest Hills is said to be good. Bert Reames of the Daytona Beach HBA can give you up-to-date advice. You could phone the AIA chapter here about custom houses.

West Palm Beach has Herbert Ross's big North Palm Beach development. The publicity spotlight is now on Perini-Westward (see p 124), which has the most beautifully landscaped models  $\Gamma$ ve seen anywhere and spectacular night lighting. Builders tell me the subdivisions to see include Edgewater Park, Lake Belvedere Estates, Polo Club Estates, and Lake Clarke Manor. I hear that Cravery Homes, Crown Estates, and Fairway Homes are worth seeing. For recommendations in your price class, see R.M. McClintock at the HBA office. Phone the local AIA chapter about custom houses.

Lake Worth: see Seminole Manor, Florida Gardens, Lake Osborn Estates, and Palm Springs Village.

Delray Beach: see Gulf Village and Delray Beach Heights for good representative houses.

Boca Raton: my friends tell me Boca Harbor is one to see, also Burt Haft's new model display, the Don Scholz houses. And you might want to take a look at the Royal Palm Yacht and Country Club.

**Pompano Beach** has the Mackle's Pompano Beach Highlands which I found worth a visit. This is one of the older Mackle subdivisions.

From Fort Lauderdale to Miami I couldn't tell where one town left off and another one started. It would have taken weeks for even a quick look at all the subdivisions, so to list any is unfair to the others. The billboards along the Sunshine Parkway or Route AlA point out the big jobs. Heritage Homes will have a spectacular opening near Lauderdale in the spring. Coral Ridge is worth seeing. In northwest Miami, Carol City is a must for visiting builders because of its size and number of builders. Heftler and Willard Woodrow both build there.

In Miami don't miss the subdivisions out south-west where Heftler, F&R, Martin Bros, and a dozen other builders are operating. In an hour or two of driving. I saw a lot of houses and some good merchandising. In the spring, Heftler and Centex will open their new Sunset Park which these two giant builders bought together. Heftler told me his best merchandising will be done here.

Around Miami you can see the custom houses of such well publicized architects as Alfred Parker, Russell Pancoast, Robert M. Little, Robert Browne, James Deen, Rufus Nims, Wohl Snyder, Polevitsky & Johnson. Next summer and fall you can see a new group of contemporary houses going up on Cape Florida on Key Biscayne. There is an AIA chapter in Miami. And Sunny Dansyear, executive secretary of HBA knows everyone and has all the answers.

Orlando is one of the boom towns but now I hear the money shortage and competition are raising the ulcer rate. Big Miami builders Herbert Heftler and F&R Construction are building here. Representative subdivisions are East Orlando, Kingswood Manor, Dover Shores, Brookshire Heights, Isle of Catalina, Timber Lane Shores, New Azalea Park, and North Orlando Homes. Hal Lind is executive secretary of the HBA.

Pensacola is sharing the growth of Gulf Coast cities. The Navy and Air Force have big bases here, and service men are steady customers for houses. I'm told the things to see include Malone, Whiting & Drake's houses, Venetian Isles, Santa Rosa Shores, and Montclair Homes. I haven't been to nearby Panama City but know things are booming there too.

St Petersburg and Clearwater are retirement towns. St Petersburg is pushing out in all directions, including right out over the water where brand-new islands are popping up. Biggest builders include James Rosati, Sidney Colen, Florida Builders, Art Rutenberg, Irving Green and Stan Fridfeld, but there are many smaller builders who do a fine job. Builders here give a terrific house for the money. See Maximo Moorings and Pasadena Isle for \$20,000 houses. Architects David Tudeen and James Bruce do some fine custom houses here.

Tampa is an industrial seaport, quite different from the retirement towns. A Sunday Tampa *Tribune* will tell you who's where. Or talk with Jack Gregory at the Tampa HBA office.

Biggest subdivision is Clair-Mel City where you can see models and product displays. Abe Johns has two subdivisions on the north side and will be making building history with his roof and wall panels.

Floral Gardens has some attractive houses by Architect George Matsumoto at \$23,500. Matt Jetton's Carrollwood shows how to sell \$20,000 houses with good neighborhoods. Southeast of town is Progress Village, where ten builders are working together on excellent minority housing. Ten miles south of town on Route 41 is Apollo Beach, a big new community.

Architect Mark Hampton has done some fine contemporary houses in Tampa.

Sarasota—like San Francisco, Raleigh, and New Canan—is a center of good contemporary design. You can see fine houses by such well-known architects as Victor Lundy, Philip Hiss, Edward Seibert, and Gene Leedy, as well as some early Paul Rudolph designs. Even the sewage treatment plant has a geodesic dome. For a cross-section of builder houses, see Kensington Park, Phillips Gardens, and Venice East. Bay Shore Gardens has 3,200 acres and six miles of coast. Dewey Kennell runs the HBA group.

Port Charlotte, south of Sarasota, is General Development's largest town. I saw 52 furnished models and was most impressed with the waterfront houses. In the sales office you will see land planning and recreation facilities that draw retirees from all over. Sales Manager Bart Sullivan will answer questions.

continued

# Labor is still cheap—and there is plenty of it

"We've had no trouble getting mechanics," says Orlando Builder George Martin. "Costs are low, and we've found that workmanship is often better than up north."

Wages vary, but they are generally lower than elsewhere. Even in Miami—for Florida, a high-cost area—the going rate for carpenters is \$3.50 an hour, according to Builder Gene Fisher. And, says Fisher, it's a lot lower in other cities—\$2.25 in Orlando, for example. In open-shop St Petersburg, ex-Long Islander Tom Domando, superintendent for a big builder, says wages are a little more than half the Long Island scale. Carpenters get \$2.65 an hour (compared with \$4.40 on Long Island), concrete-block men \$2.95 (compared with \$4.65 on Long Island). Other rates reported by Domando: electricians, \$3.10; plumbers, \$3.25; cement finishers, \$1.65 to \$2.50; laborers, \$1.25 and up.

"They work a little slower here," says Domando, "but do a good job."

#### Some people think the boom is leading to over-optimism

Many northern builders tend to be overconfident and careless when they move into Florida.

"They come down here, put up 50 houses, and expect to sell them in 50 days," says veteran Orlando Builder Arthur Demetree. "They can't do it."

Adds Builder R. F. Shephard of Eau Gallie: "Northerners—no matter how capable they are are apt to flub around for a couple of years after they arrive. Many of them don't do enough checking beforehand. They start out by building too fast and using northern methods that don't work here and end up stubbing their toes."

Even some old Florida hands are lured into overexpansion by the mood of optimism.

St Petersburg s&L official John Wahlman cites what he calls a "big mistake" by builders who are making a good profit on six to ten houses a year: "They figure if they build three times as many houses, they can make three times as much money. But too often they are not good businessmen. And when they branch out—especially when the work in several locations—profits drop. They are lucky to make half as much. I'd say their best bet is to stay relatively small or to go big and set up a real business organization. For many builders there is a dangerous no-man's land between 10 and 50 houses a year."

St Petersburg Realtor Walter Fuller observes: "Our market is so good it absorbs a lot of mistakes. Yet you can't just roll in here and make a lot of money. A couple of years ago we had a cold wet winter, and more builders than ever were in jeopardy. That could happen again."

### The biggest news is the big role played by the big operators

Nowhere—except possibly in Phoenix—will you hear more talk about the impact of big builders and big developers like General Development Corp (which buys and develops land where the Mackle Co builds), Tom Lively (Centex Construction), Herbert Heftler, International Basic Economy Corp (IBEC), Willard Woodrow, and Arvida.

"To be sure, small builders and developers are in on the current boom," says FORTUNE. "But unlike the boom of the Twenties, the present one puts emphasis on size."

Says Tampa Builder Mandell Shimberg: "Here in Florida the whole nature of the building business is changing-and forcing the small guy out."

The big operators are capitalizing on their size by 1) buying big tracts of land at bargain prices; 2) buying materials in bulk—and thus at lower prices; 3) offering FHA 213 financing or taking second mortgages; 4) going in for heavy advertising and elaborate merchandising; 5) offering expensive community facilities like beach clubs and marinas; 6) hiring more technical and sales experts; and 7) taking less profit per house (says Heftler: "We take less profit to build volume").

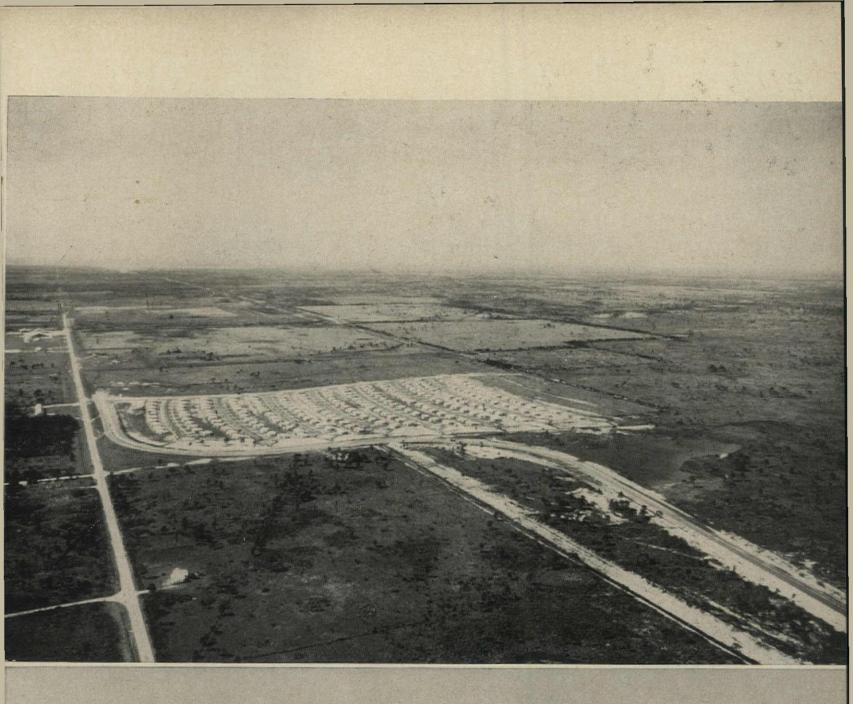
For five exciting benefits of bigness, see the story that starts on the facing page.

#### Planning to move to a new location?

### Here are nine tips for the builder who is new in town:

Many builders moving into the Florida market have run into unexpected and knotty problems as the preceding report shows. The nine tips listed at right will help you avoid similar problems—whether you are moving to a new state, a new town, or simply a new location on the other side of town.

- 1. Don't expect to do it "the old way."
- Make a thorough market analysis.
   Figure on more operating capital than you need now.
- 4. Don't hesitate to look a land bargain in the mouth.
- 5. Get a line on local labor and subs.
- Don't count on selling the same designs you always sold.
- Don't count on using the same construction you always used.
- Figure on big spending for advertising and merchandising.
- 9. Don't underestimate the competition.



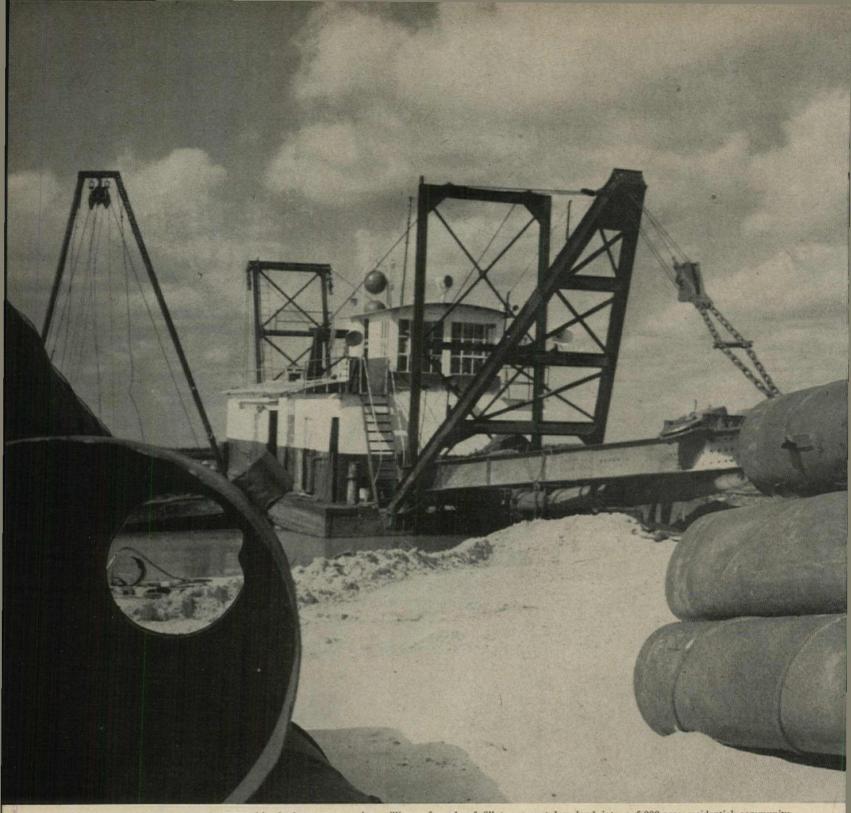
All but five of these 200 houses are empty. The tract has no schools, no churches, no pools, no playgrounds, no shopping center.

The project typifies planning problems

and development hazards that effective use of big resources can avoid.

Elsewhere in Florida, developers with big ideas and millions in capital are building communities and homesites that set a standard—and carry a lesson—for the housing industry in every major market in the US. On the next ten pages, you will see

# the big benefits of bigness +



AT PALM BEACH LAKES, big dredges are pumping millions of yards of fill to convert low land into a 5,000-acre residential community.

# Bigness lets you spend money to make money

In West Palm Beach, Perini-Westward Developers is spending \$5 million—\$1,000 an acre—to raise \$5 million of low, raw land into usefulness.

The huge dredging operation will make possible the development of a \$400 million,  $9\frac{1}{2}$  square mile community to house 40,000 new residents.

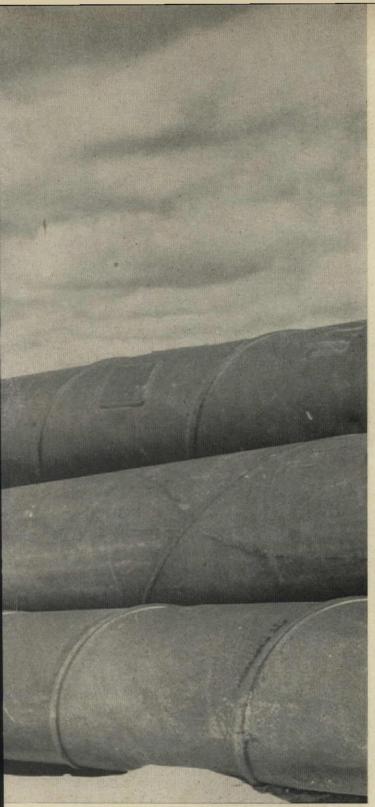
Eighteen million cubic yards of fill (at  $20\phi$  to  $30\phi$  a yard) will be dredged onto the 5,000-acre site, raising its level one to three feet. More than half of the dredging has been completed in the last year and a half. Two big dredges, like the one shown above, pump sand fill from two large lakes on the site and push it, with the aid of booster pumps, through as much as two miles of 16'' pipe. Other heavy equipment is used to spread the fill, dig canals, and lay

utility mains. When complete the community will have 100 miles of streets, 175 miles of sewers, 125 miles of water lines.

The finished project—to be called Palm Beach Lakes will be a complete community with all facilities.

The land, purchased from the city of West Palm Beach, is laid out for about 10,000 houses in all price ranges, many along canals and along golf-course fairways. One section of houses and one golf course is for Negroes. Motels, garden apartments, and commercial areas will go up on major avenues. The first of several industrial parks is now being built.

Work at Palm Beach Lakes is on or ahead of schedule. The mammoth project—which will form an orderly expan-



Van Durand

sion of West Palm Beach—is planned for completion within the next eight years.

Of Perini-Westward's progress to date, James Mott, city manager of West Palm Beach, says: "This is one of the best engineered projects in all Florida. I believe the type of housing being developed will assure fast growth for the city in the next five years."

Perini-Westward combines the talents of men who have learned how bigness can pay big dividends.

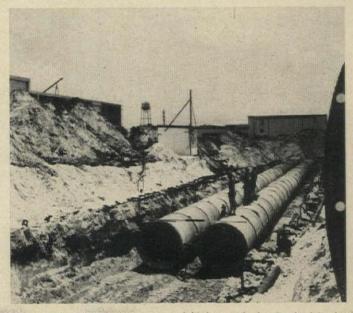
Control of the firm is held by Louis R. Perini, head of the Perini Corp, a giant New England construction firm, and owner of the Milwaukee Braves. Joe Cairnes, president of Perini-Westward (and of the ball club), was formerly Massachusetts public works commissioner. Chairman of the board is Martin Cerel, largest realtor in the Boston area. (H&H, Dec '58). And the homebuilder is Campanelli Bros, a large-scale builder in Boston and Chicago.



**MODEL HOUSES** were opened last Dec 6 on well landscaped lots along man-made canals. The builder is Campanelli Bros, long the biggest homebuilder in the Boston area, now also a major Chicago-area builder.



**SALES CENTER** with hyperbolic-paraboloid roof spanning 110' provides dramatic showcase for product display and sales offices at approach to model homes. Architect Charles F. McKirahan designed the pavilion.



**TWIN 60" STORM SEWERS** are laid in trench dug by 3-yd bucket dragline. Storm and 20" force-main sanitary sewers are cast iron. Other installations include sewage disposal plant, 28 sewage lift stations.



AT CAPE FLORIDA, 547 acres of pines and palms are being converted into a \$500 million island development 5 miles south of Miami Beach.

# Bigness lets you get the most from a prime site

At Cape Florida, Lefcourt Realty Corp is showing what multi-million dollar resources can do to turn a tropical island into some of the most desirable home sites in the us.

To start with, Lefcourt committed \$13 million to buy the choicest undeveloped ocean-front tract on the eastern seaboard, the 547 acres at the southern tip of Key Biscayne, a causeway ride from Miami.

And now Lefcourt is spending more to make the most of the natural assets of the site:

Twenty thousand palms and groves of pine trees will be saved, and the tall palms transplanted wherever necessary to roadsides or lots.

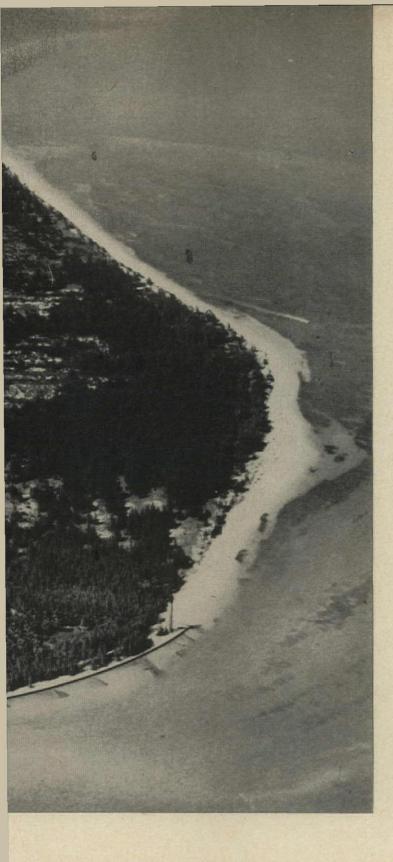
A large yacht basin has been created for homeowners' use.

Beaches will be developed, and canals will wind through much of the residential area.

Streets will be laid out in curves and cul de sacs and a 134-year-old lighthouse, the oldest structure in south Florida, will be preserved in a park setting.

An extraordinary experiment is being made to encourage a high level of house design at Cape Florida.

Lefcourt President Arthur Desser has commissioned seven top Florida architectural firms to design model houses as a standard for individual lot buyers to meet. The commissions for \$25,000 to \$53,000 houses (to be built on \$16,000 to \$17,500 lots) have been made to Architects Robert B. Browne, James Deen, Robert M. Little, Robert



Fitch Smith, Weed Johnson Assocs, and Gamble, Pownall & Gilroy.

Lefcourt is buying and developing Cape Florida on a ten-year time table.

Last year, Desser made the first of ten annual \$1.3 million payments on the tract. Since lot sales started in December, 24 lots have been sold or reserved at \$15,000 to \$37,500. And Desser hopes to sell out the first 70-lot section for more than his yearly land cost. In all, 600 home sites are planned, plus a number of hotels, apartment houses, motels, cabana clubs, a shopping center, and a yacht club.

Lefcourt is also developing other huge projects in Florida: 1) Carol City, where 5,000 houses are built and 5,000 more are expected to go up by 1962 on a 3,000-acre tract outside Miami; 2) Royal Palm Beach, where the first section of a 55,000-acre community will open this month; and 3) a 700acre tract in Boca Raton which is held under option.

Lefcourt also has projects planned near Washington, Chicago and Houston.



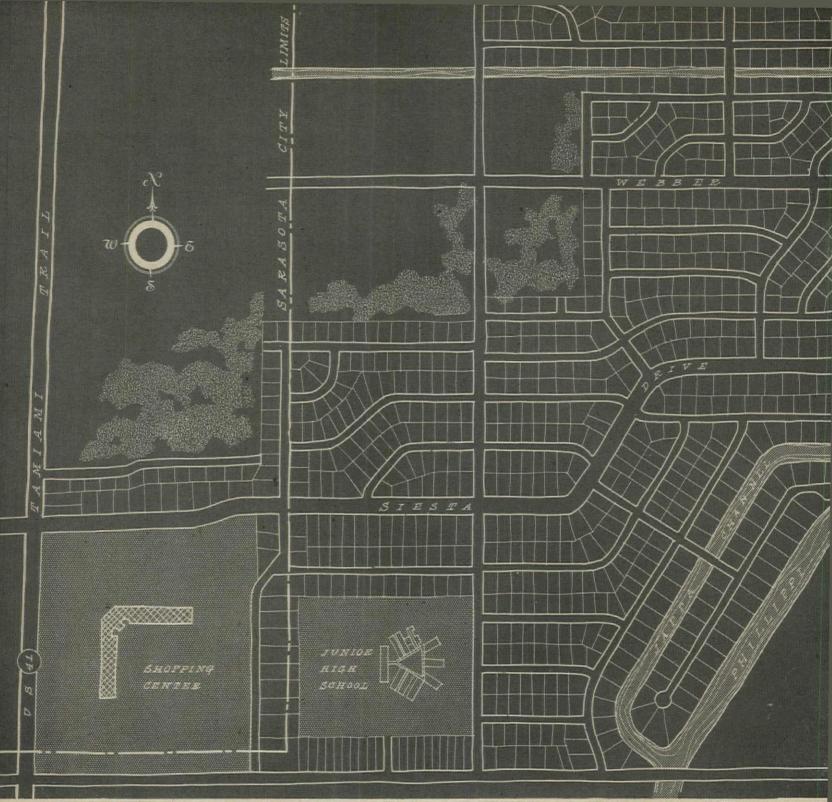
**TWO-TON COCONUT PALM** is lifted by a transit crane after first being loosened by a bulldozer. Trees are replanted in a palm nursery, later moved by crawler cranes for final planting on lots and roadsides.



LARGE EARTHMOVER is one of several used primarily to grade streets and parkways at Cape Florida. Island's sandy soil is easily moved, offers almost no drainage problems. Land is a safe 4' above high tide.



**CAPE FLORIDA SALES OFFICE** stands on stilts like a native hut to fit the "South Seas isle" surroundings of 40'-high palm trees, wild papayas, and other tropical vegetation.



AT SOUTH GATE, just south of Sarasota, 3,400 lots are laid out on curving streets and waterways. This plan shows most of 1,238-acre site.

# Bigness lets you plan bigger and better

At South Gate, the King & Smith development shown above, you can see three major advantages of big-scale land planning:

1. A smaller proportion of the houses need be located on the perimeter, unprotected from adjacent building.

2. Much more flexible street layout is possible. In a small tract, a rectilinear layout is sometimes the only practical solution; in a big tract, the planner often makes efficient use of land with more pleasant street patterns.

3. The commercial area and community facilities to serve the houses can be made part of the over-all design.

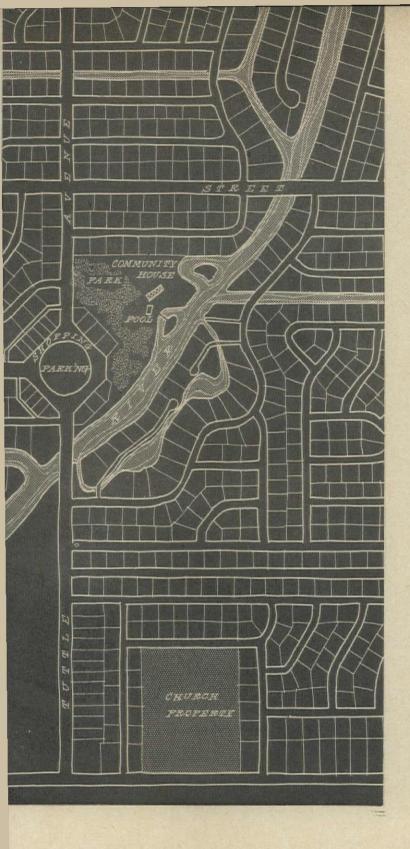
In addition, the layout drawn up by Mosby Engineering Assoc, the developer's land planners, and printed at the top of this page, shows several specific good features:

Access to the development is limited. Only two roads enter the tract from the main highway (far left in plan). There are no through roads for "outside" drivers.

The 40-acre shopping center and the junior high school (on a 20-acre site) serve as buffers between the highway and the residential area.

Except for a few collector streets laid out on a large grid, all streets curve—traffic cannot build up speed and there are few long straight rows of houses. The collector streets are extra-wide, have central tree-lined malls. There are few dangerous four-way intersections.

The best natural feature of the site—the river and its connecting canals—has been improved and fully exploited.



A ten-acre recreation area, which includes a \$100,000 community center and pool donated by the developers, fronts on the river. Choice lots on the water sell at \$8,000 to \$9,000.

Water and sewerage were part of the original plan. The water system was installed early in the development. The sewage system has been installed recently, will serve only the part of the tract still under development.

Land at South Gate is sold to many different builders, which assures a wide variety in design.

Lots are sold to builders through independent realtors, who get a 10% commission. This system gives smaller builders the advantages of bigness. Since 1955, 60 builders have put up and sold 900 houses; 150 more houses are now under construction. Most are in the \$25,000 range.

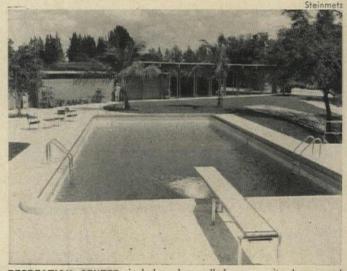
King & Smith Properties control the raw land under option. New sections are purchased and developed on a pre-arranged schedule. Price for most fully developed 100'x100' lots runs from \$4,500 to \$5,000, but builders who buy lots before the land is developed are given a 20% discount.



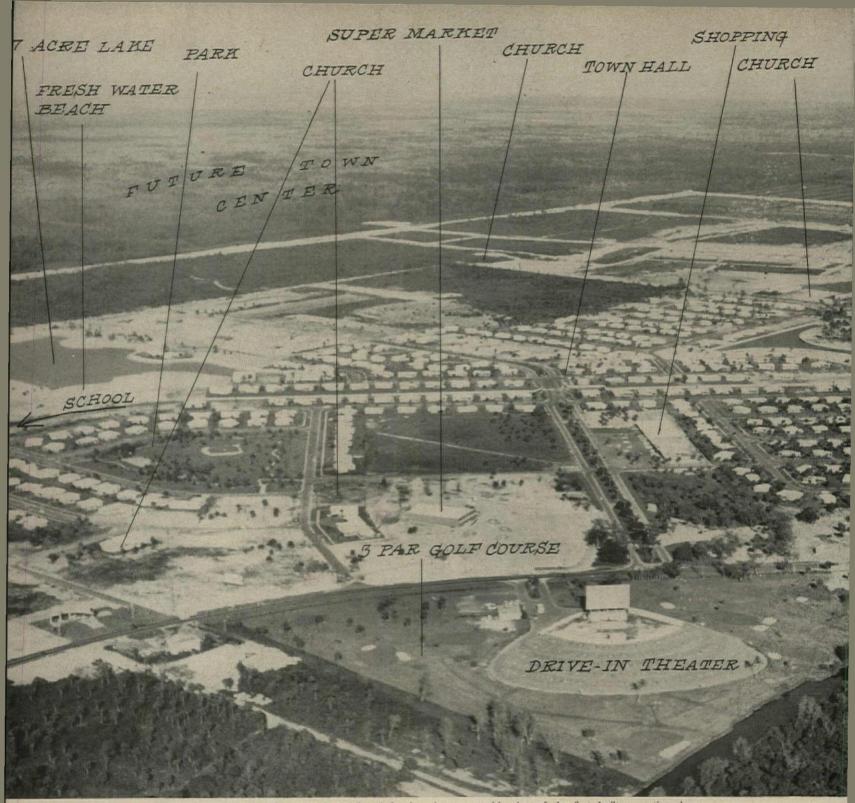
**CONNECTOR STREETS** provide easy access to curving secondary streets, have tree-lined central malls separating traffic. In foreground is one of three landscaped entrance gates.



**CURVED STREETS** are carefully graded, have soil-cement bases. Most of tract was an orange grove and best trees are saved. Land at South Gate is high, did not require costly drainage installations.



**RECREATION CENTER** includes glass-walled community house and swimming pool, cost developer \$100,000. The ten-acre site includes various sports facilities, extensive landscaping.



MARGATE has community facilities already developed for homebuyers, as this view of the first built-up section shows.

# Bigness lets you plan for the good life

At Margate, a few miles west of Pompano Beach, IBEC Housing Corp and Builder Jack Marqusee have given the buyer almost every community feature he could hope for.

Margate is called "the city that started with a plan" (see photo top right)—and from the start, the plan has been expressed in actual construction.

Though fewer than 800 families have moved in, these facilities are built and available for their use:

Several parks, and a 15-acre golf course (photo, lower right);

Twenty miles of navigable canals and a boat club; An elementary school and a nursery school;

Four churches;

A supermarket and shopping center;

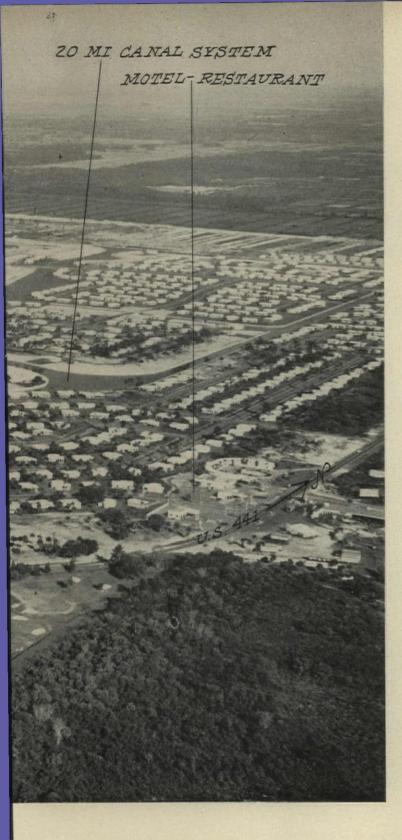
A drive-in theater, a motel, and a restaurant;

A seven-acre fresh-water swimming lake. The lake was dredged and 15 million cu yd of sand were brought in to surface the beach.

And as the development grows (the ultimate plan calls for 10,000 houses on the 3,800-acre site) buyers will see more churches, a hospital, a town center, and other facilities added. IBEC and Marqusee have agreed on a master plan in which 40% of the land will be used for community facilities.

"In Florida, you've got to compete with a dream," says IBEC's Florida manager Harvey Weeks.

"Northerners who come to Florida all want to live 'right on the ocean,'" says Weeks. "Since our project is seven miles from the ocean, we've offered—as an alternative



-all the features for good living. Even so, competition is tough."

To educate northern buyers to all the advantages of a well-planned community, IBEC has hired Long Island Realtor Irving Kern (H&H, Sept '59) to launch a remarkable new sales program. Under Kern's plan, bonafide prospects from the north are offered a week's free lodging at Margate's motel so they can examine the project. An alternative offer: a complete weekend "on the house" at Margate for the prospect who pays his own fare down and back. Results are reported excellent from the tryout of this plan in the New York area.

Says Kern: "Buyers who move to Florida are anxious to start living 'the good life' right away. Our problem is to educate prospects to all that means before they buy the first house they see near the ocean.

"Doing this job at long distance is tough. But our plan should solve the problem and create a larger number of Florida buyers. We plan to put the plan into effect in cities all across the nation, through associate realtors."



**ENTRANCE SIGN**, like all advertising, stresses that Margate is "the city that started with a plan"—and already has built major facilities. Map on sign represents only two-fifths of projected community.



**ELEMENTARY SCHOOL** consists of mobile units erected by Broward County on land bought at cost from Margate (developers also provided landscaping). Permanent high school will replace school shown.



**15-ACRE GOLF COURSE.** of short par-3 holes, was hewn out of jungle. Course is open to all buyers. Another swimming pool and tennis club is now being built, will be restricted to paying members.



MODEL HOUSE IN GRAND CENTRAL STATION is seen by thousands of commuters every day. Space rents for \$2,500 a month.

# Bigness lets you reach out for a broader market

In New York City—1,200 miles from its Florida developments—General Development Corp has built this two-bedroom model house smack in the middle of Grand Central Station. (Another model is on display in a big Loop department store in Chicago.)

Since the model was opened in December, says GDC's realtor, it has pulled 150 house leads and 250 lot leads a day. This is just the newest and most dramatic sales technique

devised by gpc to reach out of state for buyers. In addition:

This year GDC will probably repeat last year's \$2.5 million national ad campaign (mostly magazine space) to pull buyers to 93,000-acre Port Charlotte, 46,000-acre Port Malabar, 38,000-acre Port St Lucie, and three smaller coastal developments.

And it employs a northern realtor, Charlex Realty Corp,

which keeps more than 400 salesmen busy selling full time in 14 states and Europe. (For a Charlex sales technique, see photo upper right.)

Most of this sales effort is now aimed at selling houses instead of just selling empty lots.

Last year when the emphasis was on lot sales about 50,000 lots were sold, but possibly only 1,200 houses (GDC will not disclose the figures on starts.) This year, says President Frank Mackle, GDC will push house sales to close the gap between lots sold and houses started. A new ad campaign opened last month in magazines, stressing houses.

Charlex Realty started selling houses, as well as lots, in mid-November, reports selling 104 houses in 21/2 months ("a number of them from leads obtained at the Grand Central



Station model"). Charlex President Herman Perl hopes to sell 1,000 houses for GDC this year.

GDC's Port Charlotte is the biggest project in Florida. A remote pineland area when the Mackles bought it for \$2.5 million in November '57, it now has 2.285 homeowners. And more than 80,000 out-of-staters are buying lots there on a \$10-down, \$10-a-month schedule. Some lot buyers will never actually move to the tract, but so far nearly all are keeping up their monthly payments and most will probably move to Florida even before completing lot payments (\$895 and \$995), Mackle executives think.

Though GDC tracts supposedly appeal chiefly to retired people, surprisingly few buyers fit that category.

At Port Charlotte, an outside survey team reports, buyers "are almost a perfect representation of the US norm." And Charlex' figures show three main groups of buyers-one-third young people, one-third middle-aged, and one-third who plan to retire to Florida within five years.

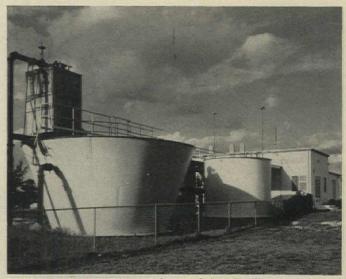


Bert Ross

MOBILE SALES OFFICE, one of eight used in the US, helps Charlex Realty sell lots and houses for General Development in smaller towns and military bases. Another ten offices on wheels are used in Europe.



SMALL SHOPPING CENTER is one of three serving Port Charlotte residents. Large shopping center has just opened. Other facilities include a swimming beach, golf course, and 400' fishing pier.



SEWAGE TREATMENT PLANT is one of three in different sections of Port Charlotte. In all, seven sewerage and water utilities are run by General Development in the huge waterfront tract. /END



This month HOUSE & HOME presents the first in a series of profiles on the men who hold the top jobs in the housing industry's major trade associations. This profile is about NAHB'S newly elected President Martin Bartling.

# Says NAHB's Martin Bartling about 1960 goals:

"... I want us to present a new face to the public this year. ... We must show people what our industry is and what we are trying to do. ... I want us to convince people that the US system of home ownership is one of the reasons our country is different from other countries. ... I want us to show every community in the land that it will pay them—literally, in more and better houses—to get behind every code reform or improvement that is devised. ... I want more emphasis on building research and more good men in the field to help us out. ... I believe we must supply manufacturers with the basic data from which they can develop more interchangeable parts for the industrialized houses we're already starting to build. ... I know all too well that the best way for our industry to get more and better publicity is to develop more and better houses. ..."

You can hear NAHB's new president talking like this at lunches, meetings, dinner programs—and even over the telephone.

Before he moved up to the No. 1 position as NAHB's 21st president, Bartling was known as a man whose prime interest was housing research. (He has built four research houses, is forceful, lucid—and sometimes rueful—about his experiences in the field.)

But Bartling is not just an expert in research. He thinks of himself as a "crusader for a better way of living" and his four-point program for 1960 does much to explain what he means.

#### 1. Bartling wants to eliminate outdated, outmoded building codes

"It's a cinch we cannot continue to make progress in building if local ordinances hamstring us from using all the good new things made possible through research and development," he says. "Bad codes frustrate both builders and manufacturers. They can't try anything new because the codes won't let them. "We have to show the public that the

problem of codes must be solved at the local level. I hope to see us actually put on exhibits in towns and cities to show what can be done if codes are brought up to date."

#### 2. He wants more research houses and more top men to work on them

"Our research houses are the best testimony of what we have done. Out of them have come 8' door heights, wider uses for plastic and aluminum, new ideas like sandwich panels with foam cores, hardware for surfacemounted doors, and bathtubs accessible from either side. [For more on the 1960 Research House, see page 142.]

"But we need more new men in research—not just nuts-and-bolts builders who know all about studs and the different ways they can be nailed together to make panels. We need men with wide experience who can take in the whole problem and who are interested in systems as well as techniques."

# 3. He wants cooperative programs set up to solve major problems

"We must have closer cooperation between builders, manufacturers, design and enginering schools, and FHA," says Bartling. Here's how he thinks one such co-op program might work:

"NAHB has already voted a grant of \$27,500 to MIT for research in component construction. We want the rescarchers to find out what house parts can be made interchangeable, to give us the greatest design flexibility. We plan to give the findings of this research to manufacturers, leaving them free to develop products instead of systems.

"For example: window manufacturers would work on window and door walls; siding and gypsum people would work on solid walls. Once one manufacturer got started, everyone else would get into the act, and we'd have a whole flood of new and wonderful products. Then it is up to the builder to combine these products in the most knowledgeable way to produce a quality house.

"We plan to pool all our information in a series of top-level meetings between industry officials and FHA, so all of us will be strengthened and better equipped to meet the demands of the 1960s."

# 4. He wants builders to stump the country to win the public

"Let's take to the road with shows and caravans and let people see what we, as a top industry, are trying to do. We've got a product to sell and we have to compete for the buyer's dollar with everybody else who has a product to sell.

"We should be doing what the automobile makers did when they showed off their experimental cars around the country. I want to see us tour the way they did with interesting, experimental products. I want to see us give live demonstrations that point out how we are upgrading houses and living standards. I want to see us lecture on our plans for the future and I want to see us talk design and research and a better way of life wherever we go."

#### Bartling has been preparing for NAHB's presidency for a long time

He has been a member of the executive committee for the past six years, has moved steadily up the official ladder for the last four years.

A towering 6'6" tall, 43-year-old Bartling is a man, as one wag recently put it, "who can't be overlooked at a directors' cocktail party."

His height, boyish good looks, and friendly lop-sided grin make people remember him easily. "Martin is a nice guy to be around most of the time," says one friend, "but he can be sarcastic as hell if he gets irritated or impatient about something."

#### Compared to many ex-presidents, Bartling is not a big-tract builder

Although NAHB releases put his volume in the 20 to 60-house-per-year class, Bartling himself says he has seldom topped 20 "because I spent more time and had more fun working with new ideas." Last year, for example, Bartling says: "I spent eight months out of the twelve in Washington and my own homebuilding operation came almost to a dead stop."

He believes "the smaller builder must be given the tools and the education to survive in an industrialized housing business. This means, I think, that the smaller builder must understand the component approach to building and then be given the components to work with."

Bartling holds with none of the gloomy fears that some small builders express about being swallowed up by giant industrial corporations. "Homebuilding needs the personal touch," he says. "The individual builder who has contact with the market and his customers is needed to supply the personal attention that people require when they buy a house."

#### He thinks his election points up increased emphasis on research

"NAHB has been heading towards a heavier research program all along," he says. "This year our new research laboratory is scheduled to open. We'll use it as a testing and development center for all kinds of products and techniques. We also plan to add six new members to the nine we now have in the Research Institute. But our program is not going to be in the realm of Never-Never Land. We expect research to produce building products, and we expect those building products to be combined in houses that will be more salable than any previous ones."

Bartling has built more research houses than any other NAHB president and "lived in more of them because they were just too advanced for buyers."

He was the first chairman (in 1952) of NAHB's Trade Secrets Committee the forerunner of the present-day Research Institute. "We did some exciting work," he says, "because we were sold on the idea of improving housing.

"Four of us—Ned Cole, Andy Place, Dave Slipher, and I—were nicknamed the Four Horsemen of Housing. We spent a lot of time—and our own money —galloping around the country trying to sell the new ideas and techniques that we believed would result in better houses. Many of the things we espoused are commonplace today—roof trusses, storage walls, ceiling-high glass walls, and air conditioning."

#### Bartling chose homebuilding after reading a professional magazine

"The magazine was ARCHITECTURAL FORUM [HOUSE & HOME's sister publication which, at that time, covered housing as well as other building types]. Most of what I first learned I got from reading the FORUM for it gave me a basic course in building."

At the time (1937), Bartling was living in a Knoxville rooming house that was popular with engineers and construction men who worked for TVA. Bartling was selling fire insurance. He quit the insurance job to take one at less pay with a local lumber company. "The pay was small and the hours were long—but I learned a lot," he says. One year later, at 21, Bartling went into the homebuilding business with Stuart Fonde, a prominent Knoxville builder.

It was his third try at finding the right career. Born in Carrollton, Mo., Bartling went to school at Kansas State Teachers College, first planned to become a chemical engineer. Then he thought of becoming a salesman like his father and went to work for the insurance company.

#### His interest in new ideas often ends in a house too advanced to sell

"That's the story of our life," says Catherine Bartling, who married Bartling in 1937. "Martin's research projects and experimental ideas have often been ahead of what the public is ready for. So he sometimes ends up with a house he can't sell and we move into it."

By Catherine Bartling's count, she, Bartling and their two sons—Martin III, now 21, and Harrison, now 18—have lived in nine different houses. "But it's fun," she says. "It gives us a chance to test-live the houses and at least we know how good they are."

The Bartlings' present home was built in 1954. It is a structural concrete house with precast concrete bents (H&H, Jan '55). "I rented it for a long time because I couldn't sell it," says Bartling, "and then moved the family in. We've been there nearly three years. That's a pretty long time for us."

#### Even in the early days

#### Bartling was always on the move

He had barely got a start in homebuilding when Pearl Harbor was bombed. The next day Bartling switched to war work.

For a while he was with the War Production Board in Atlanta as a deputy manager for materials' priorities. Then he went into the Army, rose rapidly from private to second lieutenant, and put in six months with the Army of Occupation in Toyko. "Martin was frustrated and impatient there," Catherine Bartling recalls. "He didn't feel he was doing a really important job."

Bartling came back from the war in 1946 and resumed his partnership with Stuart Fonde. About 1952 the partnership was dissolved because "I was more interested in experimentation than was good for the firm," says Bartling. Since then he has been sole owner of the Bartling Construction Co.

# Few NAHB presidents have started with such a well-defined program

Bartling's aims for 1960 fit his record. In the past he has served often and actively on committees that reflect his main interests. Last year he was chairman of the legislative committee; he has been a trustee of the Research Institute, secretary and treasurer of NAHB, a national director, a regional vice president. This year Bartling is top man—with the opportunity to push and develop many of the ideas he has championed in the past.

To make his four-point program work, Bartling will need not only the help of NAHB's membership, but the cooperation of the entire housing industry—cooperation that his goals surely deserve, /END



Martin, aged 5 astride his kiddie car.



2 nd Lt. Barthing with the boys-Martin II, left, Harrison, right



Martin, aged 15, astride "Uncle Lawrence's horse, Red Smoko", during summer vacation in Kansas



" Furnishings, Clothing, Footwear"



latherine, just after the 1960 TAHB convention



The original trade Secrets team. From left to right : Len Hager, Martin, Alan Brockbank, Ned Cole, Andy Place, and Dave Slipher.

# FHA gives quality a big boost

Two years ago the then FHA commissioner, Norman Mason, issued his now famous directive instructing all FHA offices (among other things) to require *no more* income to buy a more expensive house if the price difference was due to quality construction and quality materials that would make the more expensive house cost less instead of more to live in (H&H, Jan '58).

Now FHA Commissioner Julian Zimmerman has gone one big step further. He has just issued another all important directive instructing all FHA offices to require *less* income to buy the more expensive house—provided that careful calculations show its higher mortgage cost will be more than offset by lower operating and maintenance costs.

If these calculations show, for example, that because of full insulation, double glazing, adequate wiring, longer-warranty equipment, and less need of repainting, a house priced \$1,000 higher will probably cost \$200 a year less for repairs, replacements, repainting, and wasted fuel for heating, then FHA would require about \$650 less after-tax income to buy it. How so? The \$1,000 higher price will add about \$70 a year to the

mortgage cost (on the basis of 5.84 a month per 1,000 for a 30-year, 534 % loan). But FHA will subtract the \$70 from the \$200-a-year lower living cost and apply its five-times-after-tax-income requirement formula\* to the \$130 difference.

This \$650-less-income requirement compares with a no-higher income requirement under Commissioner Mason's 1958 directive and roughly a \$1,000-more-income requirement in 1957.

Taken together, the two directives will let millions more families qualify for a quality house, and builders will no longer have any reason to build too-cheap-to-begood houses in order to qualify more buyers.

Biggest gainers by the new directive will be homebuyers, who will be able to buy much better built and better equipped houses and live in those better houses for less money. Second biggest gainers will be homebuilders, who can now tempt buyers with much better value.

Commissioner Zimmerman's directive completes a reversal of FHA policy that began six years ago. In 1954, a HOUSE & HOME Round Table (Mar '54) agreed that the cards were stacked against quality and in favor of cheapness at every step in FHA procedure. FHA was then requiring nearly four times as much cash down to buy a \$12,000 house as to buy an \$8,000 house (\$2,400 vs \$650). FHA was requiring twice as much aftertax income to buy a \$12,000 house as to buy a \$9,000 house. FHA was requiring \$1,000 or more extra after-tax income to buy a house complete with appliances that the homebuyer was free to buy on more expensive short-term credit with no extra income at all. And FHA in practice was giving little or no credit in its income requirements for the lower maintenance and operating costs of quality construction and quality equipment.

Today all this is changed. FHA generally requires

less cash down to buy a \$17,500 house than FHA required before August 1954 to buy a \$12,000 house. FHA requires less after-tax income to buy a \$20,000 house than FHA required in 1954 to buy a \$15,000 house, less income to buy a \$15,000 house than FHA required in 1954 to buy a \$12,500 house. FHA requires not one cent of added income to buy a house priced over \$15,000 with all appliances included than FHA requires to buy a stripped-down model of the same house without the appliances. FHA requires no more income to cover the operating cost of air conditioning. And now under the new directive FHA will require much less after-tax income to buy a quality house built with low-maintenance materials and equipment than FHA will require to buy the same house at a lower price built with higher-maintenance-cost materials and equipment.

Buyers of more expensive homes built under the new rules will have to make a bigger down payment, of course. For example, if a family about to buy a \$16,000 house decides that \$1,000 more for low-maintenance materials and equipment would make sense (and FHA agrees that

He ordered a rule-tightening.

ZIMMERMAN



Mason He wrote the instructions.

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<sup>\*</sup>This formula, FHA officials note, does not govern every case (eg, a family with other heavy obligations) but applies "over a wide sample."

# EDITORIAL Let's all give FHA a hand in carrying out its new rules

FHA deserves the thanks and congratulations of the entire housing industry for its well conceived action. FHA's new directive can be a tremendous sales aid to builders. It offers them a chance to sell better homes to millions of prospects who never before could qualify for quality.

And the housing industry is applauding the new rule with a unanimity which bodes well for its widespread use (see next page). For the new regulation will be only as good as its execution by FHA'S 75 local offices. It could be a flop if local FHA offices pigeonhole it or ignore it. All elements of the housing industry should be alert to take prompt advantage of their big new opportunity. And they should make sure local FHA offices understand the new rules—and apply them.

A second piece of FHA teamwork with the housing industry that deserves applause is its just-issued regulation to simplify trade-in financing (see News for details).

Together, the low-upkeep and trade-in regulations should do more to open up the quality market (which is a trade-up market dependent on trade-in) than anything that has happened since the big change in FHA income requirements.

the extra cost would produce operating savings to more than offset the increased mortgage payment), the family would have to make a down payment of \$300 more.\* Despite this downpayment hurdle, indications are strong that the new directive will boost sales for builders.

A HOUSE & HOME check among 25 leading builders found overwhelming agreement that sales would soar as much as 20% if they were able to sell their present models (most of which are equipped with some maintenance-cutting items) to people with \$500 less income a year. Most of the 25 forecast sales would jump about 10%.

The new directive (FHA Letter 1789, dated Jan 25 and signed by Cy Sweet, deputy commissioner) is technical in tone. Chiefly, it spells out the changes local FHA offices are to make in calculating housing expense. But amidst its technicalities—worked out by Asst FHA Commissioner Beverley Mason—stands a clear statement of FHA's new philosophy:

### Here are the key provisions—in FHA's own words

"The use of maintenance-saving materials, efficient equipment, and efficient design may cost more than alternate materials, equipment, and design, but in many cases the increase in mortgage amount necessary to finance the extra cost will involve additional debt service which is only a fraction of the saving in maintenance cost and operating expense. Builders should be encouraged to take advantage of this to reduce total monthly housing expense in our low-cost programs. In the higher-priced homes, they should be encouraged to use the same principle to make it possible for a purchaser to carry a larger mortgage without increasing monthly housing expense, thus making available funds for other betterments."

The directive candidly admits that many FHA offices have not been differentiating enough up to now in estimating maintenance and operating expense for new homes built with materials and equipment that cut operating costs. And the directive notes: "The importance of this is . . . the fact that overestimating of maintenance and operating expense, if prevalent in a high percentage of cases, can affect mortgage credit conclusions to the point of excluding significant segments of the possible market." Builders have been squawking for years that many local FHA offices have been doing just this. Actually, FHA's underwriting manual tells its local offices to be meticulous in estimating maintenance costs. But as Bev Mason points out: "We feel we weren't getting good compliance, so we're trying to sharpen procedures already on the books. It's possible a few offices are already doing what the new letter tells them to. If so, there won't be any change for those offices."

The new directive gets down to specifics as to what kinds of materials and equipment promise savings in operating costs. It says: "It has recently come to our attention and been verified by our observation that siding with baked enamel finish has withstood exposure to the weather over ten years in such a manner as to indicate the probability that repainting may not be necessary for 15 years or longer. Other examples of maintenance-saving items are deterioration-resistant windows, siding with integral color, various types of roofing of a durable nature, and specially treated wood not requiring frequent repainting.

"The same principle applies in . . . estimating annual heating and cooling costs. . . . It is particularly important to recognize the effect which exterior wall material, insulation, double glazing and other construction features may have on annual heating and cooling costs.

"The addition of insulation alone over and above the FHA minimum can produce [a house where cheaper operating costs will offset higher mortgage cost] under climatic conditions in many parts of the US. Coupling this with maintenancefree materials, and efficient equipment can obviously produce results which are most beneficial to prospective homeowners. Careful consideration of such design problems is therefore of the greatest importance during pre-application conferences."

<sup>\*</sup>Some experts figure this will give builders another argument to urge FHA to cut down payments as the 1959 Housing Act permits. The law lets FHA require—for example—only \$100 more cash for a \$17,000 house than for a \$16,000 one.

### Here is what industry leaders say about FHA's new policy

"This step has long been advocated by NAHB. We hope it will be properly applied in all field offices.

"The beneficial effect in mortgage credit whereby home purchasers may be able to qualify for larger mortgages without increasing monthly housing expense is indeed gratifying to us."

MARTIN L. BARTLING, JR., president NAHB

"... a step toward recognizing quality materials and workmanship which should encourage better building."

JAMES A. STRAUSS, builder Lincoln, Neb.

"The nation-wide adoption of this policy could result in a higher volume of sales for many building materials, giving vigor to this branch of our economy."

W. O. DUVALL, president

Atlanta Federal S&L Assn, Atlanta

"Sound and worthwhile from both the homeowner and community point of view.

"It should permit low-bracket wage earners to enjoy the savings that accrue from the use of better quality materials. And houses that are less expensive to maintain almost inevitably remain community assets longer than minimum shelters...."

> JAMES M. ASHLEY, vice president Libbey Owens Ford Glass Co

"It emphasizes to the architect, the builder, and the homeowner the benefits of quality and encourages the use of the best in new homes—and we all know that as new homes go, so soon go the old homes. The gas industry welcomes anything and everything which encourages the use of quality gas equipment."

G. S. STACKPOLE, managing director American Gas Assn

"This should be the start of better housing for America.

"It is a great forward step by FHA already adopted by Mortgage Insurance Guaranty Corp and most conventional lenders."

> HENRY A. BUBB, president Capital Federal S&L Topeka, Kan.

"I am sure this policy will help keep homebuilding volume high this year." EDWARD FISCHER, builder St Louis

"I think this is terrific."

C. K. RIEGER, vice president General Electric Co "... a proper approach. The recognition of construction features which have an effect on the ownership expense would certainly seem to be fundamental in determining the income requirement of a borrower. This ... would be in line with sound mortgage lending practices."

NORMAN R. LEMCKE second vice president Prudential Insurance Co

"If well publicized, this will make a strong impression on the buying public.

"It will lead them to ask for quality and maintenance-proof products in homes."

ROBERT A. FOX, builder Plymouth Meeting, Pa.

"... a very welcome and encouraging, albeit somewhat belated, move to give greater recognition to the value of higher-quality materials and equipment than called for in the MPSs. It is to be hoped it will be extended to cover all materials, appliances, and equipment in a house, as well as less tangible but equally important values like architecture, site planning, landscaping, acoustical materials, roof overhangs, and good engineering of mechanical systems. ..."

EDMUND J. BENNETT, president

Suburban Maryland Builders Assn

"Customer reaction is the key to success of this new directive."

TOM PERINE & DON HUBER, builders Indianapolis

#### "Makes good sense in upgrading housing qualitatively and we welcome it.

"In application, it opens up areas of judgment that may be difficult to administer. Thus great discretion will need to be exercised."

> RICHARD A. BOOTH, president Springfield (Mass.) Institution for Savings; past president, Natl Assn of Mutual Savings Banks

"I hope they can properly enforce it. In the past, local FHA offices have merely given lip service to changing income requirements."

> GEORGE C. MARTIN, builder Louisville

"If the *full spirit* of this directive filters through to the mortgage-credit application sections, it will let builders include 'necessary luxuries' without penalizing the square feet of living area. It will make buyers more aware of obsolescence in their present homes."

> RALEIGH SMITH, JR., builder Houston

"This is a major step towards raising the standard of housing in this country.

"With this philosophy, homebuilders can produce a measurably better home than most houses in existence today. It will make it possible for us to make new housing so desirable that families will sell their old houses at a price the lowest income group can afford. It will no longer be necessary to sacrifice quality to reach a mass market."

> IKE P. JACOBS, builder Fox & Jacobs Dallas

"It should be great news for the homebuilding industry and aid it in awakening new interest from prospective buyers. Our builders need this help now."

> GORDON W. EVANS, chairman Kansas Gas & Electric Co

"If this directive is carried out seriously, it will have important effects.

"Lower annual housing expenses will let buyers qualify for purchase of a given-priced house with lower income than previously. Substantial savings will be realized by homeowners in outlays over the life of the home. Builders will be encouraged to produce quality houses, thus gradually upgrading the nation's housing supply."

GROVER ENSLEY

executive vice president

Natl Assn of Mutual Savings Banks

"Our limited field experience indicates we all have a big educational job ahead to inform our own field salesmen, builders, architects, lenders, realtors, distributors, and even some FHA offices of the mechanics involved in accomplishing the purposes of the directive. This can be one of the most efficient incentives for a builder to upgrade the quality of his house and earn a dollarand-cents advantage over his competitor who does not do so."

> EDWARD J. DETGEN, vice president General Electric Co

"It makes possible the extension of quality construction features and equipment including many applications, and particularly year-round air conditioning, to all segments of the homebuilding market."

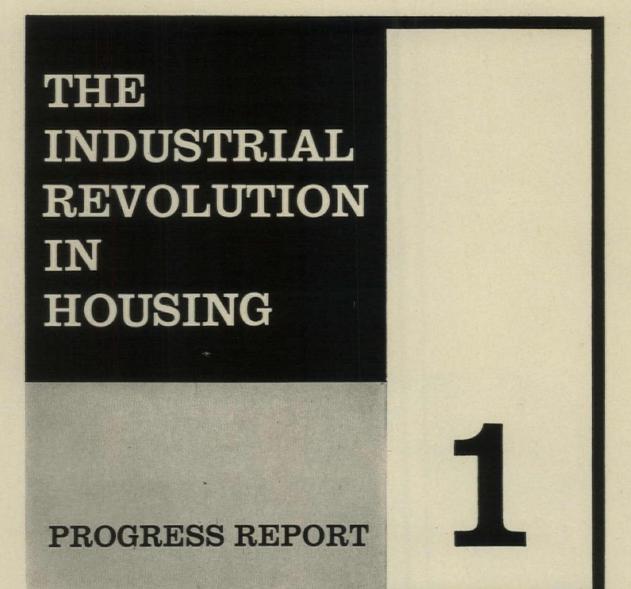
PHILLIP SPORN, president

American Electric Power Service Corp

"Evaluating performance standards for materials is a major undertaking and I hope that work will go forward on a set of working tools."

> ALAN E. BROCKBANK, builder Salt Lake City

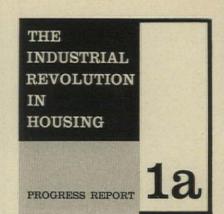
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The industrial revolution is "inevitable in the 1960s," HOUSE & HOME forecast in its January issue. Now, only two months later, here is the first progress report on the big change:

<b>Progress Report No. 1a</b> In East Lansing, NAHB's research team introduces two brand new ideas for using panels in an all-component house. (They also tested a host of other ideas.)	See	page	142	
<b>Progress Report No. 1b</b> In St Louis and Kansas City, Builders Fischer & Frichtel are switching to industrialized techniques for multi-model, multi-tract building.	See	page	150	0.0
<b>Progress Report No. 1c</b> In Phoenix, Builder John Long has abandoned conventional building methods and started on the first of three steps toward a completely factory-made house.	See	page	158	





# **NAHB Research House tests brand new ideas**

The 1960 Research House at Michigan State University in East Lansing shows how to use:

Panels, instead of a slab, on the ground—see p 144.

Panels in a balloon construction system—see p 146.

Five more new and improved ideas—see p 148.

Thirty-eight new products—see p 222.

Just as important as the ideas in the house is the bare fact that there is a research house program. Says Technical Expert Carl Boester: "This activity of NAHB's Research Institute is the strongest case our industry makes for industrialization. The houses are the best technical show of the housing industry's intentions in the next decade."

And, add other experts, design and public acceptance is just as important as the new technology that comes out of this program. "NAHB was wise," says Architect Leonard Haeger, "to use architectural consultants on these research houses. The role of the architect and industrial designer is just as important to the future of industrialization in housing as that of the engineer."

Where does the small builder fit in this picture of industrialization? Says NAHB's new president Martin Bartling: "Industrialization is coming, and the small builder can survive in this new age as easily as the giant builder if he is given the right tools and education to handle the new component techniques." (For more on Bartling's views, see  $p \ 134$ .)

#### 1960 Research House is NAHB's first two-story

The 2,100 sq ft contemporary house in East Lansing has four bedrooms upstairs, two-and-a-half baths, and an attached garage. The three previous research houses were ranches. "The idea of going to a two-story," says Research Institute Director Ralph Johnson, "was not so much a reflection of the new trend to two-story houses as it was recognition of the need to test sandwich panels in new design situations," (see four following pages).

The basic panel—a plywood and foamed polystyrene sandwich—is the same as the one used in last year's South Bend house (see H&H, Jan '59) except that this year's is more dimensionally stable.

Stability was increased by 1) gluing aluminum foil to the interior face and 2) applying weatherproof, synthetic rubber paint to the exterior. The foil and the paint keep moisture from reaching the plywood, so it will not expand or contract. The glue bond between the plywood and foil in turn prevents the aluminum foil from moving with temperature changes. Since the core will not move with ordinary temperature change, the panel is dimensionally stable.

#### Plans for 1961's Research House are not yet firm

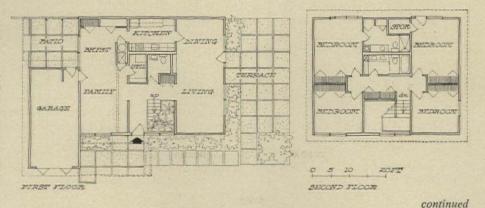
By mid-March, NAHB's Research Institute will decide:

whether to build a Research House this year and
 what kind of panels to use for the house.

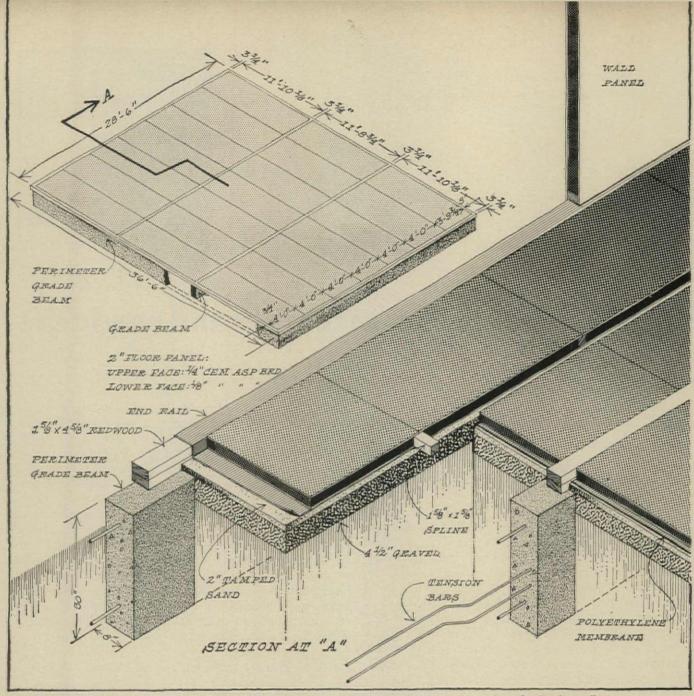
Reason for the delay: NAHB recently acquired a laboratory for testing building components, and, says NAHB's Ralph Johnson: "We hope to find out what sort of panels we should use in the next Research House. Our structural tests may show that stressed-skin panels should get closer study.

"Should we decide to go ahead with the house this year, the basic plan will resemble those used by the builder who will build the house. This will solve planning problems which have frequently, in the past, slowed up our work. If we can come to a clear-cut decision by June 1, I think we can finish the house by fall, in time for the next NAHB convention in December."

PLAN shows how a two-story utility core, with no windows in kitchen or baths, extends up through center rear of house. The Research House was designed by a team consisting of NAHB's Research Institute, MSU's Residential Building Curriculum, Kopper's Phil Waugaman, and Architectural Consultants Herman York and John Normile. Research Institute ex-Chairman Bob Schmitt was project manager, assisted by Institute Director Ralph Johnson and Assistant Director Bob Garrow. Assistant Professor Byron Radcliffe was coordinator for MSU. The contractor was Walter A. Neller Co of Lansing.



MARCH 1960



FLOOR SECTION shows how lightweight panels rest on grade beams and on sand bed between plates for bearing walls.

# Brand New Idea No. 1: panels instead of slab on ground

"This floor may be the greatest single advancement in homebuilding in the last decade," says Bob Schmitt, 1959 chairman of NAHB Research Institute. Here is why:

1. This floor-on-ground can be laid in winter. The panels, with foamed polystyrene core and asbestos-cement skins. were installed when the temperature was 22F. (Panels should not be placed in rain or snow because moisture would be trapped between the panel and the polyethylene vapor barrier beneath.)

2. Panels can be installed in less than seven man-hours. Although it took a five-man crew  $2\frac{1}{4}$  hours to place the floor, the crew agreed they could place a second such floor in half the time. The panels were laid on a sub-base of  $4\frac{1}{2}$ " of gravel topped with 2" of sand tamped and screeded off to true level. There is no cement in this sub-base; panels bear directly on the tamped sand. Preparation of sub-base took about a day.

3. Lightweight panels eliminate the heat reservoir problem. In most slab houses the mass of concrete acts as a heat sump that creates a noticeable time lag in heating and cooling when heat or air conditioning is turned on in winter and summer. 4. Panels hold out the promise of mass-production economy. These factory-made components could be turned out on high-speed assembly lines all year if sufficient market were created. "But, it will take a lot more testing of the floor before use of the panels can be recommended," cautions NAHB's Ralph Johnson.

Installation of panels still needs more study too: because of slight unevenness in final floor panel surface, NAHB nailed a plywood subfloor to the panels, tying the whole floor together in one plane. "Under ideal circumstances the asbestoscement surface of the panel should have been sufficient subfloor on which to place a wood or resilient tile finish floor," says Johnson.

#### Foundation is the only remaining winter problem

Concrete foundation beams (see drawing) are the only parts of the house that cannot be built in the winter. These foundations were set in place in the fall before frost. Says Building Consultant Carl Boester: "These beams could have been precast and made much smaller. You might use prestressed concrete members, or concrete block units post-tensioned at the site, in any weather." (For more on Boester's idea, see H&H, Jan.)

### Here is how the structural floor was laid



#### 1. Sub-base is screeded to level

Gravel and sand bed for panels was tamped and brought to level inside foundation walls poured earlier in the year. Perforated plastic drain tile was placed outside foundation.



2. Bed floor is ready for vapor barrier

When sand bed is finished and level with top of interior foundation beams (running left to right), a 6-mil black polyethylene barrier is spread (men have it ready at rear).



#### 3. Interior plates are positioned

With barrier in place, 2x4 plates with 34'' leveling strips on top are nailed to interior foundation beams. Exterior wall plates of treated redwood were set before vapor barrier.



4. Floor panels are man-handled into place

Big  $(4' \times 12')$  but light panels are placed beginning at one corner of the house. Sand bed will only take so much impact so men try to walk on plates and exterior sill.



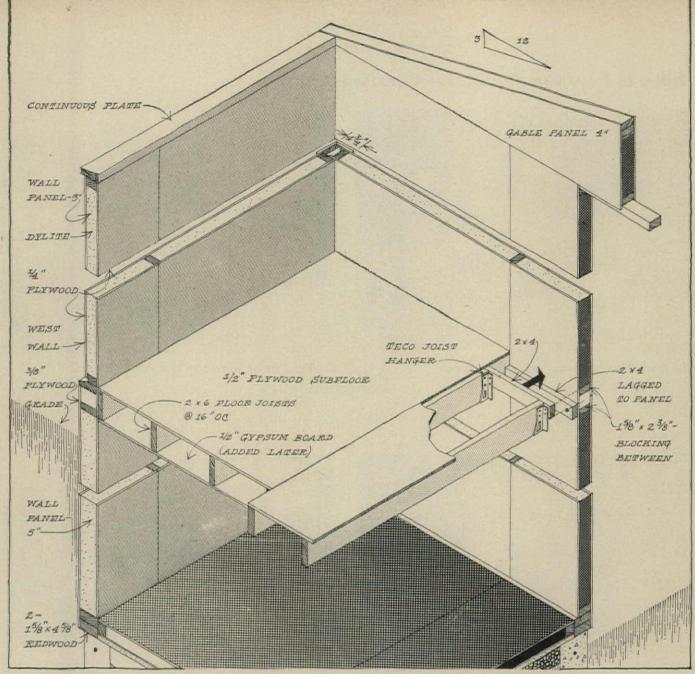
5. Panels are laid between plates

The panels are butted edge to edge, come level with top of plate. Panels are 2'' thick, have asbestos-cement skins on foamed polystyrene core. The floor U factor is 0.15.



6. Floor bears directly on sand

Floor load is spread over full dimension of panels, so there is no impact on the sand bed. In theory no subflooring is required, but in this case panels were topped with plywood.



TWO-STORY PANELS are used like barn framing to take advantage of the structural strength of the balloon system.

# Brand New Idea No. 2: panels in balloon construction

The 1960 Research House shows that sandwich panels can be used as easily in ballon construction as in the platform and post-and-beam system used in the 1959 Research Houses (H&H, Jan '59).

To test the balloon system NAHB used 16' high panels, two stories in one piece. The plywood and foamed polystyrene panels have an aluminum-foil interior face for vapor barrier and an exterior coated with Hypalon, a weatherproof synthetic rubber. Outside joints are hand finished with Hypalon. The test at East Lansing demonstrated that:

1. The new balloon panel system can go up fast. Actually, the job at East Lansing was delayed by inexperience with the system and lack of proper tools. A large part of the erection was done by hand. But observers say a crew of four experienced men, with wall jacks and the right crane equipment, could close in a two-story house in a day.

2. The new system has extra strength. In any balloon system the wall's resistance to wind and other loads is reinforced by the fulcrum action of the second floor. In the East Lansing house this inherent resistance to load is increased in two important ways:

First, the structural continuity of the wall panels gives greater strength to the balloon system. So, for example, earth loads against the west wall are better supported. (This may suggest a way to prefab basements.)

Second, the fulcrum formed by the upper-story floor is, in fact, a structural diaphragm (see drawing above) which ties together the strength of all four walls.

#### These foam-core sandwich panels are now available, have FHA acceptance for walls, roof

Wall and roof panels for the East Lansing house were made in a Detroit plant by Koppers Co (production capacity: 1,500 houses a year). First commercial sale: panels for two \$12,000 models by Macway Builders, Ypsilanti, and D&R Building Co, Northville, Mich. Panels have Detroit code

approval, and FHA acceptance when foundations, floors and roof cover meet MPS.

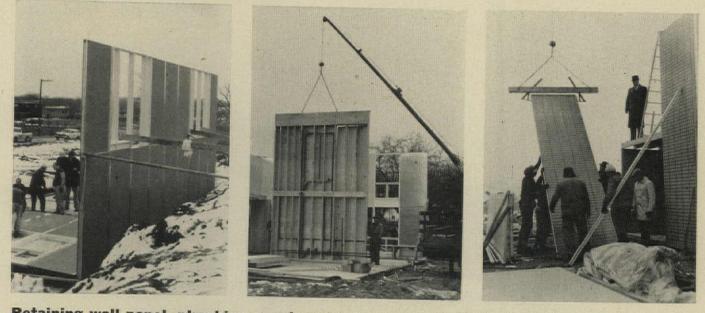
Wall panels come in various widths up to 12' for 3" thick walls. Exterior plywood is used for skins. Window and door panels have built-up wood headers gluenailed between skins. Roof panels are 2'

and 4' wide in lengths up to 24'. Thickness various with spans.

Panels will be sold by franchised distributors directly to builders. Koppers is licensing other producers to make panels in other areas.

Cost: about \$1 per sq ft.

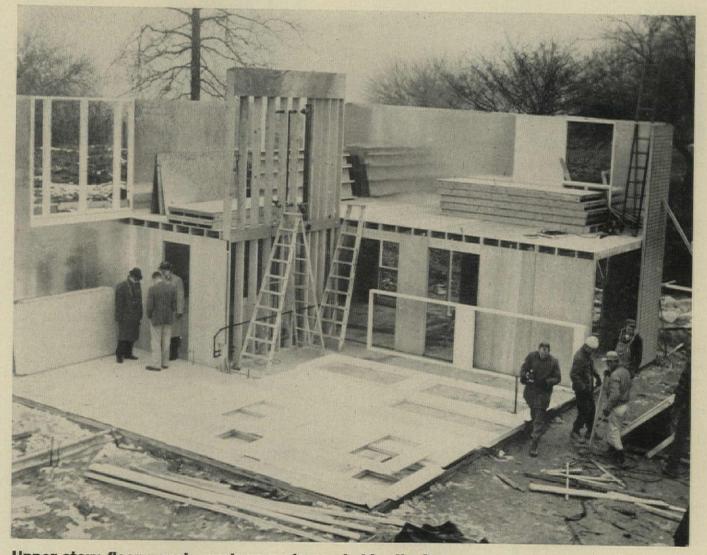
# Balloon system uses a variety of panels



# Retaining wall panel, plumbing panel, and brick panel all fit the house

Retaining wall panels, left, are 5" thick, have foam core and plywood skins. Upper-story section is 3" thick. (Earth will be backfilled later.) Plumbing fixtures go back-to-back against the two-story wet wall fabricated off site. Plastic plumbing

is based on system used in Knoxville Research House (see H&H, Jan '59). Brick panel at fight is a foam-core asbestos-cement panel: brick dust is spread over a mortar bed on the skin, then joints are scored.



# Upper-story floor panels work as a stressed-skin diaphragm

They are made of  $\frac{1}{2}''$  plywood glued and nailed to 2 x 6 to north and south walls (drawing opposite). Continuous header,  $7\frac{1}{2}''$  deep on top of interior bearing walls, supports Their ends rest on interior walls and 2 x 4 ledgers bolted inner ends. Joist space can be used as duct.

MARCH 1960



RESEARCH HOUSE gable-end panels are 4" thick, lap 3" wall panels to accent line. Triangular-top interior panels also support roof.

# The Research House also tests five more ideas

Like NAHB Research Houses in the past, the East Lansing house tried out a score of good building ideas. Housing experts say these five, and the two on preceding pages, hold the most promise for better ways to build in the 1960s:

1. A roof that bears on gables. Roof panels,  $4' \ge 16'$  and  $4' \ge 12'$ , are laid parallel to the ridge so spans can be kept to 12'—from end walls to interior bearing walls. For bigger spans the panels would be thicker than the 5" depth used. Foil-faced plywood skin and foam-core panels overhang gable ends 3' = 11''.

Panels are prefinished with urethane paint and a sand finish. Joints between panels are finished in the field in a two-step process: First, pressure-sensitive vinyl tape is laid over the joint. This is then topped with textured tape impregnated with urethane and adhered with a structural cement. The two tapes together give a weatherproof seal that stays flexible over a joint that may swell and shrink.

2. A surface-mounted wiring system. Most convenience wiring is non-metallic sheathed cable stapled to the bottom of wall panels and covered with extruded vinyl baseboard (photo, opposite). Here is how the system was installed: First, lengths of cable were stapled around the room. Then, 1" pieces were cut out for each outlet. Cable ends were stripped and shoved into pressure-lock connectors in the

outlet. Placing the vinyl baseboard finished the job. System uses standard parts, is not sold as a package.

3. Money-saving experimental door system. The doors shown in picture opposite are prefinished and shipped flat (only  $\frac{3}{6}$ " thick). When a parting rib is inserted between the two faces, the unit is ready to install. Inserting the rib prewarps the door, makes it resist moisture changes. Surfacemounted units are used for interior doors, folding closet doors, and kitchen cabinet doors. Called Monothin by US Plywood, the developer, they will match paneling. The doors are not yet in production, but NAHB's Bob Schmitt says they may save \$6 to \$8 an opening.

4. New ceramic mosaic flooring. Bathrooms in the Research House use  $9'' \times 9''$  tiles of ceramic mosaic laid like resilient tile. Tiles are made of 1'' ceramic squares imbedded in synthetic rubber (photo, opposite), are made by US Ceramic Tile Co. They adapt to floor contours, so need no special underlayment (see also  $p \ 222$ ).

5. Rapid, two-coat ceiling finish. "We learned two men and a laborer can finish 1,000 sq ft of ceiling a day by spraying gypsum in two coats on gypsum lath," says Bob Garrow, assistant director of the Research Institute. Gypsum sets hard in half an hour. Standard plaster gun is used. System was worked out by Compton, Inc, Clarksburg, W. Va.

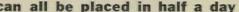
### These new ideas are designed to save time and money



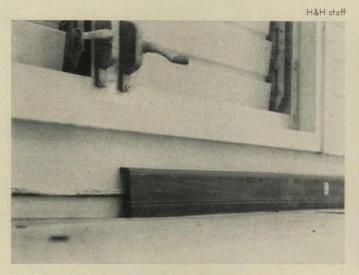


1. Roof panels, prefinished on both sides, can all be placed in half a day

The big panels are placed parallel to ridge. Small ridge pieces close the roof, at right. Cleats on underside of panels (one is shown in picture at left, above) fit into troughs in the



top of bearing wall panels to tie roof down. Aluminumfoil-finished inside surface is primed with an epoxy (see also No. 1, opposite).



#### 2. Baseboard wiring works with panels

It is easier to surface-mount wiring than to build it into a panel. Vinyl baseboard has room for telephone, heating cables (see also No. 2, opposite, and for baseboard, p 222).



3. New doors do not need square openings

Parting member being placed between prefinished faces readies door for surface mounting. Unit closes against wall; door opening need not be plumb (see also No. 3, opposite).



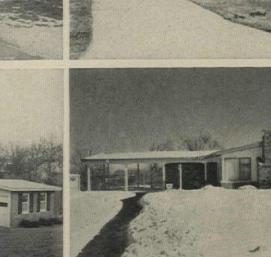
The 9" x 9" ceramic floor tiles are placed like vinyl tile on plywood. Synthetic rubber backing serves as grout. Tile's weight help it adhere (see also No. 4, opposite, and p 222).



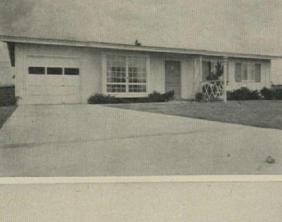
5. Ceiling finish and exposed duct cut labor The two-coat ceiling finish works well with the exposed duct above. Vinyl-covered steel ducts eliminate furring, include a light trough (see also No. 5, opposite, and p 222).

























THE

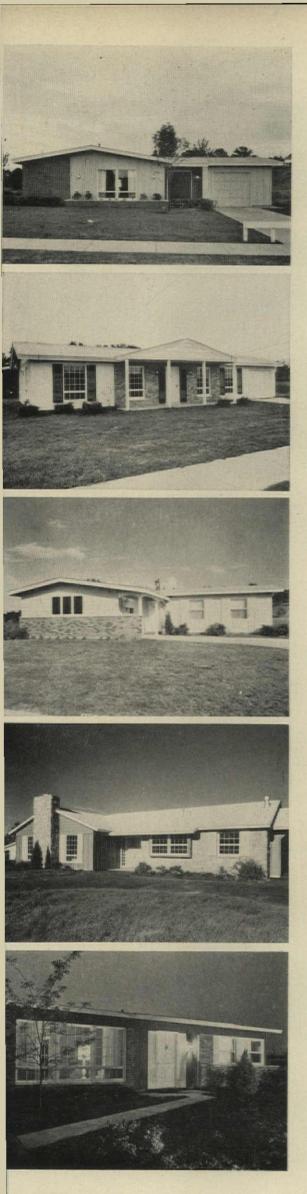
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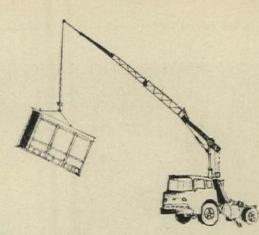
INDUSTRIAL REVOLUTION

PROGRESS REPORT

1b

HOUSING





# How to industrialize for multi-model, multi-project building

The 15 houses shown at left are less than half of the models St Louis Builders Fischer & Frichtel are now building in six scattered subdivisions in two cities.

One year ago, they had just 12 models, three developments. And they were building conventionally. But when they decided to increase the number of models, and expand their operations into another city. . . .

#### "We had to industrialize or lose control of our operations," says Ed Fischer

"We would never have been able to keep track of production of so many different models ranging in price from \$16,000 to \$40,000 if we were still building conventionally. We knew that some form of prefabrication was inevitable—that we'd either have to buy our houses or prefabricate them ourselves." Fischer & Frichtel began prefabricating their components just a year ago this month.

#### "Industrialization lets us offer the same size house —and a better house—at our 1954 costs"

Says Fischer: "The only thing that accounts for our higher sales price is the increased cost of land. We know we save more than \$200 in direct costs on each house by building in our plant. And we know we save still more in indirect costs. Our production and material flow through the shop is orderly and efficient (see p 152). And we complete the industrial building cycle by using efficient machinery to assemble the components out on the site (see p 154). This saves about \$250 more.

## "You can industrialize sooner than you think," says Fischer to on-the-fence builders

"Although we build 300 or more houses a year, we believe a builder can start to fabricate parts in his own plant if he builds 100 houses a year—and maybe fewer. Our plant cost \$50,000 to build and another \$35,000 to equip. That's a lot of money. But it is saving us plenty. We help amortize the cost by selling house parts to other builders." How to industrialize for multi-model building, continued



F&F'S PLANT is a simple pole building, cost \$1 a sq ft to build. This is section of wall component line.

## "No matter how many different models we build,

### we can control our costs by building in the shop"

"We're now building all the major parts for most of our 36 models in this shop," reports John Fischer.

"Even with so much variety, we find it easier than before to control the job and maintain our house-a-day schedule." And, adds Larry (Bud) Frichtel: "We get much of our \$450-a-house savings in the shop." Here is his breakdown:

"Logistics is improved. Each house takes different quantities of different kinds of materials. Now, instead of waiting for material to be delivered to many different sites by many different suppliers, it is delivered and stockpiled at one point: the shop. We control its distribution.

"Mass-production techniques save money. Every house has certain standard parts—say trusses or solid wall panels which we can build at very low cost once we set up our tools and jigs. Even a special part used in only one model can be produced much faster and better in the shop.

"Our workmen produce more. The best man for any job can be used on that job—and only that job—with no lost motion. When we built on the site, we often had to wait until a carpenter skilled in door setting finished some other job. Now we bring the door to him.

"Less material is wasted. In the field, small pieces are burned. But in a shop, what is left over from one house is used on another.

"Interest money is saved. To maintain the same output building conventionally, we'd have twice as many houses under construction and we'd pay double the interest on construction loans."

Frichtel adds: "As soon as we can standardize more parts, we'll save even more money with our mechanized shop."



POWER EQUIPMENT at plant includes 21/2-ton crane (left), power saws which precut standard pieces, and forklift truck.

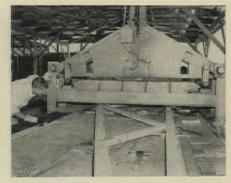
#### Here is how F&F make gable ends and trusses



GABLE ENDS are assembled from precut parts on low jig table. Some carpenters used to field work still stand on table to nail.



**PRECUT TRUSS MEMBERS** are positioned in jig on this table. Carpenters tack Gang-nail connectors in place. Then . . .



**TRUSS IS COMPLETED** by press which drives connectors into place. Trusses feed through press automatically. System saves \$4 a truss.

#### Here is how F&F make their room-size wall panels



**WINDOW COMPONENT**, purchased by F&F, is slipped into framing section built in the plant. Easy assembly saves \$3.50 a window.



**SHEATHING-SIDING** is nailed to framing sections on two different lines: one for solid walls (right), one for window walls.



**EXTERIOR SKIN** is stapled to sheathing by carpenter using air-actuated gun. Stapling saves \$6 a house over nailing.



**WINDOWS ARE CALKED** to get air-tight bond between window and siding. Calking in the plant saves 20¢ a window.

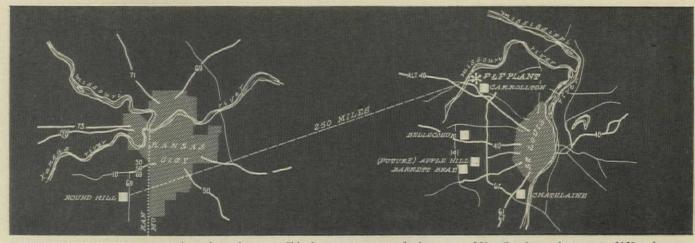


**AT END OF LINE** completed panel is lifted from the table by overhead hoist. From here, panel moves to shipping dock.



**AT SHIPPING DOCK**, monorail carries panel onto waiting truck. Soon, panels will be preprimed before they leave the plant.

#### From the plant, components are shipped to five tracts



F&F'S DEVELOPMENTS are spotted on these city maps. Shipping components to farthest tract-250 miles from plant-costs \$150 a house.

How to industrialize for multi-model building, continued



TRACTOR-MOUNTED CRANE lifts window wall from trailer, will swing it directly into position on slab.

### "No matter where we build,

## we control our on-site schedule by using machines"

"We use the same tools and techniques for building any of our models on any of our five sites," says John Fischer.

"We'd be swamped if we went back to hand-craft methods when we got our components into the field. Our kind of homebuilding is a manufacturing operation. The first steps are taken in the shop and the final steps at the site. We want our men in the field to have the same kind of laborsaving tools the men in the shop have, and for the same reasons: lower labor costs and a faster schedule.

Bud Frichtel adds these specific examples of the benefits of mechanization:

"Our bell-bottom trencher (below left) not only cuts by 75% the manpower for digging footing, but also cuts the amount of concrete needed.

"Our power wagon (below center) lets every man working on the site use power tools. The wagon is rolled right up to the house, supplies both electricity and compressed air to run any kind of power equipment we need. It is stocked with all the portable power tools, ladders, and equipment the men need to work efficiently.

"Our mobile cranes are the key to our on-site control. They let us keep all the parts on the delivery trailer until they're needed and then provide the power to move them quickly into place with a minimum of man handling. The trailer-crane combination saves us 80 man-hours of high-cost, on-site labor. And since we're out of the weather at the end of the first day (photos, opposite) there's no problem in scheduling finishing operations.

Photos: Arteaga



ON-SITE EQUIPMENT includes bell-bottom trencher . . . power wagon and tools . . . staple gun for roof sheathing.

"Powered equipment helps us get a house under roof in eight hours"



**8:00 AM** Layout men chalk lines on slab to show panel positions. Trailer loaded with panels is already standing by.



**8:05 AM** First panel is dropped in place. Crane can swing many panels from trailer and spot them on the slab without moving.



**8:45 AM** Fifth panel (for rear of house) is brought in position. By now, crane has to move to place parts in right locations.



**9:05 AM** One of the last panels is positioned. Crane holds component while carpenter nails top plate to tie panels together.



**9:25 AM** Light interior section is easily carried by two men. One exterior panel is left out so men can get into house.



**10:50 AM** Despite muddy conditions, crane moves quickly into space between house and garage to put gable end in place.



**11:00 AM** Picking up three trusses at once, crane lifts them high in the air to man waiting to lay them on top plates.



**1:00 PM** Trusses in place, the house plumbed, one carpenter applies fascia while another is aligning trusses for 2' oc spacing.



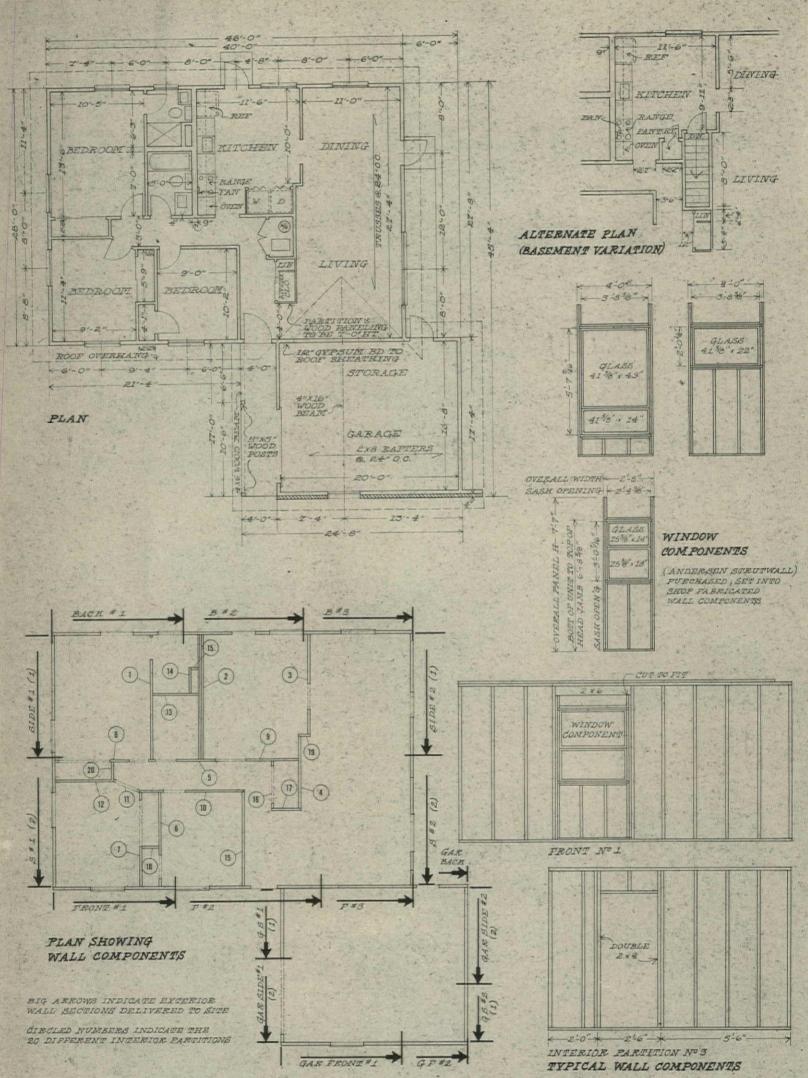
**3:55 PM** Carpenter completes nailing of roof sheathing in 45 minutes. It was earlier cut and tacked in place by two-man crew.

#### ... and 20 days later the house is complete



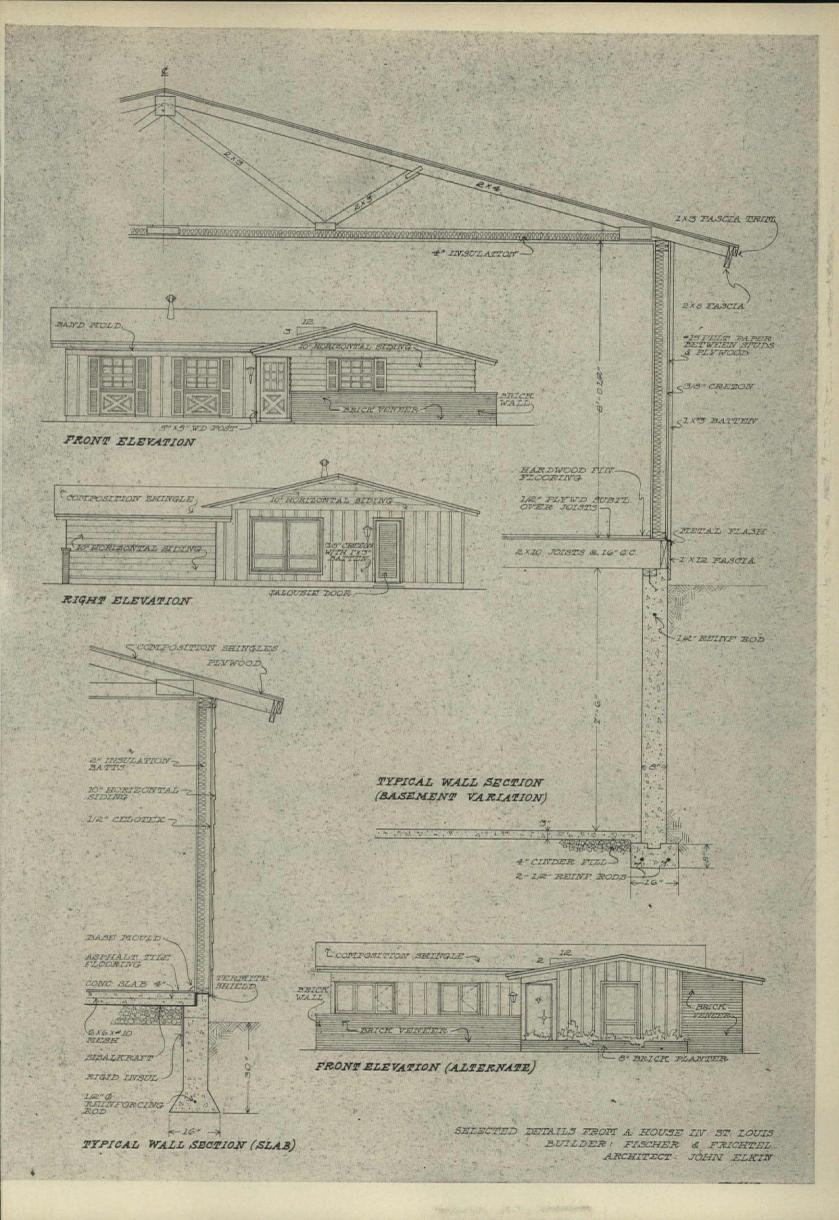
L-SHAPED HOUSE has 1,288 sq ft of living area, over-size (20'x161/2') garage, sells for \$16,450 with radiant heat.

For selected details from this model, turn the page



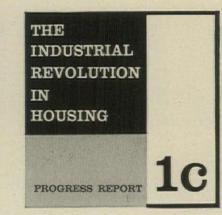
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After 11,000 hand-crafted houses John Long is shifting to component building and is planning for total industrialization in 1961



This report was written by H&H Associate Editor Arthur Pieper, who was himself a Phoenix builder and has covered Long's operation for H&H since 1956.



#### PAST

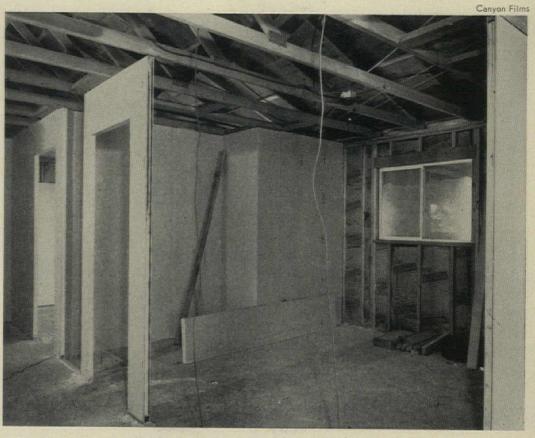
Until 1959, Long used 4,000 concrete blocks and 1,500 pieces of lumber in his low-priced houses

Photos: Markow



#### PRESENT

Long has already eliminated 1,000 pieces of lumber by substituting 38 big shop-built components



#### FUTURE

Long is now installing machinery for factory production of foam-core partitions. Next: exterior walls



JOHN LONG'S NEW SHOP in Phoenix has 100,000 sq ft under roof, 640,000 sq ft yard, \$500,000 in fabricating and handling equipment.

## Here is where John Long is revamping the methods

If you were to ask John Long why he is abandoning the building methods that have helped him sell 2,500 houses a year at perhaps the lowest square-foot selling price in the US, he would tell you this:

"You can take conventional building techniques just so far.

Photos: Markow

LONG'S OLD SHOP used for small-scale cabinet production before he industrialized, is now storage building in one corner of yard.

The closer you get to perfecting conventional methods, the less satisfactory they seem."

Long began revising his building methods less than a year ago. His progress to date: he now shop-builds interior partition framing, trusses, gable ends, closets, cabinets. By summer, he plans to be prefabbing foam-core partition panels and frame exterior panels. By late in the year, he hopes to be using foam-core panels for exterior walls. "And by next year," says Long, "we hope to have completely finished panels for use inside and out—and have most of our labor force moved out of the field into the shop.

#### "Everything we have done brings us nearer

#### our big objective, a completely factory-made house

"I've seen the need for industrialization grow every year, and today, for us, the need is crucial.

"It grows out of a lot of problems we've been facing almost since we started in business. We were pretty well organized but we couldn't really control our operation with



### that made him one of America's most successful builders

thousands of small pieces for each house going out to the field to be assembled. That way we could never get the production stability that other business enjoys.

"Even with good supervision we had trouble keeping up consistent high-quality workmanship. And labor costs kept going up and up [Long employs over 1,000 men, 100% union].

"Now," says Long, "we're beginning to get the stability we were looking for—in purchasing, scheduling, and labor. And quality is better than it's ever been.

#### "Progress must be made in orderly steps; we're doing a lot of research to be sure to take the right steps"

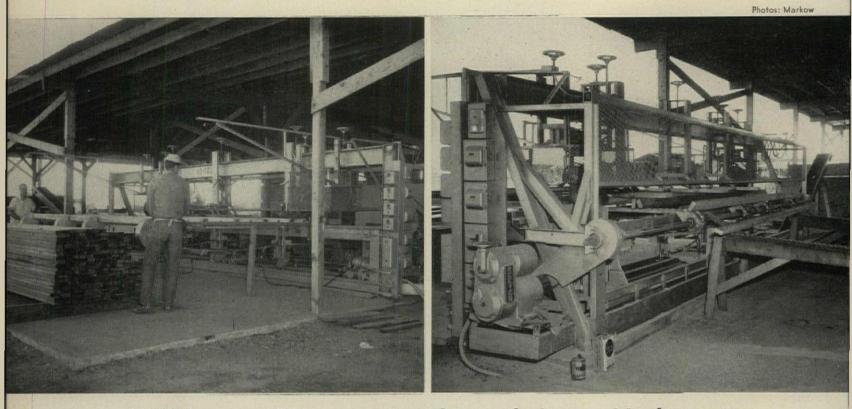
Long has opened a research laboratory, hired a full-time research director. He has also built research houses where he is currently testing plastic piping ("it makes a lot of sense for drainage, but there are problems in using it for supply") and foam-sandwich panels. Long has tried several types of panels, but says: "I think urethane foam is our answer. Do you know that just one tank car of chemicals will take the place of six carloads of lumber?

"We've run into some problems as we industrialize," says Long. "Prefinishing, especially, is a problem. We're trying to get people to take one color—off-white—throughout the house. So far we have better than 50% acceptance.

"And the thickness—or rather the thinness—of panels is a problem. People think they look flimsy because they're only  $1\frac{1}{2}$ " thick. So we're casing doors with a special buck.

"And a lot of sizes become critical. For example. . . . ." As Long talks, it is obvious that he has his hand in every detail of every operation and every experiment. You feel his pride in what he has accomplished. And you also feel his drive to get more and more house for the money. "By industrializing, I've been able to add \$800 to the value of my houses [for a look at what Long has added, without increasing his prices, see p 168].

"Most people think only a custom-built house can have real quality and workmanship. But you just can't afford to put the quality into a custom house that you can into a component-built house for anywhere near the same price." Long's structural components shop:



#### In this huge saw, 30 component members a minute are cut to size

Two men place lumber on chain conveyor—two pieces at a time (photo, left). Conveyor pulls lumber through two circular saws which trim ends to length. Pieces drop out of rig onto rollers (photo, right) which carry pieces to a waiting pallet. When pallet is fully loaded, saw operator sounds an electric horn to summon forklift truck which carries pallet to production line. Saw is fully adjustable, so cuts of any length (to 24') or any angle can be made.

Long had saw made after seeing one like it at the National Homes plant in Lafayette, Ind.

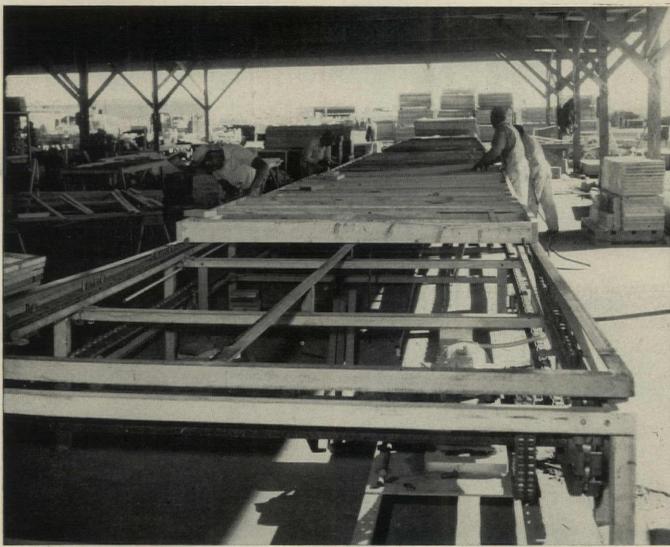


Trusses are fabricated on these jig tables at one-a-minute rate

Precut truss members are dropped in jig (photo, left) and held in place by hydraulic clamps. Metal plates are positioned, tacked in place with two or three nails, and truss is turned over (photo, right). After plates are located and tacked on second side, truss is carried through roller press (in background) which drives plates home. Completed trusses are stacked in one-house packages on supply wagons, ready to be moved to the building site.

Long has four truss jigs like the one shown. Most shops can be left open because of mild Arizona weather.



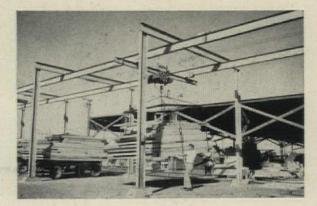


#### This production line makes all the partitions for a house in 20 minutes

At start of line (photo, top), two men drop precut studs into place on continuous chain conveyor. Pairs of dogs (seen at left in lower photo) mark stud positions, can be realigned to handle any framing pattern of any model. As the studs advance down the table, precut top and bottom plates and, (where they are needed) headers for doors and windows are dropped into the line, nailed in position by a separate crew using pneumatic nailers.

At the end of the line, completed panels drop onto a pallet. When fully loaded, pallet is moved by overhead crane to a waiting trailer (photo, right) which will deliver components to the building site.

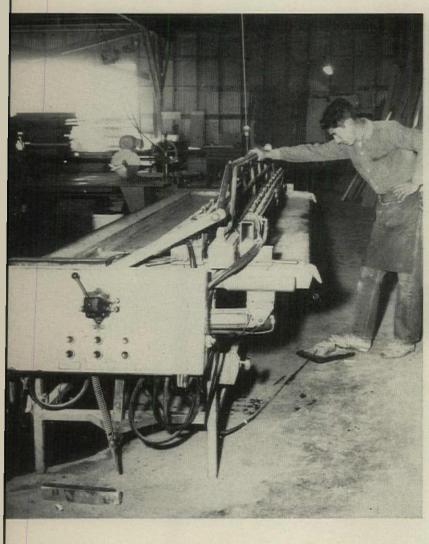
Working at full capacity the three-man line can deliver partitions for 24 houses a day.



continued

Long's cabinet and door shop:

Photos: Markow

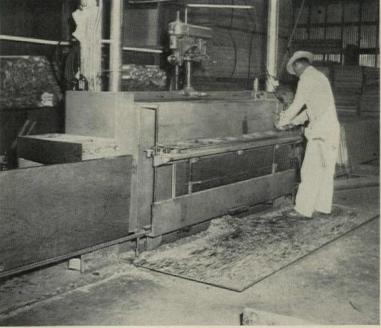




#### Kitchen counters are assembled in 20 minutes

After Textolite surfacing has been laminated to plywood in a pneumatic press (not shown), the front edge and rear cove are formed in the heated hydraulic press at left. Complete counter is then assembled, and mitered glue joints are flash cured with an electronic gun to speed glue set, insure good bond (photo, above). Long estimates he saves \$95 a house by making his own counters. Equipment used is made up of standard units which are available commercially.





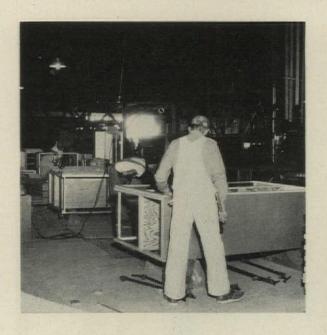
#### Doors are bored and prehung in five minutes

Flush mahogany doors are first placed in Turn-A-Bore machine above; in two minutes they are bored and routed for hardware and hinges are set. Door is then moved to jig table (photo, left) where it is prehung in frame.

Long says this equipment paid for itself in 12 weeks because of saving in shop and field time. Only two operators are needed, and production capacity of the equipment is 200 prehung doors a day.



#### All the cabinets and closets for a house are cut and assembled in 35 hours



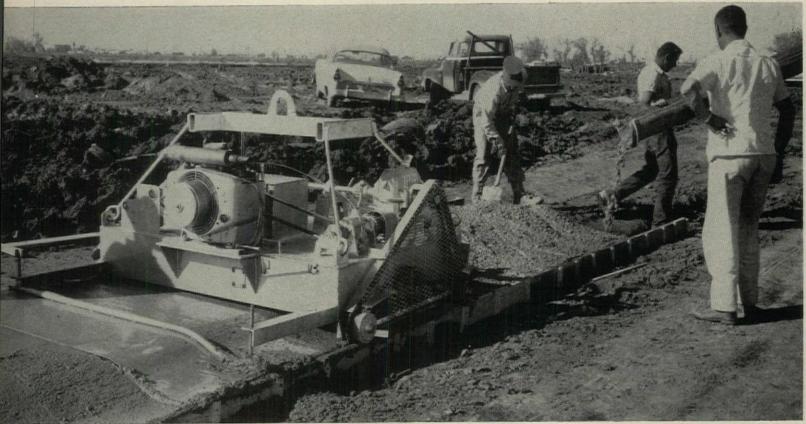
#### Trim for a house is primed in ten minutes

Long has two priming areas. Arizona's dry sunny weather lets him prime paint his exterior trim in the open air (photo, right). Natural wood finishes on doors and interior trim, which are more likely to be marred by dust, are applied under roof. In either case, spray rigs are mounted on wheeled trailers—in the painting shop it is the tools that move, the work units remain stationary. Final coat for interior and exterior wood is spray-applied in the field. Cabinets for Long's houses are precut in the shop area shown above, move to assembling areas (photo, left) where they are put together. In his shop, Long uses quality methods: all his cabinets are doweled and glued and there is no facenailing. Long also makes free-standing china closets, vanities, and storage-wall units in this shop. Unlike rest of Long's plant, this shop is completely enclosed to protect wood surfaces and keep dust from spoiling the finish.



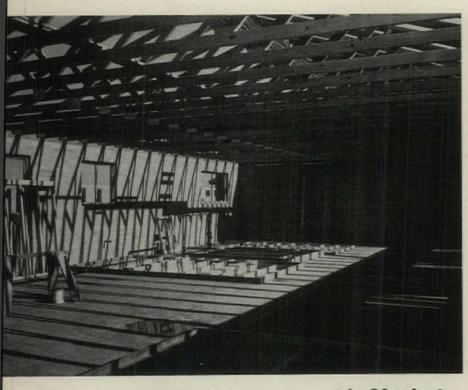
Long's on-site methods:

Photos: Markow



#### Curb and sidewalk machine lays 11/2 miles a day

Put into operation only last month, this machine forms curbs and sidewalks in one pass. The machine moves along the 2x6 edge forms, vibrating and forming the concrete into final shape. An attachment lays a tape joint between curb and sidewalk portions. After machine has passed, one man does prefinishing; finishing crew follows later. Gasoline-powered machine allows four men to do a job formerly done by eight. Machine was made in Long's shop.



### Interior partitions are set in 30 minutes

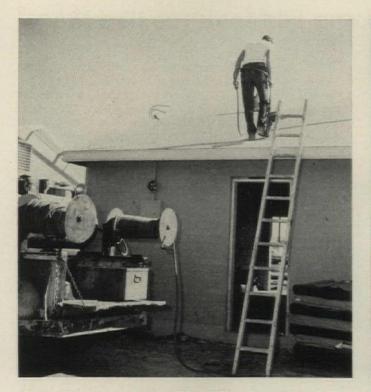
Using the "one-room" technique that trusses make possible, Long's crews lay prefabricated partition frames on slab, tilt them into place. Long says he saves \$25 a house by building and installing partitions this way instead of framing conventionally. Walls are finished with gypsum board. Resilient tile is laid after partitions are up.





Big gable-end components are hoisted into place in four minutes

This single shop-made component includes gable-end framing and sheathing, louvered metal vent, and roof overhang. It is tied into the roof structure by the ridge and fascia framing and by the sheathing. Exposed portion of the gable-end component is preprimed in the shop. Siding is Texture 1-11. Large aluminum louvered vent serves an attic furnace. (Long moved the furnace to the attic six months ago to gain space in the living area.)



Sheathing is nailed in 45 minutes

This is all the time it takes for one carpenter to "walk" the entire roof of a house, using a pneumatic nailer. Until eight months ago, Long's crews hand-nailed, took four times as long. Long then switched to  $\frac{3}{6}$ " plywood sheathing. "First costs for plywood are more than for boards," says Long, "but plywood's precision saves us money."



#### Pressure roller paints a house an hour

The roller used by Long's painters gets a continuous supply of paint from a truck-mounted pump and storage tank. This not only speeds up painting, but gives a more uniform coat, and saves as much as six gallons of paint per house. With this new method, there is no paint spatter on the ground. Special truck mounting was made in Long's shop.



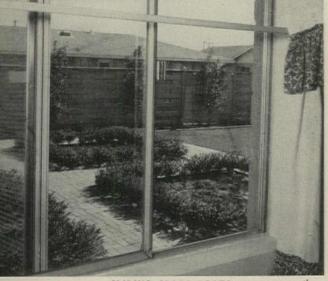
FAMILY ROOM-KITCHEN shows abundance of handsome shop-finished mahogany. Built-in kitchen appliances are included.

## The new technology lets Long add features like these

Long's industrialization to date (shop-built partitions, gable ends, trusses, cabinets, closets, and doors) has already had an impact on his costs.

"These first-stage changes in our methods," says Long, "have saved enough to let me add \$800 to the value of our [\$10,102 to \$14,685] houses without boosting the price."

While Long has not changed the plans and basic elevations of his seven current models since he began building components, he has added these features: 1) mahogany trim and doors throughout, 2) better aluminum windows, 3) a vanity in the master bedroom (photo, center, below), 4) a 40-gal five-year-guarantee water heater (vs a 30-gal one-year unit



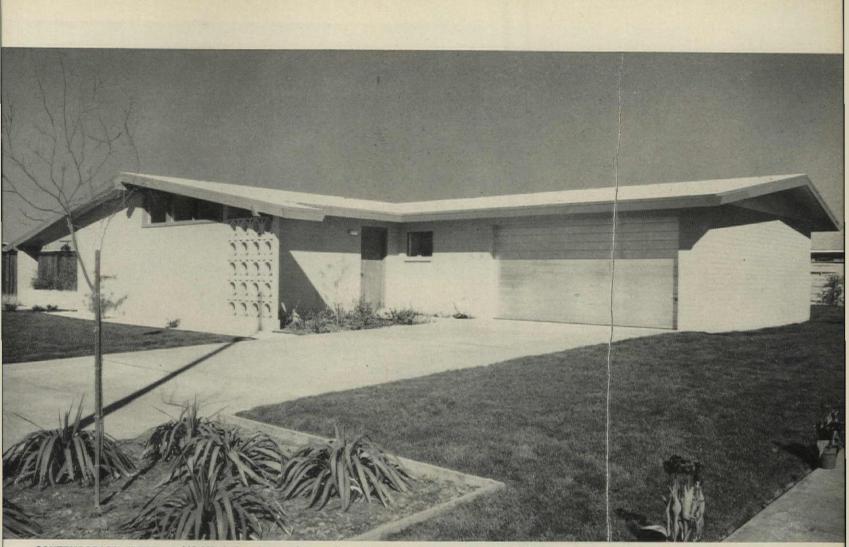
SLIDING GLASS DOORS-as many as three per house-are included in price. Some models also have patios.



rooms. This space was formerly used for furnace, which is now in attic.



GARAGE WALLS are now finished ready for painting. Big new water heater is standard in all models.

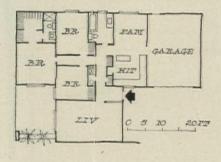


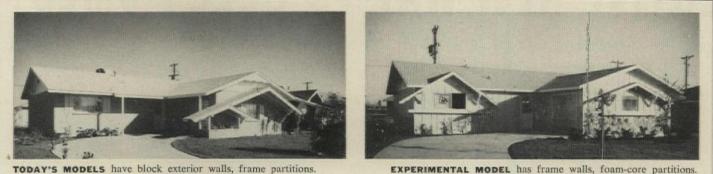
CONTEMPORARY MODEL at \$12,650, is Long's second best seller. Garage is considered plus value in Phoenix-a carport city.

## in his current models

used previously), 5) drawer units built into all closets, 6) acoustic ceilings, 7) boxed-in eaves, 8) furred and finished drywall on exterior block walls.

But this is just the beginning. Long is confident in his ability to meet his timetable, and have a completely factorymade house on the market in 1961. /END





EXPERIMENTAL MODEL has frame walls, foam-core partitions.

#### Here is how Long's next step in industrialization will affect today's house

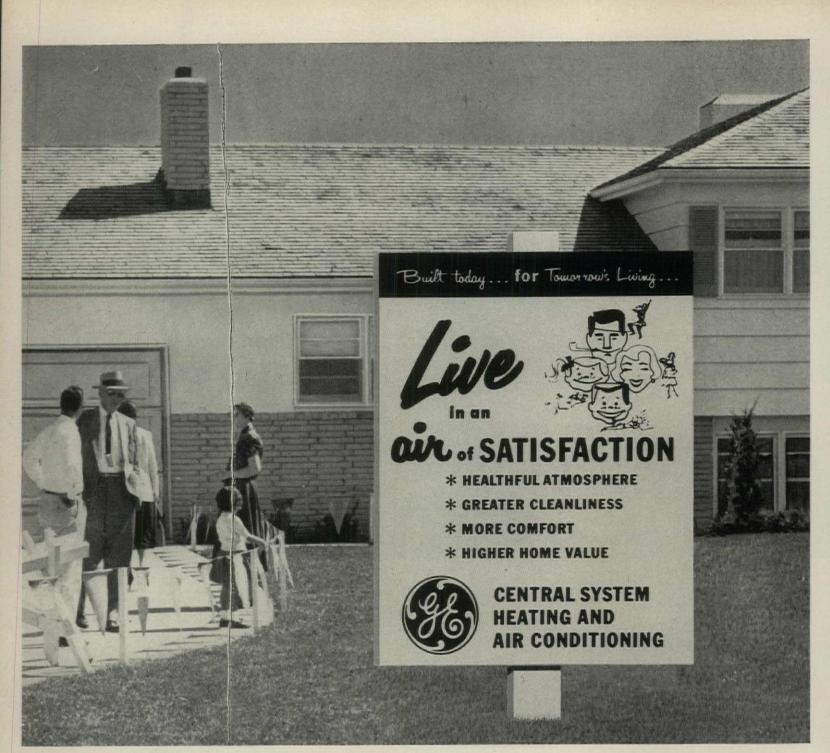
The new house will probably not look very different from today's houses, as the photos above show. But it will be very different structurally.

The new house will have frame-panel exterior walls, instead of the block walls used in Long's present models. The other important change will be in partitions: the shopbuilt frame partitions now used will be replaced with foamcore sandwich partitions. This house will be on the market,

Long hopes, later this year.

just as soon as details are available.

The final product of Long's new technology (not shown) will be a house with foam-core panels for both partitions and exterior walls-built in Long's shop with machinery now on order. If Long knows what this house will look like, he's not saying. Target date for production: sometime in 1961. HOUSE & HOME will report on both of these developments



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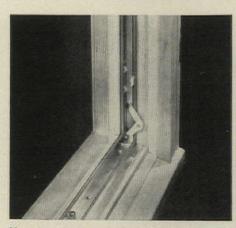
# NEW WAYS TO BUILD BETTER

A monthly report on home building ideas, products, and techniques

#### **Starting here**

15.3

**New products** 

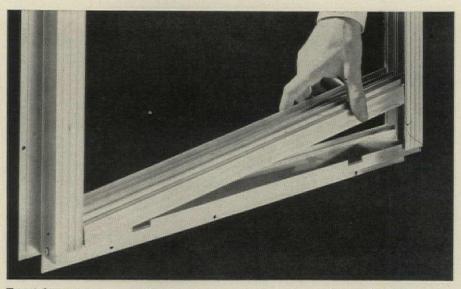


**New locking casement** from Row has a unique operator that not only opens and closes the sash, but pulls it anug at head and sill. When the sash swings shut, it pushes a nylon knuckle (left) raising a nylon catch (right) to engage a locking button on the sash. The win-



dow is sealed by parallel vinyl gaskets all around. When the window is closed these gaskets are compressed. No hardware except the operator is visible. All wood parts are toxic treated.

ROW Sales Co, Ferndale, Mich. For details, check No. 1 on coupon, p 296



**Frost insurance** is supplied by a new vinyl insert in the removable subsill of Ida Products Slidarol window. Because of the vinyl's low heat transmission, frost will not pile up in the track. The removable feature also allows easy maintenance and cleaning to prevent jam-up. Windows come in sizes from 2'x2' to 5'x10'. An integral nailing fin speeds installation.

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#### And on the following pages

#### Technology

New drywall system cuts building time two days. . . Two new built-up headers for openings up to 14'. . . . Hyperbolic roof cuts building costs. . . . see p 188

#### What the leaders are doing

Teamwork pays off for California builder and his architects. . . . American Home names prize-winning "development" houses. . . Entrance variations avoid look-alike monotony. . . . see p 199

#### **Publications**

New film boosts the housing industry. . . New booklet tells why you need humidification. . . . Design ideas on use of laminated glass. . . . New insulation data from IBI. . . .

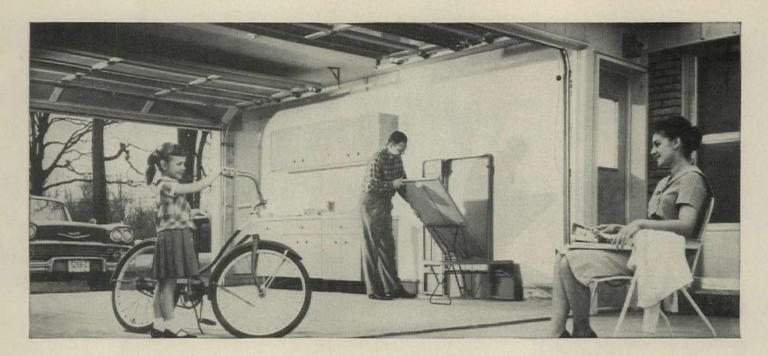
see p 290

#### More

#### **New products**

Here is a new versatile prime mover for all terrain.... China lavatory drops in place.... Router attachment cuts miters in laminated plastics.... Manufacturers show builder appliance lines....

see p 217



# Today's garage—your biggest bargain in space

More and more builders are turning to the profit and sales potential so evident in the garage. The reason is space—the extra storage, work and play space homebuyers are demanding. It's space a garage provides at the lowest cost per square foot.

It's no secret to you - today's homebuyers want more space . . . for privacy, activity, storage. They need more space to raise growing families. Unfortunately, this extra space in a home also raises the price.

For a homebuyer, the alternative to this space-price problem is to buy an older home, and that's what the majority do. For you, the alternative to losing these sales is to offer *more* livable space at *less* cost, and you can. You can develop and sell the extra living space, the extra storage space offered in the most neglected area of your home the garage. It's your biggest bargain in space!

# 1. The garage is a bargain

**to build.** Consider the worth of a garage. In addition to storing the car, it's an excellent place for a home workshop, a rainy-day place for children to play, an out-of-the-sun place for summer barbecues. It supplies room for

storage of bicycles, lawn mowers, garden tools, and for activities the house *cannot* supply. Best, it's a bargain to build.

**Extra-use space costs**  $\frac{2}{3}$  **less to build.** If you're an average builder, your *square foot* cost for building a garage is only one-third the cost of building the rest of the home –  $\frac{33}{3}$  to  $\frac{55}{5}$  per square foot, compared with  $\frac{99}{5}$  to  $\frac{15}{5}$ . An analysis by Len Haeger,<sup>1</sup> architect, estimates the building cost of an attached garage at about 2.00 a square foot. This does not include land cost, overhead or profit. Compared on the same material-and-labor-only basis, the cost of a three-bed-room home is 6.72 per square foot. It adds up to this: you can build 300 to 400 square feet of extra space in your homes at approximately *one-third of the square foot building cost.* 

What about down payment? Down-payment-wise the garage is *still a bargain to sell*, especially for homes priced near \$15,000 without garage. The down payment of a \$15,000 home with FHA financing is \$705. You add only \$260 for a *double garage* evaluated at \$1200. The total down payment for this more livable, more *salable* home would still be less than \$1000. Even for a home costing \$16,000 – a double garage adds only \$360 to the down payment.

Builders who have recognized the sales significance of the garage testify that the average homebuyer can and will put down an extra \$200 to \$300 for the space he needs in a garage. One of the first things most new homeowners do is add a garage. In fact, a study of 1957 Chicago area building revealed that the number of permits issued for garages was approximately two-thirds of those issued for new homes.<sup>2</sup> **Extra usability ups FHA evaluation.** Not only is a garage cheaper to build per square foot, but also it gets an *even higher evaluation* when offered as multi-use space. A builder in Ohio reports his garage evaluation was increased from \$950 to \$1060 when he used Overhead Door Corporation's "Convertible-Garage-Room" plan to make the garage more attractive as *livable* space. He gained \$110 in evaluation for only \$40 cost.

# 2. The garage is bargain space homebuyers want

**and need.** Buying and building trends favor the garage. Surveys show the garage, competing with carports or built-in features, is the heavy favorite with homebuyers. A study made by PRACTICAL BUILDER<sup>3</sup> found 62% of homes now being built include a garage. A survey by the National Association of Real Estate Boards<sup>4</sup> reveals that 53% of realtors believe a garage to be a strong influence in the sale of a home. In a study made by ARCHITECTURAL RECORD<sup>5</sup> architects cited the low-cost extra space offered by a garage as one of the important reasons for garage popularity. Of course, a substantial share of this preference for extra space in the garage has grown with the increase in non-basement construction.

#### Extra space is essential in non-basement homes.

The total space in the average three-bedroom home just doesn't offer enough storage space, work space, play space. HOUSE AND HOME reported<sup>6</sup> recently that, according to the Small Homes Council, The Cornell Kitchen Study, and the mortgage department of Metropolitan Life, FHA standards require *less than half* the storage space needed by most young families.

**Trend favors 2-car garage.** The fact that homebuyers favor the garage as the solution to their space problem is underlined by the trend to the two-car garage. Surveys show only 15% of families actually have two cars, yet 61% of garages being built are two-car or larger.<sup>3</sup> For one-car families, the double garage means ample room to open the car door, easier loading and unloading; it offers space for storage and play; it adds structural size that enhances the appearance of their home.

## 3. Unique "OVERHEAD DOOR" ideas open garage

**for work**, **play**. Overhead Door Corporation has taken the lead in developing plans to help you *sell* this bargain space as multi-use space. One especially exciting idea is the "Convertible-Garage-Room"— a garage that converts in seconds to a livable room. All it takes is a second "OVERHEAD DOOR" to replace the blank back wall (or side wall) to open the garage to bright, inviting living space.

Garages using this sales-provoking idea have been built all over the country, winning a tremendous response from space-hungry homebuyers.

"Convertible-Garage-Room" adds multi-use space at lowest cost. Before designing the "Convertible-Garage-Room," Overhead Door Corporation engaged a market research company to interview homebuyers on their need for extra space.<sup>7</sup> This research revealed that seven out of 10 homebuyers want and need the multi-use space a "Convertible-Garage-Room" offers. It also showed that over half of those interviewed would pay \$400 and more for this feature. Yet a "Convertible-Garage-Room" adds less than \$100 to the cost of a conventional two-car garage. Materials and labor saved in the backwall make up most of the cost of the second door.

## 4. The "OVERHEAD DOOR"—your biggest bargain in satisfaction.

Ideas that make the most of the garage multi-use space are endless. And they are *practical*, thanks to the high product quality and reliable service included in every "OVERHEAD DOOR" installation. You're guaranteed that the "OVERHEAD DOOR" will fit tightly against weather and intruders, that it will open easily. There are no call-backs. If trouble should develop, it will be efficiently handled by the same factorytrained expert who installed the door—your local "OVER-HEAD DOOR" distributor.

Style, too, is an important part of the sales appeal you get with famous "OVERHEAD DOOR." New 1960 models are available with a wide selection of flush, panelled, and carved doors to give you distinctive design as a valuable sales closer.

See your "OVERHEAD DOOR" distributor. Get the full story on the tremendous sales potential in extra living space. Your "OVERHEAD DOOR" distributor has full information on the "Convertible-Garage-Room," including plans, bills of materials, and color sketches; also builder sales tools that include wall banners, newspaper ad layouts, colorful handout idea booklets and publicity releases. Look for your distributor in the *white pages* under "OVERHEAD DOOR," or write to Overhead Door Corp., Dept. HH-3, for new idea booklet, "Discovered – Extra Living Space."

Overhead Door Corporation, General Offices: Hartford City, Indiana-Manufacturing Distributors: Cortland, N.Y.; Hillside, N.J.; Lewistown, Pa.; Nashua, N.H. – Manufacturing Divisions: Dallas, Tex.; Portland, Ore. – In Canada: Oakville, Ontario.



the original upward-acting sectional door

OVERHEAD DOOR CORPORATION

<sup>1-</sup>Consultant to FHA, National Housing Center, Time-Life, Inc. • 2-Study by Bell Savings and Loan Association of permits issued, Metropoliton Chicago area, 1957 • 3-Garage door study, August, 1959 • 4-December, 1959 issue, "Headlines" • 5-Garage and carport study, September, 1954 • 6-May, 1959 issue • 7-United States Interviewing Corp., March, 1959

# Again in '60 FORD PICKUPS beat all leading New and <u>certified</u> proof that Ford

#### Ford Six delivers 13.1% better gas mileage

in second running of Economy Showdown U.S.A., conducted by America's leading independent automotive research organization. Standard 1960 ½-ton pickups of the five leading makes were purchased from dealers just as you would and tested for over-all gas economy. The trucks were run both empty and loaded, over flat terrain and hills, at low and high speeds, and under city traffic and retail delivery conditions.

Certified results show the Ford Six won *every* test—with marked superiority in the tests covering city traffic and retail delivery conditions. The combined Ford advantage for all the tests was 13.1% more mpg over the average of all the other makes tested. In fact, the Ford Six beat one competitive pickup by a whopping 27%.

The 1960 Fords not only deliver the best gas mileage of the leading makes – but they do it without sacrificing any of the performance characteristics for which Ford is famous. Ford's highly efficient carburction system meters fuel more precisely at both low and high speeds, providing the right balance between power and fuel consumption for the best economy of operation in all kinds of driving.

#### And that's not all . . .



# makes in Gasoline Economy! Trucks give you greatest gas savings

**Ford gives twice the tire life** with proven truck-type front suspension. Ford's solid front axle and leaf spring suspension system maintain constant front wheel alignment better than the "soft-type" independent suspension used on some 1960 trucks. Certified results of tests conducted to determine the tire wear of equally loaded trucks with the two types of suspension showed that, under average operating conditions, the independent suspension wears out front tires twice as fast. And the difference in tire wear can save you as much as \$300 over the life of a pickup.

#### Ford is priced below all other leading

makes!\* New 1960 Ford ½-tonners are priced

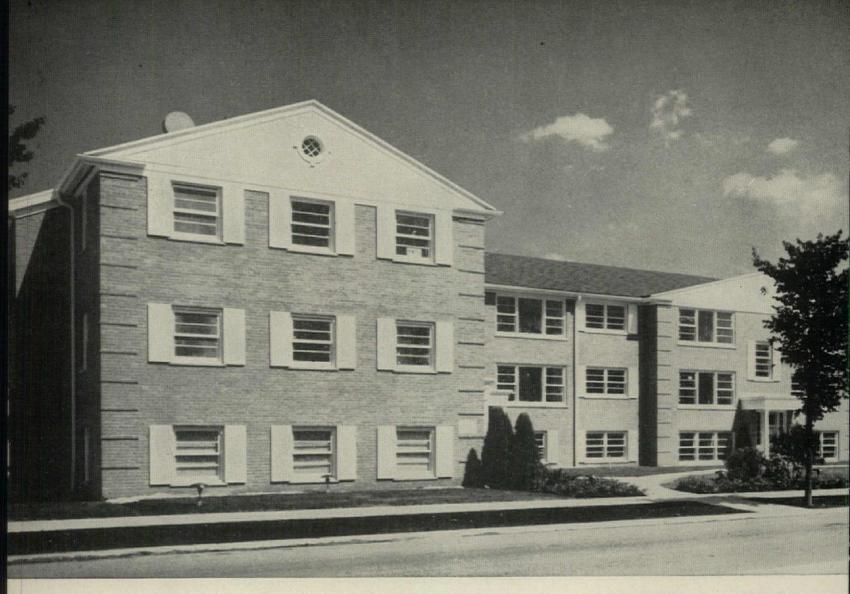
from \$33 to \$181 below those of leading competitive makes. Two Tone paint, power steering, wrap-around rear window plus many other desirable options also cost you less in a Ford. And, if you need a larger pickup a check of the suggested list prices will show Ford's prices for <sup>%</sup>- and 1-tonners to be the lowest of them all.

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\*Based on latest available manufacturers' suggested retail delivered prices, including Federal excise tax, excluding dealer preparation and conditioning and destination charges

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

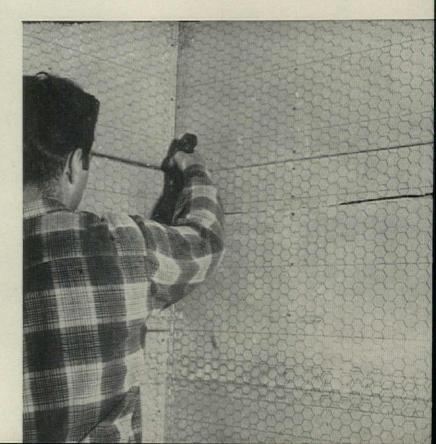
# KEYMESH · KEYCORNER ·

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

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

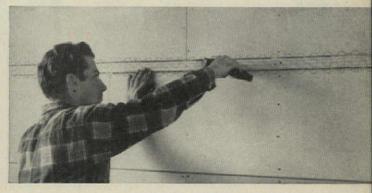
Tiled bathrooms in the Chicago project have lasting beauty with KEYMESH reinforcement. The portland cement plaster reinforced with Keymesh provides a strong, maintenancefree base for the tile. You'll find Keymesh makes any gypsum lath and plaster wall stronger and more crack resistant.

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





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



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



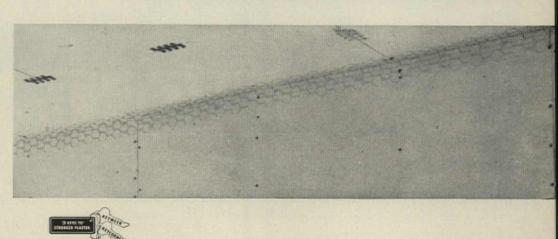
## three keys to stronger plaster

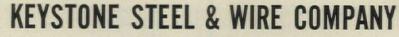
KEYSTRIP GALVANIZED REINFORCING LATH

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

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

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





Peoria 7, Illinois

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# SO STRAIGHT YOU CAN

**Always on line**...sight along the edge of a course of Hines Allwood Allweather Siding and see for yourself how flat and straight it lies. Under two coats of paint, the joints are virtually invisible. Here's *proof* of the superiority of this siding, which builders are using on expensive homes because of its durable attractiveness and on their lowest-priced models because of its economy.

#### DIMENSIONALLY STABLE FOR BETTER PERFORMANCE ... SAVES YOU 20% OR MORE ON MATERIALS AND LABOR

Hines Allwood Allweather Siding consists of a smooth hardboard surface laminated to a crossply of fir veneer and a kiln-dried lumber core. It's hot-press bonded with waterproof glue, combining the advantages of hardboard, plywood and solid wood...so rigid that *no sheathing is needed* with studs 16" on center. The fine-grained material is easy to saw, won't split or splinter and *resists abrasion and hammer dents*. Tempered and sealed with pentachlorophenol to resist moisture, decay and insect attack. No snaking, buckling, or open joints ever, regardless of changes in weather. One man can put it up! The precision rabbeted joint makes it easy for one man simply to lift each 8' length into place and nail it down —automatically level. Because of the rabbeted joint you can also get 11½" of coverage for each 12" width of siding—much more coverage than possible with ordinary lap sidings. The smooth hard surface takes and holds paint so well that less paint is needed—another saving!



NAIL WITHOUT SPLITTING
 EASY TO WORK

A ONE-MAN OPERATION



# ALLWOOD ALLWEATHER SIDING

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# SEE THE DIFFERENCE

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NEVER A BEND "We use Hines Allwood Siding almost exclusively. It's so rigid there's never a bend ... and no splitting. Once it's on we're through with it. We've never had a single call-back with Allwood Siding. The customers like the way it looks and the men like to work with it. You don't need a trim saw to cut it. There's much less waste and I notice big savings in labor. That helps me give the owner a better product.

W. D. Sanders, builder of illustrated house in Glen Ellyn, Ill.

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

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

dward Hines Lumber Co.	dward	Hines	Lumber	Co.	HH-3
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200 5	. Mic	chig	an A	venue,	Chie	cago 4, Illin	nois		
Please				samples	and	information	about	Hines	Ally

Name			-116
Title		1.	
Company			
Address			
City	Zone	State	

wood



Naturally, the Strauss twins specify Twindow<sup>®</sup>. The Strauss brothers specify Twindow in *all* their homes. They build around 600 units a year in Lincoln, Nebraska. In their sales pitch, the Strausses point up the fact that Twindow keeps a home warmer in the winter, cooler in the summer—saves on heating and cooling bills all year 'round. And there are no storm windows to put up, take down and store away. Twindow is a permanent storm window. The Strausses find that many of their buyers are on second and third homes. Having had Twindow in a previous home, they insist on Twindow in the next. This gives Strauss homes a definite sales edge over homes without Twin-Dow. Twindow-Glass Edge and Twindow-Metal Edge come in all popular sizes



for a wide variety of window styles. Write for our TWINDOW Booklet. Pittsburgh Plate Glass Company, Room 0118, 632 Fort Duquesne Boulevard, Pittsburgh 22, Pennsylvania.

... the windowpane with insulation built in



# R WINDO



Pittsburgh Plate Glass Company Paints • Glass • Chemicals • Fiber Glass

In Canada: Canadian Pittsburgh Industries Limited

Reduce hood and exhaust fan costs on your new homes!

# Another THERMADOR First...

Bilt-In Electric Oven with Integral Exhaust!

One simple installation, one electrical connection...no costly hood and building-in time. That's what you save with this new THERMADOR Bilt-In "Masterpiece" Oven with INTEGRAL EXHAUST. Powerful blower expels odor and heat through standard 4" conductor pipe. Has removable, washable filter ... or whole unit unplugs and slips out for easy cleaning ... a great selling point. Get the full story of THERMADOR'S exciting new Bilt-In oven with integral exhaust. Saves you building time and money, helps sell your new homes to buyers who have been waiting for this feature.



THERMADOR Electrical Manufacturing Co. A Division of Norris-Thermador Corporation 5119 District Blvd., Dept. 358 Los Angeles 22, Calif.

Please send literature on integral exhaust oven. I am
architect builder electrical contractor
wholesaler dealer

Address \_\_\_\_\_\_ County \_\_\_\_\_ State

#### LEADING FEATURES

- 3-spit, 2-speed rotisserie standard on this model
- · Easy-View window available
- in stainless steel or 5 decorator colors
- stranded aluminum filter provides 67.8 sq. inches of filter area
- push button exhaust blower switch on front trim panel
- rough-in dimensions 21%" wide by 31½" high by 24" deep

X

Name

"Seven Leagues Ahead"

## **TERMADOR** ELECTRICAL MANUFACTURING CO.

HOUSE & HOME

# WHAT CAN HOME BUILDERS FEATURE NEXT?

homes you build in the sixties? Most builders have run the gamut: appliance giveaways, functional floor plans, modern living themes and a host of other star attractions—all of them good merchandising ideas. But here is a *new* idea for putting glamour, livability and real buyer appeal into your homes. It can be the feature that will make people buy *your* homes, not someone else's!

What will be the big feature for the

Now here's the whole exciting story...

# RICH WOOD GRAINS at a

Royalcote Frosted Cherry No. 401

Royalcote Colonial Cherry No. 402

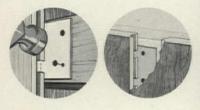
Royalcote Natura Cherry No. 400



Beautiful new cherry grains hold all the softness and warmth of wood-charming for the family room, den or bedroom.



NEW CLIP-ON INSTALLATION to lower your costs still more!



The handy  $16" \ge 8'$  ( $\frac{1}{4}"$  thick) cherry grain panels make use of an entirely new, simple clip-on system that cuts installation time like magic. Apply the first panel, insert clips into grooved edge and nail to furring or studs; then insert tongue edge into groove. Repeat, and *presto*, your home has beautiful cherry paneling.



## new low cost!

Here are exciting new Royalcote<sup>®</sup> wood-grained panels in seven of the most beautiful, professionally selected color tones you've ever seen—expertly factory-finished on genuine Masonite<sup>®</sup> hardboard. The beauty of these fine panels will be even further enhanced by a coat of clear sealer, lacquer or wax that will last for years. These beautiful wood-grained panels are ready and waiting for your new homes all at a refreshing low cost!

Royalcote Misty Walnut® No. 100 Royalcote Champagne Walnut No.102 Royalcote Rosé Walnut No. 103

Royalcote Antique Walnut No. 104



Beautiful walnut grains, too—in four smart colors! Here are good-looking panels that will enhance any decor, beautify any room in your new homes. Available in 4' x 8' panels in random grooves, five groove patterns 16" o.c., or ungrooved panels.

# Panelok "Working Walls" your next big selling feature!



MASONITE

Here's the nationally advertised Panelok® wall everyone is talking about! All the things you see on the wall—the shelves, cabinets, racks—are hooked right into the wall itself by means of hidden lockstrips between the 2' x 8' panels. Change a room in minutes . . . redecorate at will . . . shift accessories as you please—you can do it with Panelok! What a selling point for your model homes . . . what appeal to the home buyer!

Panelok is yours to feature in the handsome grains and beautiful colors you see here or plain, ready for painting. Put the walls to work in your homes!

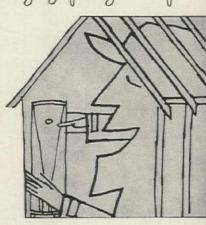
Here, then, can be your glamour sales appeal for the sixties: new grain panels . . . clip-on installation . . . low-cost paneling with the luxury look—"working walls." Find out about them (and the many selling displays you can use to feature them) from your building materials dealer or Masonite sales representative. Or write directly to Masonite Corporation, Dept. HH-3, Box 777, Chicago 90, Ill.

®Masonite Corporation-manufacturer of quality panel products for building and industry

# Announcing The World's First Water Heater That Works Like 3 THE NEW RHEEM

# with exclusive features for you...for your home buyers!

Builders SAY: "one size water heater for almost every size house... for every size family...terrific!"

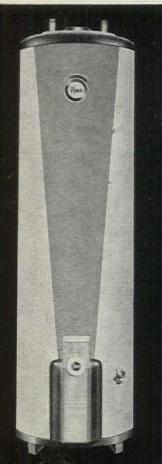


An all-new variable recovery feature lets the Rheem 30-Plus work like three water heaters in one. For the first time, here is a water heater that supplies 30, 40, and 50 gallons of hot water per hour, simply by dialing for it. Now, buyers of your homes can truly get <u>all</u> the hot water they'll ever need, without waiting for it, without ever running out of it. They simply dial up . . . or dial down. They can't outgrow it, so they never need replace the 30-Plus, an important future saving.

You the builder benefit too. You add prestige to your homes, create and keep good will, and no matter how large your models are, one water heater, the 30-Plus handles hot water demands equally well for almost all size homes.

Install the totally new Rheem 30-Plus water heater in the homes you build and you immediately prove four important points to your home buyers:

- That you're insuring their comfort and convenience in the growing years to come.
- 2. That you're guaranteeing a big future saving.





HOME BUYERS SAY: "one size water heater we won't outgrow because it works like 3 in 1...perfect!"



- That you're using the very latest in comfort products.
- That you're insuring trouble free performance by using the very best, a fully warranted Rheem water heater.

HOW CAN A WATER HEATER SAY ALL THESE THINGS? No ordinary water heater could, but then, the 30-Plus is not an ordinary water heater, but a long-awaited development that is the exclusive product of Rheem. The 30-Plus is the only variable recovery water heater today. It installs in a minimum of space because its tank is a compact 30-gallon size. It's feature-packed and totally new. The 30-Plus even lets you offer a remcte-control dial ... the very latest in water heater convenience.

Contact your Rheem representative or wholesaler for the full story on this remarkable new water heater that will say so much about you and the homes you build. The Rheem man will tell you of all the merchandising aids available to help sell this feature and your homes.

RHEEM MANUFACTURING CO. / HOME PRODUCTS DIVISION / 7600 S. Kedzie Ave., Chicago 52, III., Dept. HH-3 You can rely on Rheem...the big name in comfort products for the home—Water heaters, heating and air conditioning, oil and gas-fired boilers, plumbing fixtures.



Plate No. 1066

# Versatile Romany-Spartan ceramic tile adds a touch of sales magic

Today's home buyers expect ceramic tile in the bath-love it in the kitchen. Now, with Romany-Spartan's broad range of sizes, colors, shapes and finishes, you can turn buyer preference for ceramic tile into extra profit for you. At little or no added cost over conventional materials, you can create exciting new decorative effects throughout the house. This living room, with its fireplace wall and hearth of permanent, care-free Romany-Spartan is a striking example of tasteful individuality. Or how about a tile feature wall and floor in the activities room or living kitchen... or a tiled, built-in planter? The sales-making possibilities of Romany-Spartan tile are limited only by the imagination. Before you start another house, why not talk it over with your architect or tile contractor? United States Ceramic Tile Company, Department HH-11, Canton 2, Ohio.



Write for these two color booklets —they're free: "Portfolio of Ideas on Home Decorating with Ceramic Tile" and "Color Harmony Guide", illustrating the complete Romany-Spartan tile line and including a helpful chart suggesting harmonious color combinations.

## UNITED STATES CERAMIC TILE COMPANY



D

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# add quality...cut costs choose Rimco "Slide"

That's right! Rimco Slide Wood Window Units give more quality, yet, help cut your building costs. Reduced installation time: all parts are pre-assembled . . . fitted with beautiful hardware . . . ready to install. That's why we go further than saying just "window" . . . we say "window unit." Look at these features and you'll agree Rimco Slide is your best buy: *both* sash removable for ease of painting and storage while plastering; Selected Ponderosa Pine protected with deep-penetrating Woodlife preservative applied by the Dri-Vac *controlled* process; fully weatherstripped with anodized aluminum; wood slides over satin-finish aluminum for smooth, quiet operation.

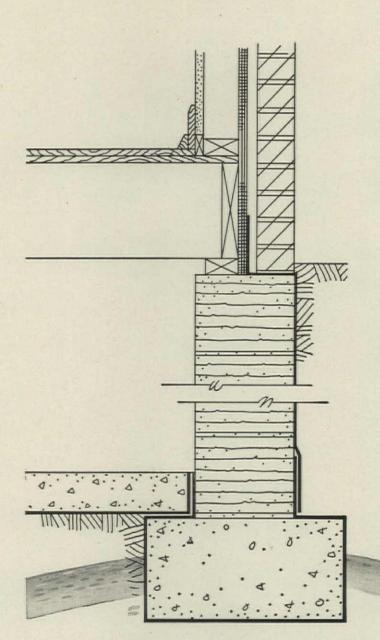
Yes, for more features at less cost, more and more progressive builders are choosing Rimco.

Ask your Lumber Dealer for more information on the complete Rimco line of quality Wood Window Units or write Department "B."



ROCK ISLAND MILLWORK COMPANY FACTORY DIVISION Rock Island, Illinois

DESIGNED AND ENGINEERED BY ROCK ISLAND MILLWORK COMPANY . HELPING BUILD AMERICA FOR OVER 90 YEARS



# How to make your new home

Line footing trench with 4 or 6 mil DURE-THENE polyethylene film before concrete is poured. Use enough film to extend 2-foot flap up side wall and under floor area. Cement DURETHENE to wall sheathing or top of foundation wall  $\varepsilon$  grade with tar. There is no need to fasten the wall film where it overlaps the footing film—backfill will hold it in place.

Before pouring concrete floor, place DURE-THENE directly on fill or earth. Make sure DURETHENE overlaps footing film for a good seal. Normal care should be taken not to puncture the film.

Installed around and under new home foundations as shown here, DURETHENE polyethylene film gives permanent protection against damaging moisture. Here's how you profit when you install DURETHENE: labor and construction costs are reduced because DURETHENE is lightweight and easy to handle, can be applied in a jiffy. And since it is a *permanent* moisture barrier, expensive call-backs are eliminated. Homes protected against dampness by DURETHENE will be easier to sell because "Durethene" Dry is a recognized symbol of quality construction. Your customers will be impressed by the fact that their homes will be more livable when they are protected for life against ugly, damaging foundation dampness.

DURETHENE comes in convenient widths up to 40 ft., 100 ft. long, black or clear, 4 or 6 mil. It is also excellent for flashing, crawl space, closing-in material, cement curing, in walls, and for many more construction uses. DURETHENE is FHA-approved. For the name of your nearest DURETHENE dealer, write Koppers Company, Inc., Durethene Plant, 7001 W. 60th St., Chicago 38, Ill.

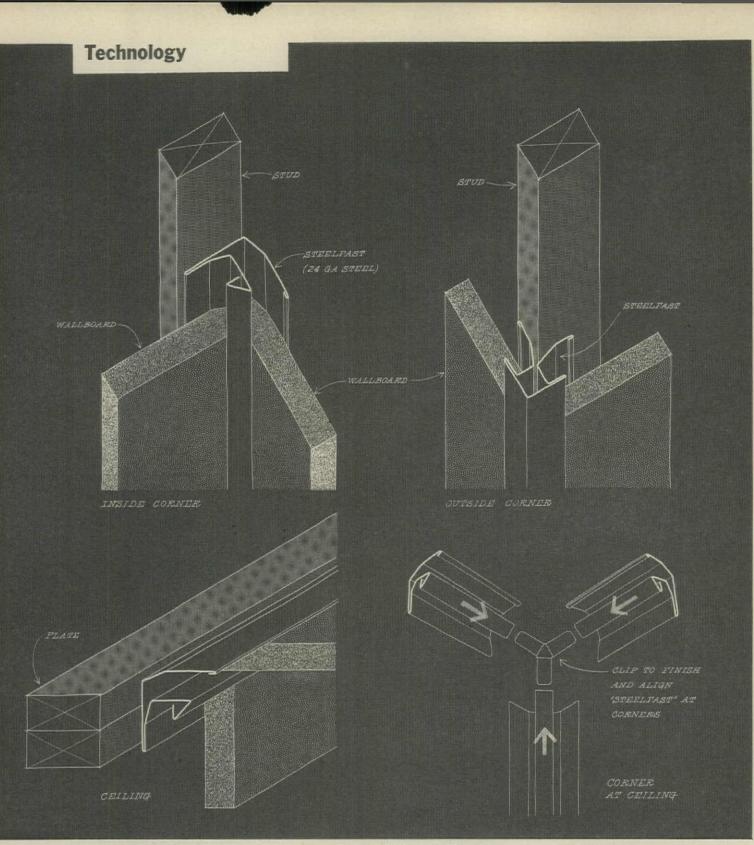
DURETHENE advertisements will appear in these national and consumer magazines and reach millions of potential customers:

Consumer Campaign: The Saturday Evening Post • Newsweek • U.S. News and World Report • Wall Street Journal • Forbes • Fortune • New Homes Guide • House Beautiful's Building Materials • House and Garden's Book of Building • Living's New Guide to Home Planning & Remodeling • Construction Market: House and Home • Practical Builder • Engineering News Record • Sweet's Catalog (Light Construction File) • Building Supply News • Southern Building Supply



FREEI Colorful Desert Dan Certificate

Ask your dealer for free Desert Dan certificates. Display them in homes you sell, to tell your customers the home they inspect is "Durethene" Dry. They will be looking for it.



STEELFAST CHANNELS are quickly nailed to posts and plates. Wallboard is slipped in groove to complete the joint.

# New drywall system cuts building time two days

In the new "SteelFast" system, drywall is held at all ceiling and corner joints by steel channels, which have been nailed to plates and corner posts. This eliminates taping and successive coats of joint cement—and the time wasted while the "mud" dries. "We cut construction time this way at least two days," reports Savannah Builder Clayton Powell (who conceived the system and developed it with the help of NAHB Research Institute and US Steel Corp).

Says Powell: "The direct and indirect economies [in supervision, production control, construction financing, interest on capital] in cutting two days off a schedule can mean savings of anywhere from \$100 to \$300."

In addition:

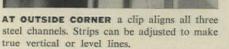
1. Installation costs are lower. A time and cost study made

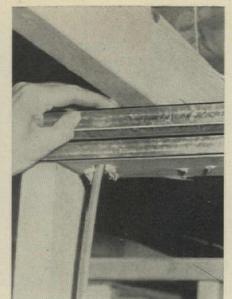
by Powell in a 1,200 sq ft test house showed the new system took ten less man-hours, a saving that outweighs the small increase in materials cost (for details, see table opposite). Moreover, NAHB's Ralph Johnson points out: "The unit prices of steel strip devices will probably drop when they are produced in quantity [which would increase the direct saving]. Savings would also be greater for builders with higher lumber and labor prices than Powell's."

2. Quality of finish is higher. Plumb and level walls are assured because the SteelFast channels can be adjusted to correct for uneven joists and out-of-plumb posts.

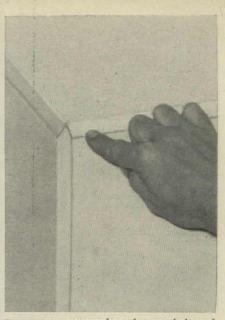
The system will be available to builders as soon as a few refinements are worked out, "hopefully in time for the 1961 building season," say NAHB officials.







**AT CEILING** gap between steel channel and joist eliminates problem of wavy ceiling. No back-up lumber is needed at top plate.



**FINISHED CORNER** shows how steel channels meet in perfect alignment. Steel is finished in the same way as the wall surface.



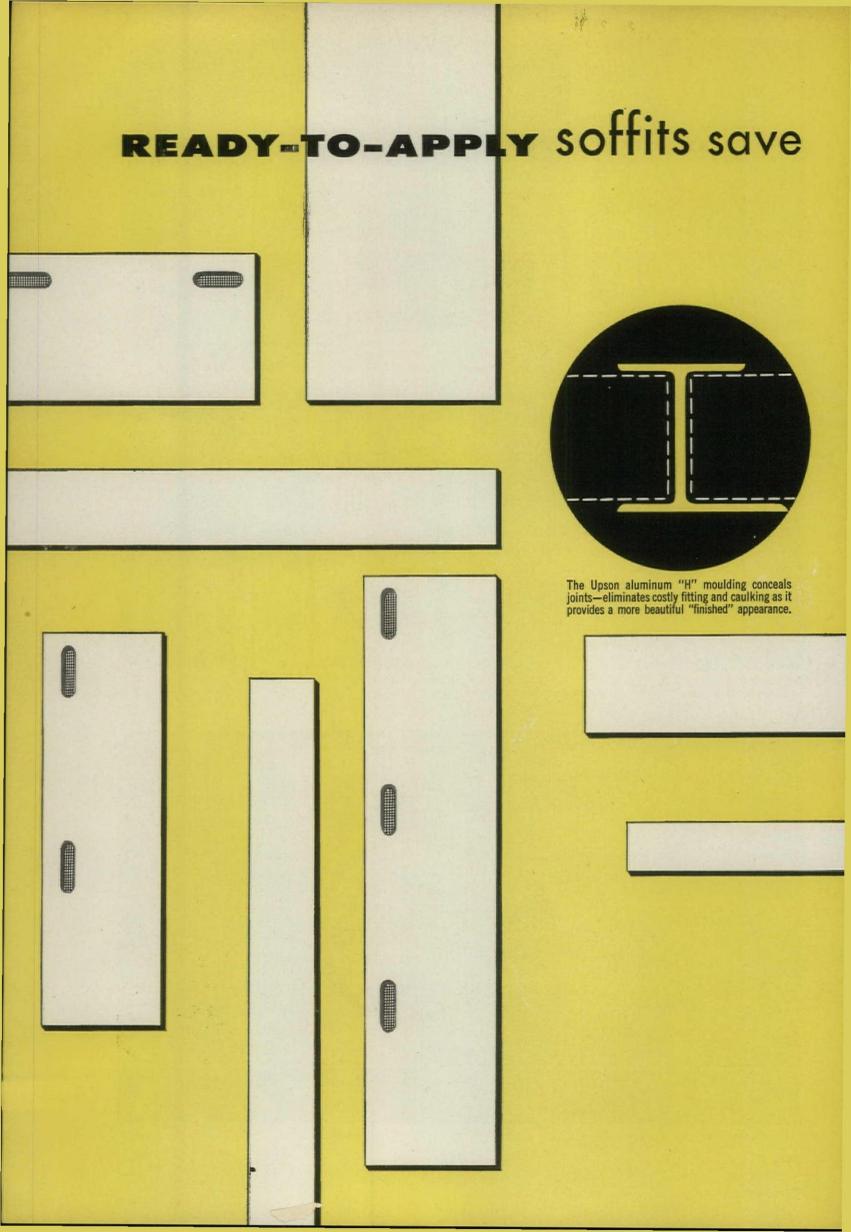
**WALLBOARD** is installed beginning at one corner and continuing around room. Joints between panels are taped and bedded, but cement in these thin cracks dries quickly, does not slow construction.



**CEILING PANELS** are installed from walls toward center of room. Final, center panel is placed by bowing it slightly so ends can slide into SteelFast channel. Ceiling joints are also taped and bedded.

	TIME & MA METAL SYSTER		ALIS S: materials		Y (TEST )		e : 1200 sq FT Iventional S				EOOMS)
qu	experimental item	unit Cost	cost total	man hrs	labor cost@ <sup>\$</sup> 3/w	qu	item	unit cost	cost total	man hrs	labor cost@ <sup>#</sup> 3/hr
48-8'	INSIDE ANGLES	10‡ FT	\$ 38.40			480 LIN	218	9¢.FT	\$ 42.20	2	\$ 6.00
44-8'	INSIDE CORNERS	10 ¢.FT	35.20			110 LIN	2×8	14¢FT.	15.40	2	6.00
44	INSIDE CORNERS (STP)	10¢ <u>E</u> A	4.40								
16-8'	OUTSIDE CORNERS	10¢ F'T	12.80			10	DUCISIRAPS	504 EA	5.00		
16	OUTSIDE CORNER, S (STP)	10¢EA	1.60	8	\$24.00	15	CORNER BEADS	5¢ FT	6.00	I	3.00
4400	WALLBOARD	52.00M	228.00	29	87.00	4400	WALLBOARD	52.00.M	228.80	24	72.00
4	ROLL TAPE	674.RL	2.68	6	18.00	7	ROLL TAPE	674 RL	4.69	61/2	19.50
6	BAGS JOINT CEM- 3 COATS	2.40	14.40	10	30.00	11	BAGS JOINT CEM-3 COATS	2.40	26.40	19 <sup>4</sup> z	58.50
	SANDING			2	6.00		FIN SANDING			10	30.00
CONTRACTOR OF THE OWNER.	TOTAL LABOI TOTAL MATER		<sup>8</sup> 337.48	55	\$165.00 337.48	of the local division of the local divisione	TOTAL LABOR TOTAL MATER	and a second	\$328.49		\$195.00 328.49
	TOTAL COST			i	\$ 502.48		TOTAL COST			3	\$ 5 2 3.49

COST COMPARISON of new and conventional methods of applying wallboard shows savings in lumber and labor.



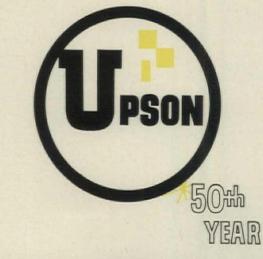
# on-site cutting and fitting costs

Primed, Vented, Screened Immediate delivery of standard sizes from stock • widths: 12"-16"-24"-32"-36"-48"

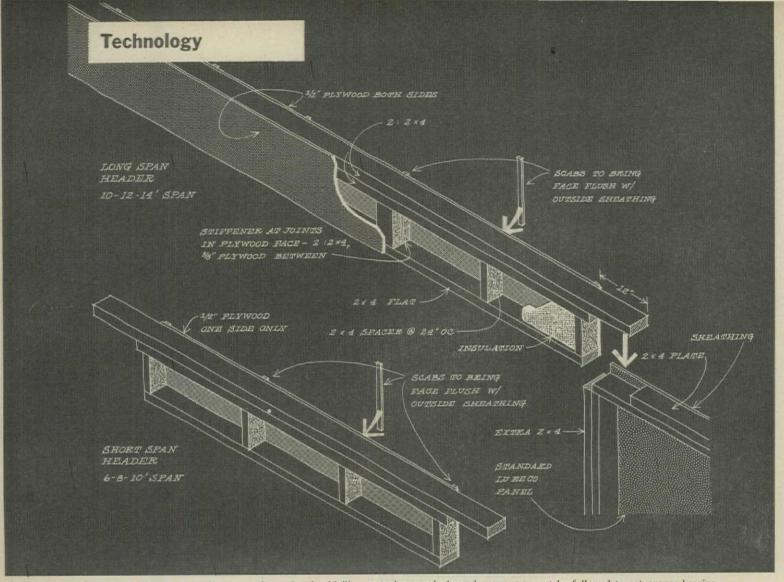
lengths 8' and 12'
 Now widely used on hundreds of projects.

Average savings are being reported at 25%. No cracking, splitting or checking troubles. No waste. Delivered to your job cut to size with or without screened vents. Clean straight edges. Aluminum "H" mouldings supplied to conceal joints. Water-proofed, white prime coat finish. Excellent painting qualities.

A trial order will convince you. Wire, write or phone The Upson Company, 130 Upson Point, Lockport, New York.



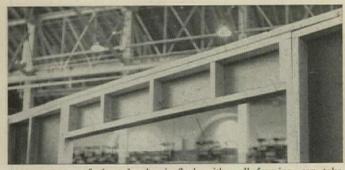
THE UPSON COMPANY • 130 UPSON POINT • LOCKPORT, NEW YORK PRIMED SIDING • DUBL-BILT • SOFFITS • ALL WEATHER • STRONG-BILT



TWO NEW HEADERS have 2x4 chords and spacers, plywood webs. Nailing procedure worked out by SHC-BRC must be followed to get proper bearing.

From the Small Homes Council-Building Research Council:

# Here are two new built-up headers—for openings up to 14'



INSIDE FACE of short header is flush with wall framing, can take any surface finish. Note how beam ties into wall framing and top plate.



**OUTSIDE FACE** of headers is plywood. Scabs make up difference in thickness between sheathing and plywood, give flush surface for siding.

The two beams—one for 6' to 10' openings, the other for 10' to 14' openings—are designed as headers to span large windows, sliding glass doors, garage doors, and the like.

Both are designed for shop fabrication. Both install easily in LuReCo or other wall panel systems and conventional framing. They are built up of 2x4 chords and spacers with  $\frac{1}{2}$ " plywood webs, nail-glued. They are stronger than solid wood members of the same weight and they are dimensionally stable.

There are two important design differences between the two beams: the long-span header has  $\frac{1}{2}$ " plywood webs on both sides of the 2x4 chords and spacers (forming a box beam) and special stiffeners at joints in the plywood webs (see drawing). Joints in the webs must be staggered. The short-span beam has a plywood web on the exterior face only.

To speed finishing, the inside web of the longer header can be made of overlaid plywood, taped and joint-cemented to the  $\frac{1}{2}$ " wallboard. The inside of the shorter header is set flush with wall framing, can be faced with any material used on the wall.

On the outside face of either header, scabs are used to provide a flush nailer for siding (see bottom photo).

The minimum depth of either header is 14". A 14' header of this depth will carry trusses spanning 27' on 2' centers. For loading tables covering beams of any depth and span and detailed information on fabrication and installation, write for Instruction Sheet 22, University of Illinois Small Homes Council-Building Research Council, Urbana.

New type rocker switches.

Styled to blend with today's appliances.

Filtered air is exhausted up at 45° angle away from face and cabinets.

ASCO DOES IT AGAIN!

Heavy duty grease filter.

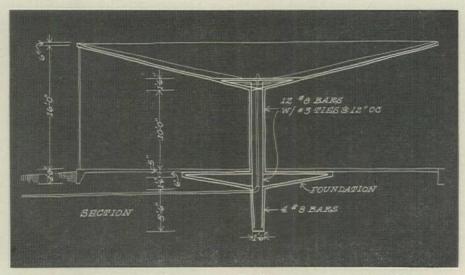
Largest, thickest activated charcoal filter on the market.

# **NEW DUCT-FREE RANGE HOOD**

60 SERIES

Once again Fasco leads the field with product performance and styling features. New Duct-Free hood has all the wanted features that have already captured so much interest. This is the Duct-Free range hood that answers the problem of installations that are difficult to exhaust to the outside. Smart style, efficient filtering and top quality construction all add up to a Duct-Free range hood you should learn about before you do another job. Write for complete catalog which includes all the other Fasco ventilators and range hoods.

CO INDUSTRIES, INC. Dept. HH360, North Union at Augusta, Rochester 2, N. Y.



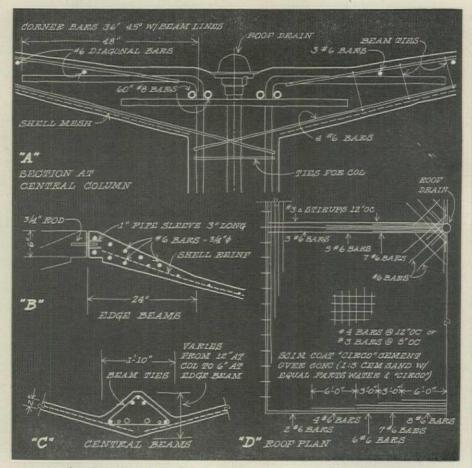
CROSS SECTION shows general construction. Details are shown in drawing below.



Hyperbolic roof cuts building costs 25%

For its new mill shop in Ogden, Utah, Edman & Jolley Constr Co used an unusual system built around a hyperbolic paraboloid roof. Cost for the basic structure is \$4.50 a sq ft (vs an average for similar space of \$6 to \$7).

Roof is 48'x48' of 2" reinforced concrete (detail D below) with heavier edge and central beams (details B and C). It is supported by a central reinforced concrete column. Roof water drains to the central column (detail A). Curtain walls are laminated pine 2x4s. The floor slab is 5" concrete. Architect: Stephen McDonald.



DETAILS (keyed to text and drawing above) show construction of hyperbolic paraboloid roof.

## Reheat cuts humidity in air-conditioned houses

In hot weather, any cooling system will cut humidity to a comfortable level moisture from the hot humid air will be continually condensed on the cooling coils of the air conditioner. In cold weather, the air is normally dry and when heated will hold much more moisture—the winter problem is over-dryness, not humidity.

But in mild weather, an air conditioner cycles on and off. Moisture condensed from the air during the on cycle will be re-evaporated while the system is off so that the room air stays humid.

A new solution to this problem is being advanced by air-conditioning engineers. The answer: constantly overcool the air in the conditioner to remove moisture, then reheat it to a comfortable temperature for circulation.

Heat for reheat can be supplied in many ways: by a direct-fired furnace, a steam or hot-water coil, electric heating units, duct heaters, or supplemental heaters in a heat pump.

One self-contained dehumidificationreheat system has been developed by Ranco, Inc. Ranco has designed valves to control the coolant flow in a heatpump system. During mild humid weather, the flow of coolant from the compressor is diverted so part passes to the outside coil, where the accumulated heat is dispersed. The cold coolant then flows to the front section of the inside coils where it cools and drys the room air passing over it. The other half of the hot compressed refrigerant is diverted to the back section of the inside coil, which becomes a heating element, and warms the cold dry air to a comfortable temperature before rejoining the main coolant stream. The excess moisture removed by the front, or cold, coils remains on the coils as frost until drained away during a defrost cycle.

### British study shows "little saving" from prefabbing

In sharp contrast to the growing success of component building and home manufacturing in the US, prefabrication is not catching on in Britain. Reporting on a government study of conventional vs prefab building, *The Economist* says: "It was found that little saving in labour cost was gained by transferring work from the site to the factory; that this saving was sometimes more than offset by higher factory overheads and profit; and that labour cost on the site was often increased....

"The study concludes that further evolution of traditional processes such as use of larger blocks for external walling—may hold greater promise of economy than the introduction of radically different principles of construction." /END



# NEW 3000 WATT

POSITIVE PMA\* POWER BY BORG-WARNER

# **ZEUS**

Electric Power Supply

## NO BRUSHES NO SLIP RINGS NO COMMUTATOR

Now...the all-new ZEUS GW-300 model— 3000 watts of quiet ac electricity you can depend on...anytime...anyplace. The missile flight proven **Permanent Magnet Alternator**\* connected to a rugged gasoline engine delivers full power rating hour after hour **without** voltage loss or overheating. Less maintenance is required because there are **no** brushes, slip rings or commutator to wear out. Non-integral fuel tank permits longer running time without refueling. Simply converted to butane-propane or natural gas if required. You get **more** power with less maintenance at lower cost with the powerful ZEUS Model GW-300. Write for complete details today.



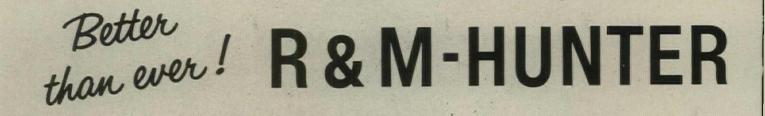




FARM

Rugged 1250 WATT Models also available!!

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# HONEYCOMB HEAT EXCHANGER

Continuous interlocking fins provide fast heat transfer from element to air.

Reflective aluminized steel baffles enclose Honeycomb heat exchange cells.

Double spring mounts absorb \_\_\_\_\_\_ expansion and contraction silently. Fast action, reliable calrod heating element.

#### FEATURES

**High and low density** — For concentrated heat loss area, higher wattage sections may be used (below a window, for instance). Low wattage sections spread heat source evenly for better comfort control.

Automatic controls—Individual built-in room thermostat sections control comfort levels in each room. This eliminates wasteful overheating in one area to provide comfort in another. Insures efficient use of power.

**Complete safety**—Casing temperatures are always low. Can't harm sensitive skin of children. Won't damage fabrics that can be ironed with "medium" setting.

Thermal cut-out—Each baseboard section has a thermal cutout switch. This prevents any overheating that might

occur if the air flow through unit were restricted or shut off.

**Silent operation**—Operates without sound. Heat exchange assemblies and baffles are separately spring mounted to prevent expansion or contraction sounds resulting from cycle operation.

Accessories—Convenience Outlet Sections (240 or 120 volt). Dummy Sections. Matching End Plates and Corner Pieces. Built-in Thermostat Sections. Wall Thermostats also available for use where desired.

**Other data**—240 and 208 volt sections available. Lengths of sections: 32'' and 48''.  $6\frac{3}{8}''$  high x  $2\frac{1}{4}''$  deep. High density sections approved for dual voltage.

# New, exclusive HEAT EXCHANGER increases warm air delivery

In the new R&M-Hunter Convection Baseboard, heating engineers have combined a fast-action, highly efficient calrod heating unit with newly designed Honeycomb heat cells of non-corrosive aluminized steel. The result is greater metal-toair ratios, providing more efficient heat transfer at lower surface temperatures.

> AIRFLOW DESIGN DELIVERS HEAT WHERE IT'S NEEDED

Directional outlet speeds circulation of

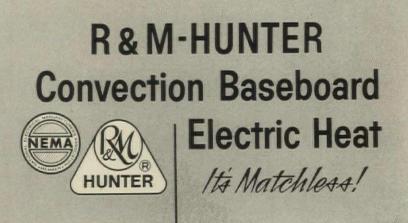
warm air into room, away from wall. The advanced design of the R&M-Hunter Convection Baseboard achieves a 9 to 1 ratio of warm air delivery to radiant heat.



# **Convection Baseboard**



# MAIL COUPON FOR COMPLETE DATA



Hunter Division—Robbins & Myers, Inc. 2452 Frisco Avenue, Memphis, 14, Tenn.

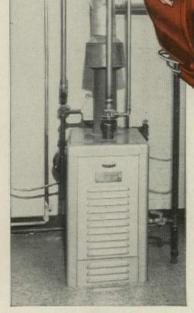
Send complete data on the new R&M-Hunter Convection Baseboard to:

Name

Address

# 14,000 JAM THROUGH MODEL HOME ...

SEE HOW Hydronic\* SYSTEM DOUBLES USUAL LIVING AREA



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

#### "Hydronic Homes" sales promotion for builders

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

#### **B&G Booster Pump**

The B&G Booster is a silent, vibrationless electric pump which circulates hot water through the heating system—automatically keeps indoor temperatures at whatever degree desired. This key unit and other auxiliary Hydro-Flo equipment can be installed on any hot water boiler. M & I Supply Co., Muskegon, Michigan, sponsored this home to show builders how a properly designed hydronic heating system could produce 2400 sq. ft. of usable floor space in a 1200 sq. ft. house.

This show home has three bedrooms, one full and two half baths, living room, separate dining room and completely usable basement.

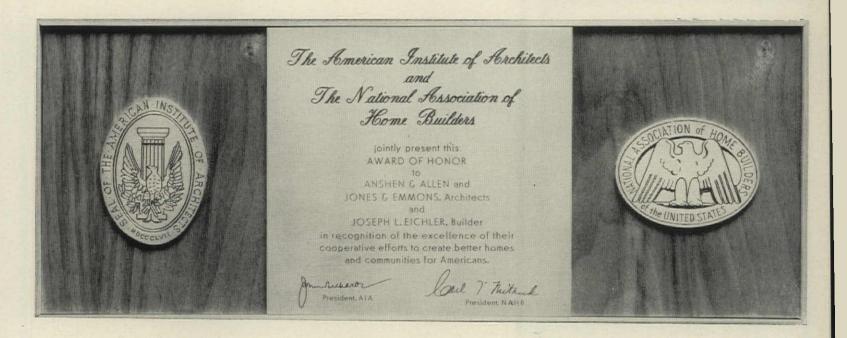
Full use of the basement was made possible by the hydronic heating system. It includes a family room, playroom, half bath, laundry, hydronic heating plant, water heater and storage areas. The playroom floor is so warmed that young children can play in the coldest weather without need for extra clothes.

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

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



## What the leaders are doing



The winners of the first AIA-NAHB annual award say:

# "Architect-builder teamwork is good business for everybody"

"It is such good business," says Joseph Eichler (Eichler Homes, Palo Alto, Calif.) "that it has helped us become the nation's biggest volume builder of over-\$25,000 houses (900 last year). And it helped us sell 45 houses in the Los Angeles market even before we opened down there in January."

And says Architect Quincy Jones of Jones & Emmons: "Working closely with Eichler has been good business for us. Over the past ten years it has meant an \$11 million, 3,000 house volume for us, as it has for Eichler's other architect team, Anshen & Allen.

"And it has helped us get all kinds of other commissions. We can trace almost all our commercial and public work to house designs and community planning for Eichler Homes.

"It is my guess, too, that almost all the architects doing the top quality work in the US today got their start in residential work, either with their custom houses or with designs for professional homebuilders who really wanted to work closely with architects."

Eichler, Jones & Emmons, and Anshen & Allen are joint winners of the first annual honor award (H&H, News, Feb) made by AIA and NAHB for architect-builder cooperation.

The AIA *Journal* has also recognized the need for architect-builder teamwork by devoting its entire first issue of 1960 to the subject.

#### Journal lectures industry on need for cooperation

"Pure poppycock," says AIA's magazine of architects' and builders' usual reasons for not working together. It warns the architect: "It is imperative that he assume the task of designing all the nation's houses, not just the choice and most expensive."

It warns the homebuilder: "As the leader in one of the nation's greatest industries, as the man responsible for building vast suburban areas now being criticized, it is imperative he employ the finest talent available to him."

Idea for the "let's join hands" issue came from Architect Ed Fickett, who headed the jury of builders and architects that made AIA-NAHB award.

#### "Teamwork is necessary to produce houses of value"

So says Architect Fickett, who designs houses for NAHB ex-President Nels Severin in San Diego.

"The architect of today," Fickett explains, "is not an impractical dreamer who knows nothing about costs. In most parts of the country there are capable architects working as part of a builder team who realize that homebuilding is a profitable and satisfying design field."

Two of the 16 articles in the issue are by Fred Emmons of Jones & Emmons and Robert Anshen of Anshen & Allen.

Builders who wrote for the issue include Bob Schmitt of Berea, Ohio, exchairman of NAHB'S Research Institute, and Ike Jacobs of Fox & Jacobs, Dallas.

Says Schmitt: "Schools of architecture must formally recognize homebuilding as a production specialty as well as a general part of architecture."

Says Jacobs: "Perhaps if each side gave a little we would be able to do the kind of job the public deserves."

#### What the leaders are doing

"Development builders" win American Home awards \_\_\_\_\_ page 202

Varying entrance design avoids look-alike look page 206

New ideas in building and selling from all over page 208



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

Your built-in appliances go a long way in carrying the quality appeal of your homes to your prospects—especially a built-in KitchenAid dishwasher which says immediately and emphatically, "This is a quality house!" Home buyers want the convenience of automatic dishwashing and they know that KitchenAid represents the finest made.

KitchenAid's reputation for rarely needing service is a very important long-range sales advantage for the builder. The word-of-mouth advertising of a satisfied homeowner pays off again and again in more homes sold.

Millions of home-buying prospects know about the superior features of KitchenAid through continuous national advertising...through other satisfied users. They know that no other dishwasher can match its washing and drying features. And they know that the builder who includes a KitchenAid dishwasher in his plans is a *quality builder*.

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Please send complete in complete line of Kitchen	nformation and specifications on the Aid dishwashers.
Please send name of ne	arest distributor.
Name	
Firm	International Station
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City	ZoneState

# Each time you specify KitchenAid ... it starts to sell for you

# **Plywood with a Plus**

## **SAVE 30% PLUS ON SINGLEWALL CONSTRUCTION**

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FHA accepted singlewall construction eliminates sheathing costs and labor. Combine this new technique with CreZon overlaid lap, bevel or panel siding and you'll save at least 30% in material and labor costs on installations of comparable quality.

CUT LABOR COSTS ... CreZon overlaid siding goes up quickly, easily, cuts cleanly, requires fewer nails for application.

CUT PAINT COSTS...CreZon is easy to paint. Two coats do the job of three. You save one-third the cost of paint and labor.

**EXTRA DURABILITY...** CreZon is a permanent wood fiber, resin-fused overlay that eliminates cracking, checking and grain rise in exterior plywood. Paint lasts twice as long. Write: Crown Zellerbach CreZon Sales, One Bush Street, San Francisco 19, California.



BEVEL SIDING of CreZon overlaid plywood is applied directly to studs.

These leading plywood manufacturers produce the highest quality overlaid ply-wood by bonding CreZon to DFPA Tested exterior grade plywood:

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Corp. **Evans Products** Company

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United States Plywood Company

Washington Plywood Company, Inc.

Canadian Western Lumber Co.

MacMillan & Bloedel, Ltd.

Western Plywood Co., Ltd.



FHA ACCEPTED. Singlewall construction with CreZon saves 30% plus.

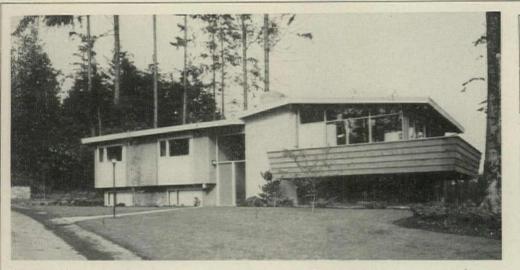


CROWN ZELLERBACH CREZON SALES

# "Development builders" win American Home Awards

"Nine times out of ten," says *American Home* in its February issue, "the best buy in a home, whether it's priced at \$10,000 or \$40,000, is the one offered by a development builder." Here are seven of 17 houses the magazine has published as this year's outstanding values in the 17 states where most new houses are built:

UPPER LEVEL



**In Seattle,** E.B. Vaughters built this \$25,250 two-story house with a split-level entry from a design by Architect Seth M. Dulcher. There are 1,772 sq ft of living

space, plus a two-car garage at the rear where the lot slopes downhill. The wood deck is 6' wide and open to both sides of the 20'6"x12'6" living room. Upper level *STUDY REC RVI GARAGE COVER LEVEL Construction Construction* 

rooms. Downstairs: large recreation room

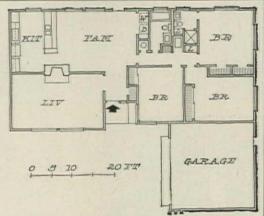
and study that can double as a bedroom.

DIN

DECR



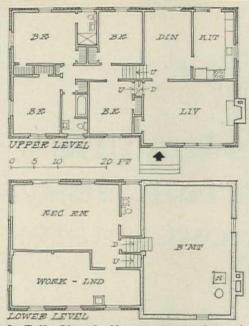
In Costa Mesa, Calif., Dike & Colegrove offers this 1,601 sq ft L-shaped house for about \$20,000. Designed by Architect Harold A. Carlson, it has a stucco and brick-veneer exterior, with wide eaves shading glass areas. The floor plan provides good separation of sleeping from living areas, and there are two large living areas —front living room with fireplace and rear family room open to the kitchen. A compact utility core includes two full baths, utilities, and washer-dryer closet.





**In Indianapolis,** Perine Development Corp gives buyers 1,509 sq ft of living space in this house that sells for \$15,990. There are two full baths—the one off the master bed-

room is compartmented. The front kitchen is close to front door and garage (through door in family room). There is space for washer and dryer in closet at one end of the kitchen. Elmer J. Son, who designed the house, also designed and built a nearly identical house in Dayton that won the magazine's Ohio award.



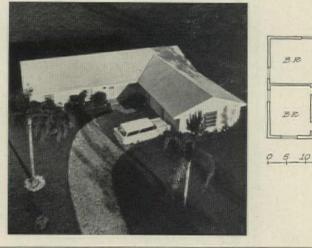
**In Falls Church, Va.,** Kettler Brothers offers this 1,784 sq ft split level house for \$31,450. The design by Architects Patterson & Worland has a Williamsburg flavor, and

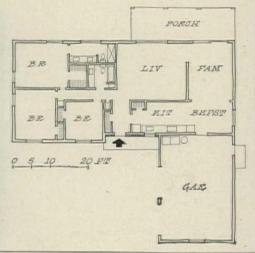


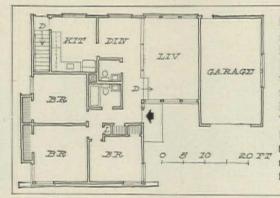
the plan is well suited to a lot that slopes to the rear. There are two indoor-outdoor living areas—one terrace off the dining room on the middle level and one off the

lower recreation room. Fine detailing, as in the round gable louver, raised costs and this house is the highest priced of the 17 houses picked by the magazine.

In Orlando, Fla., Builder Gerald A. Gay designed and built this 1,728 sq ft house to sell for \$21,500. (Gay also developed the large tract where it is located. A canal leads to a 640-acre lake where buyers can fish, swim, and boat.) The masonry house has three bedrooms and two full baths at left of entry. Entry opens also to 29'-wide kitchen-breakfast area next to garage and to 20'x15'4" rear living room. There is a large family room with sliding glass doors opening to a 30'-wide screened porch facing the canal. The 29'4"-wide garage has ample room for two cars and laundry.

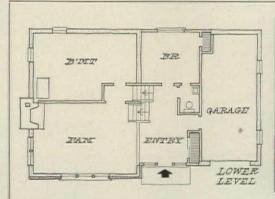






In Madison, Wis., Midland Realty's Lshaped contemporary with 1,500 sq ft of living space sells for \$18,900. Architects Miller & Waltz avoided cutting up space with a separate dining room by dropping the living room two steps and separating living and dining areas by a low divider. This permits the two areas to borrow space from each other while preserving their functions. House has 1½ baths and three bedrooms, two with wide closets cantilevered from the bedroom wing to gain space.

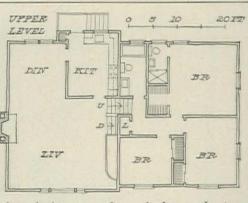




In Bloomfield, Conn., Green Acres' split level has 2,018 sq ft of living space and sells for \$25,225. A 10'-wide entrance foyer is open to the 20'8"x13'6" mahogany-pan-



eled family room on the lowest of the four levels. The main living areas are a half flight up from entrance and garage. The house has four bedrooms and  $2\frac{1}{2}$  baths—



three bedrooms and two baths on the top floor and one bedroom and half-bath at the rear of the entry. As with other houses shown, the price includes land cost.

# Builder chooses Insulite Primed Siding for fast, easy application-without waste

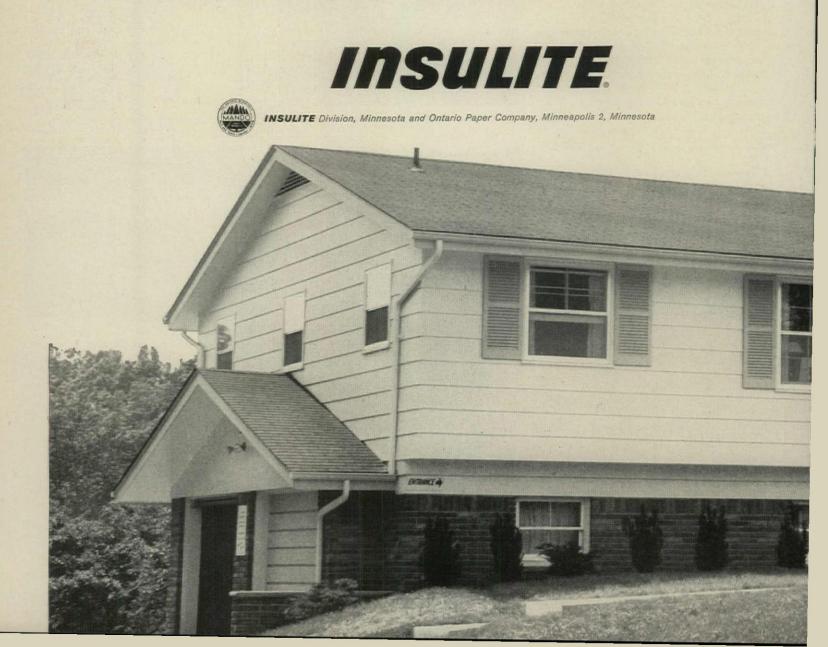
Insulite Sheathing also used on these unique "no bedroom, no bathroom" homes by Austin Building Company of Detroit, Mich.

"For our new 'Privazone' homes, we're using Insulite Primed Siding and Insulite Sheathing," says Don Muehl of Austin Building Company in Detroit. "From our standpoint, as builders, Insulite Primed Siding offers the moneysaving advantage of fast, easy application with no waste. And our homeowner customers get beauty, durability, with a minimum of upkeep."

These Austin homes feature an unusual room layout, with private "suites" for sleeping and living; other suites for dressing and bathing.

Austin Building Company is also using Insulite Sheathing for these new homes. Its extra strength provides additional bracing, eliminates wasteful breakage, aids in straightening out studs. Dimensional stability reduces call-backs due to buckling. And Insulite Sheathing is marked for nailing placement on the stud lines to save time, assure best results. Many leading builders are now using Insulite Sheathing under brick veneer because it's protected throughout by an integral asphalt treatment that keeps moisture out, eliminates the need for building paper.

For complete information on how Insulite products can save time and money, just call your nearby Insulite Sales Representative; or write Insulite, Minneapolis 2, Minnesota.





GOES UP FAST! Insulite Primed Siding is fast and easy to apply. No prime coat is needed. Careful inspection and packaging at the factory means it is 100% usable on delivery. 8' and 16' lengths, 12" wide for 10%" exposure; also 4' x 8' panels.



**EASY TO SAW!** Insulite Primed Siding cuts easily on the job; won't crack or split, eliminates wastage. Resists paint blistering, provides beauty and durability with a minimum of upkeep.



**EASY TO NAIL**: The high-density, resin-impregnated siding has no structural or surface grain, no knots, no slivers. Can't crack or split from nailing; cuts on-the-job costs.



**INSULITE SHEATHING** is marked for nail placement to cut application time, give best results. Structural strength, insulation value make it ideal for use with brick veneer.

"NO BEDROOMS, NO BATHROOMS!" Unique "Privazone" homes feature separate suites. Closet-less lounge used for sleeping and daytime living. Closets, dressing rooms combined in large "dressetories."

### What the leaders are doing



**ORIGINAL DOORS** were solid like these, are still most popular. Porch has brick posts.

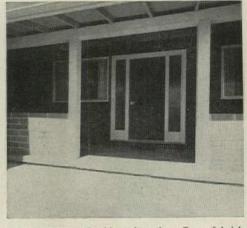


**SIDE-LIGHTED DOOR** has translucent glass strips. This house has brick posts, no railing.



starts on p 199

**DOUBLE CROSS-BUCK DOORS** match cross-buck pattern in porch railings and garage doors.



**DARK DOOR** and wider trim, plus effect of brick porch railing, give another variation.



**DOUBLE SHOJI FRONT DOORS** have finely spaced verticals. Porch has wood posts, no railing.



**CONTRASTING PAINT** varied doors from those in center photo above. Railing is open brick.

# Varying entrance design solves a "look-alike" problem

Although Brown & Kauffmann of Palo Alto build several different \$20,000 to \$25,000 houses, most of their buyers prefer just one style. To avoid look-alike monotony, B&K asked Architect Sandy Prentice to give them a wide choice in elevations, some of which are shown here.

To vary the double front door, a widely copied B&K trademark, Prentice specified four kinds of double doors and four single doors, and showed how these can be varied even more by using different colors and different materials.

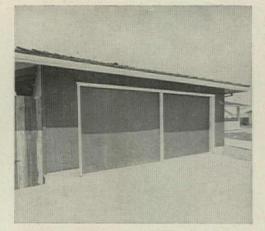
Porches are varied by using 4x6 wooden posts or thicker posts made of wire-cut or clinker brick. Some porches are wide open, some partially enclosed with brick or with cross-buck railing that matches front-door and garage-door trim. Besides the three garage-door patterns shown below, there are others with I, x, and horizontal bar designs and some with stucco and brick veneer exteriors.

Garage roofs come in three styles—gable, hip, and combination hip-gable. Architect Prentice sites the houses so they look as little alike as possible.

The basic house, first published in H&H (Dec '57 and May '59), won awards from *McCall's* and *American Home*.



SHOJI PATTERN in garage doors is used with shoji front doors, as in top right photo.



NARROWER TRIM, in contrasting color, is one of half a dozen variations in plain garage doors.



GABLE END facing street gives different look to this garage. Colors alter patterns.

One of the most exciting new products to arrive on the Grant Pulley & Hardware Corporation building scene in years is Grant's Gold Closet Rod A product with "visible value," whose exciting gold anodized aluminum track and smart "snap-in" black nylon carriers will bring "oohs" and "aahs" from your I FIRM NAME: prospects...and your raves too, for function and durability Write today for literature and prices

52 High Street, West Nyack, N. Y.

YES, I'D LIKE ADDITIONAL LITERATURE ON GRANT'S CLOSET ROD!

STATE

NAME:

CITY:

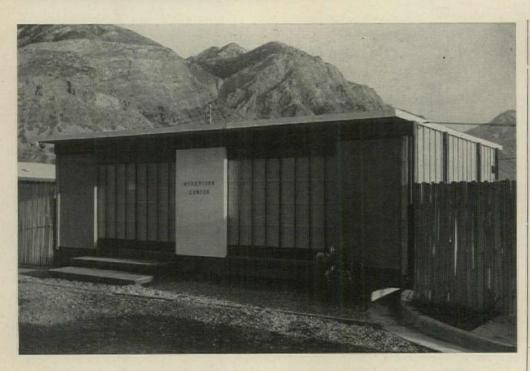
# COMING YOUR WAY

SPECIFICATIONS: aluminum track, gold, anodized carriers, black nylon center bracket, brass end brackets, brass



## What the leaders are doing

starts on p 199



### Vandals can't break glass in this demountable sales office

This contemporary building in Ogden, Utah, is the builders' answer to vandals who broke windows in their last sales office. Builders Edman & Jolley had Architect Steve Mac-Donald design an office "without the drawback of breakable glass." Two sliding panels front and rear have 2-ply, 4-mil polyethylene film coverings. MacDonald also designed a prefabricated floor and roof system so the structure can be disassembled, moved, and re-used. Interior partitions and closets are made up from mahogany doors.



## Strapping and "roll-off" double a truck's usefulness

That is what Moser Lumber Co found in Naperville, Ill., since it developed a new system for handling builder orders. Trucks can handle twice as many loads a day because loading and unloading time dropped from

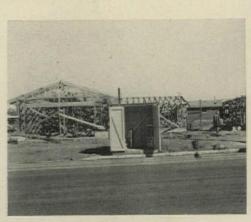


4½ hours to 45 minutes. Lift trucks load dimensional lumber, which is double strapped (left) so the load will roll off intact (right). Some trucks have split roller beds for handling two orders on one run.



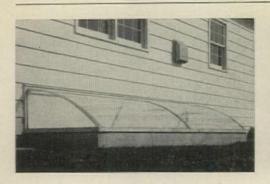
#### There's a pool in their future

Medema Builders had this scale model built to dramatize for their buyers that Medema's Oak Forest, Ill. tract would have a pool, bathhouse, and playyard once construction of the new community got under way.



#### Water coolers save \$7 a house

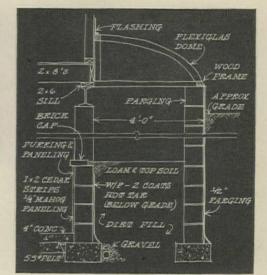
At Del Webb's big San Diego tract, workmen can drink electrically cooled water in six sheds like the one above. They formerly used 15-gal double-walled cans packed in ice. Webb built portable sheds, rented the coolers, and hooked them up to water mains and power lines. Sheds are moved as the production line moves along. It formerly cost about \$11 a house to provide drinking water. The current cost with rented coolers is only \$2.83 a house. Cost of the six sheds came to \$340.





Prefabber offers a garden unit for basement recreation room

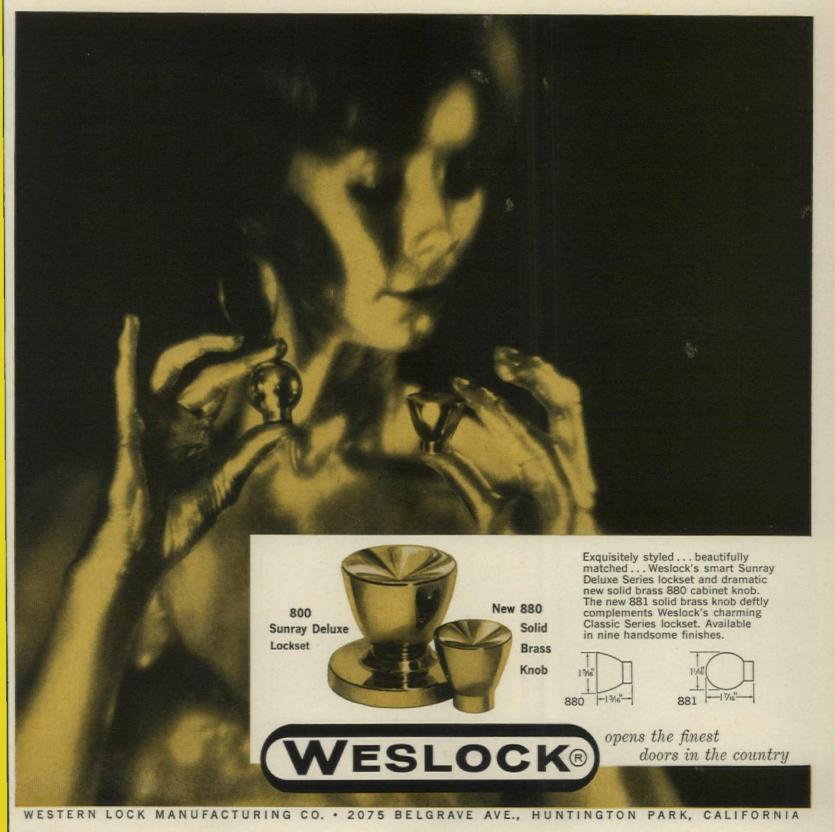
Buyers of Presidential Homes' manufactured houses can get this covered garden conservatory to brighten their downstairs recreation rooms. Cost of the Plexiglas dome is \$175 fob Pemberton, N.J., and the prefab company says that the total costincluding aluminum ribs, lumber, and labor --comes to less than \$400. Dealers report that the daylighted garden has helped sales, too. /END



Naturally it's new...it's from WESLOCK!

# matching cabinet hardware

Quietly echoing the elegant styling of famous Weslock locksets, these finely-sculptured new knobs establish that special custom note all quality-minded home buyers search for. Also in stunning solid bronze.



209

NATIONAL ADVERTISING—Briggs Beautyware promotes New Home Living in full-color ads in LIFE, HOUSE & GARDEN'S BOOK OF BUILDING, HOUSE BEAUTIFUL'S BUILDING MANUAL and LIVING'S GUIDE TO HOME PLANNING. Your Briggs representative will tell you how you can take advantage of this promotion, or write Advertising Department, Briggs Manufacturing Co., Warren, Michigan.

# BRIGGS BEAUTYWARE can make a BIG difference in your new home sales

Unsurpassed quality of product . . . ease of installation . . . ready availability are just a few of the reasons why more and more builders are turning to Beautyware by Briggs. They know that nationally advertised Briggs Beautyware in their homes can make a big difference in boosting their new home sales. The fused-in-to-stay compatible colors add a fresh and imaginative touch that harmonizes with every and any décor. The rich, sculptured styling will be as fresh tomorrow as it is today. And, Briggs Beautyware needs so very little care to keep it at its sparkling best day in and day out..

So, if you're looking for bathroom beauty that gives your homes the mark of quality-look to BRIGGS BEAUTYWARE.



THE CHAUCER vitreous china lavatory is smartly styled with oval offcenter bowl for abundant counter space, has anti-splash rim and castin soap impression and features unique spray spout. Completely flexible, it may be installed in a countertop, vanity or placed on legs.

THE MEDALLION porcelain enamel bathtub boasts full-length seat, slipresistant bottom and recessed toe panel. Has seam-free one-piece construction, leakproof wall flange and H-framework that installs without blocks, shims or extra support.



THE KING water closet in vitreous china is wall hung for easy cleaning beneath, eliminates dirt-catching cracks and crevices and hard-to-getat space between wall and fixture.



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As unique as the tree that grew the wood. Weldwood hardwood paneling is made of only the finest woods. Its natural beauty comes to you preserved and protected by Weldwood's exclusive 18-step finish. You can actually *feel* the difference.



Only \$75 (retail) pays for Weldwood prefinished walnut paneling for a 12-by-8-foot wall. Other prices as low as \$39.

Builders who have tried it say this: add real wood Weldwood<sup>®</sup> paneling, and a home sells more easily, faster, and at a better price. *The paneling pays for itself*.

Genuine wood paneling is a mark of quality. It's a visible sign that the home was built by a man of taste . . . for an owner who likes attractive surroundings.

You can feel the difference between Weldwood prefinished woods and other brands. You can see the warmth and richness, the glow of genuine wood protected by Weldwood's fine furniture finish.

And you can use Weldwood paneling with assurance, because it is backed by the world's largest and best known plywood organization. You get a written life-of-thehome guarantee that you can give to your customer.

Your Weldwood lumber dealer, or our nearest branch (there are 124 throughout the U.S. and Canada) can show you a breath-taking array of Weldwood paneling —more than 70 types and finishes. Take your architect or decorator with you. In Canada, Weldwood Plywood, Ltd.



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55 West 44th Street, New Y	ork 36, N. Y.
Please send me the names of nearl Also send the new idea booklet, " Paneling For Fine Interiors," showin	Weldwood Prefinished
installation instructions, photograph	
Name	

# New General Electric built-ins—the ranges with all



# New! Cooktop with Sensi-Temp automatic unit

This new built-in makes top-of-the-range cooking completely automatic. Temperature is simply dialed, and the automatic Sensi-Temp\* Unit maintains the perfect cooking heat.

Pushbutton panel with dial for automatic unit and other cooktop controls can be placed in back or side wall. Roomy 21-inch Custom oven has automatic timer and minute timer, charcoal-type broiler, automatic rotisserie and meat thermometer, floodlight, two shelves and removable door.

General Electric Built-Ins offer so many other wanted features. There are single and double ovens, 2 and 4-unit cooktops, a wide range of Mix-or-Match colors and a choice of three types of pushbutton controls. Figure General Electric Built-In Ranges into *your* plans for 1960!

For specifications and installation information on all General Electric Built-In Ranges, contact your local distributor, or write Range Dept., General Electric Co., Appliance Park, Louisville 1, Ky.

\*Trademark of General Electric Company.

The Golden Value Line of the 60's

# the most-wanted features!



# Popular Mark 27 one piece built-in

Practical glamour... that's the Mark 27. Compact, smartly designed, this one-piece built-in is easy to install in so many settings.

Features? Big capacity oven, removable oven door, automatic oven timer, minute timer, highspeed units with pushbutton controls—easy to see why more than 1000 builders have installed Mark 27's in the first four months of production alone.





**Only one unit to install**, one control to connect ... needs space only 27" wide x 24" deep. Smart between cabinets or in island or wall installations. Leaves room for extra appliance or cabinet. Control mounts wherever convenient.

Hefty savings, too with the Mark 27. It takes one connection, needs no oven cabinet nor cooktop base cabinet. And you save on costly countertop covering.



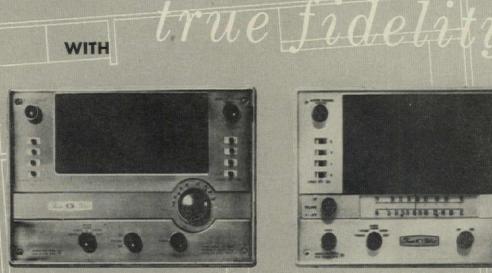
Tile Description: 11/16" Squares, c.e. Pan-O-ramics; Slate Textone, Azure Textone and Blue Granite. Tile Contractor: Lee Nordloh Tile Company, Cincinnati, Ohio. Color Plate 116.

Tile creates an impressive entrance to House Beautiful's Pace Setter Home ... bringing rich texture and color interest to the exterior and striking a keynote of elegance in the inviting foyer. With American Olean ceramic tile, possibilities for such fresh and distinctive treatments are virtually unlimited. And of course wherever you use it, tile brings an assurance of permanence and ease of maintenance unmatched by other materials. For other examples of outstanding tile treatments, write for Booklets 451 and 550.



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## THE RADIO-INTERCOM-MUSIC SYSTEM





Master Panel with AM Radio Master Panel with AM/FM Radio Both available in antique copper or satin chrome.

BY

Trade-Wind gives you all the features you expect in a modern radio-intercom-music system --- PLUS TRUE FIDELITY.

These versatile systems are available with either AM 6-tube or AM/FM 7-tube radios . . . with master panels designed in a striking new motif and finished in brushed chrome or antique copper ... and with TRUE FIDELITY ALNICO-V heavy duty speakers.

As many as 9 inside and outside speaker locations can be installed with the Trade-Wind systems and voices as far away as 35 feet from the speaker are reproduced clear and lifelike, even while music is playing. Master Panel features separate Master Speaker Volume Control, concealed Phono Jack and separate Intercom Volume Control.

Trade-Wind Intercom systems are available NOW. ASK your authorized Trade-Wind wholesaler for a demonstration or write us for complete information.

	-	
luxe Concert Speaker	• • • • •	Outside Speaker
Trade-Wind DIVISION OF R	OBBINS & MYERS, INC. DEPT.	

The natural beauty of cedar sets the tone of custom home design. On the roof, three layers of genuine cedar shingles assure decades of trouble-free service. Cedar shakes – factory-colored, precisely squared, cleanly striated – add colorful importance to exterior walls, fences and wind screens. <u>Team the two</u> – cedar shingles for roofs, cedar shakes for walls – for the quality look that sells.

For complete application details, see your Sweet's File, or write ...

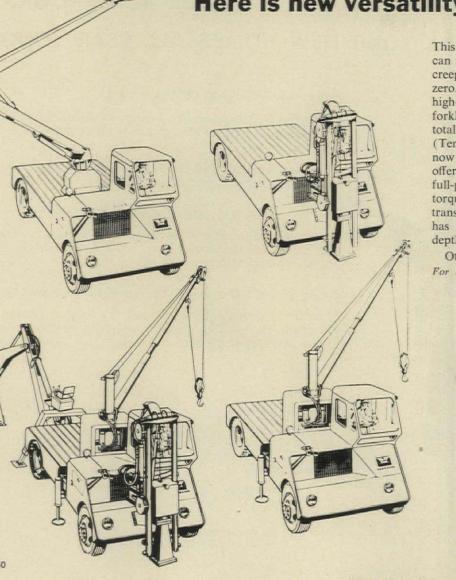
RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Washington 550 Burrard Street, Vancouver 1, B.C. nothing says quality like the genuine





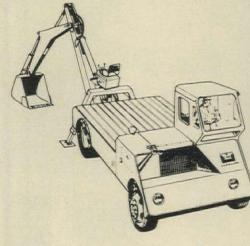
OVER-THE-ROAD POWER has ready mount for equipment at front or rear, clear visibility, easy access to controls and engine.



# Here is new versatility in prime movers

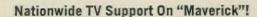
This combination truck-tractor-power unit can move over the road at up to 35 mph or creep over rough terrain at speeds down to zero. It can act as backhoe, tamper, crane, high-lift platform, bulldozer, power broom, forklift, or what you will (see left) for a total equipment cost in the \$5,000 range. (Ten attachments for the Commando are now available and more are planned.) It offers two- or four-wheel drive and steering; full-power hydraulic creep, direct-drive, or torque-converter drive in a single shuttle transmission. The Commando turns in 24', has 7,000-lb digging power. 12½' digging, depth, 10' wide tamping swath, 7,000-lb lift. Ottawa Steel, Ottawa, Kans.

For details, check No. 6 on coupon, p 296



# SEE THE 1960 HOMES... GO BUY!

KAISER ALUMINUM INTRODUCES A UNIQUE NEW PROGRAM TO HELP YOU SELL YOUR NEW HOMES ALL YEAR LONG!



Throughout 1960, Kaiser Aluminum's "Maverick" will help professional builders everywhere sell to 40,000,000 TV viewers!

This vast audience will be watching commercials with a theme that sells for professional builders...

### "SEE THE 1960 HOMES ... GO BUY!"

... commercials that present new home features and values that make 1960 the year to buy ... that help build the kind of model-home traffic you can *sell* to!

#### Spring Kick-Off Campaigns In Top Home Building Areas!

In addition to nationwide commercials, Kaiser Aluminum will create special TV commercials to deliver local impact to these 16 major new housing markets!

Seattle San Jose San Diego Phoenix Dallas Denver Minneapolis St. Paul St. Louis Detroit Cincinnati Hartford Washington, D. C. Atlanta Orlando New Orleans

James Garner and Jack Kelly are Warner Bros. stars.

## Major Market TV Efforts Locally Supported By This Traffic-Building Program!

- 1. Exciting outdoor posters seen all over town!
- The same message on city bus posters-rolling from downtown to suburbia!
- Special full-page insert-type newspaper ads in exclusive high fidelity color! (Builders' names and addresses listed.)
- Big follow-up newspaper ads in color, repeated on two successive week-ends! (Builders' names and addresses listed.)

### You Can Tie In With This Material!

If you are a builder member of the local association of the NAHB in one of the 16 markets named, you will be contacted with details of the opportunity this campaign offers.

The materials shown below are available to participating builders—to help them tie in with this tremendous selling campaign right at their own model-home locations.

- A. Distinctive lawn signs repeat the colorful outdoor poster design, feature builder's name.
- B. Dramatic triangular "Sold" signs help add more sales excitement in your home-selling location.
- C. Unique "Prospect Portfolio" organizes vital home data for prospect, gives salesman follow-up lead; large space on cover for your imprint.
- D. Informative new color booklet helps you sell prospects on the reasons why a professionally-built new home is their best investment in the future.

## Kaiser Aluminum Offers You New Building Ideas With Aluminum–The Nation's Most Talked-About Home Building Material!

In 1960, aluminum is offering more ways to add value, cut costs, save time and stimulate home buyer's demand. Kaiser Aluminum offers this program to help you apply these advantages to your own building prospects.

### "Building With Aluminum" Advertising Series

A series of "idea finder" ads, will appear regularly in this publication, showing you new products, new application ideas, money-saving construction techniques.

### **Product Information Bulletins**

Bulletins, mailed directly to builders, that present actual "how to" information for application techniques and for newly-available aluminum building products. Sign up now for this valuable series! (See coupon.)

#### Aluminum Building Product "Supermarket"

Shows builders how aluminum products add value. Kaiser Aluminum has had special showings of *locally-available* aluminum building products in each of the 16 Spring-Campaign cities.

### Aluminum Building Product Service Centers

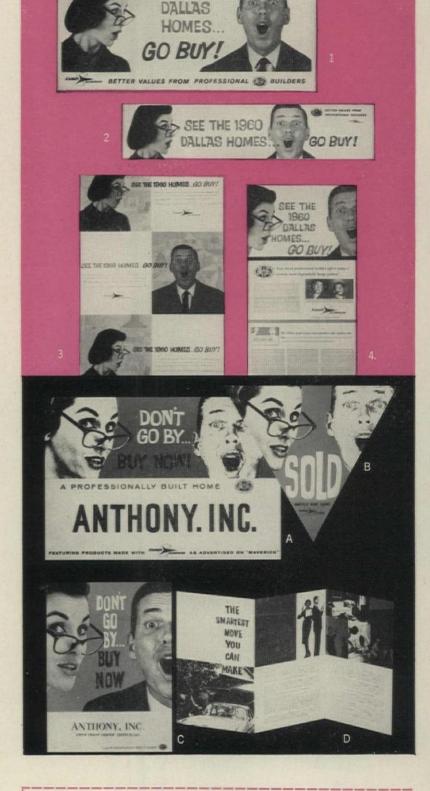
Permanent education and display centers established in Kansas City and Cleveland serve home buyer prospects both before and after they buy, and offer builders assistance in locating and using aluminum building products.

### **Major Building Conventions**

Throughout 1960, Kaiser Aluminum will participate in bringing professional builders the newest in aluminum building material ideas through such important buildersponsored events as the NAHB convention.

### This Program Can Start Working For You Right Now!

This Kaiser Aluminum program is intended to help you *put to use* the many new aluminum products that can help you apply improved methods to your own building projects. Send the coupon now!



SEE THE 1960

	KAISER ALUMINUM*
	To Build Better To Live Better
Der	ser Aluminum & Chemical Sales, Inc. ot. HB-201A, Kaiser Center, Lakeside Drive, Oakland 12, Calif.
00	Please enter my name to receive the Product Information Bulletins. Please furnish data on local sources of aluminum products indicated (1 un- derstand that Kaiser Aluminum does not manufacture aluminum building products, and that information on local availability will be forwarded to me by manufacturers who are users of Kaiser Aluminum.):
	(Please write-in type of product needed)
NA	ME

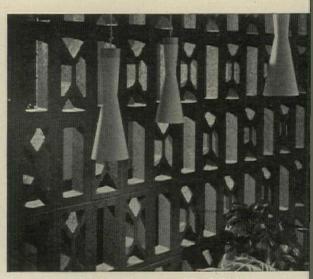
\* TRADEMARK KAISER ALUMINUM & CHEMICAL CORPORATION



Offset units of standard block form an eye-catching wall to complement the natural wood of the balcony.

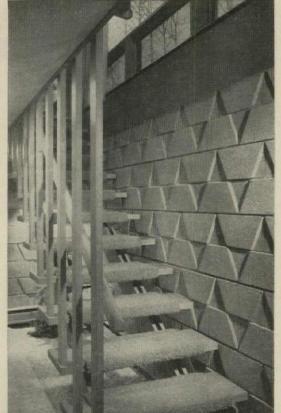


Split block makes the hearth go modern



A screen of grille block for either a room divider inside the home or a wall for a patio. Hellmuth, Obata & Kassabaum, St. Louis, designer.

# Homes to go with bright young imaginations:



from the wonderful new world of Block!

M ODERN concrete block is the low cost way to give new home owners the versatility and the personality they want in a new home. We show here, just four of the many thousands of new wall fashions possible with block. And look what else block delivers: proof against fire and vermin; low first

cost and maintenance costs; built in insulation and sound conditioning. Your local NCMA member can keep you up to date on the many new developments in the wonderful world of block.



NATIONAL CONCRETE MASONRY ASSOCIATION . 1015 WISCONSIN AVENUE, N.W. WASHINGTON 7, D.C.

Basement walls are never dull with the built-in distinction of smart Shadowal block. Tannebaum & Koehnen, A.I.A. Milwaukee, designers.

## To fit every builder's budget ...every kind of opening

#### There's a Modernfold!

You'll hear it from home buyers. Modernfold is a name they know and trust . . . a name that will help you sell.

#### There's a Modernfold!

You'll hear it from your supplier . . . the man who can specify the Modernfold that best fits *your* job . . . *your* building budget.

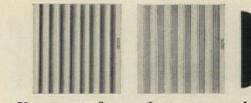
Remember: Modernfold offers you more than just one door or divider. You have a *selection* of models . . . ranging from downright economical to

NEW CASTLE PRODUCTS, INC. New Castle, Indiana
Gentlemen :
Please send me the 1960 Modernfold Residential Idea Kit.
NAME
ADDRESS
CITYSTATE

luxurious . . . from fabric-covered steel framework to wood . . . from standard to room divider size.

Even better, you'll find Modernfolds both practical and attractive . . . closing closets or dividing dual-purpose rooms . . . providing privacy for dressing alcoves or hiding away washer-dryer space. In short, at *every* kind of opening . . . on *any* sort of room division.

But see for yourself. Find out how many ways Modernfold will help you sell homes. Call your supplier. Or . . . simply mail the coupon below for your 1960 Modernfold Idea Kit.



#### modernfold

Choose...to fit your homes...your budget In both fabric and wood finishes, Modernfold models range from thrifty to luxurious—for every size opening.

NEW CASTLE PRODUCTS, INC., NEW CASTLE, INDIANA In Canada: New Castle Products Canada, Ltd., St. Lambert, Quebec

### These are featured in the NAHB research house



Of the many products used in the research house (see *page 142*), the ones listed below are all new and all in production ready to be used in your houses. Experimental products and prototype products are not included. Some products listed have been described in stories of earlier research houses or reviewed in recent issues of HOUSE & HOME. In such cases, a reference to the earlier story is included in the notice. Others, which are just now being released, will be discussed at greater length in the next few months. You can get more information about any product in the list by checking the appropriate number on the inquiry coupon, *page 296*.

**ALUMINUM CO OF AMERICA.** Aluminum jamb caps at surfacemounted doors are ceiling high. Caps extend partition headers across door openings, form a bearing surface for the top of the door. *For details, check No. RI on coupon.* 

**BB CHEMICAL CO.** Roofing system. Urethane coating is factory applied to roof panels. Panels are sealed on site with two layers of vinyl tape. *For details, check No. R2 on coupon.* 

CHALLENGER LOCK CO. Entry door lockset has white Delrin plastic knobs. For fuller story, see H&H, Feb. For details, check No. R3 on coupon.

COLONIAL PLASTICS. Tuftite PVC pipe and fittings used for the waste system and drainage field. For details, check No. R4 on coupon.

COMPTON, INC. Hardkote gypsum drywall finishes on walls and ceiling to eliminate joint spackling. For details, check No. R5 on coupon.

COAST FOUNDRY & MFG CO. Delrin plastic ballcocks used in all water closets. For details, check No. R6 on coupon.

**CURTIS COMPANIES.** Louvered ventilating units used with windows in west elevation. For details. check No. R7 on coupon.

Combination door with wood sash. For details, check No. R8 on coupon.

**DOW CHEMICAL CO.** Rovana woven wall covering used in dining room. A similar Dow wall covering was used in last year's research house. See H&H, Jan '59. For details, check No. R9 on coupon.

E I DU PONT DE NEMOURS CO. Textured Hypalon exterior wall coating. For details, check No. R10 on coupon.

Hypalon caulking compounds, For details, check No. R11 on coupon.

Neoprene waterproofing for below-grade installation. For details, check No. R12 on coupon.

**EMERSON PRYNE.** Complete two-room ventilating system—ducts, grilles, and fans—for inside baths and kitchen. For details, check No. R13 on coupon.

**B F GOODRICH CHEMICAL CO.** High temperature Geon pipe for hot and cold water distribution. For details, check No. R14 on coupon.

**KEL-WIN MFG CO.** Drip-proof lavatory faucets with Delrin valve assemblies. For more complete story, see H&H, May '59. For details, check No. R15 on coupon.

**KOPPERS CO.** Floor slab system of asbestos cement and Dylite panels. *For details, check No. R16 on coupon.* 

Plywood exterior wall and roof panels with Dylite cores. For details, check No. R17 on coupon.

Interior partitions of gypsum board, plywood, and Dylite. For details, check No. R18 on coupon.

Brick-finished Dylite exterior wall panels. For details, check No. R19 on coupon.

MINNESOTA MINING & MFG CO. Adhesive-coated aluminum joint tape for interior partitions. For details, check No. R20 on coupon.

Mastic for underlayment. For details, check No. R21 on coupon.

Mastic for wall paneling. For details, check No. R22 on coupon.

**MOEN FAUCET CO.** Single-handle mixing valves for bath and shower. For fuller story, see H&H, Jan. For details, check No. R23 on coupon.

NATIONAL FIBERGLASS CORP. Molded fiberglass-reinforced doublebowl vanitory. For more complete story, see H&H, Sept '58. For details, check No. R24 on coupon.

Molded fiberglass-reinforced shower stall. For more complete story see H&H, Jan '59. For details, check No. R25 on coupon.

NICKEY BROS. Oak and apitong hardwood veneer strip flooring. For more complete story, see H&H, July '57 and June '59. For details, check No. R26 on coupon.

NUTONE, INC. High-fidelity stereophonic music and intercom system. For fuller story see H&H, Jan. For details, check No. R27 on coupon.

H. K. PORTER CO. Vinyl-covered baseboard for electric convenience outlet system. For details, check No. R28 on coupon.

**REYNOLDS METALS CO.** Aluminum foil for wall and roof panels. For details, check No. R29 on coupon.

Aluminum stair baluster and handrail. For details, check No. R30 on coupon.

**STANLEY WORKS.** Router and guide for leveling sill plates. For details, check No. R31 on coupon.

Surface-mounted passage-, closet-, and garage-door hardware. See also H&H, Feb '59. For details, check No. R32 on coupon.

Aluminum kitchen cabinet frame and hardware. For details, check No. R33 on coupon.

Expandable closet rod. For details, check No. R34 on coupon.

**US CERAMIC TILE CO.** Ceramaflex ceramic-tile flooring imbedded in synthetic rubber. For details, check No. R35 on coupon.

**US STEEL CORP.** Vinyl-coated troffers for ceiling lighting systems. For details, check No. R36 on coupon.

Vinyl-coated steel exterior doors with foamed plastic cores. For details, check No. R37 on coupon.

WESTINGHOUSE ELECTRIC CORP. Single-unit built-in range and oven with electric subpanel. For details, check No. R38 on coupon.

Advertisement

AMERICAN-STANDARD MONTHLY REPORT

RANCHERO

6 ROOMS · 11/2 BATHS

HOT WATER HEATING

\$14,500

#### WITH NEW PRODUCTS AND NEW INSTALLATION METHODS

# HYDRONIC HEATING NOW FITS INTO ALMOST EVERY BUILDER'S PRICE RANGE

2

Now you can offer hydronic\* heating for less than you ever thought possible. The reason? There's an improved way to install hydronic heating at a price that is competitive with other systems—and more and more contractors are using it. If you think that the cost is out of your range, turn the page to discover some of the new installation methods and products that are giving buyers the clean, uniform, draft-free warmth they like . . . at a cost that builders like.

\*Hydronics-the science of heating and cooling with water

• Trained salesmen find that it's a definite sales "plus" to be able to point out the advantages of baseboard hydronic heating.

# money-saving methods slash

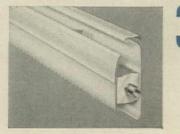
Here's how you can work with a progressive contractor to save hundreds of dollars per house and still offer the quality sales feature of hot water heat. Use this check list to be sure you are getting the latest design and installation methods and the most modern equipment.





An accurate heat loss calculation is the basic step that determines how much heat is needed to keep the home comfortable. Using the heat loss factors developed by I-B-R\* for every type of construction, it is unnecessary for your contractor to add the big, wasteful safety margins used in many rule-of-thumb methods.

Accurate sizing of the boiler is simply a matter of your contractor's matching its capacity to the heat loss which he calculated for the home. There is no need to oversize a boiler a costly practice inherited from the hand-fired-coal-boiler days, when performance was unsure.



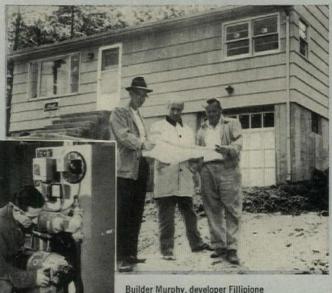
Accurate sizing of baseboard, based on the use of 215° water instead of 170° water (as used in old-fashioned installations), saves you many feet of heating panels. For example: in a 60,000 Btu/hr house, you save 47 feet of baseboard panels using American-Standard N85-L Heatrim and 215° water.

\*Institute of Boiler and Radiator Mfrs.

### Builder of \$11-15,000 homes finds hydronic heating system helps him sell

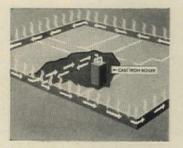
When Connecticut builder Henry Murphy and developer Rocco Fillipione discovered that they could include hydronic heating in their tract for \$900 per house, they jumped at the chance. Says Murphy, "We have found that people who bought Sherwood Park homes are more than willing to pay the small price differential for hot water heating in order to get the advantages of better performance and savings over the long run." And installation was fast, too. Murphy is convinced that the system impresses buyers, because they associate hydronics with more costly homes.

> Two-man team installs an American-Standard cast iron boiler with tankless water heater, baseboard panels, piping and fuel tank in one day.

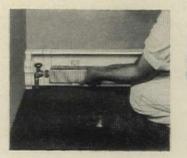


Builder Murphy, developer Fillipione and heating contractor Charles Coviello at Sherwood Park model.

# the cost of hydronic heating



Accurate sizing of pumps and piping is simple when the I-B-R installation guide is used. The use of rule-of-thumb procedures generally leads to the oversizing of pumps and piping. Depending on the size of the house, many builders save as much as \$100 through accurate sizing.



An organized labor procedure slashes cost. Starting with equipment on the site, and using the American-Standard "Rhythm of Installation" method, two men can install a G-2 gas boiler and Heatrim baseboard panels for a six-room house in one day. Boilers can arrive on the site packaged, with accessories, controls and a tankless water heater factory-installed.



Use I-B-R test-rated equipment to insure that the above cost-cutting steps work. American-Standard boilers and radiation are I-B-R rated. Use this equipment in the "engineered" system described here, and you can offer the comfort and health advantages of hydronic heating, without increasing the cost of the home.

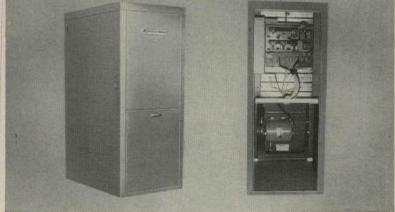
### Extra advantages of Hydronic Heating that help sell houses

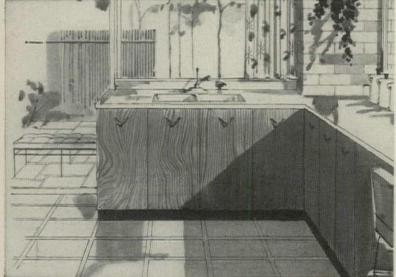
A hydronic heating system has many extras that can be used by a salesman in selling the house. Here are some of the sales points many salesmen are using to help close sales.

- House can be zoned economically with only two thermostats and one boiler — not the two heating units often required.
- Built-in water heater supplies abundant hot water year 'round...saves cost and space of separate water heater.
- Snow-melting system for driveway, sidewalks and porches is a sales-making benefit.
- Compact American-Standard boilers can be installed in basement, utility room, even in the garage . . . use little space.
- **Heating panels** replace ordinary baseboards —can be painted to match walls. They allow buyer to place furniture against walls, lay wallto-wall carpeting, hang draperies to the floor.

# What's new from American-Standard?







**Dramatic Contour bathtub** stops model viewers in their tracks. It makes them talk about and remember your home. The unique off-center bathing area is excitingly different, and provides more room where it's needed for showering and bathing. There are two wide ledges one is a comfortable seat, both are handy for toiletries. There's a narrow, easy-to-grip front rim and a flat bottom that makes sitting down and getting up easier and safer. Made of gleaming acid-resistant enamel in six decorator colors and white on solid cast iron. All this is available in the Contour at a competitive price.

**Electric furnaces,** both up-flow and down-flow models, feature extremely versatile heat modulation. Either model, in large or small cabinet size, can be adapted to individual-home needs by a simple rearrangement of heating-element connections. These compact furnaces can be installed almost anywhere—even in a closet or alcove. Factory-installed control panel swings out on hinges for easy access. Rated from 41,000 to 82,000 Btu/hr. Easily adapted to air conditioning.

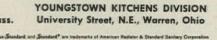
#### UNI-PAK packaged kitchens by Youngs-

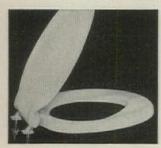
town Kitchens are specifically designed for builders. They're completely flexible, allow for any size kitchen. Each UNI-PAK sink and storage cabinet form a "package" pre-planned by experts to save you much of the work of kitchen planning and cabinet grouping. Sink, bowl and range units can be positioned to meet all requirements. UNI-PAK kitchens are engineered to save time and money. One unit can replace two to four standard base cabinets. All doors and hardware come completely assembled and mounted. All you do is place the units in position. Choice of White, Monterey Beige or Honeywood, the mar-resistant wood-fashion laminate.

For more information write to:

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

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



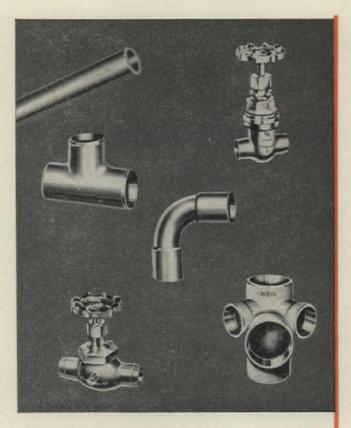


Church snap-off seat and cover make it easier to clean. Both seat and cover are easily removed without detaching hinge posts from bowl. The No. 300, a smart, modern design with streamlined cover, is high-impact plastic. White and colors.

AMERICAN RADIATOR & STANDARD SANITARY CORPORATION



# MUELLER BRASS CO.®



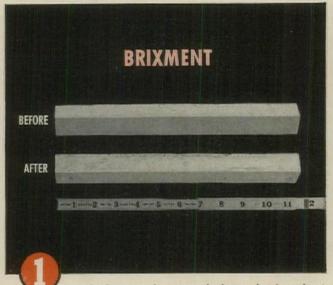
a new symbol for all these QUALITY PRODUCTS for plumbing and heating from <u>ONE</u> dependable source

This distinctive corporate symbol is a new addition to the American business scene and will be found on the many diversified products made for the plumbing and heating industries by the Mueller Brass Co. of Port Huron, Michigan ... your one dependable source for such products as Streamline solder-type fittings, copper tube and valves.



# PORT HURON 10, MICHIGAN

ALSO MANUFACTURERS OF: REFRIGERATION VALVES, DRIERS, FITTINGS AND ACCESSORIES • FORMED COPPER TUBES • BRASS AND BRONZE ROD • FORGINGS • SCREW MACHINE PRODUCTS • IMPACT EXTRUSIONS • CASTINGS • ALUMINUM WINDOWS • ALUMINUM SHEET, COIL AND STRIP • POWDERED METAL PARTS • PLASTIC PIPE, CUSTOM EXTRUSIONS AND INJECTION MOLDINGS.



In these autoclave tests, the bottom bar in each set of neat cement bars above was exposed to 295 lbs. steam pressure, 420° F., for 3 hours. Left: The two bars are both Brixment. Note that it



is sound—it has not expanded. *Right*: The two bars were made of one part portland cement and one part of a lime which does not meet autoclave test. Note expansion—proof of unsoundness.

# BRIXMENT meets the Autoclave Test for SOUNDNESS!

Sound mortar is essential for strong, durable brickwork. To be sound, mortar must be free of constituents which may cause abnormal expansion after long exposure to weather.

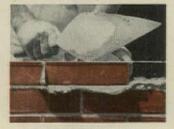
Unsoundness in mortar material is readily detected by the autoclave test. This severe test rapidly accelerates the chemical reaction of mortar materials, and the slightest unsoundness is immediately revealed by excessive expansion.

Brixment easily meets the autoclave test requirements of the Federal and ASTM specifications. It also complies with the strength requirements of both specifications for Type II masonry cement. Therefore, when Brixment is used, sound, strong, durable mortar is assured.

But soundness is only *one* of the characteristics in mortar necessary to produce top-quality masonry at lowest cost. Several others are listed below—and *no other mortar combines ALL these characteristics to such a high degree as Brixment mortar.* It is this combination of advantages that makes Brixment superior to any mixture of portland cement and lime—and which also accounts for the fact that Brixment has been the leading masonry cement for over 40 years.

Louisville Cement Company, Louisville 2, Ky.

#### BRIXMENT MORTAR ALSO COMBINES THESE 8 OTHER ESSENTIAL CHARACTERISTICS



PLASTICITY



LOW EFFLORESCENCE



WATER RETENTION



IMPERMEABILITY



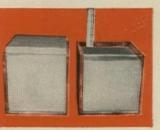
BOND



DURABILITY



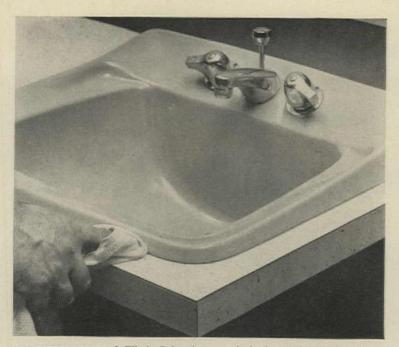
STRENGTH



YIELD

**New products** 

start on p 217



**ONE-PIECE LOOK** of Eljer's Brian lavatory is broken only by the fittings. There is no metal rim to separate the fixture from its setting in the counter.

#### New vitreous china lavatory

#### drops in place in rough-cut opening

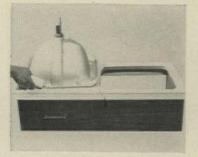
Eljer's new Brian lavatory, due for quantity production in May, drops into a rough opening with up to 1" tolerance. It rests on the finished countertop, with a simple mastic seal, so it can be installed during finish stages, avoid damage during construction. Moreover, installation is completed by the plumber not the counter man so jurisdictional disputes are avoided.

The vitreous china fixture was designed for Eljer by Dave Chapman & Assoc. Its smooth contours and lack of metal rim make clean up easy. The self-rim makes for a large bowl—as large as that in some 24"x20" lavatories—and ample soap dishes. The bowl has hidden overflow under front splash rim, comes in six pastel colors and white. Equipment price is competitive with other countertop lavatories but unit should be cheaper to install.

Eljer Co, Pittsburgh.

For details, check No. 7 on coupon, p 296

continued on p 235





**MASTIC ON RIM** will seal bowl to counter, keep out moisture at edge.

**COMPLETE WITH BRASS**, lavatory drops easily into rough-cut opening.



WING-NUT CLIPS, two to a side, fasten bowl to counter without tools.



BOWL FITS COUNTER but has raised rim to limit water splashing over.

# "How NU-HOME ALUMINUM SIDING gave me the 'eye-catcher' I needed to make sales!"

Mr. Herbert Rosner, vice-president in charge of construction, A. Siegler and Sons Builders, Inc., Cleveland.

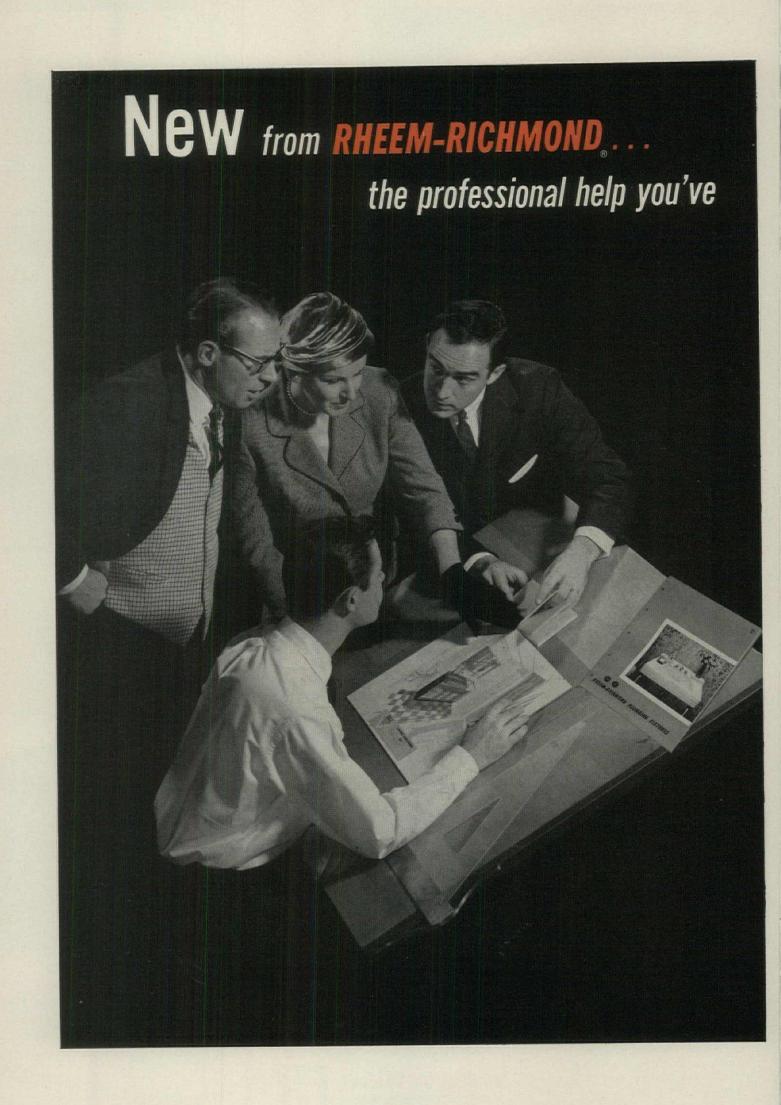
This is the story of how one successful builder uses Hastings NU-HOME Aluminum Siding to build better houses for less money — and sell them faster! Mr. Rosner tells us that NU-HOME is less expensive to apply. There is less waste; work can go on in any weather. Projects look much neater and public acceptance is so good that they quickly sold out their last three projects. And, because they can close sales faster, the company gets its money out that much sooner.

**One more Important fact:** Nu-Home Aluminum Siding is sold only to builders through building supply firms. For the complete story, fill out and mail the coupon. No cost, of course, and no obligation.





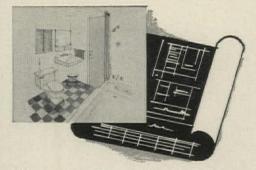
HASTINGS ALUMINUM PRODUCTS, Dept. 9C, Hästings, Mich. Please rush me additional informa Aluminum Siding.	
Name	
City	Zone



# always wanted!

# NOW!

your homes can have the prestige of bathrooms <u>individually</u> designed for you by the design staff of Living For Young Homemakers Magazine Imagine the impact . . . the sales appeal to home buyers . . . when you offer homes with bathrooms designed and planned exclusively for you by famous Living For Young Homemakers Magazine!



This prestige selling tool is exclusively yours from Rheem-Richmond through arrangement with Living For Young Homemakers magazine. Living's designers, interior decorators, and architects will completely design and color coordinate your bathroom, powder room and/or utility room. They'll create an original room correct in every detail and realistic in design, using material you've already contracted for, or others easily available. They'll follow your ideas if you wish, and work within your budget.

The service itself costs nothing but a small mailing fee and handling charge for all the material you get. Here's what this exclusive design package includes: Beautiful perspective rendering showing you how the room will look, blueprints, floor plan and elevation. Rheem Richmond will even furnish you with signs and material to advertise this exclusive design feature in your model homes.

#### PRESTIGE PLUMBING FIXTURES . . . PROFES-SIONAL PLANNING . . . BENEFIT FROM BOTH

This exclusive Living/Rheem-Richmond design service puts Rheem-Richmond fixtures in their proper setting, enhancing the beauty of the fixtures and the bath area of your homes. In addition to expertly coordinated rooms, you offer home buyers the long-lasting quality, newest styling and modern features of the Rheem-Richmond line. Designers will select the sizes, shapes and any of Rheem Richmond's seven pastel colors or Whiter White to make even the smallest bath look luxurious.

Fill out the coupon below . . . Rheem-Richmond will rush full information to you.

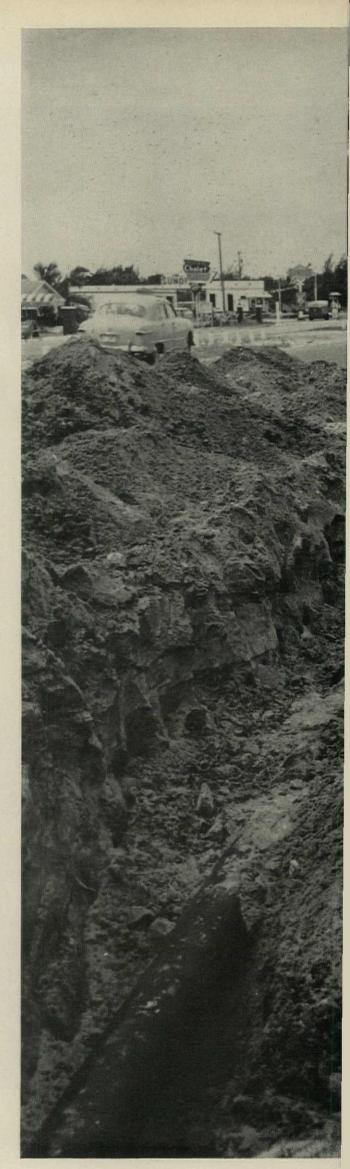
Richmond Plumbing Fixtures Div. Rheem Manufacturing Co. 16 Pearl Street, Dept. HH-3 Metuchen, New Jersey	
Gentlemen: Please send me more details on room Design service and mercha Name	
Company Name	
Address	A company
City	State

PALM BEACH LAKES

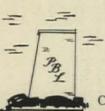
ANOTHER QUALITY DEVELOPMENT THAT INSISTED ON CAST IRON PIPE



Symbolic of the 12-acre model homes exhibit—"World's Fair of Housing" —is this unique central pavilion, with hyperbolic paraboloid roof.







Created by Perini-Westward Developers, Inc., the Palm Beach Lakes development is being built within the city limits of West Palm Beach, Florida—truly a "city within a city," so to speak.

#### It is a bold venture, by any building standard

- The ultimate potential value estimated by the builders is \$400 million.
- Ten thousand homes and a population of 40,000 are expected by 1968.
- An elaborately modern showcase of home construction and housing, the "Million-Dollar Homes Exhibit," already had its grand opening on December 6. With seven model dwellings ranging in price from \$13,900 to \$24,900, the display is bringing thousands of tourists to the Palm Beaches.
- One hundred acres have been reserved for schools, churches, parks, playgrounds, golf courses, public swimming pools, police and fire installations, and other municipal structures.
- One hundred miles of roads are planned—including a segment of a 4-lane state highway, with three clover-leaf intersections.
- Four million square feet of paving have been set aside just for home driveways.
- Twelve million square feet of parking space are being provided for commercial and industrial sections.

The choice of pipe for the water supply system for this 5000-acre tract: cast iron pipe. The amount of pipe to be used: over 150 miles, in sizes ranging from 4" to 24". Cost of expanding water and sewage facilities will amount to \$2.4 million in the next few years.



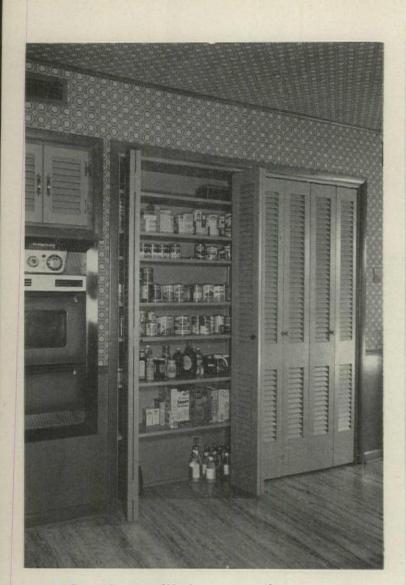
Louis R. Perini, chairman of the board of the Milwaukee Braves, and president of the Perini Corporation, is one of the development's directors.

#### Why cast iron pipe?

Mr. Lou Perini and his associates wanted a water supply system that would perform dependably and inconspicuously, with no major repairs or replacements; they wanted QUALITY piping for a QUALITY housing development; they wanted the assurance that their choice would long outlast the bond that bought the utility. Only cast iron pipe met all these qualifications.



Cast Iron Pipe Research Association, Thos. F. Wolfe, Managing Director • 3440 Prudential Plaza, Chicago 1, Illinois



# An "ideal" feature for homes

These popular folding doors will help give your homes maximum appeal. Home buyers like them because they are practical as well as beautiful, allowing easy access into closets and pantries. And they are ideal for use between rooms, too.

Made in four sizes to fit door frames 6' 8" high and 3', 4', 5' and 6' wide. Units, which include aluminum track and hanger hardware, are available with wood louvered, panel or flush doors. Carton-packed with instructions for fast and easy installation.

#### SOLD AT RETAIL LUMBER YARDS IN

Texas, Oklahoma, New Mexico, Kansas, Nebraska, Missouri, Arkansas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, Kentucky, Tennessee.

Send for Your free Catalog

IDEAL COMPANY, BOX 889, WAC Please send catalog on IDEAL Milly	
NAME	
ADDRESS	
CITY & STATE	H&H 3-60



### Why Executive House builders chose Gerber Plumbing Fixtures —the Mighty Middle line

Architects and owners of Chicago's luxurious Executive House selected Gerber color bathrooms for each of the 466 private bathrooms and public washrooms.

Gerber Plumbing Fixtures gave them the beauty and high quality they wanted to enhance the luxurious accommodations of the structure, at a moderate price made possible by Gerber's policy of producing fixtures for the mass market the Mighty Middle.

By specializing in the big volume market only, Gerber offers more value, in a complete line of high quality plumbing fixtures. Six modern colors: Petal Pink, Wedgewood Blue, Forest Green, Driftwood Tan, Daffodil Yellow, Cloud Gray.

More and more builders are putting in Gerber fixtures, for homes in the \$9,000 to \$24,000 mass market price range right up to luxury hotels such as the Executive house. Write for booklet on The Mighty Middle.

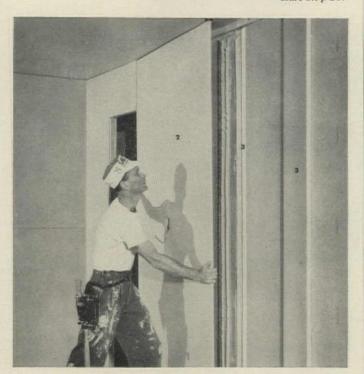


Plumbing Fixtures Gerber Plumbing Fixtures Corp. 232 N. Clark St., Chicago 1, Ill.



#### **New products**

start on p 217



#### Studless wall saves layout and cutting

US Gypsum's new system is assembled in place, avoids staggered joints by centering core blocks every 24". Faces of new partition are 5/8" Sheetrock. In solid runs, full sheets of wallboard are nailed to 1" thick floor and ceiling runners. Gypsum coreboards 1"x8" are then glued to the back of the first drywall face at the joints and midway in the sheets. The second drywall face is then nailed to runners and glued to 1" coreboard. Because the only nailing is at floor and ceiling, there are no nails to conceal in wall face.  $7\frac{1}{2}$  coreboard leaves room for electrical conduit in 8' wall.

US Gypsum, Chicago. For details, check No. 8 on coupon, p 296



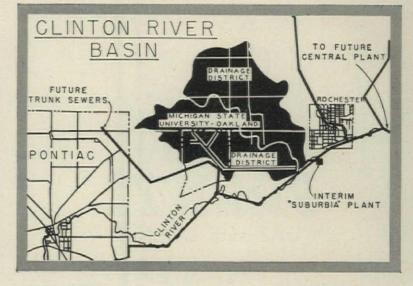
#### New tool forms tees in five minutes

All it takes are three simple steps: 1) tube is locked in a clamp; 2) pilot hole is cut; 3) spinner is turned in the hole until tube wall is pushed outward to form the tee. No heating or other pretreatment is needed. Tool cuts the need to stock tee fittings and cuts soldered joints at each tee from three to one. New tees can be spun in installed lines as easily as in unassembled tube. Tee Turner will work on  $1\frac{1}{2}$ " to 4" tubing of DWV, M, L, and K types (separate sets are made up for water distribution and drainage lines).

Erie Tool Works, Erie Pa.

For details, check No. 9 on coupon, p 296

continued on p 239



## Low-cost sewage plant is key to development of Clinton River Valley

In the Clinton River Valley near Pontiac, Michigan, a new town is going up... a complete, 700-home community surrounding Michigan State University's new Oakland County campus. Yet, one short year ago, both college and community were termed "impossible."

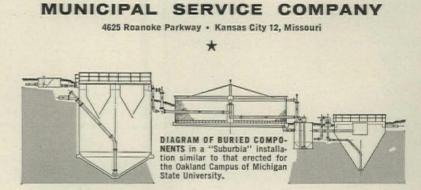
The reason is one only too familiar to builders: lack of adequate sewage facilities—and not enough money to build a traditional sewage treatment system. Only two factors saved the day... Oakland County's determination to *have* that University branch—and the low-cost sewage treatment plant that made it possible.

Three interested groups—the University, County officials, and the developers who wanted to build the new campus community—evolved a "master-plan" which may be the pattern for metropolitan areas all over the nation.

It involves construction of a "Suburbia" sewage treatment plant, together with collection and intercepting sewers of size and location calculated to fit into the County-wide masterplan. "Suburbia's" relatively modest cost made it possible to obtain good private financial backing.

Developers are finding that "Suburbia" can be planned for projects of 200 to as many as 10,000 homes, and can be erected in a surprisingly short time. Individually planned and installed under the direction of their own consulting engineers, the unit conforms to State Health Department requirements.

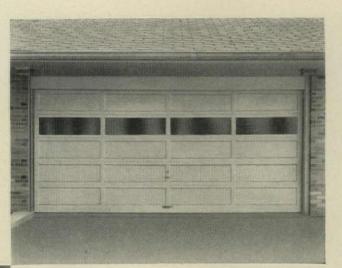
Best of all, "Suburbia" involves less initial and operating capital than any other type of sewage treatment plant. Perhaps it can help *you*, too, "unlock" new land . . . by providing sewage treatment quickly, efficiently, from a single source of responsibility. For further information, write to . . .



# FINEST O GARAGE DOORS

### SERIES

Truly deluxe in every sense of the word, the beauty and styling of the 200 Series are matched only by its quality materials and its many features. Just turn the latch and a 200 door glides up as if by magic, with no rebound. On closing, a crisp click signals automatic latching on both sides. Such easy operation-plus fast installation makes the 200 Series preferred by those who want a door that has everything! Choose from 21 different sizes and styles. No door can give you more!



#### NO OTHER DOOR HAS ALL THESE FEATURES

Exclusive double brakes, adjustable and self equalizing . . . Exclusive two-way adjustable springs for perfect adjustment . . . Chrome handle and brass cylinder lock . . . Glide-O-Matic self-opening . . . tapered track . . . inside lock . . . zinc plated hardware . . . 14 big features in all.

FRANTZ ... The Lumber Dealer's Door

FRANTZ MANUFACTURING COMPANY

Sterling, Illinois



(Advertisement)

Busy builders, engineers and city officials view the new Smith & Loveless movie in their own offices on a special-built, continuous projector.

## S&L Industrial Movie Wins Acclaim

Smith & Loveless Movie on Factory-Built Sewage Lift Stations Applauded by Builders, Engineers-Award at NAHB Show

The world's largest manufacturer of factorybuilt sewage lift stations has come up with "just about the world's easiest method" of showing their first industrial movie to prospective customers.

Sales representatives of Smith & Loveless, Lenexa, Kansas, use a special-built, continuous projector, called a Cinesalesman, to show the firm's first color-sound motion picture on sewage lift stations to busy builders, developers, engineers and city officials all over the United States and Canada. The projector looks like a portable television set, is as easy to carry as a piece of luggage and requires no external screen, no rewinding or rethreading of the film.

Movie Program Has Educational Value The Smith & Loveless movie shows the operation, design features, manufacture and installation of factory-built sewage lift stations and gives the viewer a complete tour of the company's modern, well-equipped manufacturing plant near Kansas City.

#### **Movie Wins National Award**

The movie program was cited for "Exceptional Merit" in the "Ideas for Home Builders" contest, sponsored by the Producers' Council, Inc., and the National Association of Home Builders, Washington, D. C. The award, represent-



The continuous projector used by Smith & Loveless sales representatives

ing the top honor in its class in this national contest, was presented at the NAHB show in Chicago.

Several copies of the film are available for special meetings or classroom use. Special showings may be arranged by contacting DEPARTMENT 70. SMITH & LOVELESS, DIVISION-UNION TANK CAR COMPANY, LENEXA, KANSAS.



# Sell Houses Faster with the Plus Appeal of New **Kelvinator Built-In Electric Ranges and Dishwashers**



Built-In Range Beauty PLUS No Messy Oven Cleaning! With Kelvinator, you don't just offer easier oven cleaning, but elimination of all the drudgery ... with throw-away aluminum oven linings in the oven and under each surface unit. When linings become soiled, they're easily replaced. And here's another plus: exclusive new multi-heat broiler does all meats, even fish, to order without raising or lowering the grill!



Matching Dishwasher Beauty PLUS Cleaner Washing of Every Pot, Pan or Dish! With Kelvinator, you can offer true multi-cycle dishwashing ... including exclusive automatic control of a pot and pan soak cycle or pre-selected pre-rinse cycle. Twin detergent dispensers distribute just the right amount for normal or heavy loads . . . while four power rinses remove all detergent scum for cleaner, more sparkling dishes and tableware!

Give your houses the Plus Appeal of Kelvinator Built-In Exclusives . . . write or wire today for full details!



DETROIT 32, MICHIGA

**MARCH 1960** 

# With GENERAL HOMES'

Brendonaire!

Get the GENERAL Idea for 1960— Double Your Profit Under Our Unique Plan of

TOTAL PREFABRICATION TOTAL

A General home can be ready for occupancy two days after arrival—pre-wired, pre-plumbed, pre-painted inside and out. Everything but concrete arrives in one trailer. And General Homes gives you a firm commitment on a permanent, guaranteed finance program at a definite price, covering everything from land procurement to final mortgage, as well as personal counsel on planning, erecting, marketing . . . total dealer support!

#### CALL, WIRE OR WRITE NOW!

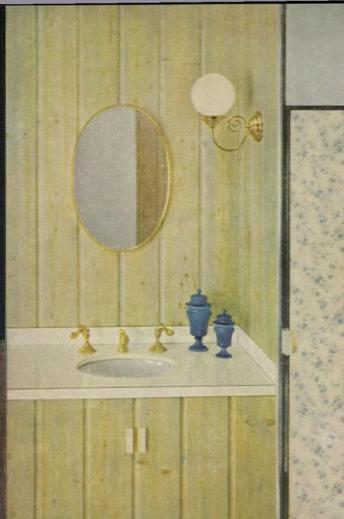
If you're a qualified builder with 25 or more lots within 450 miles of Ft. Wayne, get complete information from General Homes Builder-Dealer Manager or Wm. B. F. Hall, President, General Homes Division of General Industries, Inc., Ft. Wayne, Ind. PHONE: Kenmore 6221.





For luxurious walls like this ...

the right-for-color woods of the Western Pine Region\*



Western Pine Region woods harmonize or contrast with all building materials. Bathroom paneling Engelmann Spruce, Cimarron Sky finish.

#### ELEGANT-AND PRACTICAL-TO HELP YOU SELL

Make your homes more elegantwithout increasing costs and without difficult extra work. Use easyto-work-with paneling of Western Pine Region woods. Finish it in bright colors so the grain shows through. Elegant-and practical.

This is a way to make model homes sparkle...to perk up prospects' interest. Quite likely they'll have seen our advertisements in American Home and Better Homes & Gardens. Seeing it in your homes gives them a delightful "extra"...helps bring them closer to deciding "yes."

For facts on color finishing Western Pine Region woods and a sample package of HELPFUL HOME MERCHANDISING AND SALES AIDS, write to Western Pine Association, Dept. 428-V, Yeon Bldg., Portland 4, Oregon.

#### Western Pine Association

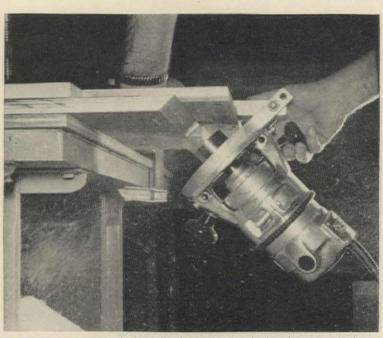


these woods to high standards of grading and measurement . . grade-stamped lumber is available in these species

abor mills manufacture

\* IDAHO WHITE PINE • PONDEROSA PINE SUGAR PINE • WHITE FIR • INCENSE CEDAR • DOUGLAS FIR • LARCH • RED CEDAR • LODGEPOLE PINE • ENGELMANN SPRUCE

Today's Western Pine Tree Farming Guarantees Lumber Tomorrow



COUNTER TOP EDGE is held at the proper angle by the new attachment while special blade in the  $2\frac{1}{2}$ -hp router cuts a clean, slightly hollow bevel.



GLUE IS APPLIED freely to bevels. Waterproof glue is recommended.



JOINT IS SO TRUE glued edge can be held in place by cellophane tape.

**New products** 

start on p 217

# This tool will insure clean sharp self-edges for laminated counter tops

New attachment for Porter-Cable's 2½-hp router cuts edges of laminated countertops so they form a sharp mitered corner. With it you can make a countertop that does not show a black line of undersurface at joint as most self-edged tops do or require a concealing T molding as rough-edged tops do. With the new system an eccentric cutter makes a slightly concave miter in the edge of each piece to insure a clean corner and a large contact surface. When the bevels are brought together, they can be held by cellophane tape while the glue sets.

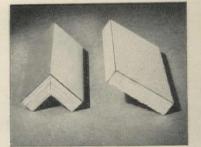
The new attachment was developed for Porter-Cable by Knick-March Engineering, Inc. The makers recommend that the special cutters be sent back to them for regrinding. Price of attachment and blade: \$175, regrinding costs \$4.

Porter-Cable, Syracuse. For details, check No. 10 on coupon, p 296

continued on p 240



JOINT IS SO SHARP it may need slight sanding for safe handling.

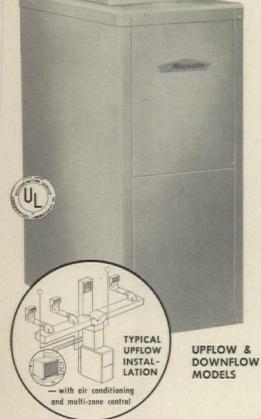


FINISHED JOINT (left) avoids the black edge of most countertops.

### Sell <u>all-season</u> comfort with today's cleanest heat

THE NEW





C ustom home buyers find a happy combination of leisure and economy in Majestic's Electric Furnace! It combines the best features of forced-air and electrical resistance heating. There's no combustion, no smoke, no soot, no burned fuel deposits to settle on walls, draperies and

There's no heat lost, just 100% clean, effective warmth. No stale, dead air results; instead, Majestic's smooth-running belt-driven blower circulates air healthfully through the system. To assure economy, the heat supply is *modulated*, delivered *only as needed* by means of automatic controls. It's the perfect furnace for adding year-round air conditioning with cooling, filtering, humidity control and multi-zone comfort.

It's the *best comfort system* available for today's better insulated homes.

	Warm Air Heating Manual Comfort'' and other literature.	
Name	Title	
Company		ACTIVITY MARANA
Address		-
City	Zone State	-

The Majestic Co., Inc. 416 Erie Street, Huntington, Indiana



**NEW STYLING** and larger, more accessible racks are in latest Frigidaire dishwashers.

#### Frigidaire shows its builder appliance line

New ovens, surface units, dishwashers, and clothes washers were introduced by Frigidaire at NAHB'S January show.

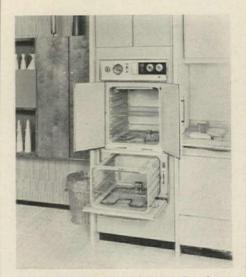
Easy cleaning is the chief feature of 1960's ovens. The pull-out oven liner introduced in 1959 freestanding ranges has been used in two double ovens, one with French doors, one with a 180° dropleaf door. Other models: a double oven and three single ovens. Top line models have automatic time and temperature controls, spatter-free broiling, clock, etc.

New surface units include three models with fold-back space-saving burners. These come two burners to a 24" section, can be installed anywhere in the house for point-of-use cooking. Also in the line are four drop-in models, including one to fit a 24" counter top.

New dishwashers hold large platters as well as pots and pans. A new spray tube between the racks assures thorough washing of top rack. Budget-class washer with automatic pre-soak completes the line. All come in chrome and colors.

Frigidaire, Dayton.

For details, check No. 11 on coupon, p 296



**PULL-OUT OVEN LINER** is featured on lower unit of new built-in double oven.

continued on page 248

# Here's how this Amtico Vinyl Floor helps sell prospects

As illustrated on the facing page



THE FLOORING: Amtico Celestial Vinyl

#### THE COLORS:

1 VL-140 Golden Fleece	5 VL-540 Sunset Red
2 VL-240 Golden Night	6 VL-541 Dawn Pink
3 VL-330 Silver Cloud	7 VL-840 Neptune Green
4 VL-440 Champagne Mist	8 VL-940 Horizon Blue

#### **CELESTIAL FLOORING SPECIFICATIONS:**

Amtico Permalife Vinyl ½"... all-vinyl, color throughout thickness • Standard tile sizes ... 9" x 9", 12" x 12", 36" x 36" (untrimmed) • Special sizes ... 9" x 18", 18" x 18", 24" x 36", 36" x 36" (trimmed) • Feature strips (Stardust and plain vinyl colors) up to 1" wide, 36" long.

#### AMTICO FLOORING FACTS:

Amtico Celestial Vinyl Flooring is just one good reason why builders look to Amtico for great ideas in flooring designs. In striking Celestial—inspired by the sweeping beauty of the heavens—starry clusters glitter through pearly translucent hues.

Amtico, the complete resilient flooring line, floors homes with the ultimate in sales appeal in every price range. You can choose highest fashion in luxury all-vinyl flooring like famous Amtico Renaissance.<sup>®</sup> Or, Amtico's budget-priced designs, like Amtico Care-Free,<sup>®</sup> give floors a fresh, imaginative look. It's easy to sell with the smartness of Amtico's colorful beauty. You can point out, too, the long-range advantages of Amtico quality that withstands hardest wear with so very little care.



a floor is moonlight... and romance... and beauty...



Floor illustrated is pearlescent Amtico Celestial Vinyl. Other imaginative Amtico designs include dimensional Renaissance, gleaming Stardust and co-ordinated Terrazzo, Marbleized and Plain Colors.

AMERICAN BILTRITE RUBBER COMPANY, Trenton 2, N.J. Dept. HH-30

Please send detailed literature and FREE complete set of Amtico Vinyl and Rubber Flooring samples to:

NAME		in the	-
FIRM			-
ADDRESS			1
CITY	ZONE	STATE	
101		and and an it is	-

(Please attach coupon to your business card or letterhead



Every woman knows the Hotter the Water the Cleaner the Dishes. Only the Westinghouse ROLL OUT Dishwasher has the Hot Water Booster that guarantees 140° piping hot water all through the wash cycle and final rinse. Power Soak during the Booster heating period loosens problem food soils, assuring spotless sanitary-clean dishes. Power-Temp drying leaves glasses and silverware absolutely spot-free. The Westinghouse ROLL OUT Dishwasher loads from the top and has a porcelain WashWell\* that is selfcleaning. 24" wide, the ROLL OUT is easy to install. Requires only one electrical connection. Saves on cabinetry, too.

# WESTINGHOUSE BUILT-IN ROLL OUT DISHWASHER

guarantees 140° hot water from start to finish



CHOOSE-N-CHANGE FRONT PANELS. Select from eight interchangeable custom front panels in the following colors and finishes: Mint Aqua, Frosting Pink, Lemon Yellow, Sugar White, Coppertan, Coppertex, Brushed Chrome, and Heirloom Maple Wood (at left), which perfectly matches Westinghouse Heirloom Maple Wood Cabinets.These Choose-N-Change Panels can be easily switched in minutes... will enhance any kitchen decor.



CONVENIENT ROLL OUT WASH-WELL. Just press latch bar and the WashWell rolls out. Top loading eliminates bending and stooping... is preferred by home-owners. Automatically washes, rinses, and dries service for 10. Scientific rack design and construction permits safe, thorough washing of finest china, crystal, and silverware.

WATCH "WESTINGHOUSE LUCILLE BALL-DESI ARNAZ SHOWS"-CBS-TV ALTERNATE FRIDAYS

Westinghouse TOTAL ELECTRIC gold medallion home Where everything is done electrically even the heating HEATING - COLING - LIGHTING - APPLIANCES	YOU CAN BE SURE IF IT'S Westinghouse SEND COUPON FOR COMPLETE INFORMATION ABOUT WESTINGHOUSE KITCHEN EQUIPMENT
Wood and Food Waste Refrigerators Laundromats	<ul> <li>Westinghouse Electric Corporation, Contract Sales Dept. 246 East Fourth Street, Mansfield, Ohio</li> <li>Please send descriptive catalog on WESTINGHOUSE DISHWASHERS, plus the complete line of other Westinghouse appliances and cabinets.</li> <li>I wish to have a representative call.</li> </ul>
Steel Cabinets Disposers Freezers and Dryers Dishwashers Ovens and Platforms Electric Water Appliance Centers	I wish to have a representative can.         Name

#### NEW HOUSE IDEAS YOU CAN MERCHANDISE ...

# NEWEST NO-FROST



# **REFRIGERATOR-FREEZER**

with IceMagic<sup>®</sup> ice maker replaces every cube...automatically!



IceMagic is an important "extra" that really appeals to modern home buyers . . . a powerful sales feature available only in the all-new RCA WHIRLPOOL refrigerator-freezer line. Exclusive IceMagic makes distinctive, half-moon shaped ice cubes and stores them in a convenient ice bucket that can be used for serving. As cubes are taken from the bucket, they are automatically replaced; no trays to fill, no prying of cubes, no mess or fuss. Ice cubes are always ready for immediate use.

#### ELECTRIC OR GAS

RCA WHIRLPOOL refrigerator-freezers are made in both electric and gas models . . . in a wide variety of sizes to meet practically every need. They fit flush . . . can be built in. Another powerful sales feature!



It's easier to sell RCA WHIRLPOOL equipped homes!

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

\*Tmk

# frost never forms

IN THE REFRIGERATOR OR THE

FREEZER

BECAUSE . .

... all frost-gathering coils are located outside the food storage areas of the new RCA WHIRLPOOL refrigerator-freezers. No frost-covered packages to pry loose; no frost-packed shelves or interior walls; no messy defrosting chores. Housewives really love this important feature. A powerful selling point for you.

[ .....

#### All these features, too!

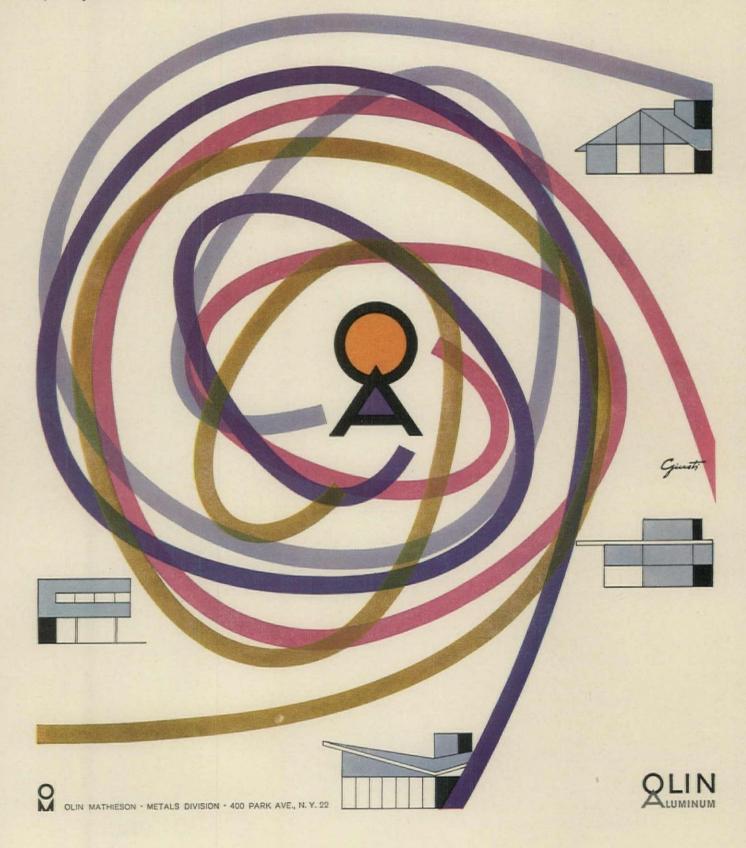
There's the Constant-Cold Reserve to bring cooling back to normal faster... Air Purifying System and Activated-Carbon Filter that removes up to 97½% of objectionable food odors ... Million-Magnet\* door that seals all around ... Jet-Cold\* Shelf that chills food and beverages faster . ... Jet-Cold Meat Chest that maintains ideal meat storage temperatures ... and many more outstanding features, all to help you sell.

#### Mail coupon for full details

Contract Sales Division Whirlpool Corporation, St. Joseph, Michigan	HH-3-0
Please send complete information on the new line of RCA WHIRLPOOL gas and electric refrigerator-freezers.	
NameTitle	
Firm Name	
Firm Address	
CityZon	e
CountyState	

### There's no pace like Home-Building

Olin Aluminum is right in step with fast-moving home builders and building product manufacturers. They like us because we go all out to meet their precise schedules. Want sales-provoking alloys and finishes for siding, flashing, railings, gutters, etc.? We tailor-make the metal and speed it out. Want extrusions that cut the time and cost of producing components?  $\mathbf{Q}$  will help you design them... will make them. Looking for quality materials that cut down on job-site operations? Plenty of products fill the bill and they're made of Olin Aluminum. Call us today for a rundown on the many ways aluminum can cut your costs... improve your product... speed your sales. Your local Olin Aluminum sales office or distributor is listed in the Yellow Pages.



## You get more roofing profits with every swing of a Bostitch H4 Stapling Hammer



Why? Because applying asphalt shingles with the Bostitch H4 Stapling Hammer is as much as four times faster than with hammer and nails, giving you time to do more jobs.

It takes only six swings to fasten each strip of shingles with 3/4" galvanized staples. Roofing is faster with the H4 and staple legs spread inside roof deck for maximum holding power. Staging time is cut, too.

More and more builders are saving time and money and earning better profits with Bostitch. See your building supply dealer for a demonstration.

#### Other Bostitch products help you speed work, increase profit



#### THE BOSTITCH H5 STAPLING HAMMER

is best for fast, light tacking jobs. It's the almost "nofatigue" way to install builder's paper, foil-type insulation and vapor barriers.



#### THE BOSTITCH T-5 TACKER

--the standard by which all spring tackers are compared. Operates with easy squeeze of hand. Small nose permits staple location as close as one-sixteenth inch to inside of rabbet. Cuts time on every job. Also made with heavy spring for hard-to-penetrate materials.



#### THE BOSTITCH H2B STAPLING HAMMER

is designed to cut costs on medium tacking or nailing jobs such as insulation, building paper, undercourse shakes. Fast onehand operation—other is free to position work. Pays for itself on a few jobs.

Profits are better and faster with



523 BRIGGS DRIVE, EAST GREENWICH, RHODE ISLAND



#### Style leader for any decor

• TRIM, CONTEMPORARY DESIGN Hugs the wall and compliments any decor with its rich, beautifully proportioned appearance.

• MATCHES OR BLENDS WITH ANY WALL You simply paint the easily snapped-out face panel. A touch of the brush and it's part of the decor.

#### . ANTIQUE GOLD TRIM RING

Accents the Desert Tan face panel. Other trim ring finishes also available for individual needs.

#### RECOGNIZED STYLE-LEADER

The "decorator" has been acclaimed by a national design magazine as the leading thermostat design.

#### . GREATER ACCURACY

Precision engineering makes the "decorator" especially sensitive to temperature changes for even temperature control, with the widest range in the industry.

#### . POSITIVE SNAP ACTION SWITCH

Gives split-second response with immediate contact. There's no prolonged "sizzling" period when the "decorator" turns on or off.

#### . EASY TO INSTALL

Screw-type terminals for easier connecting, faster installation, more positive contact. Installs easily over rough plaster.



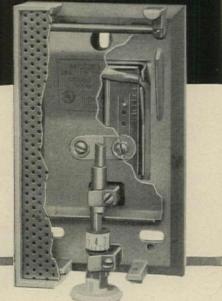
Contact your electrical distributor for full information, or send for informative catalog.

### modern MEARS "DECORATOR" thermostats

for modern electric heat as advertised in



ENGINEERED FOR Most Accurate, Reliable control



Leaves plenty of room in the box for wires.

#### . MEETS ALL CODES

Double line break of the M6-D offers additional safety and performance, meets all local codes . . . for very little additional cost.

• THREE "DECORATOR" MODELS AVAILABLE All identical in size and design . . . offer the finest control for all types of electric heating.

MEARS ELECTRIC CONTROLS, INC. Box 3798, Portland 8, Oregon Please send your catalog on the new "decorator" thermostat and names of suppliers in our area.

Name Address..... City\_\_\_\_\_ Zone\_\_\_\_ State\_\_\_\_\_

New products

start on p 217

**KENMORE** "X" is Sears' new trim freestanding range with two eye-level ovens.

## Sears line looks built-in, can be free-standing

New ranges and refrigerators being offered by Sears Roebuck have the square-lined built-in look but can be used free standing when layout requires it. Most new Kenmore ranges are 30" wide. Top-line model (shown above) sits on cabinet base, has two eye-level ovens, one with threespit rotisserie. Matching gas and electric models come with controls up front or on back panel. New refrigerator line is headed by frost-free combinations in 14 and 16 cu ft sizes. All shelves slide, cooling is speeded 50%. Seven 10 to 14 cu ft refrigerators fill out line.

Sears Roebuck, Chicago. For details, check No. 12 on coupon, p 296

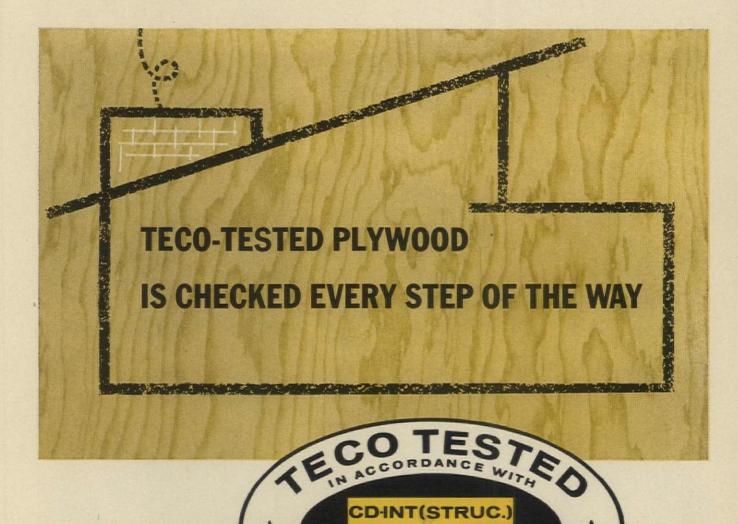


STRAIGHT-LINE 30' RANGE fits between cabinets, looks built-in. This is gas model.



FRONT VENT LOUVERS on Sears refrigerator-freezer let back be flush with wall.

continued on page 252 HOUSE & HOME



# Western Veneer's New Plywood Grade Stamp

.vwoor

THE COMMERCIAL STANDARD FOR

### **Guarantees Consistent Quality**

DOUGLAS FIR

Western Veneer & Plywood Co.

Lebanon, Oregon, Phone ALpine 8-3134, TWX 485-U

The Teco Grade Stamp is backed by the Timber Engineering Co., Washington, D.C. It is an independent FHA-Accredited Testing Agency. The Teco Grade Stamp means that plywood carrying this stamp has undergone production line inspection and testing by a technician employed by Timber Engineering Co. What this means to you is that this technician is on duty every day watching and checking every step of the manufacturing process. He knows what goes between the two outer plys-the core material, the kind and type of glue, patching, in fact the whole operation from log to finished product. Only when plywood meets Teco's rigid requirements is it given the Teco grade stamp of approval. This is your guarantee of a consistent supply of superior quality plywood when you insist on TECO.



# "We're 'sold' on concealed telephone wiring—and our customers are, too"

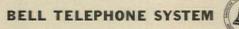
-says William B. Watkins, President A. J. Watkins & Sons, Inc., Baltimore

This is one of the handsome custom homes in the "Pot Spring" community of suburban Baltimore.



In an unfinished model, builder Bill Watkins discusses a kitchen phone location with telephone man C. L. Anderson.

Your local Telephone Business Office will gladly help you with telephone planning for your homes. For details on home telephone installations, see Sweet's Light Construction File, 11c/Be. For commercial installations, Sweet's Architectural File, 34a/Be.



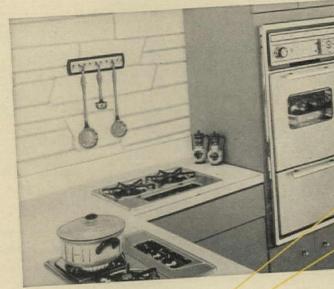
A. J. Watkins & Sons, Inc., has built more than 4500 homes since World War II. The firm's current project is the "Pot Spring" community of homes north of Baltimore in historic Dulaney Valley.

Custom-built in the \$35,000 to \$40,000 range, these distinctive homes have one important feature in common: a minimum of six built-in telephone outlets with wiring neatly concealed in the walls.

"We've telephone planned over 200 of our homes—ever since the telephone company made concealed wiring available," says Bill Watkins, president of the firm. "Nowadays, people *ask* us about it. They consider it a necessary feature of a modern, quality-built home. It makes it easy for them to add extension phones whenever and wherever they need them.

"We're 'sold' on concealed telephone wiring—and our customers are, too. It definitely helps us sell our homes."

# Look what Gas is building-in for you!



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

#### Your houses will sell faster when women see this Gold Star!

Built-in Selling Advantages... Ranges built to Gold Star standards have the features women want: automatic roast controls, automatic burner controls, even automatic rotisseries! These features will help sell houses. Gold Star quality pays off in building your reputation, too-most women judge your whole house by details like this!

**Built-in Acceptance**... Both the manufacturers and the American Gas Association are pre-selling Gold Star award-winning ranges to millions of Playhouse 90 viewers, to millions more who see page after page of beautiful 4-color ads in top national magazines. Local advertising and promotion too. A total of \$30,000,000 support.

Built-in Cost Advantages ... Lower installation costs of Gas built-ins save you money. Lower use and upkeep costs with Gas appliances, make important savings for your home-owner-to-be ... a big selling advantage. Call your local Gas Company for free help in planning better kitchens. AMERICAN GAS ASSOCIATION Look for these famous names:

\*\*\*\*

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

OAm. Gas Assoc. Inc.

Today more people than ever are cooking with A GAS!



Here's the perfect Vent Hood for use with powered kitchen and bathroom exhaust fans ... a new specially designed combination ventilator and roof jack with construction features resulting from several years of laboratory and field testing. Rustproof all aluminum construction for attractiveness and long life ... unique back draft damper located in rolled stack to prevent damper clatter ... hood louvered on three sides for adequate ventilation, increased weather protection, and the elimination of clogged screens ... one piece seamless bottom to prevent leakage. Wherever you use ceiling exhaust fans be sure you include the new Model 700 LoManCo exhaust fan Vent-Hood ... only product of its kind on the market specially designed for use with power ventilators!

Ask your dealer or jobber . . . write, wire or phone today for complete information.

• 100% Rustproof Aluminum construction—built for a lifetime of service

 Unique clatter-proof back draft damper

Louvered Roof Hood—provides extra weather protection, eliminates clogged screens

Seamless one piece bottom prevents water leakage

For all hip, pitched or gable roofs

Note: Cutaway illustration above





start on p 217

**New products** 



**NEW WALL OVEN** has clean lines, full width handle; surface units fit snug in countertop.

#### Waste King previews line it will sell this summer

At the January market, Waste King Corp simultaneously changed the name of its sales organization to Waste King Universal and showed its new line: nine dishwasher-dryers, ten built-in gas and electric ovens and ranges, an economical electric drop-in range, and an electronic oven. The dishwashers use a new rotating Z or T arm to circulate pump-forced water through the load. New ovens have removable drop-down doors for easy cleaning, fiberglass insulation, porcelain linings. Top line has automatic controls. New drop-in is a small, inexpensive cooking unit for problem areas.

Waste King Corp, Los Angeles. For details, check No. 13 on coupon, p 296

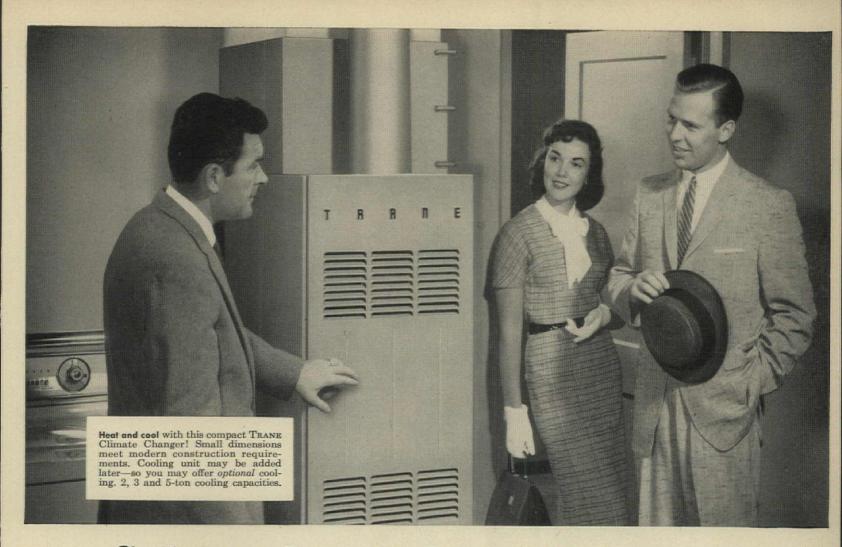


BUILT-IN DISHWASHER is sleek and modern, has new water distribution system.



**DROP-IN RANGE** has four surface units, front-control oven in space 2'x2'x2'.

continued on page 256



# Sell your homes <u>faster</u> this spring with versatile Trane Air Conditioning

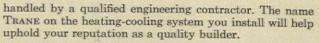
Offer heating and cooling—or <u>optional</u> cooling with these new, thrifty Trane Climate Changer units

The homes you build for sale this year can be "upgraded" —made more attractive to buyers—if you install TRANE Climate Changer units. Yet, you need not price yourself out of the market—because these TRANE heating or heatingcooling units are competitively priced, simple to install.

With TRANE Climate Changers, you offer your prospective buyers *exactly what they want*: you may install just the heating unit when you build, offer cooling as an optional feature. And with TRANE, you may choose either forced warm air or hot water heat; there's a matched TRANE cooling unit to go with either. And every TRANE Furnace has been designed to go with cooling. The cooling unit may be added when you sell the home or it may be added later ... easily, economically.

And TRANE offers you a complete range of capacities, with gas or oil-fired models for any size, any type of home.

Designed and built by a leader in air conditioning, TRANE Climate Changers are built in a new, modern plant designed exclusively for manufacturing residential air conditioning equipment. And every TRANE installation is



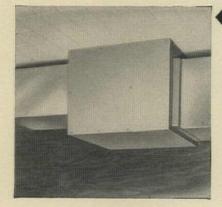
Want More Facts? Call your nearby TRANE Sales Office, or write TRANE, La Crosse, Wisconsin.

#### For any air condition, turn to



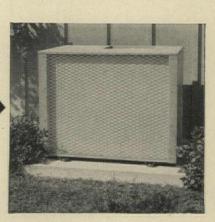
MANUFACTURING ENGINEERS OF AIR CONDITIONING, HEATING, VENTILATING AND HEAT TRANSFER EQUIPMENT

THE TRANE COMPANY, LA CROSSE, WIS, + SCRANTON MFG. DIV., SCRANTON, PA. CLARKSVILLE MFG. DIV., CLARKSVILLE, TENN. + TRANE COMPANY OF CANADA, LIMITED, TORONTO 97 U. S. AND 19 CANADIAN OFFICES

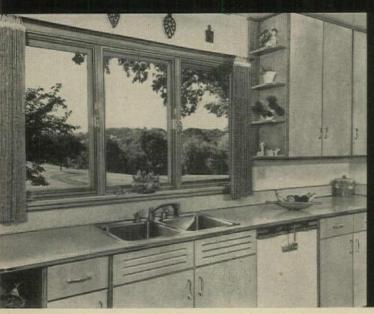


Cooling that matches any heating system! This Climate Changer fan-coil unit tucks away in attic, utility room, basement or behind partition. Takes only 5 sq. ft! Perfect for use with TRANE Baseboard and similar types of heating systems.

Needs no water! This compressor and condenser unit is used with the TRANE Climate Changers described above. Air-cooled, it eliminates water supply and disposal problems. Installed outside the home or building.









# The outlook is always the <u>best</u> with Qualitybilt Wood Windows



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

See our catalog in Sweets Architectural and Light Construction Files!

## FARLEY & LOETSCHER MFG. CO.

DUBUQUE, IOWA

Entrances / Doors / Frames / Sash / Blinds / Casements / Glider Windows / Sliding Doors / Screens / Combination Doors / Storm Sash / Garage Doors Mouldings / Interior Trim / Sash Units / Louvers / Kitchen Cabinet Units / Cabinet Work / Stairwork / Disappearing Stairs / "Farlite" Laminated Plastics In celebration of our 60th year of world-wide progress . . .

## Special Anniversary Offer to Builders

A Genuine Coleman gas-lite

with the installation of

# America's Only Bonded Line Heating and Air Conditioning

Now you can give your homes the extra elegance of outdoor gas lighting at no extra cost!

As a 60th anniversary salute to builders, Coleman makes this offer: A genuine Coleman Gas-Lite for every home in which you install a Coleman central furnace, wall heater, floor furnace or air conditioner.



This allows you to offer the home buyer a *double* bonus. Bonus No. 1 is an exclusive \$500 Warranty Bond on the Coleman equipment installed. Bonus No. 2 is the Coleman Gas-Lite.

Lamp is easily placed at any point where it adds the most charm—in front yard or patio, along driveway, on wall of house or garage, on a table. And remember—the Gas-Lite is yours with the installation of Coleman heating or air conditioning. Get in touch with your Coleman dealer or mail coupon below.



Also makers of famous Vit-Rock water heaters, Decorama space heaters, Coleman lanterns, camp stoves, jugs and coolers mobile home heating and air conditioning

Works on any gas-Installs 4 ways Can be mounted on post (as at left)







Can be mounted on wal with decorator bracket

#### The Coleman Company, Inc. Wichita 1, Kansas

I'm interested in your gas-lite offer. Please have your nearest dealer see me.

lame			-
ddress			1
Nity	Zone	State	



**New products** 

start on p 217



New Mutschler kitchen series 600 replaces series 500, has square lipped doors and drawers to match square-lined appliances. Square lip and new slide assembly give more drawer depth and width. Series 600 comes in a choice of hardware and in natural grain or color finishes.

Mutschler Bros, Nappanee, Ind. For details, check No. 14 on coupon, p 296



New Norge refrigerators, just introduced, now all include automatic ice servers. One 13 cu ft refrigerator is Norge's first gas unit. Other new topline models are electric-freezer-top 13 cu ft and 15 cu ft freezer-bottom with swing-out shelves. Suggested prices for new electrics: \$430 and \$530. Price of gas unit is still to be set.

Norge, Chicago.

For details, check No. 15 on coupon, p 296



Whirlpool's gas refrigerators introduced at the NAHB show are all frost-free. Thin-wall urethane foam insulation, magnetic door seals, square lines are standard. Top line GA-1400, has an automatic ice maker, quick-chill dessert shelf, air-conditioned meat chest. Units work on Servel gas absorption principle but exhaust heat at base, not top rear; are claimed to use less gas than predecessors. All three units are the same size, differ in features. No prices have been set.

Whirlpool Corp, St Joseph, Mich. For details, check No. 16 on coupon, p 296

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HOUSE & HOME

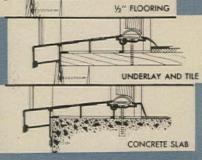
ELIMINATES

- Cutting subfloors
- Chopping out headers and floor joists
- Nailing in cripples

Rugged Aluminum Extrusions

- Built-in Adjustable Threshold
- Safety-Walk-Non-Skid Surface
- Nailless Aluminum Weatherstrip
- Pre-cut Aluminum Sill and Threshold Ideal for All Types of Construction

#### WAHLFELD MFG, CO.



BUILDER

DEALER

DISTRIBUTOR

Sill Sets on Top of Subfloor

**Built-in Threshold Adjusts** to Any Floor Level!

PAD AND CARPET

" FLOORING

Canadian Patent No. 582,697

Peoria, Illinois

For complete information on the new DAN-D® DOOR FRAME, clip and mail this coupon.

WAHLFELD MFG. CO. Peoria, Illinois

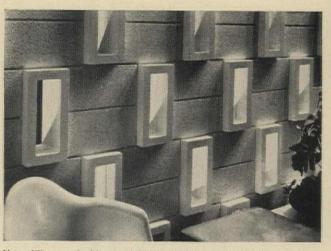
Please send your DAN-D DOOR FRAME Data: NAME

COMPANY NAME\_\_\_\_

ADDRESS

more "jace value"

for your home designs



Here, Vibrapac Architectural Block combines with standard block to form an unusual, decorative wall.

... with beautiful **Vibrapac** Architectural Block — the modern interior-exterior building material



The imaginative use of Vibrapac Architectural Block, as in this handsome home, attracts home buyers.

Something wonderful has happened to concrete block! It's no longer just "plain Jane." Hundreds of interesting, dramatic forms — new designs, new shapes, new colors — give it a new warmth that adds exciting decor to modern living.

As Vibrapac Architectural Block, it becomes today's most versatile exposed building material for interiors and exteriors. Beautiful open patterns admit light and air, while providing separation between indoor and outdoor living areas, Most Vibrapac block plants can meet your specifications for all types of architectural block.

Bulletin No. 139 suggests visually pleasing, functional applications of six examples of Vibrapac Architectural Block. Request your copy today — no obligation.





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

# WHAT OTHER MATERIAL CAN BE USED



Here at the entrance to this handsome home, it's readily apparent how important a contribution redwood makes to the casual, natural beauty so characteristic of the welldesigned contemporary home. Note, too, the pleasing harmony between wood, planting, translucent glass and tile.



Saw-textured redwood is particularly effective when used in combination with adobe and other natural materials. When not stained or painted, a water-repellent preservative is recommended to reduce the tendency of the wood to darken.



Because Certified Kiln Dried redwood is easy to work, holds its shape and finishes so beautifully, it is often specified for the fine millwork required in such decorative design elements as this sliding grille.

# SO EFFECTIVELY SO MANY WAYS?

From simple patio planter to the finest of interior paneling, from siding to decorative millwork, there's a grade and type of redwood

to meet the most exacting specifications. What's more, the warm, natural beauty of Certifled Kiln Dried redwood, with its wide range

of grains, textures and color variations, has an almost universal appeal to both the architect and home owner. No wonder this excep-

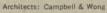


tionally versatile wood is used so extensively in so many distinguished homes from coast to coast.

All the wonderful

warmth of wood is best expressed in redwood.

CALIFORNIA REDWOOD ASSOCIATION · 576 SACRAMENTO STREET · SAN FRANCISCO · CERTIFIED KILN DRIED REDWOOD





**New products** 

start on p 217



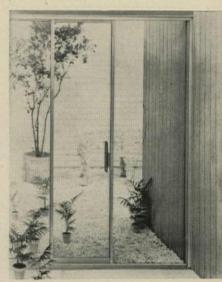
**Majestic Char-grill** is completely restyled in four new models for use with gas, electricity, and charcoal. Gas and electric models have ceramic Char-Roks to hold and distribute heat. Grill top tips to reduce flame-ups. Framing is heavygauge steel; finish is grey enamel and stainless steel. Matching hood has 600 cfm capacity.

Majestic Co, Huntington, Ind. For details, check No. 17 on coupon, p 296



Sunlite siding, the exterior hardboard product developed by Masonite for use in two NAHB research houses, is now available for general distribution. The tempered board comes 4' wide, 8', 9', or 10' long. Ribs are 2" wide spaced 8" oc. Panel is  $\frac{1}{2}$ " thick at the ribs,  $\frac{5}{16}$ " thick between. Shiplap joints are concealed by edge rib. Siding may be used directly on studs 24" oc. FHA accepted. Masonite Corp, Chicago.

For details, check No. 18 on coupon, p 296



**New Arcadia door** is made only in stock sizes to keep price at builder level. Sliding panel is mounted outside to permit use of step sill and insure weather tightness. Screen panel is inside to save it from weathering and becoming dirty. Frame of 151 door is  $5\frac{1}{2}$ ", includes interior and exterior mold to cut labor and materials 'cost. Alumilite finish. 6'10" high; 5'10", 7'10", 9'10" wide.

Arcadia, Fullerton, Calif. For details, check No. 19 on coupon, p 296

continued on page 268

#### ZEGERS

#### BALANCED TAKE-OUT WINDOW EQUIPMENT



#### new!

ZEGERS TAKE-OUT...'A TOUCH AND IT'S OUT'' Just a slight pressure on the interior left side and either sash is very easily removed or replaced.

#### new!

ZEGERS TAKE-OUT HAS EFFICIENT DURA-SEAL WEATHERSTRIPPING The "match test" proves it! Nationally known and proven Zegers Dura-Seal weatherstripping makes Take-Out a stand-out. No cold or dirt can enter!

#### new!

ZEGERS EXCLUSIVE "DUAL" BALANCING Balances on both sides of each sash prevent tilting; "Dual" balancing provides the most efficient weatherstripping and easiest window operation.

14

#### \*Only Zegers Take-Out has these important features: "Dual" balancing plus Dura-Seal weatherstripping!

Now you can offer your customers the best removable window on the market . . . equipped with Zegers Take-Out. It's the easiest to move and remove. Because of its superior weatherstripping and proper balancing it now makes the take-out type window a *practical* window.

Despite all its luxury features, Zegers Take-Out equipment is low in price. It can be installed with stock frames and sash; no extra millwork parts are necessary to trim out the window.



\*

SEND FOR NEW BOOKLET that tells all about the Take-Out! To receive this factfilled, illustrated booklet Write to ZEGERS, INCORPORATED

8090 South Chicago Ave. Chicago 17, Illinois





# ADD THE TOUCH THAT MEANS SO MUCH

Planned for comfortable family living...Hall-Mack bathroom accessories are made for a lifetime of practical use. Their gleaming, sparkling beauty . . . original design and distinctive appearance provide the utmost in convenience and comfort.

When building or remodeling, specify and select Hall-Mack... with the confident knowledge that Hall-Mack is the leader in bathroom accessories. For more than 35 years Hall-Mack has been pioneering new and original ideas, and better ways to make bathroom accessories of outstanding convenience and quality... to fit every building budget. The bath you design, sell or install today – will always have the best ... when you choose Hall-Mack!

Sold by leading plumbing, tile and hardware dealers everywhere

HALL-MACK COMPANY Division of TEXTRON INC.	HH-360
1380 W. Washington Blvd., Los Angeles 7, Calif.	

Please send your FREE color booklet of new bathroom ideas

PLEASE PRINT	
ADDRESS	



## How to give homes added floor beauty at no extra cost

Turn lookers into buyers with this floor that gives even an unfurnished new house a feeling of warmth and charm. Factory-inserted walnut pegs, alternating oak strips of 2¼" and 3¼" widths, and a mellow factory-finish combine to make Bruce Ranch Plank a floor of unusual beauty. Because there are no on-the-job finishing costs you can use Bruce Ranch Plank without extra expense. It's nailed just like plain strip flooring. For a feature room or throughout the house, let Bruce Ranch Plank give your homes added floor beauty. Write for color booklet. See our catalog on all Bruce Floors in Sweet's Files. E. L. BRUCE CO., 1596 Thomas St., Memphis, Tenn.

# Bruce Ranch Plank Floor.

with walnut pegs and alternate widths



PREfinished Twice the wear - half the care

# Pitty Poor Pata

#### ... the contractor who neglected to reinforce his concrete

Pete the Contractor knew his business, knew it very well. But unfortunately, he had a mental quirk when it came time to pour concrete. He simply didn't reinforce it with a rugged steel mesh like Clinton Welded Wire Fabric. The result: short hairline cracks spread into long crevices. His driveway lacked the strength to stand up under years of service and lost its good looks prematurely.

Most contractors avoid the fate that befell poor

Pete. They reinforce all concrete with Clinton Welded Wire Fabric. Made to ASTM specifications, Clinton Welded Wire Fabric gives concrete construction lasting durability and prevents cracks from spreading.

For complete information and fast delivery, call our nearest sales office.



In the West: THE COLORADO FUEL AND IRON CORPORATION - Albuquerque • Amarillo • Billings • Boise • Butte • Denver • El Paso • Farmington (N. M.) Ft. Worth • Houston • Kansas City • Lincoln • Los Angeles • Oakland • Oklahoma City • Phoenix • Portland • Pueblo • Salt Lake City • San Francisco San Leandro • Seattle • Spokane • Wichita

In the East: WICKWIRE SPENCER STEEL DIVISION—Atlanta • Boston • Buffalo • Chicago • Detroit • New Orleans • New York • Philadelphia CF&I OFFICE IN CANADA: Montreal CANADIAN REPRESENTATIVES AT: Calgary • Edmonton • Vancouver • Winnipeg

# virden Presents the NEW line of SCOTCH PLAID LIGHTING

#### Beauty PLUS Economy ...

From Virden, famous for quality, comes a new and separate line of lighting fixtures. Called Scotch Plaid Lighting, here is beauty in design, excellence in workmanship, at a truly economical price! Ideal for tract homes or low-cost housing. Excellent for remodeling, wherever you want high-style at budget prices. See the new Scotch Plaid Lighting line at your nearby Virden distributor. Ask him for your copy of our new, free, fullcolor catalog. Or mail the coupon below.

> 130 items in full color. All styles, all types.

- ceiling pieces
- wall brackets
- pulldowns
- outdoor fixtures
- recessed

See your Virden distributor or mail the coupon today!



In Canada, John C. Virden Ltd., Toronto, Ontario

Virden Lighting, Dept. HH-3 5209 Euclid Avenue Cleveland 3, Ohio

Please send me your free Scotch Plaid Catalog SP-160.

Name\_

Address.

City\_

\_State\_

Find It Fast

In The



Slidarol, the low cost, wonder window that has always featured nylon rollers, heavy vinyl glazing spline, screw fastened corners, heavy pile weather stripping, now adds F.F.F.\* to its remarkable removable track. Slidarol's removable track is made of vinyl, guaranteed to be completely FROST FREE. No more piling up of frost or ice on the interior track section of the window. Allows completely free operation of the window at all times.





Our sales representatives will be pleased to show you our window. Call, wire or write today!

\*Frost-Free Feature

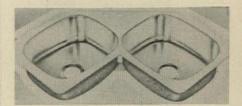
New products

start on p 217



Adjustable water heater will act as 30- to 50-gallon unit at the set of a dial. Hot water supply can be raised to meet the greater loads of washday or weekends, lowered to give midweek savings, or altered to grow or shrink with the family. New design permits high inputs, high rate of recovery under precise adjustment. Well-mounted thermostat allows easy adjustment from kitchen.

Rheem Mfg Co, Chicago. For details, check No. 20 on coupon, p 296



**Corner sink** is new from Jensen-Thorsen. Right-angled stainless steel unit is  $43\frac{1}{2}$ " corner to corner, 22" front to back. 21" back ledge has three faucet openings. Standard drain openings are  $3\frac{1}{2}$ ". Hudee rim is available. Bowls have white sound-deadening undercoat.

Jensen-Thorsen Corp, Chicago. For details, check No. 21 on coupon, p 296



**Single-control washer** provides ten automatic cycles to handle all fabrics. A single button sets timing, temperature, water level, agitation and spin speeds for each type of load. A special rinse cycle is included for pre-wash rinse or an extra post-wash rinse for baby clothes. Retail price \$410 to \$430.

Maytag Co, Newton, Iowa.

For details, check No. 22 on coupon, p 296

continued on page 276

HOUSE & HOME



Tee area capacity certified by Metal Ventilator Institute

# 0 sq. in. **GUARANTEED** FREE AREA

f Louver — For buildings that have no le ends. Easily installed on roofs of any h. Free area, 50 sq. in. Overall size, x 18%". pitch.

## **Competitively Priced**

# Pleasing design... solid construction **MILCOR ROOF LOUVER VENTILATORS**

#### Meet FHA Requirements

FHA specifications now set minimum standards for the amount of ventilation required in the homes you build. These standards measure ventilator capacities in square inches of free area - the only true criterion for buying ventilators.

Milcor Ventilators, like the Roof Louver shown above, offer maximum free areas in all sizes - and at competitive prices. Free area capacities for all Milcor Ventilators are certified by the Metal Ventilator Institute. Construction meets all FHA requirements.

See your building supply dealer or write us for Catalog 300A, for complete information on FHA requirements, sizes and styles.





PART OF MILCOR'S **BROAD LINE OF 4,979 QUALITY** BUILDING PRODUCTS

- that makes it easy to combine LCL quantities for truckload or carload savings



Under-Eave Louver Finned louvers deflect r

and snow. Three sizes, 4" x 16", 6" x 16", 8" x 16".

Stationary Louver — Flush and self-casing designs. 8" x 8" to 24" x 30". Triangular Louvers—Fixed and adjustable types. Sizes to fit various roof pitches.

rain



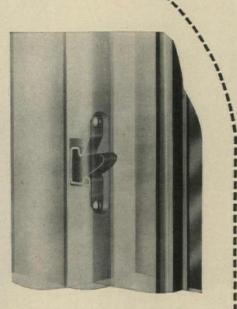
Foundation Grilles - For crawl spaces and windo less basements. Size one concrete block. of

SM-8

-Fixed

BALTIMORE, BUFFALO, CHICAGO, CINCINNATI, CLEVELAND, DETROIT, KANSAS CITY, LOS ANGELES, MILWAUKEE, MINNEAPOLIS, NEW ORLEANS, NEW YORK, ST. LOUIS





Exclusive Bilt-Well sash-holding device (patent applied for)

Simple, automatic friction release of specially compounded neoprene permits effortless opening and positive holding of the sash in any open position.

# Low cost Super-Hold removable windows

The economy model of the BILT-WELL "Super" line. Budget priced without sacrificing weathertightness, long life and removability.

#### Look for these other BILT-WELL features:

- Unitized sill construction for single or multiple openings.
- Far surpasses F.H.A. minimum property requirements.
- 3. Patented BILT-WELL weatherstripping.
- 4. Exclusive adhesive glazing.
- New jamb adjuster that eliminates blocking 
   (patent applied for).

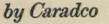
There's more to offer with

#### The BILT-WELL Line of Building Woodwork:

WINDOW UNITS, Double-hung, Awning, Casement, Basement, CABINETS, Kitchen, Multiple-use, Wardrobe, Storage, Vanity-Lavatory. DOORS, Exterior, Interior, Screen and Combination.

> Manufactured by CARADCO, INC. Dubuque, Iowa





# WHEN A HAWAIIAN HOLIDAY

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

#### **HOTPOINT MEDALLION HOME PROGRAM**



Now, a complete advertising and merchandising program to help you cash in on the public preference for Hotpoint appliances, plus 1960's greatest sales-clincher—Hotpoint Electric Baseboard Heating. This dynamic program is power-packed with everything needed to give your home sales a sensational start in '60. Call your Hotpoint distributor for complete details today! \* DRAMATIC FULL-COLOR MAGAZINE ADVERTISING

- \* NATION-WIDE NEWSPAPER ADVERTISING
- \* PROSPECT-PULLING DISPLAY MATERIALS
- \* PROFESSIONALLY-PREPARED HANDOUT BROCHURES
- \* SALES-BUILDING KITCHEN PLANNING SERVICE
- \* PROVEN PUBLICITY PROGRAM

A Division of General Electric Company, Chicago 44, Illinois

\* PLUS SPECIAL MERCHANDISING ASSISTANCE



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

# NEW HOTPOINT BUILT-INS MAKE ORDINARY KITCHENS



Model RU35-A

#### Offer the Extra Convenience of Pushbutton Surface Cooking-at no extra installation cost!

Touch a button and Hotpoint Calrod® Recipe Heat Units give accurately measured heat for recipe-perfect meals every time. Surface section with built-in pushbutton controls needs only one cut-out, fits in a standard 30" cabinet.

#### 1960 Hotpoint Extra-Value Oven puts extra salespower in your kitchen

**NEW** lift-off door makes oven cleaning easier and faster than ever before.

**NEW** ventilation system assures natural circulation for better baking on each shelf.

WIDE Super-Oven lets you cook banquet-size meals. OVEN TIMING CLOCK and Minute Timer.

NEW extra-large Insulated Panorama Window.

REMOVABLE Calrod® bake and broil units.

INTERCHANGEABLE Oven Door Panels in Sunburst Yellow, Turquoise, Coral Pink, Copper Brown, Silver Satin and Classic White.

# EXTRAORDINARY AT NO EXTRA COST!

Today's home buyer expects more for his money than an "ordinary" kitchen. And Hotpoint Extra Value built-ins in the kitchen take even the most moderately priced home out of the ordinary . . . and into a sale.

Compare these 1960 Hotpoint Extra-Value built-ins with any others and you'll find only the price is ordinary. Hotpoint's extra features say "better living electrically" the minute your prospects see them. Hotpoint's extra styling and design make any kitchen a showplace. Hotpoint's extra values mean extra salespower for you, extra satisfaction for your customers. For extraordinary results at no extra cost, call your Hotpoint distributor today.





Model DA25-A

EXTRA CAPACITY Hotpoint Dishwasher holds complete dinner service for 10

See these Extra-Value Features:

- Two washes, two rinses
- Calrod® electric drying
- Front loading Roll-R-Racks
- Lifetime porcelain finish tub



#### EXTRA powerful EXTRA quiet EXTRA easy to install Hotpoint DISPOSALL®

Designed by plumbers, for extra economical installation. Extrastrong nickel alloy grinding teeth give you added years of outstanding performance.

When you build in Hotpoint, you build in Public Preference



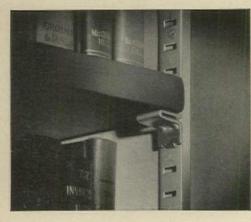
ELECTRIC RANGES · REFRIGERATORS · AUTOMATIC WASHERS · CLOTHES DRYERS · CUSTOMLINE® · DISHWASHERS DISPOSALLS · WATER HEATERS · FOOD FREEZERS · AIR CONDITIONERS · ELECTRIC BASEBOARD HEATING

CTRICA

FOR OPEN WALL SHELVES No. 80 Standard (18" to 144" lengths)1" Adjustment. No. 180 Brackets (4" to 20" lengths) Satin anochrome, brass or ebony black finish.

# K-V Shelf Hardware

FOR BUILT-IN SHELVES No. 255 Standard (24" to 144" lengths) ½" Adjustment. No. 256 Support (34" long, %" wide.) Nickel, zinc or bronze finish.



# easily installed, easily adjusted!

For low cost, decorative effects or storage facilities wherever they're needed. Easily installed, easily adjusted. Lasts the lifetime of the home. Always keeps shelves straight, strong and sagfree. Ask for complete catalog.

KNAPE & VOGT MANUFACTURING CO. Grand Rapids, Michigan



Manufacturers of drawer slides, sliding and folding door hardware, closet and kitchen fixtures and Handy Hooks for perforated board

#### Why Builders LIKE W-M Hardwood Block Floors

**Low Cost Luxury Appeal** The rich, lustrous beauty of W-M hardwood block floors provide that *luxury look* that says quality—and at competitive costs. They help to create a favorable first impression—especially important in an unfurnished home where nothing is noticed *more than the floor*.

**Time-Saving Installation** Prefinished Wood-Mosaic hardwood block floors are quickly and easily installed with adhesive over wood or concrete subfloor. After laying, floors are ready for immediate use—no finishing time required—save up to 3 to 4 days labor on the job!

No Costly Call Backs W-M hardwood blocks have 3-ply laminated construction. When properly installed, won't warp, buckle or crack—stay beautiful through the years —a daily reminder of your good judgment and good construction.

#### Why Home Owners LIKE W-M Hardwood Block Floors

**Provide Beauty and Dignity With Versatility** There's nosubstitute for the beauty, warmth and dignity of genuine hardwood floors. And with W-M hardwood block floors the home owner has his choice of Oak, Walnut, Maple, or Cherry which can be mixed or matched in almost limitless combinations the W-M Way.

Tough, Durable Finish Wood-Mosaic's exclusive "Diamond Lustre" finish keeps floors looking lovely year after year —provides 3 to 4 times greater wear resistance than ordinary on the job finishes. Resists indentations, and is unharmed by common household spills like ink, nail polish, fruit juices, alcohol, etc.

Quick, Easy Maintenance Wood-Mosaic hardwood blocks fit surely and snugly together—just dry mopping and an occasional waxing keeps them looking like new.

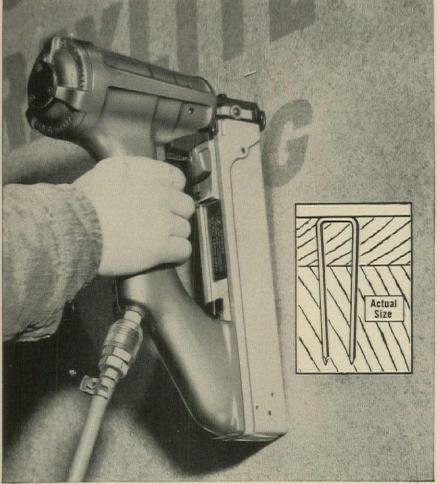
Send for literature to Wood-Mosaic Corporation. Dept. HH-3 Louisville 9, Ky. In Canada: Woodstock, Ontario



#### New products

start on p 217





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



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

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

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

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

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

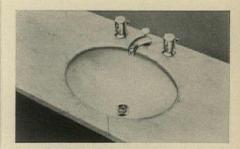
FASTENER CORPORATION 3754-66 River Road, Franklin Park, Illinois





**Plastic bathroom** is possible with new fixtures being made by Denver Metals for national distribution under the trade name Fibersheen. To start, the line includes shower stalls, receptors, tubs, and vanities of gel-coated fiberglass-reinforced polyester. Fixtures are lightweight, seamless, leak-, chip-, rust-, and rot-proof, are designed to meet Commercial Standards 221-59 and 222-59.

Denver Metals & Chemicals, Denver. For details, check No. 23 on coupon, p 296



**Countertop lavatory** from Briggs is a flat-topped oval of vitreous china, particularly suited for use in marble or composition counter. It is available in six colors with fittings in matching or contrasting color inserts. Overflow is in front under splash rim.

Briggs Mfg, Warren, Mich.

For details, check No. 24 on coupon, p 296



**New lavatory vanity** is all porcelain enamel—bowl, top, cabinet, and all surfaces. The 32" single vanity comes in a wide range of colors. Other styles, including a vanity dressing table and a double bowl model, are planned. All are designed by Peter Muller-Munk.

AllianceWare, Alliance, Ohio. For details, check No. 25 on coupon, p 296



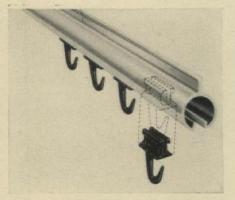
**Non-sag eave vent** is deep-formed from heavy-gauge aluminum. Louvers are 2%" x 1%", are arranged in sixlouver banks 1%" apart to give over 35" of net free area per 8' length. Unit will fit any type of soffit in any pitch, can be installed flush or recessed. Vents are 8' 1 9/16" x 2%". They come 30 lengths per carton.

Leigh Building, Coopersville, Mich. For details, check No. 26 on coupon, p 296



Stainless steel lock trim is now available in a standard duty lockset from Schlage. The lockset, shown here in the Tulip design and in standard residential escutcheon, is claimed to offer more durability and more corrosion resistance without maintenance and without a lacquer coat.

Schlage Lock Co, San Francisco. For details, check No. 27 on coupon, p 296



New closet rod is a gold anodized aluminum extrusion. It comes in nine standard closet sizes in 3' to 8' lengths. Black nylon carriers snap into rod track. Closet rods come in complete packages of rod, track, carriers, end brackets, center supports, and screws or in Econo-Pak with track and parts packed in bulk. Extra carriers are available in 12-unit lots.

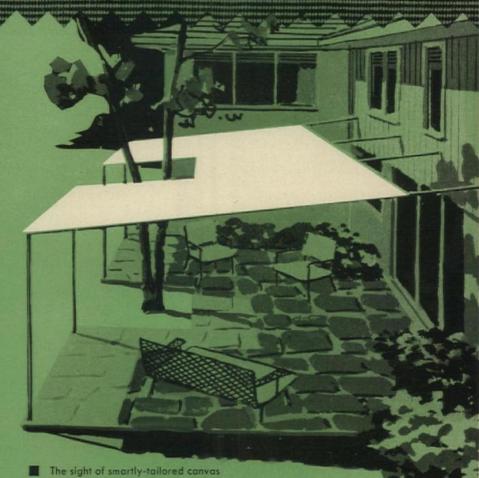
Grant Pulley & Hardware Corp, West Nyack, N. Y.

For details, check No. 28 on coupon, p 296

continued on page 280

# FOR SHOW OR FOR Shade...

# GANVAS AWNINGS



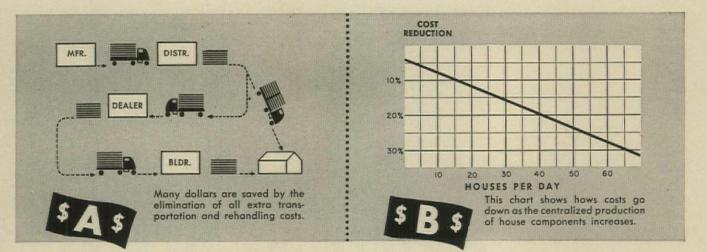
The sight of smartly-tailored canvas awnings in a pretty pastel or a gay new stripe says a lot to a prospective home buyer. It suggests comfortable living that can begin right now—with rooms free from harsh glare and sizzling sun heat.

Smart shoppers know, too, that canvas awnings make a home easier to cool without air conditioning, cheaper to cool with air conditioning. Get the latest on the new acrylic paints and vinyl coatings that make canvas awnings a betterthan-ever feature to attract new custamers and keep home buyers happier.

See our catalog 19e/Ca in Sweet's Architectural Catalog or write for a free copy. It contains original and practical ideas plus helpful information for specifying canvas.



CANVAS AWNING INSTITUTE, INC. and NATIONAL COTTON COUNCIL P. O. Box 9907/Memphis 12, Tenn.



# WITH P-B COMPONENTS

# Steps A and B save 15% for the Builder -on any type or size of house

We have 24 years' experience in the building of the major house components. No other firm can offer you comparable experience. Many millions of dollars' worth of homes have been built by our method—known as Precision-Building. All this experience points to one fact... the centralized building of Precision-Built House Components—by the building materials distributor—cuts costs for everybody. To any builder—large or small—this means a saving of about 15% on wall, floor, ceiling, roof and gable components.

Two facts account for this saving. A—When the distributor handles the fabrication, many unnecessary handling and rehandling costs are eliminated. The component parts come direct from the distributor to your site.

B—When the distributor handles the fabrication, you share in his far larger volume discounts—regardless of the volume of your activities.

Reduced handling costs and larger volume discounts on the materials are easily understood. You are saving money.

You are also increasing your selling strength—when you build with P-B Components. You are not limited to any type or size of house—any plan can be quickly detailed for P-B Components. You give the home buyer a top-quality, custom-built house—two to four months sooner than by con-

ventional methods. You maintain a far smaller staff of skilled labor. You invest no money in expensive equipment. You are fully equipped to compete profitably with every type of prefabricated housing.

Your walls and partitions

are not of some limited arbitrary length or width, but *room-size*—with either exterior finish or sheathing applied and with the interior finish applied. They can even be wired for electricity. Floor components are built mainly 8-feet in width and of the length needed; the underflooring is insulated and the factory-finished flooring already in place. Ceiling components have the ceiling material already in place. Roof and gable components have the sheathing already in place.

You buy your P-B Components through your local lumber dealer custom-built to fit your plan—delivered to your site. (If he does not yet know about P-B Components, ask him to contact us.)

Take the time to get all the facts. Let us show you in detail just how this plan works for you—in your territory. Write or wire today—to Department C-5.





## PUSHBUTTON SPOTSTAPLER

SAVES YOU \$20 PER HOUSE

LETS YOU SHINGLE AT 10° BELOW ZERO

.

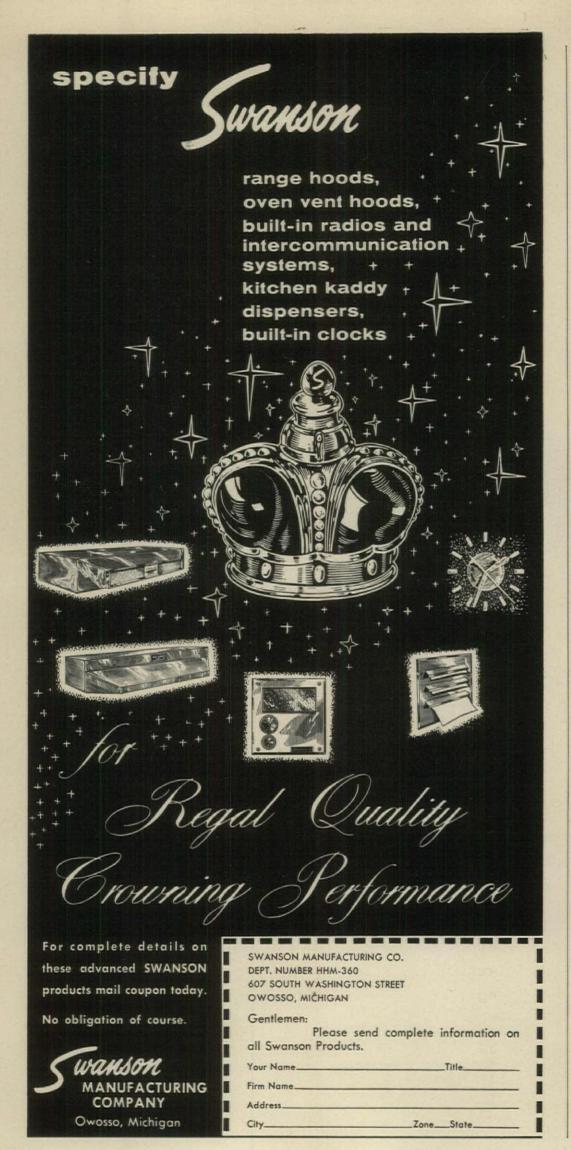
DRIVES 1" WIDE STAPLES THAT OUTHOLD NAILS With a Spotstapler doing the work and your men just touching the button there is no fatigue. They get more done with less effort. They lose no days from cold weather either. A leading Chicago builder says: "With no nails to handle my men wear mittens and shingle at 10° below zero using a Spotstapler." Wind tests by independent laboratories and shingle manufacturers prove your Spotstapled roof will hold better than a nailed shingle roof. Roofs in Pittsburgh applied with divergent-chisel Spotstaples held tight while nailed shingles were blown off homes next door. Test this new "OW" <u>pushbutton</u> <u>roofer</u> on one of your homes without cost. Over 100 field representatives stand ready to serve you.

Write for descriptive folder and a demonstration



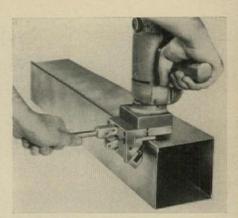
IS27 LYONS, EVANSTON , ILLINOIS UNiversity 4-2711

Spotstaples meet F.H.A. Standards for subfloors • wall sheathing • roof sheathing • gypsum lath • floor underlayment • asphalt shingles



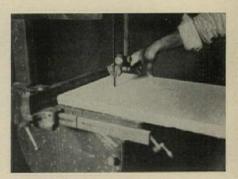
#### **New products**

start on p 217



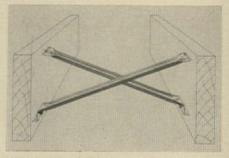
**Duct former** rolls smooth, tight, lock seams in 18 to 28 gauge metal at 18' to 30' a minute. Lectro-Lok is light (15 lb) and compact (12" overall), can be used to form ducts on site from flat or nested sections. Unit is powered by a heavy-duty 5-amp motor, costs \$225 with a slide for 5/16" seams. Slides for 3/8" and 1/2" seams are \$17.50 each.

Millers Falls Co, Greenfield, Mass. For details, check No. 29 on coupon, p 296



New asbestos board called Unarcoboard is 100% incombustible, can be used for walls, ceilings, partitions, back-up board, duct work, etc. It can be worked like wood, machined to .001" accuracy. Sealed surfaces do not need finishing. Compressive strength is 2,400 psi at 35 lb density. Modulus of rupture is 600 psi, of elasticity, 500,000 psi. Boards come 4' x 8' in 1",  $1\frac{1}{2}$ ", 2",  $2\frac{1}{2}$ ", and 3" thicknesses, 20 to 75 lb densities.

Union Asbestos, Bloomington, Ill. For details, check No. 30 on coupon, p 296



**Nailless cross bridging** with Teco Fas-Lok is claimed to save up to 80%in labor costs, can be installed in one operation after subfloors are down. Sharp projections on the brace are placed against the joist, hammered home. Bridging is 18-gauge steel, 1%" wide in sizes to fit 2 x 8, 2 x 10, 2 x 12 joists 16" oc.

Timber Engineering, Washington, D.C. For details, check No. 31 on coupon, p 296

continued on page 285

HOUSE & HOME

# **NOW...with BESTWALL** ...no corner bracing needed

WATER REPELLENT

SHEATHING



GYPSUM

Gypsum sheathing is low cost, fireproof ... and now Bestwall combines these advantages with another — extra strength. Bestwall's new 4' x 8' and 9' gypsum sheathing can be used in frame construction without corner bracing, meeting FHA requirements.

FIREPROOF



• Vertically applied - easy to handle

reinforced with glass fibers for

greater flexibility and strength

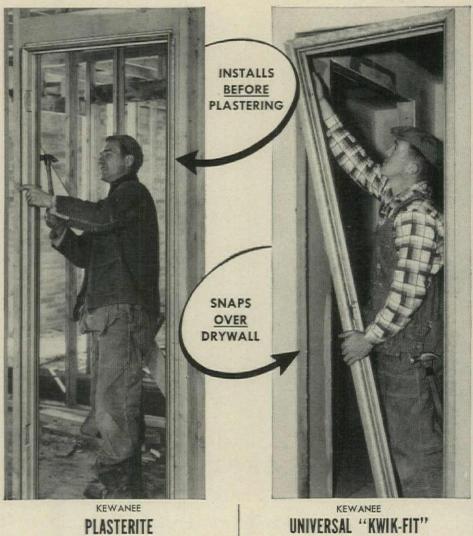
- Large size cuts labor costs
- Specially treated core with strong surface covering — extremely waterrepellent — eliminates need for building paper

#### **BESTWALL GYPSUM COMPANY**

Ardmore, Pennsylvania

Plants and offices throughout the United States

# **KEWANEE'S FAST INSTALLATION** STEEL DOOR FRAMES WILL SAVE YOU LABOR TIME (Money)



PLASTERITE

Quick 3-piece installation. Nail holes on flanges of frame spaced 7 inches apart-provide secure anchorage. Galvanized finish protects metal frame from wet plaster. Full range of sizes to fit standard 13/8" and 13/4" doors, over 2 x 3" or 2 x 4" studs. Swing, sliding and folding doors . . . cased openings.

For Swing, Sliding and Folding Doors. Jamb, stop and trim formed into a complete steel frame. Fits snugly over drywall. Nail only at baseboard position. Shipped prime coated with oven baked-on

enamel, ready for finish painting. Sizes for  $\frac{1}{2}$ ,  $\frac{1}{2}$ 

door dimensions. (Made under U.S Pat. Nos. 2.660.272: 2.835.933 and Canadian Pat. No. 563.915.)

Both Kewanee steel door frames feature low "first" costs and a trim, modern appearance. Easily adapted to pre-fit doors-available for use in low-cost, pre-hung units. Shipped mortised and punched, and with mitered corners . . . ready for fast installation. Handy packaging-complete frame packed in individual carton to protect against damage in transit or at job site. Clearly marked with size and installation details. See your dealer or . .

WRITE FOR STEEL DOOR FRAME LITERATURE

kewanee Manufacturing

360 FULLER AVENUE . KEWANEE, ILLINOIS

ALSO NEW **KEWANEE** MASONRY DOOR FRAMES All welded unit frame (Write for details)

UNIVERSAL "KWIK-FIT"

Contour edges . looks like ranch

trim

PLASTERITE

Note simplicity

of line



## Top profits when you offer this beautiful Fibercrete Pool

Here at last is a pool that has licked both the construction and maintenance problems of ordinary pools by combining the new miracle fiberglass with ageless concrete. The Swim Queen pool is engineered by the Midwest's largest pool contractors, using panel construction which permits fast installation and utmost simplicity of assembly without expensive forms. The walls are made of  $3\frac{1}{2}$  foot reinforced fiberglass panels bolted together at 8', 10' or 12' intervals. A patented built-in coping locks pool panels to cement walk around the pool. The floor is of permanent concrete. A variety of shapes and a complete line of pool equipment available. Prices start at \$2395. Complete engineering service and sales aids are provided. Advertised in the Saturday Evening Post, Sports Illustrated, Town and Country, House Beautiful, House and Garden and other national magazines.

Pool owners in key areas throughout the U.S. who have enjoyed their Swim Queen pools for five or more years report they look absolutely brand new. They are unaffected by severe winter weather and they never need painting or calking.

Solution Please	An affiliate o, 300 N. Waukeg	Pool Co., Dept. H <i>Pile Pool Co.</i> ran Rd., Glenview, III <i>"Dealership Broc</i>	
Name.	100 Martin		
Addre	\$\$		
City_		State	

**New products** 

start on p 217



Natural stone veneer is quarried in 1" thick slabs, cut to 4" and 8" heights, 8" to 24" lengths. Edges of each stone are grooved to take special anchors that hold stone to wall. After stone is hung, joints are mortared. Factory-bonded mitres are available for corners. Called Silvara, stone is suitable for exterior sidewalls, accent walls, fireplaces, room dividers, etc.

Shakertown, Cleveland.

For details, check No. 32 on coupon, p 296



Underdrain pipe is a new version of Transite pipe. It comes in 6" and 8" diameters in 10' lengths, 10" and 12" diameters in 13' lengths. Perforations subsoil drainage. allow satisfactory Smooth corrosion-free interior minimizes frictional resistance to water flow. Mechanically exact plastic couplings insure tight joints, good alignment.

Johns-Manville, New York City. For details, check No. 33 on coupon, p 296



Water repellent masonry is treated with Permasel, a concentrated silicone product. Permasel is sprayed or brushed on soft brick, stone, block, stucco, asbestos, etc, penetrates masonry and deposits an invisible film to seal out water and dirt. Solution is fireproof, colorless, guards against efflorescence, keeps dirt on surface where rain will wash it off. Cost: less than 1¢ per sq ft.

Perma-Stone, Columbus, Ohio. For details, check No. 34 on coupon, p 296

continued on page 288

**Full Kitchen Facilities** In **Compact Space** 

**SPACEMAKER** 

Designed and engineered specially for rental properties, new and remodeled, Dwyer Kitchens not only provide complete, convenient kitchen facilities, but also allow more spacious living area at no additional building cost!

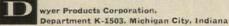
There's a roomy refrigerator with rollout shelves and freezer compartment,

deep sink, storage, and choice of fast-heat electric or gas range. The entire unit is sealed in Lifetime porcelain set off against chrome anodized aluminum trim-your assurance of permanent beauty and durability. Models from 39" to 69" in length, for standard or recess installation behind closures.



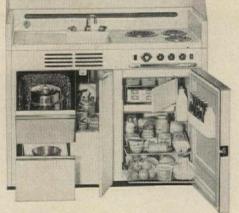
Send for 16-page catalog

DWYER SNACK BAR Sizes 57" to 89" in length, selection of attractive wood paneled fronts or unfinished fir for custom decorating. Contain refrigerator, sink, lock-up beverage keeper, electric cooking facilities, optional.



Gentlemen: Please send complete information on Dwyer compact kitchens for rental properties.

Also send details on the full line of new Dwyer Snack Bars.



wyer

000

more builders of more houses more residential architects more realtors more lenders more appraisers more dealers and distributors more government officials more prefabricators

You're in good company when you fill out the coupon below and become a regular reader of HOUSE & HOME.

You join over 125,000 other housing professionals who depend on HOUSE & HOME to tell them what's going on—and what's going to happen in America's *biggest* industry.

Our readers make us the biggest industry monthly in America's biggest industry for just one reason. We cover *everything* about housing, everything from land planning and financing to designing, building and selling. We deliver a complete package on housing. We do not cover merely this phase or that phase of housing.

That's why HOUSE & HOME gives its readers more editorial pages every year than any other magazine in the housing industry. In 1959, for example, HOUSE & HOME published 1,256 editorial pages. And they were the best-read, most preferred editorial pages in the housing industry. HOUSE & HOME consistently wins when surveys ask the housing industry to name its first-choice magazine.

Readership like that leads to leadership of another kind that interests readers. HOUSE & HOME carries more advertising pages than any other magazine in the field (1,847 pages in 1959).

When you combine our greatest number of editorial pages with our greatest number of advertising pages, you realize that HOUSE & HOME is the *biggest* magazine buy in America's *biggest* industry.



profession

House & Home Time & Life Bldg. New York 20, N.Y. Gentlemen: Please begin my subscription to House & Home with your January, 1960, issue.

Name\_\_\_\_\_ Company\_\_\_\_

Position\_

Address\_\_\_\_

#### **New products**

start on p 217



## Neat, thrifty, safe ELECTROMODE heating saves construction time...cuts selling costs

An ELECTROMODE Electric Heating System gives you all these heating advantages ... and every one of them gives you a sales advantage:

Electric heat is thrifty heat. It uses the only fuel that's getting cheaper-and that will continue to get cheaper.

It's the safest heat you can put in a home. An Electromode baseboard or wall heater with our exclusive Safety Grid can't burn, can't cause a fire, can't shock.

It's personalized heat . . . allows individual room temperature control for better living, better health.

It saves construction time . . . cuts selling costs by eliminating duct work, chimneys, heater rooms, soundproofing, etc.

It's neat heat . . . the cleanest you can install.

It makes home decoration and furniture placement easier.

It's maintenance-free. Once it's in. you don't have to worry about it.

ELECTROMODE Electric Baseboard Heat. Pictured above (in main illustration). In 32-, 64- and 96-inch lengths, matching blank sections, corner sections, hardware. Provides a wall of warmth around each room. Individual room thermostats. No cold spots, no drafts. Never gets too warm to touch. Can be finished to match rest of woodwork.



ELECTROMODE Bathroom and Wall Heaters. Fan circulated warm air for hard to heat rooms, and areas where only intermittent heat is needed. Completely shockproof and burn-proof. With or without thermostats. Easily installed.



ELECTROMODE Floor Insert Heaters. For installation under picture windows and similar locations. Mount flush with floor. Whole heating unit is easily removable for cleaning. Safety Grid can't burn or start fire.

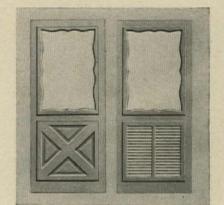
For full details write for Catalog No. EC 199

Look for the ELECTROMODE Safety Grid . . . the cast alu-minum heating element in which all the current-carrying heating wires are safely sealed inside. Nothing to burn inquir-ing fingers, no shocks, can't start a fire.



Pantograph partition is designed for use where a movable partition with more rigidity and less side sway is needed. Besides the heavy duty pantograph frame, its features include self-lubricating nylon wheels, an I-beam aluminum track, channel hinges for extra-strength, snap-locked fabric covering reinforced with heatsealed nylon tape.

Curtition Corp, Hawthorne, Calif. For details, check No. 35 on coupon, p 296



New panel doors for wooden storm and screen combinations are offered by Farley & Loetscher. Decorative inserts are made to fit a basic door blank so that a variety of styling can be achieved. Dor-Mate units are said to be priced economically. Full openings as well as the half openings shown are available.

Farley & Loetscher, Dubuque, Iowa. For details, check No. 36 on coupon, p 296



Teak finish paneling is now included in Georgia Pacific's Grain-Ply line. Hardwood plywood has teak (or oak) patterns applied to it to give the look of luxury wood to a low-cost paneling. Panels are presealed and have G-P's "family-proof" finish. Patterns in teak are Rangoon, Sumatra, Ceylon, and Cashmere; in oak are smoke, acorn, and tan. Sheets are  $4' \times 8'$  and  $4' \times 10'$ ,  $\frac{1}{4''}$ thick. Panels are random grooved with beveled edges. Grooves fall 16" oc.

Georgia Pacific, Portland, Ore.

For details, check No. 37 on coupon, p 296

Publications start on p 290

Dept. HH-30, Division of Commercial Controls Corporation, Rochester 3, New York





Can Be Reused Indefinitely

Drives easily into hard earth. Can be used for practically any type of stake work. This popular and profitable item is available in 12", 18", 24", 30", 36" and 42" sizes.

Pullout hole for easy removal

Easily secured to lumber— can be nailed every 1" O.C. "I" beam design drives easier, holds best

HI-Carbon Alloy Steel tough to bend Rugged point with minimum deflection

#### FREE!

#### **Stake Puller** with order of 100

#### Sizes can be mixed

Prices and items shown are net F.O.B. Chicago, Illinois factory and subject to change without notice.

TERMS: (Check one) Check enclosed\_\_\_\_; if satisfactory mercantile rating or reference is furnished, net 30 days\_\_\_\_, C.O.D. \_\_\_\_\_

	ersey	Avenue Please	Dept ship the fol	. C-O lowing Stee	l Stake		ago 39, Ill.
Quantity	12" 18"	Price Each \$1.00 1.10	Total Price	Quantity	Size 30" 36"	Price Each \$1.30 1.45	Total Price
PLEASE PR		1.20		I <u></u>	42"	1.60	
Address		- posta	ingl				

#### Publications



NARRATOR SWAYZE introduces the film . . . describes important jobs of architect . . .







FILM ALSO SHOWS how quality materials . . . and quality household appliances . . .



and building supply dealer.



work with a better design for living.

#### New film makes a pitch for the whole housing industry

Today's Homes: a special report is a new selling tool for housing that has been produced by the Celotex Corp as a major element in the company's new "Your home comes first" campaign. The film-cosponsored by NAHB, NRLDA, HMA, USS&LL, NAMSB, and NAREB-is available to all television stations and to members of sponsoring associations for showing to local groups.

The film tells the story of home ownership in the US: the story of new suburban development and urban renewal; of new markets among younger married and older retired people; of new quality construction and materials; of the work of architects, developers, builders, suppliers, bankers, realtors. It points out the growing value in today's quality house. The only mention of Celotex is in the credits at the end.

Celotex Corp, 120 S La Salle St, Chicago 3.

For showing, write direct to manufacturer

#### What is humidification?

Armstrong Machine Works, which makes home humidifiers, has published a handy 16-page booklet on humidity and moisture control. Content is technical but the language is not; the booklet can be useful to your customers or vour staff. Among subjects covered: humidity and relative humidity, why indoor air becomes dry in winter, bad effects of high or low humidity, what to do about low humidity, what to look for in a humidifier, condensation on windows or in walls. Tables show moisture content of air, moisture sources, condensation conditions, perm ratings. Armstrong Machine, Three Rivers,

Mich.

For copy, check No. 38 on coupon, p 296

#### Paneling for motels

US Plywood has a new 8-page color brochure of paneling ideas for motels, hotels, and restaurants. The booklet tells how to use paneling ranging from inexpensive Samara to architectural grade teak and benge. Special attention is given to problem areascolumns, curved walls, too-small spaces.

US Plywood, New York City. For copy, check No. 39 on coupon, p 296

#### Southern Pine grading rules

New provisions in 1960 rules include: stress-rated grades of 3x6 and 4x6 t&g decking; all-purpose stress ratings for standard grades; stress ratings for standard No. 1 and No. 2; moisture content for all types in line with FPL recommendations. Knot provisions for C and D drop siding are now identical with those for C and D finish. E grades of flooring and side are eliminated.

Southern Pine Inspection Bureau, New Orleans

For copy, check No. 40 on coupon, p 296

#### "Fashions in Glass"

This color folder tells the story of decorative laminated safety glass and its architectural uses. Available patterns and customizing methods are shown and many uses suggested.

For copy, check No. 41 on coupon, p 296

"Laminated architectural glass" tells the more technical story in terms of physical properties and installation techniques. Uses suggested include not only decorative applications but also uses involving heat, light, and sound control. Multiplate Glass, Glendale, N.Y.

For copy, check No. 42 on coupon, p 296

New data on scaffolding

New 16-page brochure shows the many ways single and double portable scaffolds can be combined to make bigger work platforms. Besides describing the features of the line, the brochure acts as a complete catalog of equipment.

Baker-Roos, Inc, Indianapolis. For copy, check No. 43 on coupon, p 296

#### How to use terne plate

Follansbee Steel's latest brochure on their roofing metal gives installation details on four types of seams: batten. standing, Bermuda, and flat-lock. It also gives comparative weights and expansions of various roofings, and shows various accessories made of terne.

Follansbee Steel, Follansbee, W.Va. For copy, check No. 44 on coupon, p 296

#### **Basics of insulation**

A new edition of IBI's Fundamentals of Building Insulation is now available. The new 44-page booklet is published to keep the housing industry abreast of significant improvements in insulation design and application.

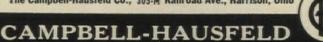
Insulation Board Institute, Chicago. For copy, check No. 45 on coupon, p 296



Offers years of trouble-free high volume air delivery for fast sales, satisfied customers. Write for Bulletin HP 100 today!

"Whatever your paint spray needs ... Campbell-Hausfeld has the unit for you."

The Campbell-Hausfeld Co., 305-M Railroad Ave., Harrison, Ohio





# All New for 1960!



#### a complete package of MATCHED BUILT-INS (GAS OR ELECTRIC) in luxury finishes, colors and prices for every kitchen plan!

#### ONLY CHAMBERS

OFFERS 7 MATCHING OVEN MODELS Including famous Retained Heat Ovens with 4 times more insulation than conventional units.

Vista View Twin Ovens with Rotisserie! Completely Automatic . . . separate thermostat controls permit simultaneous use of both ovens for different types of cooking.



Vista View Twin Ovens



ONLY CHAMBERS OFFERS CLASSIC QUALITY REFRIGERATOR-FREEZERS with Unique "Uni-Temp" System

A superb achievement in fine refrigeration. Choice of 21 matched models from 12 cu. ft. to **"The Presidential Twins,"** 31 cu. ft. in 72" wall space.

Presidential Twins

ONLY Chambers offers Built-ins completely matched in design and size for any kitchen plan...Ovens and Surface Ranges (Gas and Electric) ... Refrigerator-Freezers... Dishwasher-Dryers ... Kitchen Hoods and Disposers, each a famous Chambers quality product ... No mismatches, No mis-fits, No "off" colors ... with One call to order, One call for service and One sales policy! Mail Coupon for Complete Details!

BUILT-INS rush. Specifications on all Chamb	2012 N. Harlem Ave., Chicago 35, III.
Address	
Cily	ZoneState

#### Completes Your Masonry Jobs ... Cuts Costs!



Permapel bars all moisture from penetrating surface. Inside dampness can still breathe out.

# New Concentrated **PERMAPE**

1 gallon concentrate makes 8 gallons repellent

#### COSTS LESS THAN 1 CENT PER SQUARE FOOT APPLIED

Improves appearance! Invisible deeppenetrating PERMAPEL protection seals out water, dirt and soil. Guards against efflorescence. Does not discolor. Effective on all masonry surfaces — concrete, plaster, stucco, stone, porous brick and asbestos siding — for as long as 8 to 10 years.

Big savings for you! PERMAPEL costs less than 1 cent per square foot to apply. Concentrated form saves storage space. Mixes instantly, 1 part PERMAPEL to 7 parts water. Only one coat needed. Apply with spray or brush. Fireproof. Contains no oil, grease, or wax.

Lumber and Building Supply Dealers ... write for Distributor's offer.



#### Publications

start on p 290

#### How to use metal lath

Complete specifications for the use of metal lath are given in a new 20-page booklet just issued by the manufacturer's association. The booklet contains fire resistive ratings, design tables, and specifications for hollow, solid, sound insulating partitions and ceilings. Other sections detail materials, corner reinforcement, etc.

Metal Lath Mfrs Assn, Cleveland. For copy, check No. 46 on coupon, p 296

#### Plumbing goods catalog

Bridgeport Brass has a new brochure showing its product line now available nationwide. Included is copper water tube, pwv copper drainage tube, copper refrigeration line, brass and copper pipe, plumbing brass. Types, sizes, weights, strengths, velocities, flow characteristics are given in handy specification tables.

Bridgeport Brass, Bridgeport, Conn. For copy, check No. 47 on coupon, p 296

#### Trowel trades catalog

Goldblatt's 1960 catalog is now available. The 72-page book covers tools for cement finishing; brick, block, and stone masonry; plastering; lathing; tilesetting; drywall installation. New this year are Jitterbug concrete finishing, power plastering equipment, and a masonry guide and estimating system.

Goldblatt Tool Co, Kansas City. For copy, check No. 48 on coupon, p 296

#### Apartment mail boxes

Catalog sheets describing new governmentapproved apartment mail boxes are available from Jensen Industries. The galvanized steel boxes come in a variety of finishes in gangs of 1 to 16 units, with and without magazine receptacles and directories.

Jensen Industries, Los Angeles. For copy, check No. 49 on coupon, p 296

#### Swimming pool equipment

Paragon has a new architect-builder catalog of their diving stands and boards, ladders, underwater lights, built-in filters, skimmers, fittings, and accessories. The 8-page brochure covers equipment for residential and commercial pools.

Paragon Swimming Pool Co, Pleasantville, N.Y.

For copy, check No. 50 on coupon, p 296

#### New data on garage doors

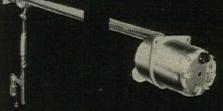
Barber-Colman has two new folders on its garage door products. One 4-page folder describes the new Model 33 Overdoor and shows typical installations. Features shown include continuous shaft springs, automatic latches, night lock, rigid track brackets, flush and panel sections.

For copy, check No. 51 on coupon, p 296

A second 4-page brochure announces a new Weather-King electronic door control that is operated by a dash-mounted transmitter. Unit has instant-reversing motor, light control, adjustable safety clutch, and low-voltage wiring. Barber Colman Co, Rockford, Ill.

For copy, check No. 52 on coupon, p 296

# RAYNOR Electronic GARAGE DOOR OPERATOR



#### Guarantee YOUR Customers Convenience .Safety .Dependability

- \* Opens and closes garage door automatically
- Turns on light when door opens, shuts off light when closed
- Instantly stops and reverses door when it contacts any obstruction while closing
- Can be stopped in any position from control button, will reverse operation when started again
- \* Locks door in closed position
- Release cord disengages operator if power fails
- Convenient lever adjustment on operator for different door weights
- One year guarantee on all parts, 90 day guarantee on tubes

The Raynor residential operator is the most modern, compact unit available, shipped completely assembled and weighing only 60 pounds, it can be easily installed by one man.



#### TRANSISTOR HAND TRANSMITTER

Designed for the ultimate in convenience and satisfaction, the handy *transistor hand transmitter* operates on FCC approved frequency. The handy Transistor Transmitter can be carried in glove compartment or clipped to sun visor... easily transferred from car to car without costly installation charges.

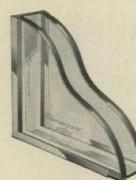
Tube type Transmitters are also available.

RAYNOR MFG. CO. Dixon, Illinois Hammonton, New Jersey Builders of a complete line of sectional overhead type doors



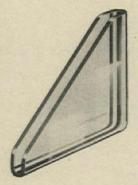


Now 2 types of Thermopane insulating glass for all kinds of windows



It's both desirable and practical to put insulating glass in all of the windows of a house. Two types of *Thermopane* make it possible: *Thermopane* with *Bondermetic Seal*<sup>®</sup> for picture windows, window walls and sliding doors; *GlasSeal*<sup>®</sup> *Thermopane* for double hung, casement, awning, sliding—all types of opening windows.





# In every room ... built-in quality you can put your finger on!

It's there, lightly etched right on the pane —the familiar name *Thermopane*<sup>®</sup>.

Your prospective home buyers may miss it *if you don't point it out*. It's that inconspicuous! But the inscription is there— PROOF that you've used the best—builtin quality your prospects have read about in magazines and seen on network TV.

Thermopane has been nationally advertised for 17 years. So most of your prospects know that *Thermopane in every window* means a more comfortable home to live in. A home that will cost them less to heat, less to air condition.

Put *Thermopane* in all of the windows of your next model house. Offer it as an option, if you wish. *Thermopane* is the bestknown, most wanted insulating glass in the world.

#### ... you can't miss with these merchandising aids!

Your  $L \cdot O \cdot F$  Glass Distributor or Dealer has other merchandising aids to help make your model home promotion a complete success. Phone him he's listed under "Glass" in the Yellow Pages of your phone book.



FLOOR DISPLAY (available on loan)

Advertised on Bourbon St. Beat ... ABC-TV Network ... Monday Nights\*





LIBBEY . OWENS . FORD . TOLEDO 3, OHIO

295

## **INCREDIBLE BUT TRUE!**







Right now in Levittown, as well as in developments all over the nation, one mechanic is installing tile in four bathrooms in just one day. Certainly it takes a special material to do the job. That's Miracle MA-266. Truly the mechanic's mastic. Made by Miracle Adhesives Corporation, who introduced the 'thin-set' adhesive method of setting clay tile more than 20 years ago, and has been the pacemaker to progress in setting tile ever since. And, Miracle has engineered MA-266 in accordance with the mechanic's own specifications. All over the country tile mechanics have told us what they wanted. In economy, in coverage, in long open time and in real waterproofness. All are combined in MA-266, finest and most economical tile adhesive in Miracle's entire 20 year history. Really long lasting, too! Try it. You'll be delighted



250 Pettit Avenue, Bellmore, L. I., N. Y.

#### Publications

#### Metal closet doors

New line of folding doors for openings 6'8" or 8' high and up to 6' wide is shown in a just-released catalog. Glide-Wide doors are bonderized steel, prime coated, have nylon bushings and guides. Folder tells features, shows typical installations, charts the available sizes.

Addison Products, Addison, Mich. For details, check No. 53 on coupon below

#### Data on baseboard convectors

start on p 290

Young Radiator has revised its catalog on Perimaheat baseboard. The new 12page booklet covers units for homes, apartments, institutions, and offices. Capacity data with specification graphs and roughing-in dimensions, a 9-step installation routine, new installations are included.

Young Radiator Co, Racine, Wis. For details, check No. 54 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.

47. Bridgeport plumbing goods catalog
48. Goldblatt 1960 trowel trade catalog
49. Jensen apartment mailbox catalog sheets
50. Paragon post equipment catalog
51. Barber-Colman Overdoor folder
52. Barber-Colman Weather-king folder
53. Addison metal door catalog
54. Perimaheat baseboard data

**RESEARCH HOUSE** 

 PICE
 Alcoa aluminum jamb caps

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 Alcoa aluminum jamb caps

 Re
 BB Chemical rooting system

 Re
 Colonial Tuffite rvc piping

 Re
 Compton Ine Hardkote drywall finish

 Re
 Corris ventilating louvers

 Re
 Curtis ventilating louvers

 Re
 Ouront Hypalon caulking

 Re
 DuPont Hypalon caulking

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 Oucorith Geon water piping

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 Re
 Goodrich Geon water piping

 Re
 Kel-win Lavatory faucet

 Re
 Koppers exterior brick panels

 Re
 Koppers partition panels

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 Ms waterprofing

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#### **NEW PRODUCTS** • March

1.  New ROW locking casement	
2. 🗌 Ida Products frost-free wind	ow
6. 🗌 Ottawa Steel Commando	
7. 🗌 Eljer vitreous china lavatory	
8. US Gypsum studless wall	
9. 🗌 Erie Tool Tee Turner	
10.  Porter-Cable countertop miter	r
11.  Frigidaire builder appliances	
12. Sears kitchen appliances	
13. New Waste-King line	
14. Mutschler kitchen series 600	
15. New Norge refrigerators	
16. Whirlpool gas refrigerators	
17. Majestic Char-grill	
18. Masonite Sunlite siding	
19. New Arcadia sliding door	-
20. Rheem adjustable water heat 21. Jensen-Thorsen corner sink	er
21. ☐ Jensen-Thorsen corner sink 22. ☐ Maytag single-control washer	
23. Denver Metal plastic bathroo	
24. Briggs countertop lavatory	m
25. AllianceWare lavatory vanit	v
26. Leigh non-sag eave vent	
27. Schlage stainless steel lock th	rim
28. New Grant closet rod	
29. Millers Falls duct former	
30. New Union asbestos board	
31. Teco Fas-Lok bridging	
32. Shakertown stone veneer	
33. Johns-Manville underdrain pi	ipe
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  Southern Pine 1960 grading rules
  Decorative uses for Multiplate glass
  Technical story of Multiplate glass
  Data on Baker-Roos scaffolding
  Follansbee terne plate roofing
  New Bi Insulation booklet
  New booklet on metal lath use

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1 year, \$6 🗆 2 years, \$8 🗔 I wish to enter a subscription to House & Home for US and possessions and Canada only

□ New □ Renewal

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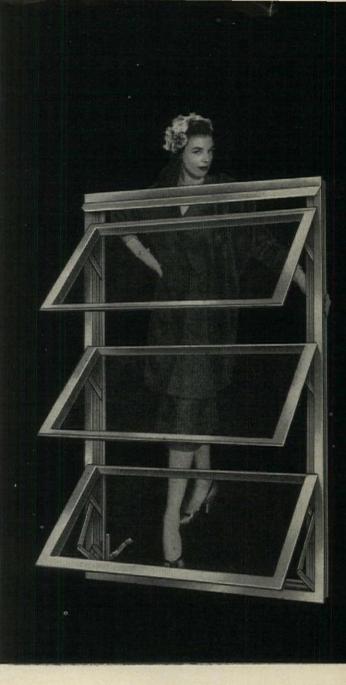
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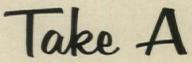
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# TRUSCON LOW COST Aluminum Windows



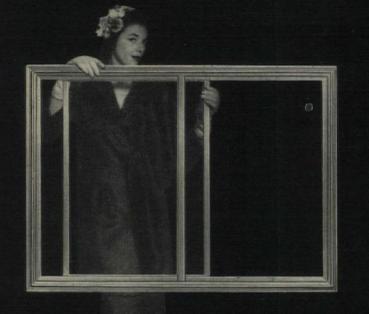
New Value REPUBLIC STEEL KITCHENS—widest selection of attractive wall and floor cabinets, sink centers, drop-in range, and built-in oven units, with work and serve conveniences homemakers want most. Features for any size kitchen. Stay-new designed and built to keep just installed freshness for years. Bonderized and baked-on enamel finish in white and clean crisp colors. Send coupon. New Value TRUSCON HOLLOW METAL DOORS AND FRAMES save dollars all the way. Install in just 15-minutes, complete with all hardware. No cutting, sanding, planing, or fitting. Frame is finished trim and serves as plaster return. Bonderized and primed. Onecoat painting completes the job. Write for additional information.



New Value REPUBLIC STAINLESS STEEL ROOF DRAINAGE PRODUCTS — easy to install long-lasting rain-carrying system resists rust and corrosion indefinitely. Extremely strong, able to withstand heaviest loads of ice and snow. Republic Stainless Roof Drainage Products are good for the life of the house. Send coupon for additional data.









# Good Look at these Windows

The best known brand in the window business now is a greater value than ever. Truscon's major program of engineering excess cost out of window production and distribution is now complete.

Started in time to pay-off in the 1960 market, this program includes cost-cutting refinements in all phases of window design, manufacture, and distribution. The



result is true economy, real value.

If you are ashamed of showing shoddy windows with an unknown name, yet must hold costs down now is the time to take a new look at Truscon. There's new value in the brand.

Get the details direct. Call your Republic-Truscon representative, or write. Send coupon below.

REPUBLIC STEEL	CORPORATION
DEPT. HO-8878	
1441 REPUBLIC BUI	LDING . CLEVELAND 1, OHIO
□ Truscon Alu □ Truscon Alu □ Truscon Alu □ Truscon Hol □ Republic Ste	e facts on the following products: minum Windows—Single-Hung minum Awning Windows minum Horizontal Sliding Windows low Metal Doors and Frames el Kitchens inless Steel Roof Drainage Products
Name	Title
Firm	
Address	
Cim	Zooo State



Prowler-Proof Ventillation with strong WOMAN APPEAL and 6 other big engineering exclusives build Better Value and Sales Appeal right into Penguin COM-PETITIVELY PRICED Windows.

> Penguin Quality Windows offer these exclusive design features that mean real construction benefits which you can turn into strong merchandising values to help make your homes move fast.

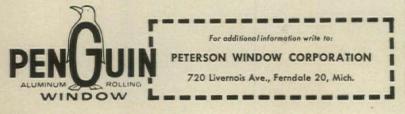
- 1. Super-smooth action . . . permanently lubricated sintered bronze rollers . . . sashmounted nylon guides.
- Weatherstripping, Positive Seal at sash-sill and unique interlocking foam closure at sash-jamb.

3. Adjustable track that keeps window square ... makes weatherseal positive ... speeds installation.

 Sealed double glazing for solid insulation values, eliminates need of storms . . . keeps fuel cost down.

- 5. Three styles . . . modern, traditional colonial and diamond lite . . . fit every home design.
- 6. All muntin bar details contained between the two glass panels. Smooth surfaces inside and out are easy to clean.

Install Penguin Windows in your next new homes. Take advantage of their great merchandising possibilities . . . advertise and tell your prospects about them. Put Penguin Quality Windows to work for you. They'll help you sell more homes . . . FASTER!



Created for today's pleasure-loving home buyers--



Being Pre-Sold in the Nation's Big Consumer Magazines: LIVING HOUSE BEAUTIFUL HOUSE & GARDEN and many others

## Majestic<sup>®</sup> CHAR-GRILL America's quality line of built-in barbecue grilles

Now better than ever for '60 — with handsome new styling and many advanced operational features! It's the barbecue built-in that was hailed by hundreds of builders and home buyers in '59 and specified by scores of custom home architects! The Majestic Char-Grill line includes gas,

electric and charcoal-fired models for installation in standard wood or steel kitchen cabinets or

