

House & Home

Y 1960 SIX DOLLARS A YEAR—ONE DOLLAR A COPY



MODERNIZATION: What you need to know to profit from the changing modernization market

Round Table: Better use of wood in tomorrow's house

Market Report: Eleven new-house features buyers want most today

NEWS BEGINS ON PAGE 41 / NEW WAYS TO BUILD BETTER, PAGE 157 / COMPLETE CONTENTS, PAGE 95

NuTone

Stereo

Built-In

*It's Stereo + High Fidelity
+ Intercom + am-fm Radio*

Model Home Offer for Builders and Architects..



NOW . . . A BUILT-IN STEREO SYSTEM FOR YOUR MODEL HOME . . . See Next Page

NUTONE BUILT-IN STEREO • INTERCOM • AM-FM RADIO • HIGH FIDELITY MUSIC

A 4-WAY STEREO SYSTEM throughout your entire house . . . not just for a single room. It's completely BUILT-IN to standard walls to save space and avoid cabinet clutter.

You can install only two of the units now and the home owner can add remaining units at a later date. Ask your NuTone supplier for complete information.

2A



- ① AM-FM Radio Tuner to receive Stereo Radio programs.
- ② Dual channel Stereo amplifier with room-to-room Intercom.
- ③ Fold-in-wall 4-speed Record Changer with automatic shut-off.
- ④ Wall Cabinet for cartridge tape player . . . or for record storage.

DON'T MISS NUTONE'S SPECIAL STEREO OFFER ! See Next Page →

LET US PROVE* NuTone's Built-In Stereo
can add SALES APPEAL to YOUR HOMES..



YOUR MODEL HOME provides a perfect setting for NuTone's Built-In Stereo System . . . it's the "romance item" to help close sales for you!

OFFER EXPIRES SEPTEMBER 15, 1960
. . WILL NOT BE REPEATED AGAIN!

See Other Side
←

MAIL THIS
COUPON TODAY!

Model Home Offer

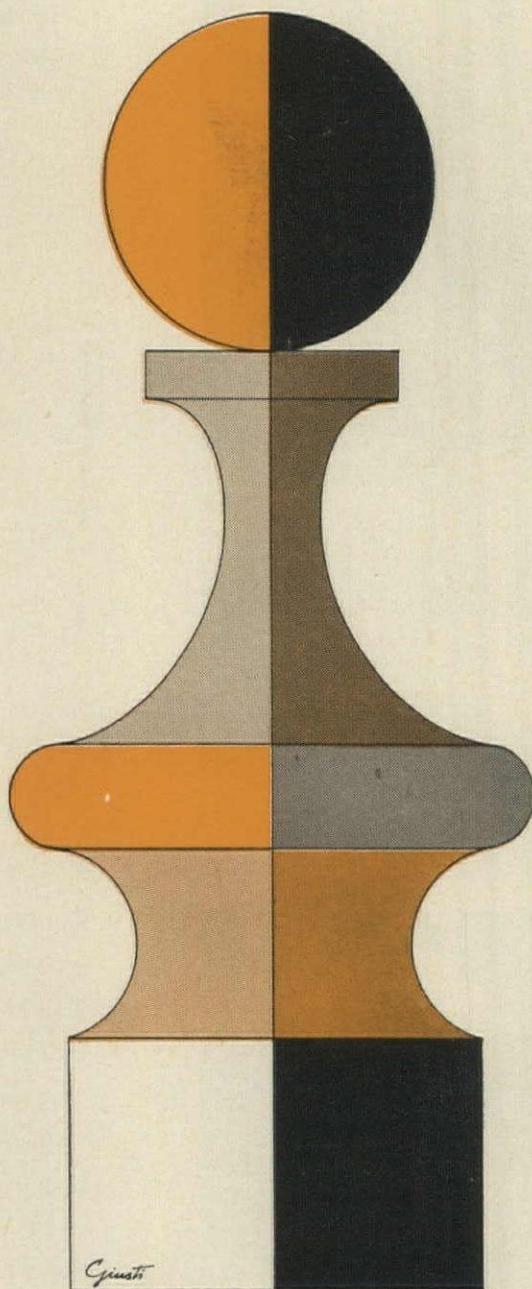
* Send me more information about NuTone's
Built-In Stereo for my MODEL HOME . . .

Firm _____ Title _____
My Name _____
Address _____
City _____ Zone _____ State _____

Write NUTONE, Inc.
Dept. HH-7
Cincinnati 27, Ohio

NuTone

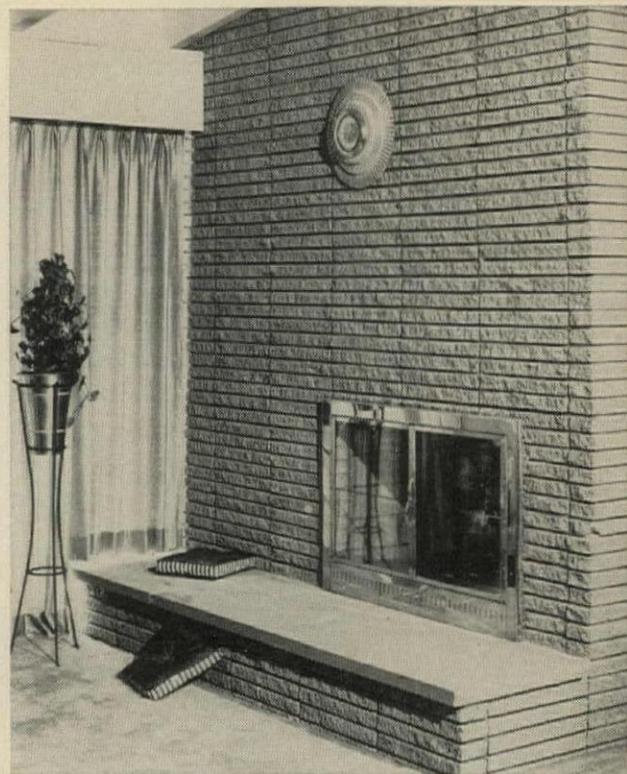
When they come to buy...nothing has the initial impact of brass. Potential home buyers may not know a soffit from a sofa when it comes to construction...but they do know that solid brass is the hallmark of quality in depth. You'll sell faster with a generous display of solid brass fixtures and hardware. And the finest brass products are always made from **Western Brass**—the “tailor-made” material that’s alloyed and rolled to your supplier’s individual needs.



OLIN MATHIESON • METALS DIVISION • EAST ALTON, ILL., NEW HAVEN, CONN.



Western BRASS



From
the wonderful
new world
of block

Fireplace Fashions



Concrete Masonry lets you create a fireside to match your mood and taste. The bright new faces of block available today can make your fireplace and adjacent walls a spectacular focal point in your home. With block you get the added plus of a building material at home inside, outside all around the house. See your local NCMA member for all that's new in block.

National Concrete Masonry Association
1015 Wisconsin Avenue, N.W.
Washington 7, D.C.





Sculptured Imperial Beauty LINE

Like precious art objects Kwikset Imperial Line locksets were sculptured in clay before being selected to house the expertly crafted solid brass and steel cylindrical mechanism. The result is a harmony of superior styling and unsurpassed construction. This combination assures enduring beauty and security for finer residential and commercial buildings. Available in all popular functions and finishes and two distinctive knob designs — the fashionable Balboa and the handsome Catalina. Send for free, colorful, illustrated brochure.

KWIKSET SALES AND SERVICE COMPANY:

A subsidiary of The American Hardware Corporation, Anaheim, California

kwikset  **locksets**
®

With P-B Components any house is—

... enclosed in one day
... completed in one to
three weeks

—and the builder
saves 15% of his
building costs!

HERE'S HOW:

The components are **BIG**
and custom-built to fit any plan

- Your wall components are 8' high and usually 12' to 14' long—
- Your floor components are 6' wide and up to 20' long—
- Your ceiling components are 8' wide and span the width of the room—
- Your roof components are 8' wide and rafter length—
- Your gable components are generally the width of the building—

HERE'S WHY:

With large components you get savings not obtainable in any other way and—these savings are made possible because of the "Big Sheets" of Homasote that are tough enough to stand the handling of large sections and, at the same time, are not affected by the weather in case a storm stops the operation before the house is closed in.

It takes only 11 seconds longer, with four men, to put an 8' x 14' P-B Component into place than to put an 8' x 4' "baby" panel into place; but you have erected, in less than a minute, 3½ times as many square feet!

Once erected, the components are ready for the exterior finish and the interior decoration.

To save money in conventional building—send us your blueprints for a free Cost-Reduction Analysis. They will be returned with an engineering report on the savings you can make with Homasote Materials. Homasote Board-and-Batten and Grooved Vertical Siding construction are lower in cost than anything else you can use currently for exterior walls.

- The floor panels are covered with factory-finished 25/32" oak flooring which you cover immediately with Sisalkraft-type paper, leaving it on until the owner is ready to move in. When you finally take it up, he has bright, shiny new floors and you have eliminated a lot of extra cleaning expense.
- The ceiling panels are ready for decoration as soon as they are in place.
- The roof components have 5/8" Homasote sheathing already applied, with joints flashed to prevent leaks before the roofing is applied. This, too, saves a lot of field labor.
- And you can erect the average house in one day!



Please write for our 8-page brochure containing complete details. Kindly mention Department G-6.

HOMASOTE COMPANY

TRENTON 3, NEW JERSEY

Homasote of Canada, Ltd. • 224 Merton Street • Toronto 7, Ontario



FOR ANY SIZE
OR TYPE OF HOUSE

Your selling advantages:

Homasote's 24 years' experience with P-B Components here and abroad gives you a better house to sell than others know how to build.

- You get your customer in fast—3 to 4 weeks, or less.
- Your house is 7 times quieter than a plaster or gypsum board house.
- Your house is free from dampness and drafts.
- Your house heats economically in winter and is cooler in summer.
- You can sell it for less than an equivalent conventionally-built or prefabricated house.
- You can sell it at a greater profit, too!

Look at the extra value you get for a few extra minutes installation time with a Flintkote•Van-Packer Chimney

*Rugged, durable
Flintkote•Van-Packer Chimneys
do take a few more minutes to install
than other chimneys
with lightweight metal flues,
but look what you get in return —*



DURABILITY—The fire-clay tile liner, heart of each Van-Packer Chimney section, will not corrode. The sections are built with a fire-clay tile liner $\frac{5}{8}$ " thick, a 3-inch vermiculite and cement insulating wall and an asbestos-cement jacket. Only the Van-Packer tile-lined chimney offers such rugged and durable construction.

ATTRACTIVENESS—Sturdy asbestos-cement housing panels are embossed with a brick pattern. Much more rigid than metal housings, they won't rust, stain or streak the roof. Colored housings have Butyl finish to preserve their original beauty.

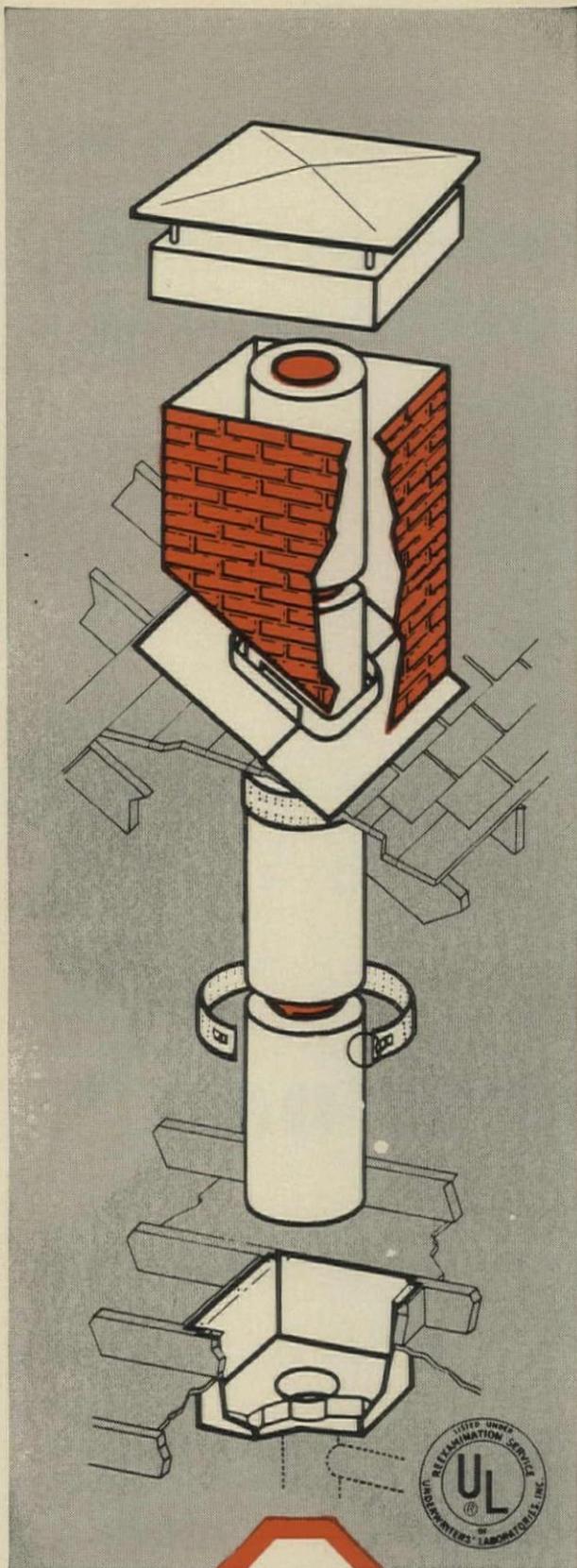
SAFETY—Van-Packer Chimneys are UL listed for all fuels and all home heating plants, including incinerators. The fire-clay tile-lined flue withstands 2100°F. Flue sections have high insulating value through the use of vermiculite in the 3-inch section wall. Approved by major building codes.

GREATER BUYER ACCEPTANCE—Van-Packer chimney housings come in red, buff, gray or white brick colors to blend with the home. Flue sections provide more draft than lightweight chimneys, resulting in more efficient furnace operation and cutting nuisance furnace service call-backs. Heavy flue construction won't transmit furnace or fan noises.

EASY ASSEMBLY—One man can put up a Van-Packer in three hours or less, without special tools or skills. Two-foot flue sections are cemented atop one another with acid-proof joint cement that is provided. Sections are then secured with snap-lock draw-bands. Flue can be ceiling- or floor-suspended, permitting more freedom in floor-plan design and central location of furnace for balanced heat runs. No clearance is required at floor, ceiling or roof—chimney installs between joists on 16" centers without joist cutting. Can be installed even after house is completed.

COMPLETELY PACKAGED, IMMEDIATE DELIVERY—Van-Packer Chimneys come in easy-to-handle, labeled cartons, with everything provided including flashing and joint cement. No inventory is required—you can get immediate delivery to your job site from your local jobber. Only two simple measurements needed to order.

See "Chimneys—Prefabricated" in the Yellow Pages.
Or write for Bulletin RS-19



FLINTKOTE

VAN-PACKER

Division of The Flintkote Company
Manufacturer of America's Broadest Line
of Building Products

30 Rockefeller Plaza
New York 20, N. Y. • PLaza 7-5500

In the West:
Pioneer Division, The Flintkote Company
Box 2218, Terminal Annex, Los Angeles, Calif.

In Toronto:
The Flintkote Company of Canada, Ltd.



/ the

The Pacific Lumber Company is proud to announce a significant advance in lumber manufacture:

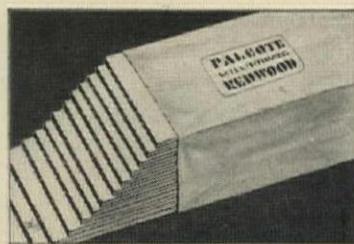
PALCOTE MILL-PRIMED **REDWOOD**

Our famous Architectural Quality Redwood, now available factory-finished with high-grade exterior primer in neutral color, plus water-repellent back primer.

Member of California Redwood Association



ultimate



Wrapped in heavy plasticized paper for maximum protection, PALCOTE siding and pattern redwood means extra profits for you, offers your customers the ultimate in building materials; saves construction time and up to 40% in finishing costs. Get the full story on money-making, money-saving PALCOTE REDWOOD today...write, wire or phone:

PALCO

THE PACIFIC LUMBER COMPANY

Mills at Scotia, Eureka, and Elk, California

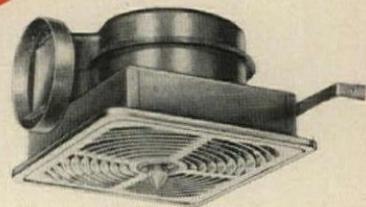
100 Bush St., San Francisco 4, Calif.

35 E. Wacker Dr., Chicago 1, Ill.

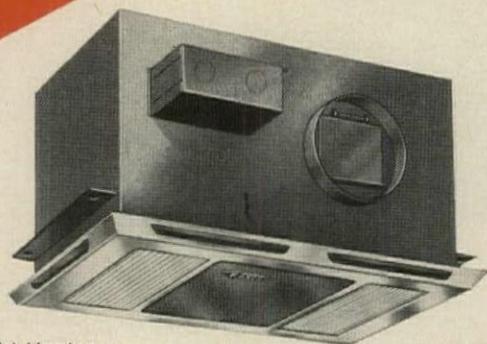
2185 Huntington Dr., San Marino 9, Calif.

*PALCO—over 90 years of leadership built by
people, plant, product*

FASCO



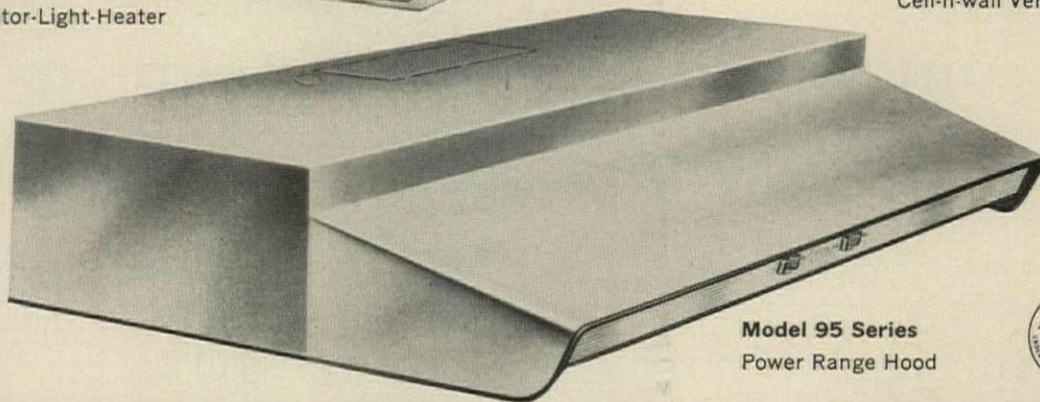
Model 650A
Bathroom Ventilator



Model 657C
Ventilator-Light-Heater



Model 1020A
Ceil-n-wall Ventilator



Model 95 Series
Power Range Hood



OFFERS "BALANCED"

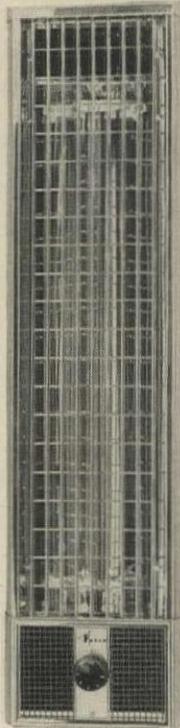
Fasco's long experience in dealing with scientific movement of air proved invaluable in developing the new electric home heating line . . . enabled Fasco to offer an efficient, pre-determined "balance" between proper heating and ventilation.

Homes equipped with the "balanced" Fasco system are free from "over" or "under" ventilating or heating . . . offer highly efficient and truly scientific control of air freshness and warmth.

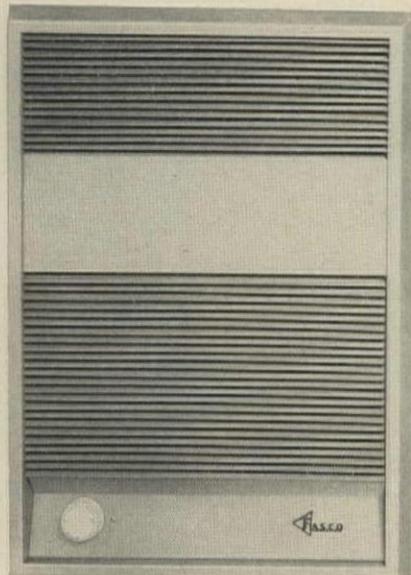
Add to Fasco's "balance" the ease of installation and the progressive styling, and you come up with the conclusion that here is heating and ventilating that makes real sense—to builders, contractors, and home-buyers alike! So look into the stability and performance of Fasco's "one-source" system for your installations.

Fasco... first with the finest Always!

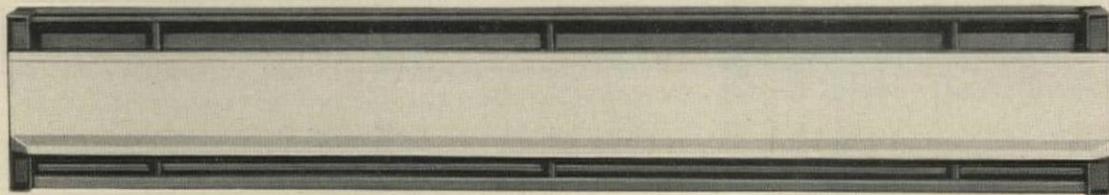
Model RW-1215
Radiant Wall Heater



Model FW-2440
Forced Air Wall Heater



Models 2250 thru 2265
Radiant Cable



Model BB-2408 Baseboard Heat

HEAT AND VENTILATION

ATTENTION! CONTRACTORS — Fasco's "researched" ventilating and heating units are trouble-free, easy to install.

BUILDERS — Fasco heat and ventilation units offer futuristic features requested by thousands of convenience-minded builders.

DISTRIBUTORS — Fasco is a progressively-styled, highly-saleable line for modern electric home heating and ventilation.

FASCO INDUSTRIES, INC.

North Union at Augusta • Rochester 2, New York

Please send me additional information on FASCO ventilating and electric heat products.

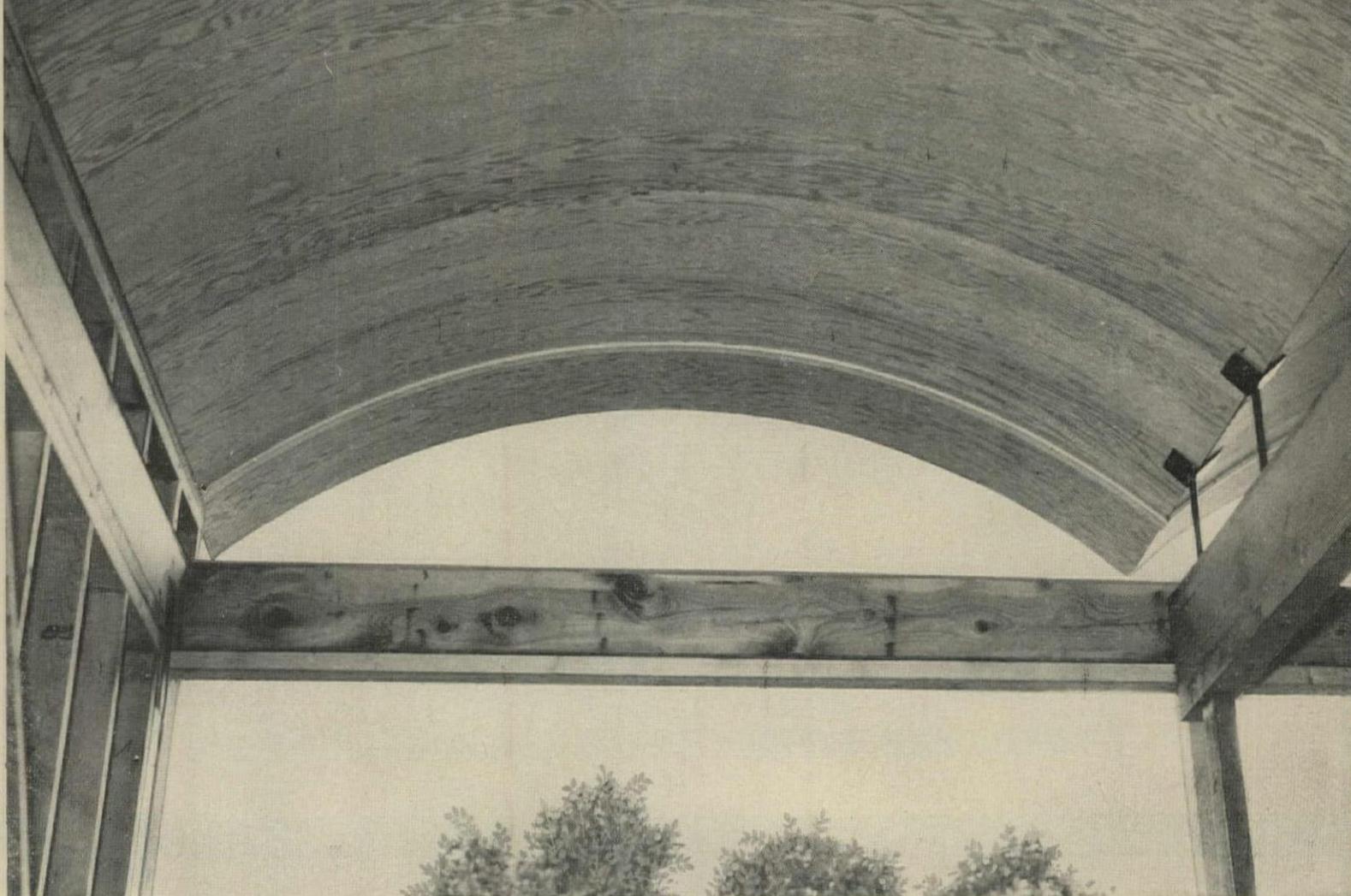
Name _____

Address _____

City _____ Zone _____ State _____

HH-7-60

HINES



Hines Curved Panels make a graceful clerestory in a residence in Madison, Wisconsin. Architect: Emil Korenic, A. I. A.

NEW LOW COST WAY TO

Span a hundred feet or more with lightweight beams in almost any shape your imagination suggests. Or enclose an entire building in just a few hours with insulated panels that serve as subfloor, walls and roof. These are only a few of the construction feats possible with Hines Plywood Components.

This modern way to build permits both esthetic effects and construction economies that can't be achieved with conventional methods. Hines field engineers will be glad to give you *free* assistance in estimating and engineering for use of Hines Plywood Components.

Hines manufactures these components under conditions rigidly supervised by inspectors of the Plywood Fabricator Service, Inc., sponsored by the Douglas Fir Plywood Association. (In addition, Hines maintains its own fully equipped quality control laboratory.) And Hines provides reliable delivery.

BOX BEAMS—Structural members made by combining laminated lumber flanges and plywood provide high strength-to-weight ratio. Span up 120'. Can be manufactured in a variety of decorative shapes to precise specifications. Dimensionally stable. Basic efficiency of concept gives low in-place costs.

STRESSED SKIN PANELS—Most versatile plywood component is made of plywood laminated to seasoned lumber framing with hollow core that can be filled with insulation during fabrication. Panels are rigid and suitable for use as subfloors, roof decks or walls.

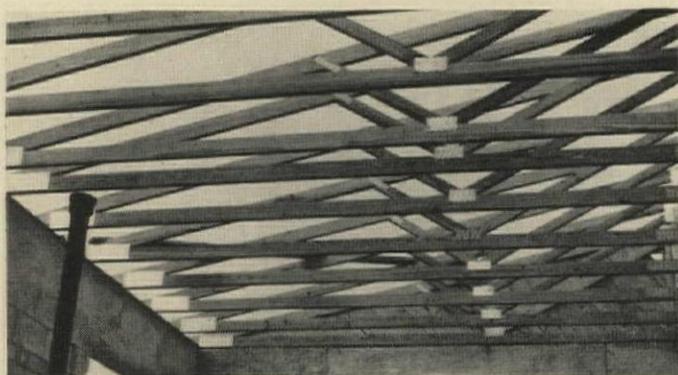
CURVED PANELS—The beauty of the arch combined with up-to-date efficiency. Hines Curved Panels are manufactured to exact radius, easily span up to 16'. Available filled with insulation. Strong, but lightweight and easy to assemble.

PLYWOOD COMPONENTS



In building at Rochelle, Illinois, Hines Box Beams span 35'. Stressed Skin Panels form roof deck. Architect: Gene C. Jackson.

GET DESIGN FREEDOM



GANG-NAIL® GUSSETS MAKE HINES TRUSSES EXTRA RIGID
Hines Trusses are built with patented Gang-Nail metal gussets and superior grades of kiln-dried Douglas Fir and Western Hemlock for the highest quality. Use Hines Trusses to speed building, save labor costs, reduce lumber waste, and eliminate interior bearing walls.

Send today for free technical data

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.

Edward Hines Lumber Company Dept. 107
200 South Michigan Avenue, Chicago 4, Illinois

Please send me full technical data on Hines Plywood Components and Gang-Nail Trusses.

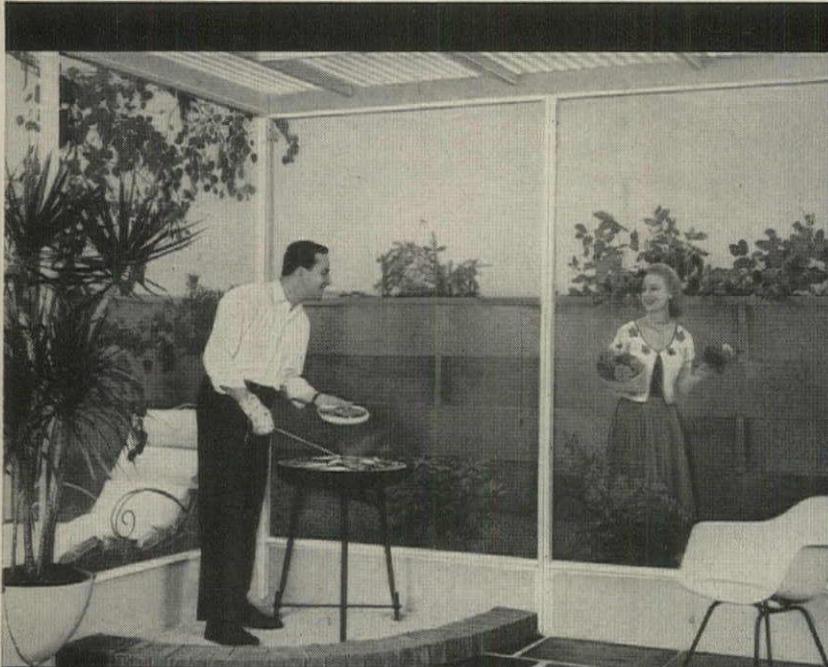
Name _____

Address _____

City _____ Zone _____ State _____

THE LOWEST COST ROOM YOU

Comfortable outdoor living room combines



**BUILD YOUR HOUSES
BIGGER, BETTER LOOKING,
AT LITTLE EXTRA COST,
WITH OUTDOOR
LIVING ROOMS
LIKE THESE...**



America's biggest home-selling program promotes your sales of patio-equipped homes.

This is the room that can sell the house! This year make the most of the growing demand for indoor-outdoor living areas. Versatile, easy-to-erect Fiberglas materials let you add on this "extra" room at low cubic-foot cost. Fiberglas offers wide-span 84" screening, which allows wider spacing of uprights, provides an appealing "open look." What's more, Fiberglas Screening handles easily, resists weather, won't glare, dent, rust or stretch.

Call the Fiberglas Patio contractor nearest you

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BIRMINGHAM Cain Awning Co.
The Willingham Co.
MOBILE Beautilite Co.
Lambert Roberts | ARIZONA
MESA Ray-O-Lite Awning Co. of Arizona
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FT MYERS Fl. Myers Screen Enc'lres Jackson Reed Co.
Norton Glass & Screen Co.
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HIALEAH Magic-Aire Co. | HOLLY HILL Modern Screen Products
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PANAMA CITY Aluminum Craft
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Ray-O-Lite Southeast, Inc.
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ADDISON Sto-A-Co of Illinois
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Carson Pirie Scott & Co.
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Monarch Products
Norton Screen Co.
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TERRE HAUTE Lough Bros. Roofing & Siding Co.
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CEDAR RAPIDS Wall and Company
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Paulsen Window Company
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NEW ORLEANS Sidney N. Prats Sheet Metal Works
Romano Aluminum Screen |
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CAN ADD TO YOUR HOUSE!

Fiberglas* Screening and Paneling



Fibreglas Translucent Paneling is resistant to weather and damage, comes in a new range of decorator colors, and is easy to handle because it saws and nails like wood. For all sizes, types and styles of homes, choose from prefabricated or custom-designed aluminum or wood-framed units. For versatile new patio plans by architect Herman York, write to Owens-Corning Fibreglas Corporation, Dept. 67-G, National Bank Building, Toledo 1, Ohio.

- | | | | | | |
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K and S Screen and Carpenter Service
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ALBUQUERQUE Kapp's Cabinet Shop | CINCINNATI
CLEVELAND Aristo Products Inc.
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Perma Shield Co.
Sto-A-Way Windows, Inc. | TENNESSEE
FOUNTAIN CITY Sawyer Mfg. Co., Inc.
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Marvel Industries, Inc. | NEW YORK
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FONDA Kasson & Keller Industries
HEMPSTEAD, L. I. Emerson Industries, Inc. | WAGNER AWNINGS
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DAYTON Palmer-Donavin Mfg. Co.
Aluminum Materials, Inc.
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EUCLID Euclid Jalousies
GEAUGA LAKE Suburban Storm Window & Door Co.
MEDINA Fiber-Glass Products Inc.
MIDDLETOWN Denney Lumber Co. | TEXAS
ABILENE Beautilite of West Texas
CORPUS CHRISTI Horton Glass Co.
HOUSTON Air Vent Awning Co.
Alce Building Specialties
Quality Home Center
LEWISVILLE Ray-O-Lite of Texas, Inc.
PORT ARTHUR Dura-Craft | MINNESOTA
LAKEVILLE Weyerhaeuser Company
MINNEAPOLIS Coronet Window Co.
De Vac Window Company
The Denesan Company, Inc.
Sather Co.
Standard Home Service Co.
Stuart Construction Co.
Weyerhaeuser Company
OSSEO Northwest Fibre Glass Co.
ST. PAUL Ray-O-Lite Northeast Fibre Glass Inc. |
| MASSACHUSETTS
BROCKTON Bonney-Glenn Co.
CAMBRIDGE Bailey Kellogg Corp.
Engine Metal Products Co.
DORCHESTER All Weather Aluminum Co.
Nash Aluminum Products Corp.
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SPRINGFIELD Security Window
WALTHAM Bailey Kellogg Corp. | MISSOURI
INDEPENDENCE Shoco Ventilated Awning Co.
KANSAS CITY Ray-Rite Co.
Zephyr Ventilated Awning Co.
ST LOUIS Arundale Mfg. Co. | OHIO
AKRON Alisco Inc.
BARBERTON Weather-Seal Inc.
BEDFORD Bedford Porch Enclosures | OKLAHOMA
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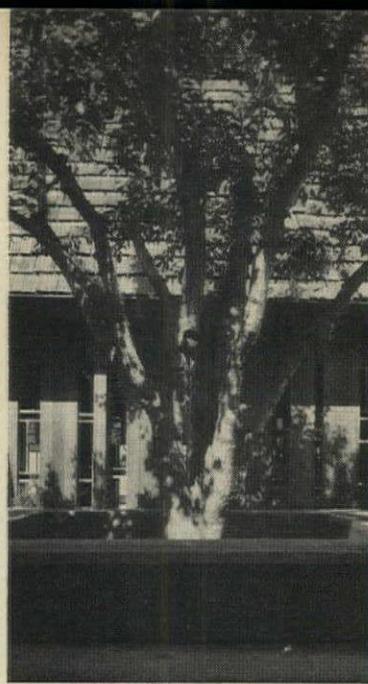
*T.M. (Reg. U.S. Pat. Off.) O-C-F. Corp.



Each board in this siding of saw-textured redwood was carefully selected to take full advantage of the decorative color variations. The rustic setting of this church was one of many reasons for the choice of redwood as the prime building material.



Architect: Clark & Beuttler



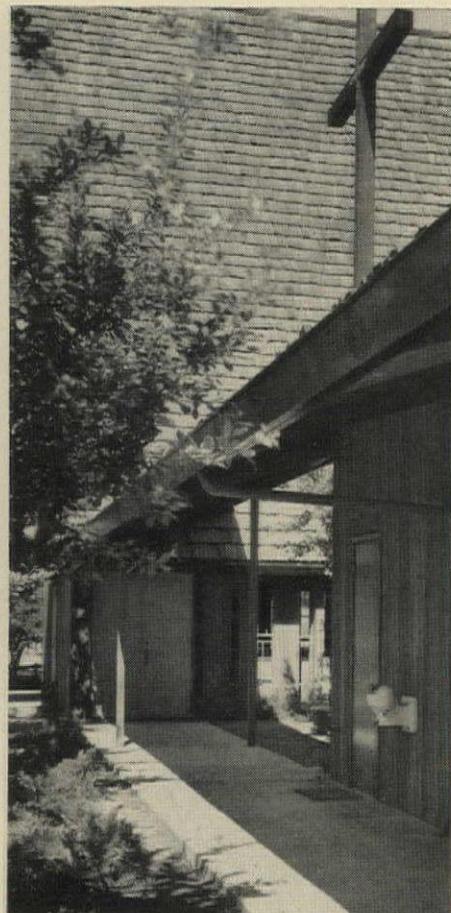
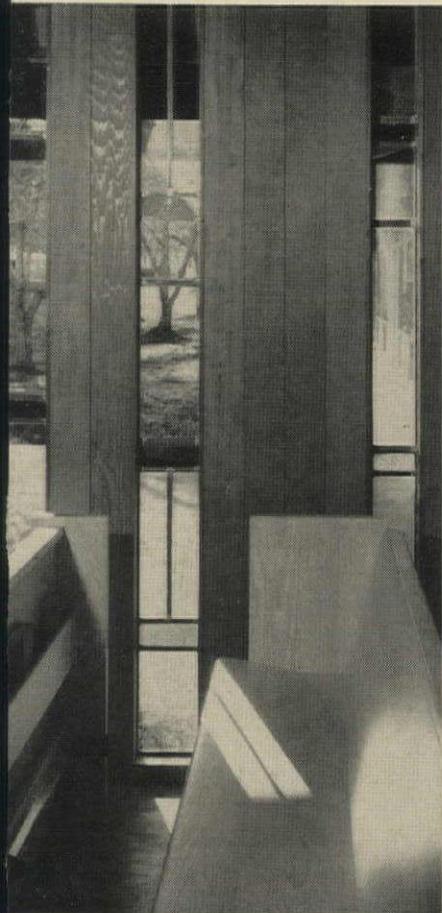
The warmth of redwood is felt throughout this handsome church

A major consideration of the church architect is to design a building that will be completely functional as well as one that conveys an atmosphere of warmth and simple dignity. Many architects of contemporary churches therefore specify redwood, inside and outside, because of its rich, natural beauty and exceptional durability.



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All the wonderful warmth of wood is best expressed in redwood.



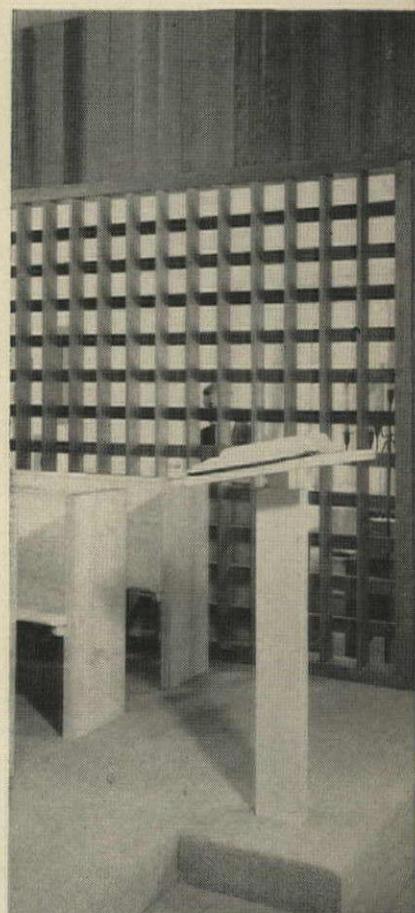
Left to right:

The saw-textured redwood paneling behind the altar was left unfinished to reveal the color variations and decorative grain patterns.

The unfinished redwood paneling used inside the church is in harmony with other materials... naturally relates the interior to the outdoors.

Note how the exterior redwood blends naturally and beautifully with nearby trees and planting.

This decorative redwood grille separates the organist from the choir without completely blocking his view.





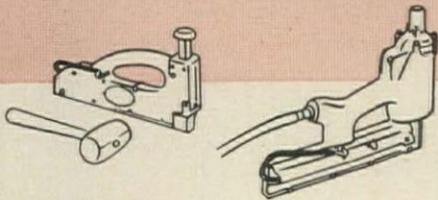
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DRIVES 1" WIDE STAPLES
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Watch your prospects as they inspect your homes. HE examines floor joists and scans the ceilings knowingly for tell-tale cracks. SHE gets that "far-away" expression as she squints her eyes to picture how her furniture would look in *this* living room. She's concerned, too with saving steps and time. He wants a home that's built to last. She wants a home that's planned for living. Satisfy them both by installing beautiful, trouble-free R-O-W Removable Wood Windows.

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The little house that

IT WAS A LOVELY LITTLE HOME, just right for a young couple. And a very young, newly-married couple was going through it with Mr. Johnson, the builder. After they had finished the inside tour, Mr. Johnson took them outside to see the landscaping, the patio and the driveway.

"Look, Jim," said the bride, "isn't this a nice patio? We could do a lot of entertaining outside next summer if we bought this place. Do you like it?"

"Yes, Ginny, I like a patio a lot. In fact, that was one of the things I especially liked about the house we saw in Pine Trees yesterday. Remember, the house that was just a little bit more money than we had planned to spend."

"I remember and I was so disappointed," she sighed. "But," brightening, "I like this place just as well and it's not so expensive."

The builder interrupted with, "Well, I try to give my customers as much home for their money as possible. I don't

waste time, work and money on a lot of unimportant extras. I find that I can undersell many other builders."

"Glad to hear it," says Jim. "By the way, this concrete patio is pretty big. What about the danger of cracking from frost heave. Is it reinforced with welded wire fabric to guard against breaking?"

"Well," said Mr. Johnson, "that's a pretty heavy, well-laid piece of concrete. I don't think you need to worry about it breaking."

"But is it reinforced," persisted Jim.

"No it isn't," replied the builder. "I found that I could save a few dollars by not using welded wire fabric for concrete reinforcement. This is one of the ways I told you I saved you money—by eliminating unnecessary extras."

"I don't consider Welded Wire Fabric Reinforcement an unnecessary extra. It'll cost me a lot to replace the concrete later if it breaks. Maybe that builder over in Pine Trees had a good reason for asking a little more for his home. I think we'll go look at that house again. Its concrete *was*



was almost sold

reinforced with USS American Welded Wire Fabric. Thanks a lot for showing us your home, Mr. Johnson."

Like this young couple, more and more homeowners are asking is it reinforced and are deciding that maybe the little extra welded wire fabric cost is well worth it. The use of USS American Welded Wire Fabric will add 30% to the strength of concrete, and it gives you a strong selling point. Use USS American Welded Wire Fabric in the homes you build. Tell your prospects that it insures the protection and appearance of concrete for only about a penny a day on the mortgage life; and that it will add years of service to drives, walks, patios and basement slabs. Tell them that even after the mortgage is paid, the concrete areas will be in good condition.

USS American Welded Wire Fabric is made of cold drawn, extra strong steel wire, and it's prefabricated

for quick, easy installation. American Welded Wire Fabric is available in a wide variety of styles and sizes. For more information, see your building supply dealer, or write American Steel & Wire, Dept. 0288, 614 Superior Avenue, N. W., Cleveland 13, Ohio.

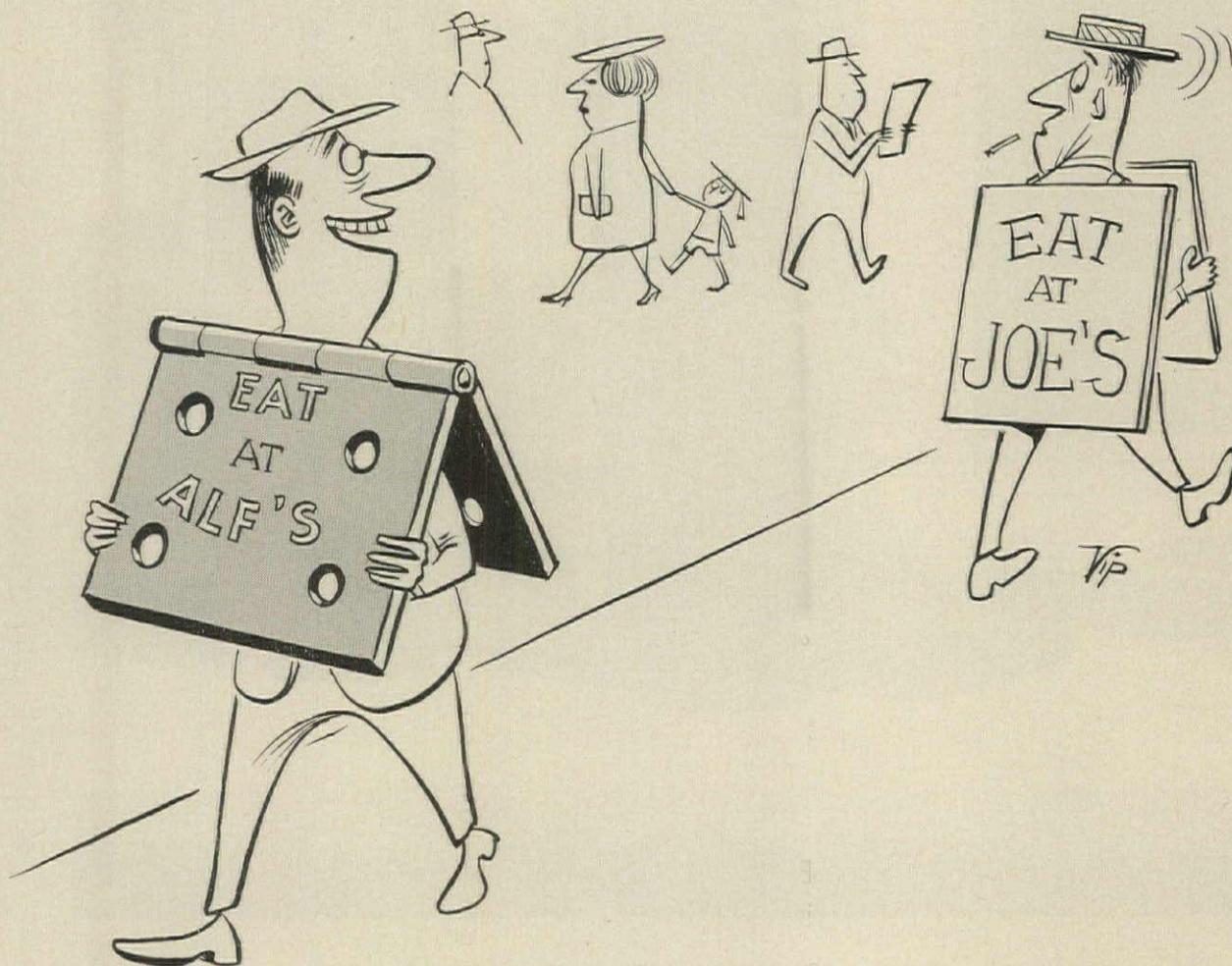
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buyers will ask *"is it Reinforced?"*



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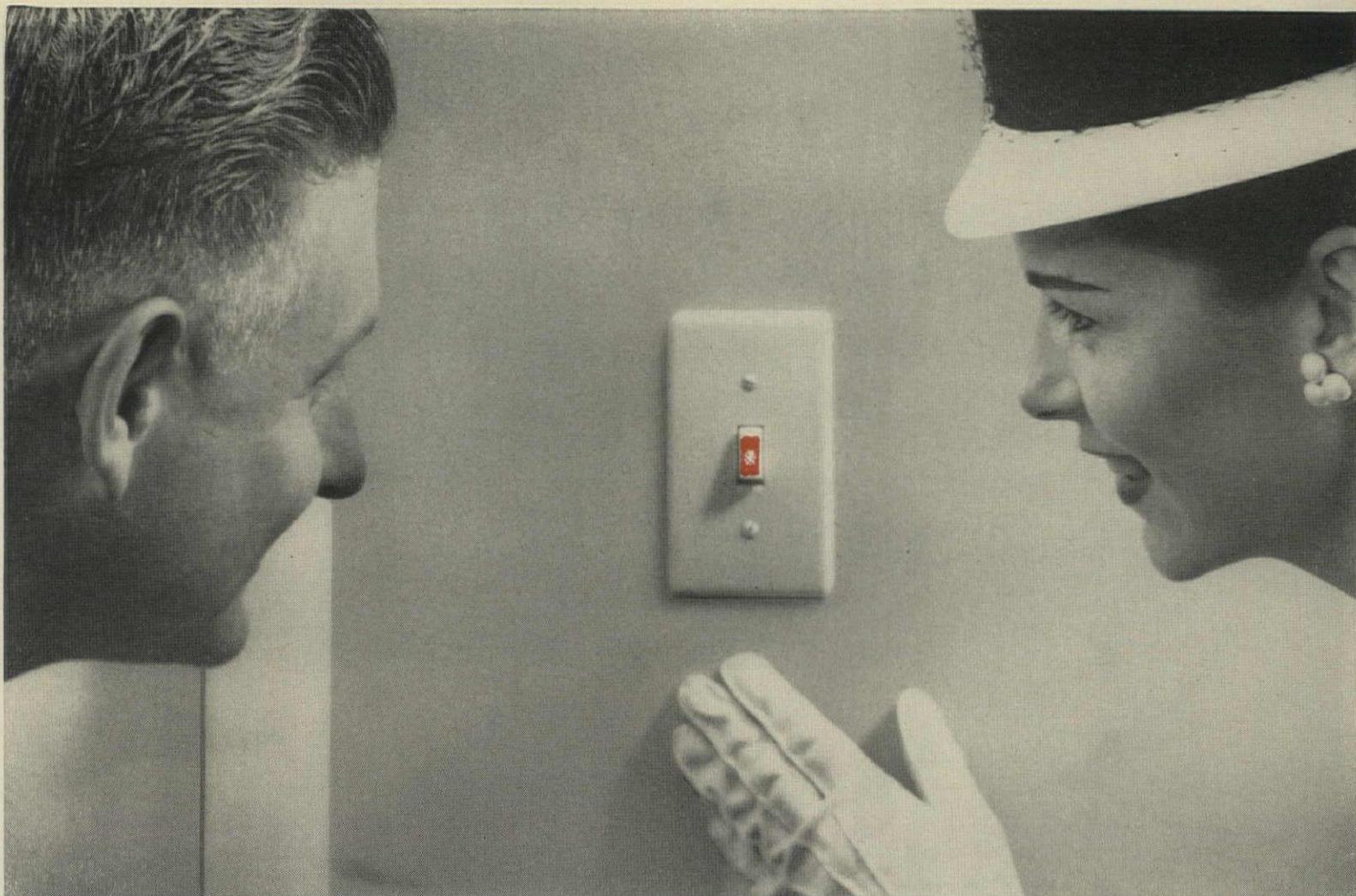


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Tiny neon bulb behind red jewel in new G-E Pilot Push-Button Switch costs less than 1¢ a year to operate — lasts up to 20 years.

“Look! The lighted switch tells you when the basement light is on...”

Home buyers take a bright view of new G-E Pilot Push-Button Switches. And it costs you little to include them!

Your prospects are quick to appreciate the savings in electricity and effort that these new General Electric switches offer in your houses.

They have bright red pilot lights in their push buttons, that show instantly when lights on porches and

in the yard, basement, garage and attic — lights that can't be easily seen from the switch location — are ON.

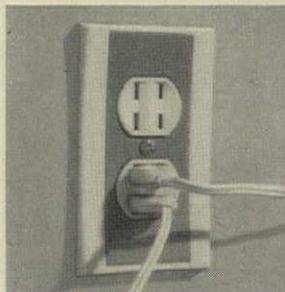
Ask your electrical contractor to install new G-E Pilot Push-Button Switches for all “hidden” lights.

These two-in-one devices cost less to buy and install than separate switches *and* pilots and are neater, too.

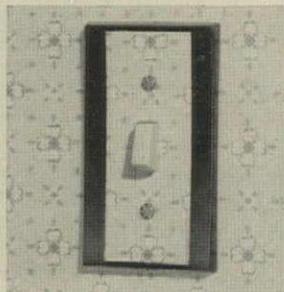
General Electric Company, Wiring Device Department, Providence 7, Rhode Island.



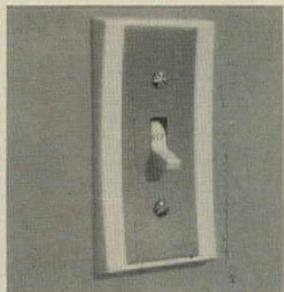
General Electric is your headquarters for new, low-cost wiring device ideas



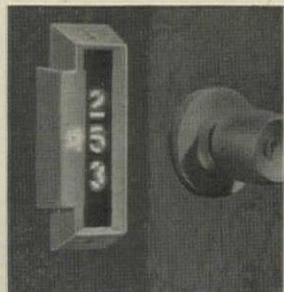
New G-E 4-Plug Outlets take twice as many plugs, in same space.



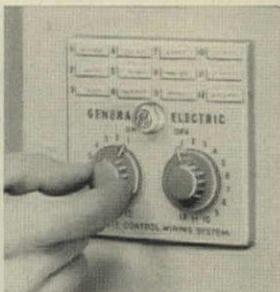
New G-E Decorator Wall Plates beautify switches and outlets



G-E Silent Mercury Switches have soft, luxurious action



New G-E Lighted House Number and Doorbell Button

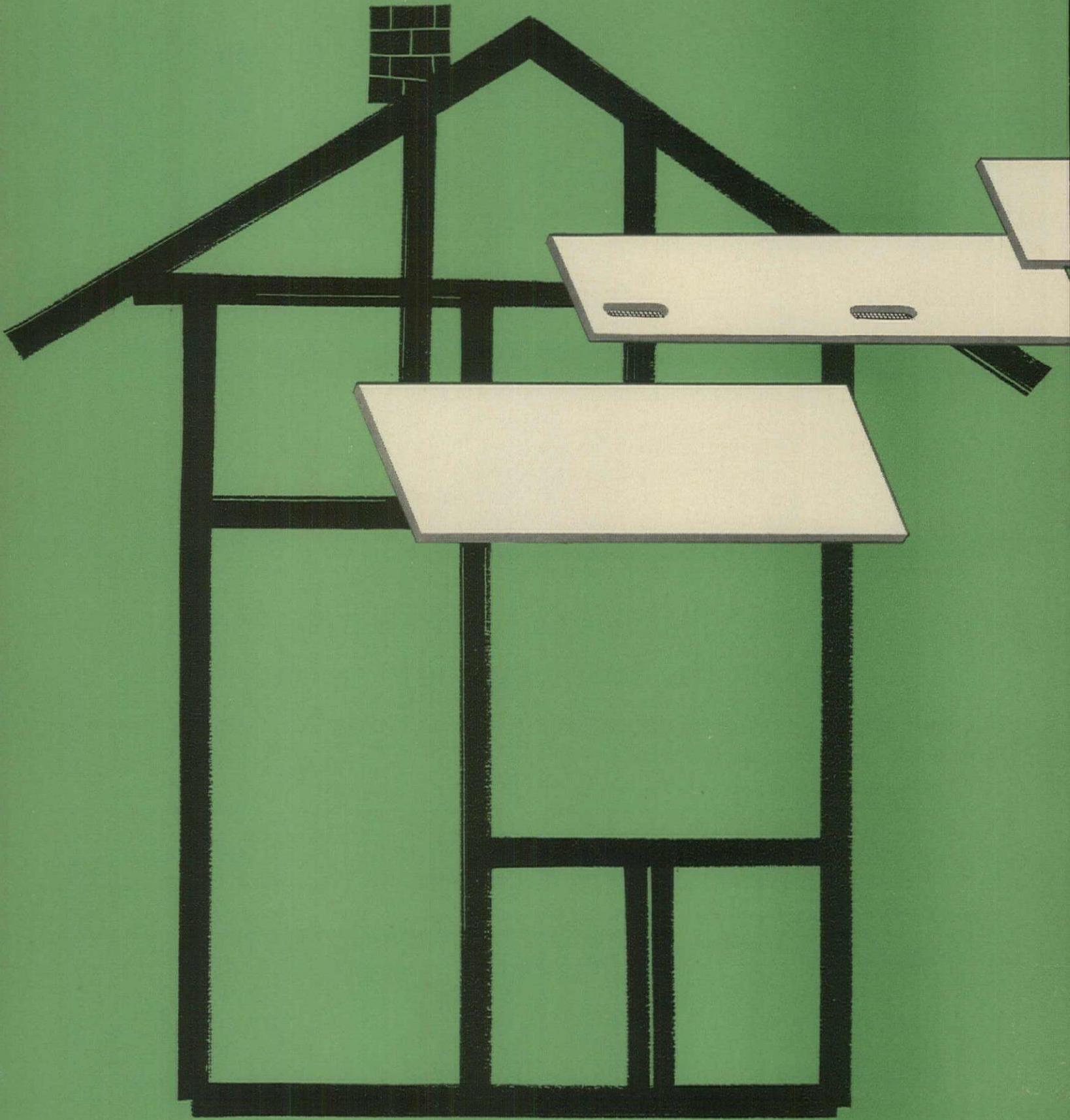


G-E Remote-Control Master Selector Switch controls 12 circuits.

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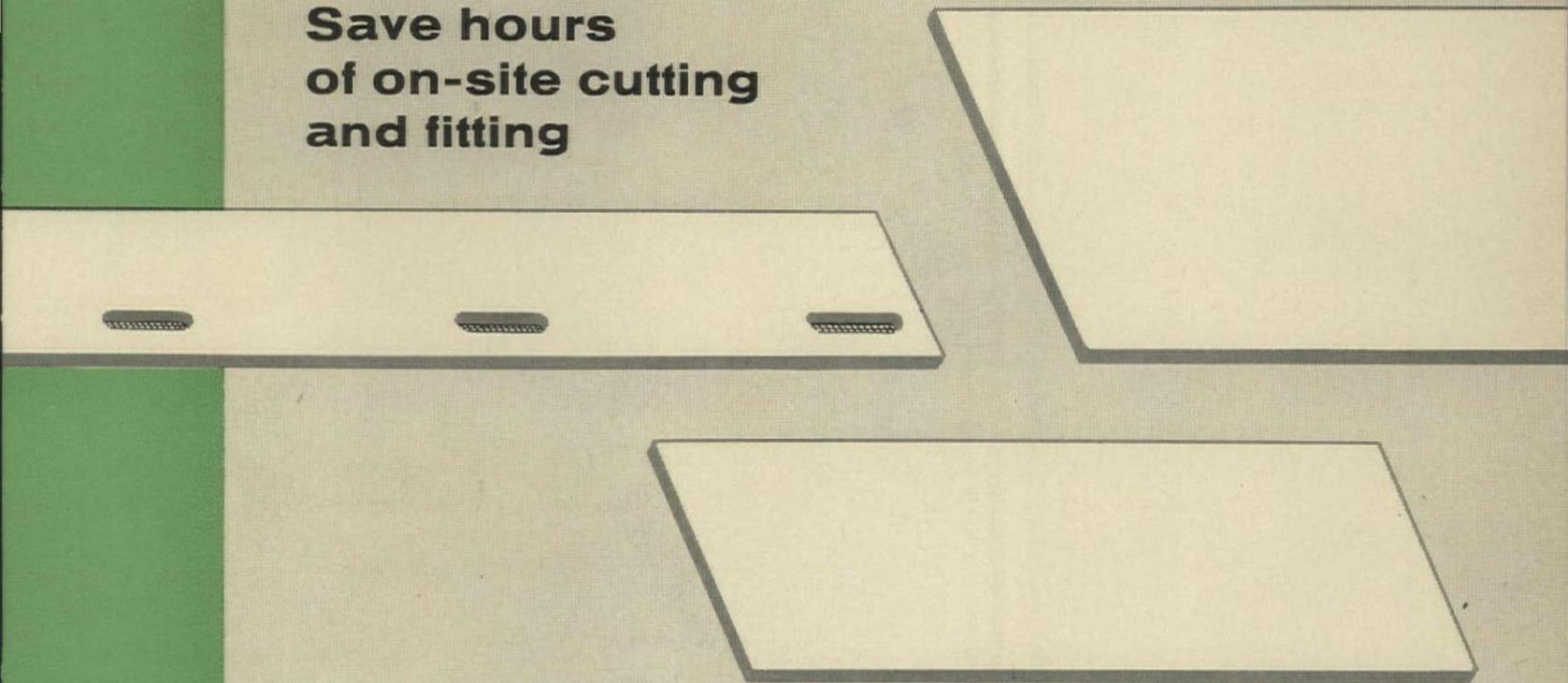
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What size of



READY-TO-APPLY soffits do you need?

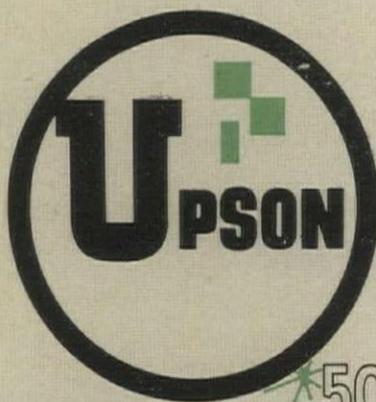
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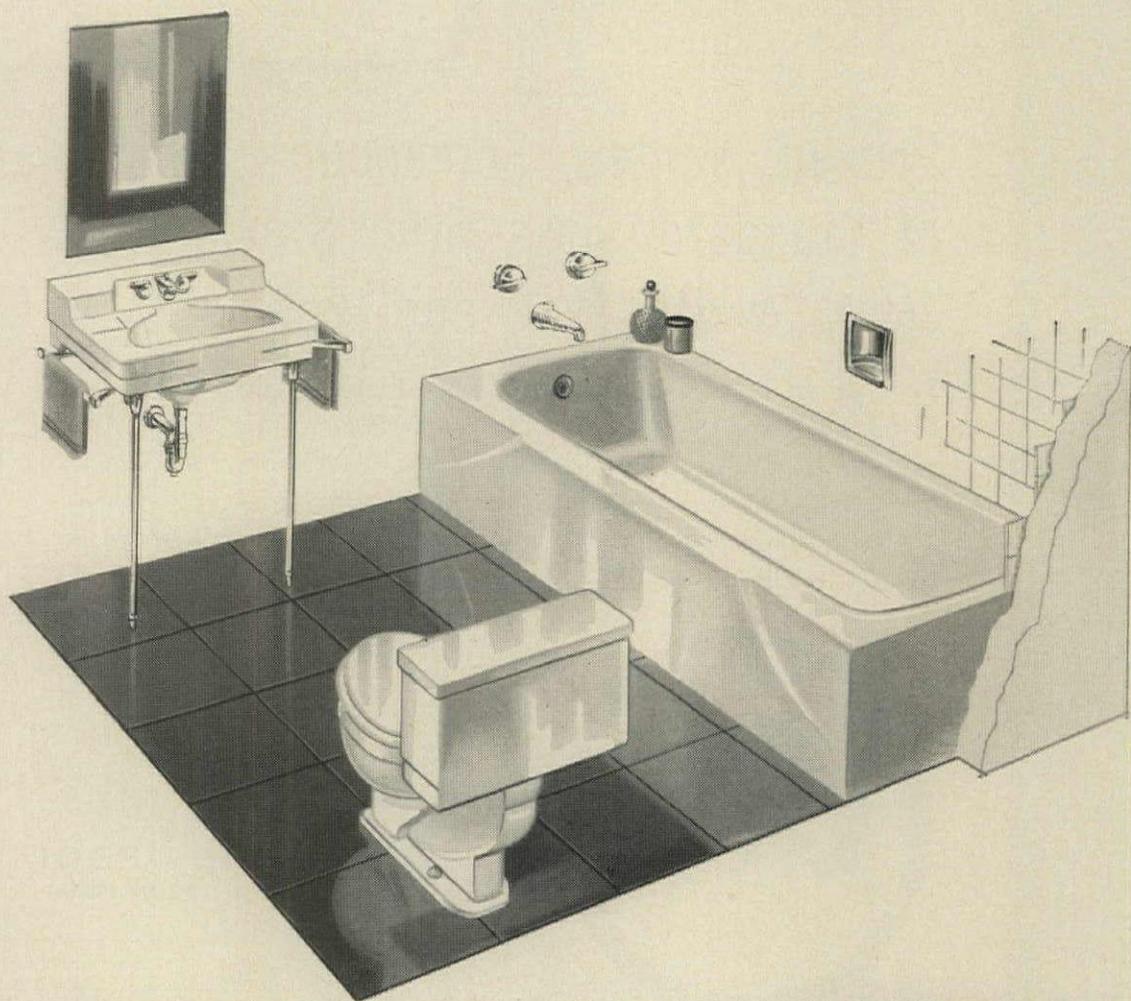
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Crane curbs price without cutting quality. Even low-cost Crane fixtures have the luxury look. The Westgate Lavatory is vitreous china, has beveled panel shelf back, front overflow, semi-oval basin... sturdy, gleaming metal legs, shown with towel bars. The Fairfax Recessed Bath is brand new. Just 5 feet long, with a safe and convenient low side and outer edge wide enough to sit on. Water Closet is the Drexel, a close-coupled combination in vitreous china, with siphon-jet, whirlpool action.



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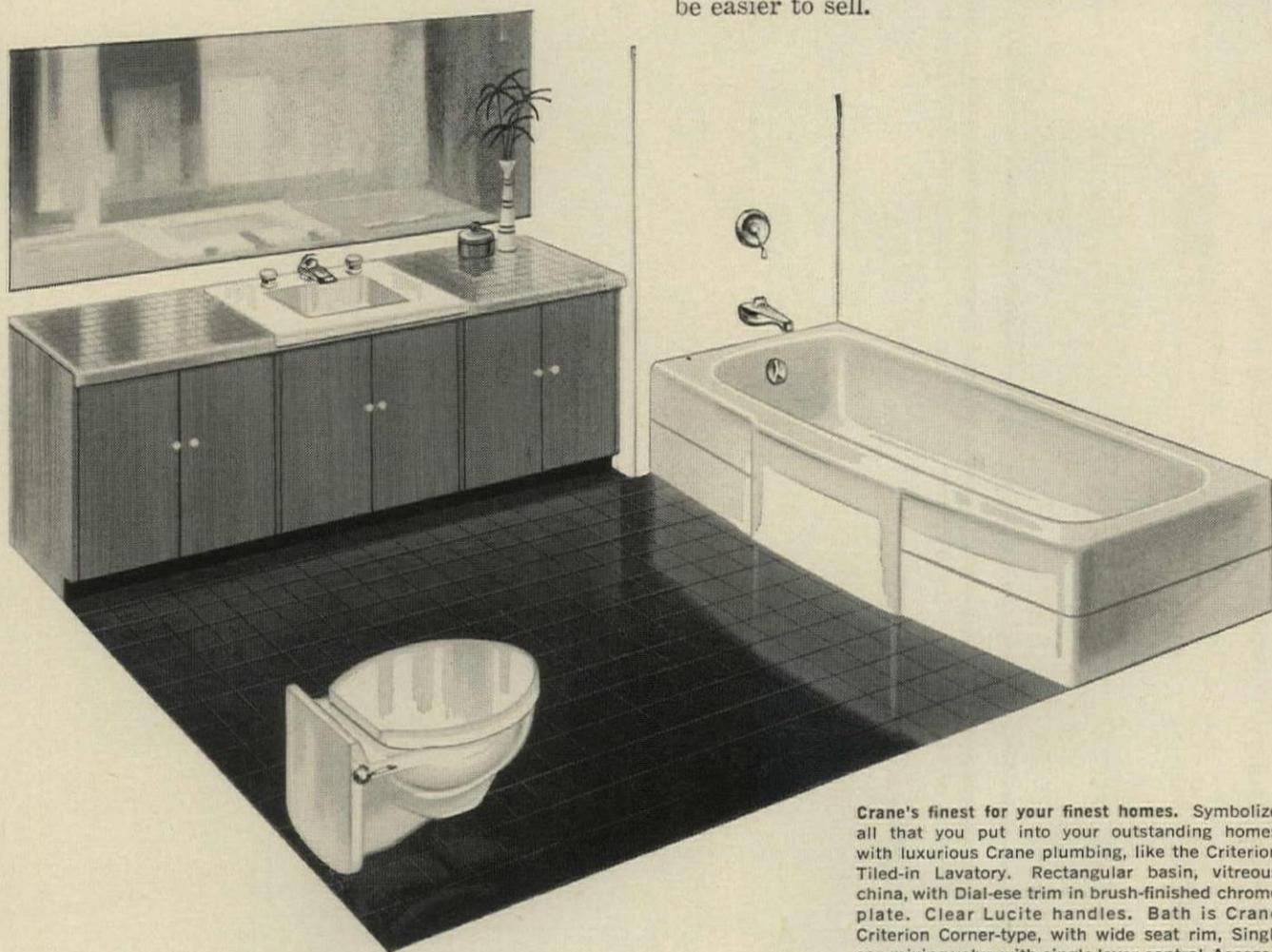
Quality in construction is hard to demonstrate to the average consumer.

You have to illustrate quality in terms he understands. And buyers think of *brand*. The plumbing brand they think *best* is Crane. Surveys prove it.

Not only do they think Crane plumbing represents highest quality, they think it costs more and is worth it. A quick check of the prices will show you Crane quality costs *no* more than other brands. And the others lack Crane's quality standing.

So without increasing your costs, you can make Crane your *proof of quality*. You can use the name . . . the styling . . . the mechanical features as important parts of your sales story. And you can make Crane your *proof of quality* in every home you build—from low price to high. Crane makes fixtures to fit your budget.

Get your Crane representative to talk cost. He'll prove you can add *proof of quality* at no extra cost. Get in touch with him now so your next homes will be easier to sell.



Crane's finest for your finest homes. Symbolize all that you put into your outstanding homes with luxurious Crane plumbing, like the Criterion Tiled-in Lavatory. Rectangular basin, vitreous china, with Dial-ese trim in brush-finished chrome plate. Clear Lucite handles. Bath is Crane Criterion Corner-type, with wide seat rim, Single-ese mixing valve with single lever control, Accesso Waste and flat bottom. Available in 60 inch length for right or left hand installation. Closet is Crane Walsan, a new and compact off-the-floor model to help conserve space.

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Using a wrench on a lock is exaggeration, of course. But tests show California Locks *can* stand the heaviest use by the strongest hand.

All possible troubles are *tested out* of California Locks. You save a big part of their cost in freedom from callbacks.

These interior locks are *low* in price...but built to stand up to day-to-day use in community development homes. Available in Tulip and Plymouth designs, in bright brass, dull bronze, brushed aluminum.

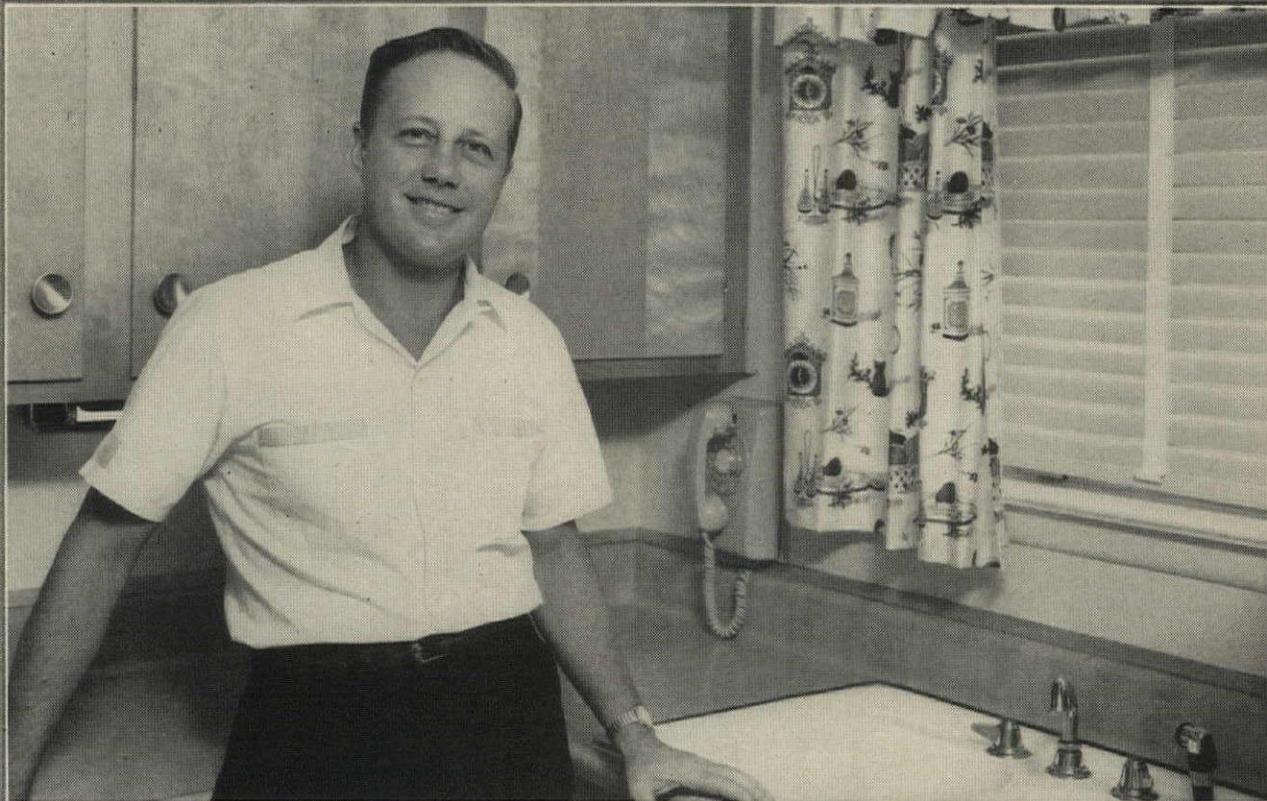
All California locks have zinc-dichromated steel parts, compression springs, and non-ferrous trim. They can be installed in a 2" or 2½" lock hole, are self-aligning, and are adjustable to varying door thicknesses with equal knob projection.

California Locks are ideal for low-cost homes when used in combination with the famous Schlage wafer key locks for exterior doors.

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Schlage Research Laboratories pre-test California Locks to meet the same quality requirements that are maintained for all Schlage products.

CALIFORNIA LOCKS are manufactured by the Schlage Lock Company. Competitively priced and built to last...they carry the same guarantee as famous Schlage cylindrical locks. Schlage Lock Company • San Francisco • Chicago • Los Angeles • New York



Alden Wagner is shown in the kitchen of one of the modern Mahaffey-Wagner homes. Note the convenient wall phone.

“We’ve always telephone-planned our homes. We consider it a fine investment”

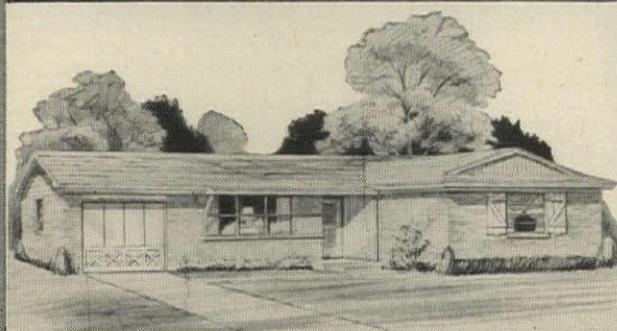
SAYS ALDEN WAGNER, MAHAFFEY-WAGNER CONSTRUCTION COMPANY, DALLAS, TEXAS

John Mahaffey and Alden Wagner have built 940 development homes in the Dallas area since they formed the Mahaffey-Wagner Construction Company in 1953. The homes range in price from \$9900 to \$18,000 and reflect contemporary, modern and early-American stylings. One thing they have in common is *concealed telephone wiring*.

“People no longer think in terms of a one-telephone home,” says John Mahaffey. “They

want telephones where they *need* them—and they want them installed without exposing wires or drilling holes in the walls. We give them as many as five built-in outlets, each in a key area of the home.”

Says partner Alden Wagner: “We’ve always telephone-planned our homes. We consider it a fine investment—a feature that tells people our homes are quality-built.”



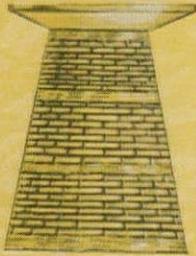
Your local Telephone Business Office will gladly help you telephone plan your homes. For details on home telephone installations, see Sweet's Light Construction File, 8i/Be. For commercial installations, Sweet's Architectural File, 32a/Be.

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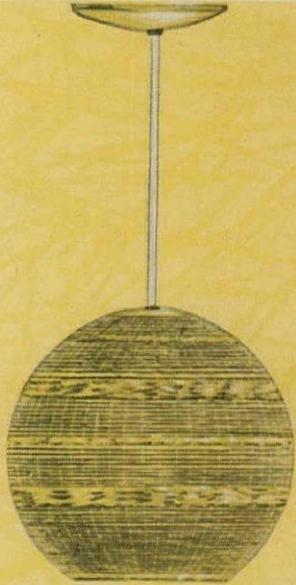


the light idea[®]

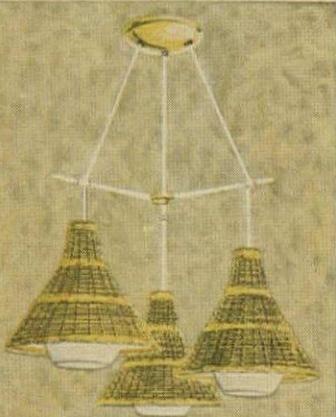
SUN 'N SAND Unique, different... appealing! Shades are an arresting blend of imported Italian sand-tone reed, handwoven with glistening brass accents. Satin white, vacuum formed styrene diffuser. Sun 'N Sand — original... beautiful... modern!



V-5675 For hallways or tasteful accent lighting. Length 8¼", diameter 6½". One 100-W.

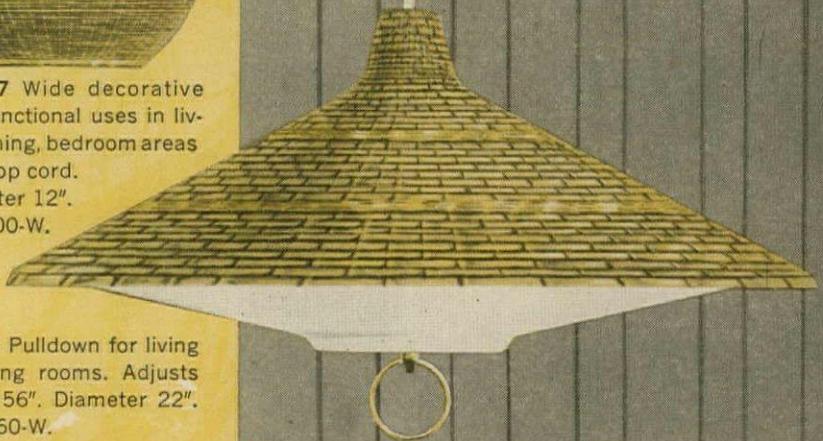


V-1677 Wide decorative and functional uses in living, dining, bedroom areas. 60" drop cord. Diameter 12". One 100-W.



V-1676 Designed for dramatic living room lighting. Three-light cluster. 48" white drop cords. Diameter 26½". Three 100-W.

V-1675 Single unit 48" drop cord. Diameter 10½". One 100-W.



V-1673 Pulldown for living or dining rooms. Adjusts 20" to 56". Diameter 22". Three 60-W.

V-1672 Same but 17" diameter. Two 60-W.



new custom creations

FLORENTINE SERIES Exquisitely detailed scrolls cast in aluminum. Antique white color delicately toned with gold fleck. White opal globes. Matching white chain. Here is new richness for all homes — contemporary, transitional, traditional!



V-1713 Perfect in foyers, living rooms, dining areas. Spread 31" (6' chains and yolk). Three 100-W.

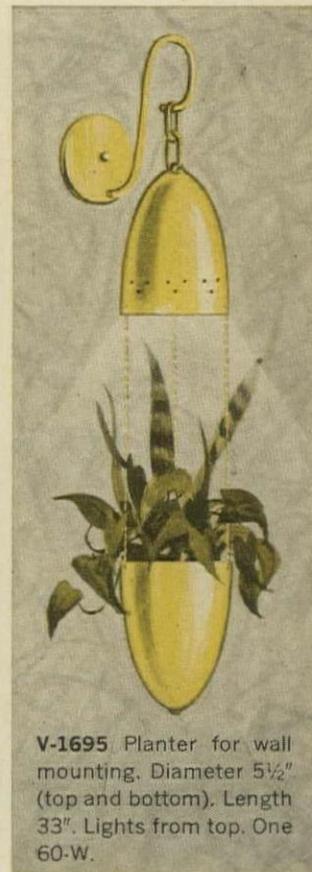
V-1712 Majestic! Diameter 12". Matching white 6' drop chain. **V-1710** diameter 10". One 150-W.



PLANTER SERIES Bright ideas! Lighting fixtures that double as planters. Perfect accents for fireplace, entranceways, in dinettes or family rooms . . . wherever you want a touch of eye-catching beauty!



V-1690 Polished brass. Diameter 15 $\frac{3}{8}$ ". Length 36". Lights from top. Three 60-W.



V-1695 Planter for wall mounting. Diameter 5 $\frac{1}{2}$ " (top and bottom). Length 33". Lights from top. One 60-W.

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STANLEY *Building* NEWS

No.3

A Series On Residential Hardware For Builders Of America's Homes

1960

Standardize on Surface Mounted Hardware for all Interior Bi-Folding Doors

Effect Big Savings in Installation and Service Costs!

Why *spend* for the old and ordinary, when you can *save* with the new and extraordinary... STANLEY HARDWARE. Use with interior bi-fold doors and you can hang them in one-third the time it usually takes. No more valuable time spent in planing, trimming or mortising doors. You'll never be called back to service doors that bind because, set on the wall surface, not in the opening, doors cannot bind. You'll give your customers greater value, too... more closet space, greater closet depth, and, thanks to a special guide track, smooth, controlled performance.

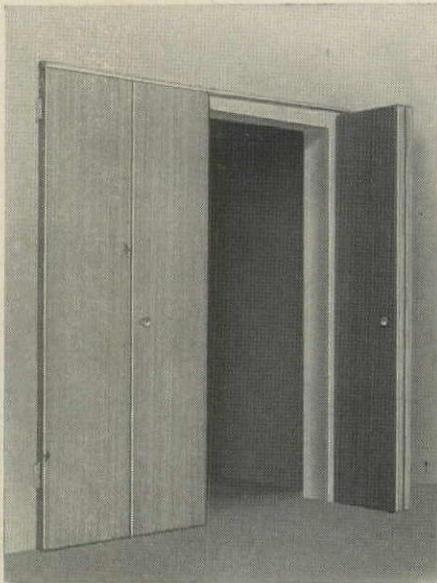
Use SURFASET* SURFACE MOUNTED DOOR HARDWARE with swinging doors and you will profit from similar time-saving, money-saving advantages. No wood jambs... no finish trim... no mortising or planing. The positive action of the refrigerator-type latch will prevent any door rattle. Door warpage will not affect latching. The clean, modern appearance will give your homes added appeal for style-minded house hunters.

Write for SURFACE MOUNTED DOOR HARDWARE literature.

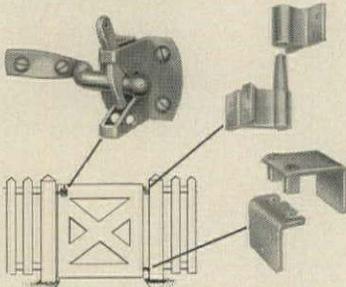
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Dress Up Doors with New Stanley Pulls

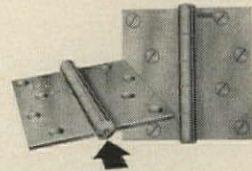
These new, eye-pleasing Stanley Pulls do more for doors than provide a means for opening and closing them. They dress up the doors, fit perfectly into any decor, lend a decorative accent to any room. Select the solid molded black pull (No. 3710) or the richly stained hardwood pull (No. 3714) and impress your modern-minded home seekers with doors with a distinctive difference. Each set includes one pair of pulls designed for mounting back-to-back with through bolts. For single pulls, order 3705 (Black) or 3707 (Wood).



NEWS NOTE! Fences and Gates are back in Style



Perhaps it's because no one has devised a more decorative means for dividing property lines, or for keeping pets in the yard that fences and gates are back in favor. For single action gates, the 1261 Stanley Gate Latch, featuring automatic latching with a quick, positive release, is ideal. The Stanley 1637 Gate Hinge is a popular choice for residential fence gates swinging in, out or both ways. Closes gate automatically by gravity action. Both 1261 and 1637 are zinc plated. Address requests to Stanley Hardware, Division of The Stanley Works, Dept. G, 80 Lake Street, New Britain, Conn.



Hole-in-tip for Easy Pin Removal!

A patented Stanley feature, the hole in the bottom tip (size 3" x 3" and larger) makes pin removal convenient, easy, fast. The hole provides for insertion of a nail, prevents marring the hinge or finish. Install with the hole at the bottom and hinge can't go on upside down! Stanley Hinges with the unique hole in the tip include the popular 241 and 741.

Rules for Determining Proper Size Hinge

Door Thickness (Inches)	Height of Hinge	
	Width of Doors (Inches)	Height of Hinges (Inches)
3/4 to 1 1/4 cabinet	to 24	2 1/2
7/8 and 1 1/8 screen or combination	to 36	3
	to 32	3 1/2
1 1/8	over 32	4
	to 36	4 1/2
1 1/4	over 36 to 48	*5
	over 48	*6
2, 2 1/4 and 2 1/2	to 42	5 1/2 Extra
	over 42	6 1/2 Heavy

*Extra heavy hinges should be specified for heavy doors and for doors where high frequency service is expected.

NOTE: Height of hinge is always first dimension not including tips.

Thickness of Door (Inches)	Width of Hinge	
	Size of Hinge (Inches)	Clearance (Inches)
1 1/8	3 1/2 x 3 1/2	1 1/4
	4 x 4	1 3/4
1 1/4	4 x 4	1
	4 1/2 x 4 1/2	1 1/2
	5 x 5	2
	6 x 6	3
2	4 1/2 x 4 1/2	1
	5 x 5	1 1/2
	6 x 6	2 1/2
2 1/4	5 x 5	1
	6 x 6	2
2 1/2	5 x 5	3/4
	6 x 6	1 1/4
	6 x 6	3/4
3	8 x 8	2 3/4
	8 x 10	4 3/4

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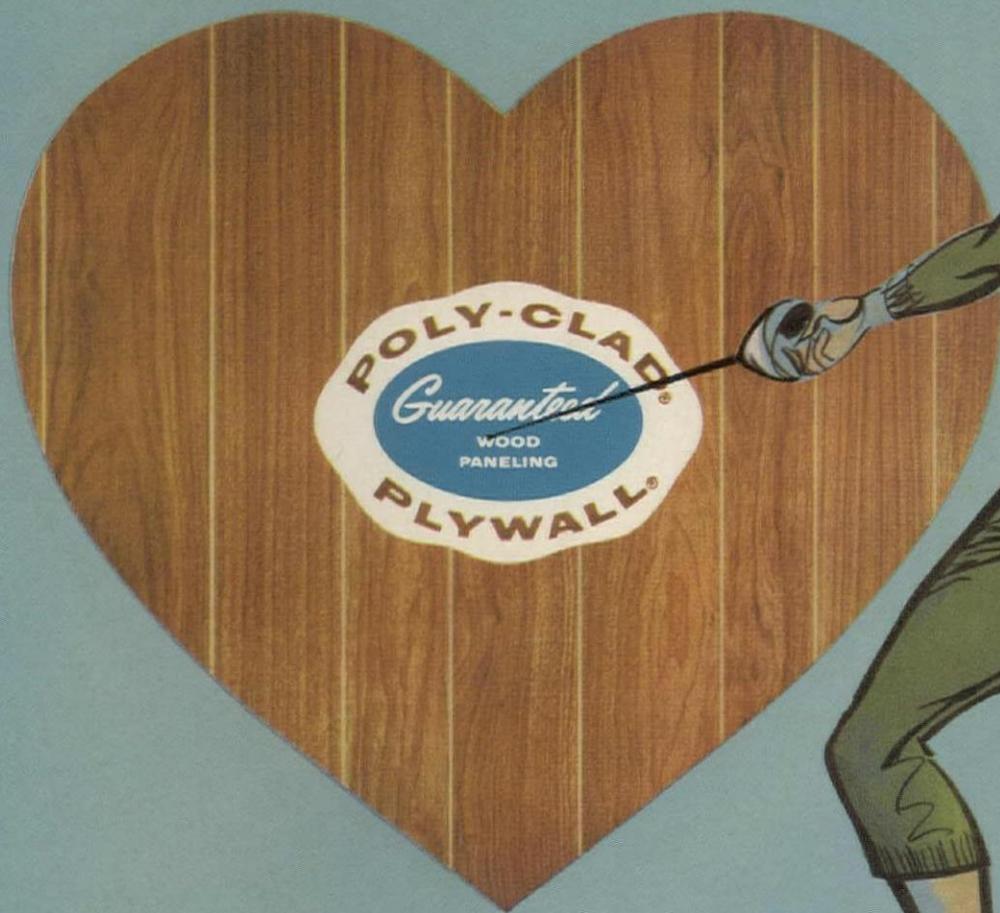


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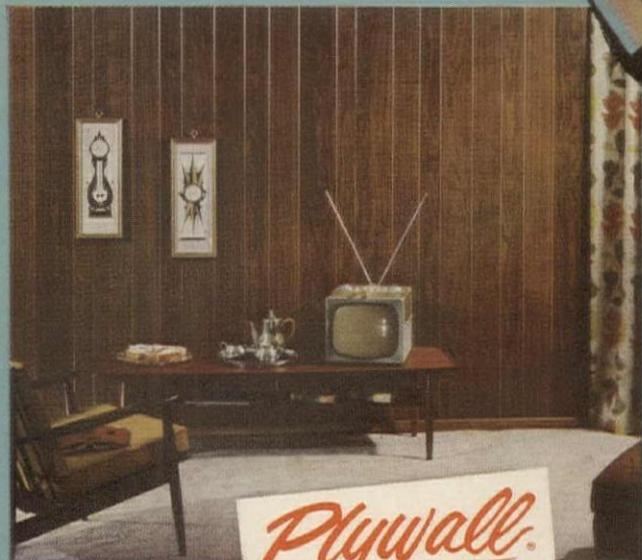
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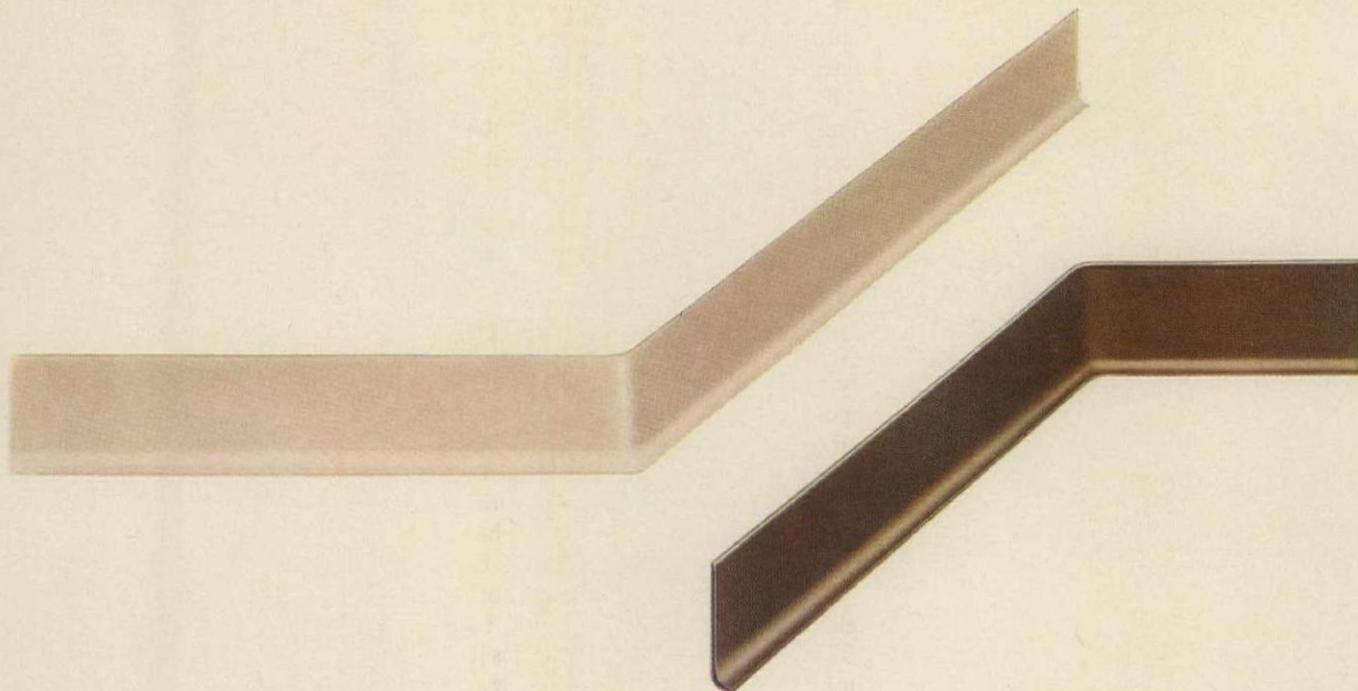
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Roundup:

Builders call a summit of their own

NAHB last month invited some eight top executives of leading materials manufacturers to an off-the-record summit conference at the swank Lake Tahoe summer home of Henry J. Kaiser. The four-page agenda drawn up for the meeting by NAHB President Martin Bartling began with a full page of questions about how to make mortgages more marketable so as to tap more money sources. Other topics: land, building codes, construction methods. Among the NAHB delegation: Bartling, First Vice President E. J. "Jim" Burke, Past Presidents Nels Severin, Rodney Lockwood, Earl Smith, Alan Brockbank, Thomas Coogan, pious Builder E. W. "Ted" Pratt, and Prefabber Hamilton Crawford.

When should you line up 1961's mortgage money?

Pay your money and take your choice: the US Savings & Loan League says "no important or significant" drop in mortgage interest is in sight for the rest of the year. President Wallace O. DuVall insists this is so despite the cut in the Federal Reserve's discount rate from 4% to 3½%. More experts (*see p 51*) are predicting a slow slide in interest levels throughout the economy, but most of them couple this with the qualification that the drop may be very slow indeed. "The peak of interest rates is past," says John K. Langum, president of Business Economics Inc of Chicago. But he adds that mortgage yields are unlikely to follow the plunge in yields on 90-day Treasury bills (down from a peak of 4.57% last December to 2.92% last month for new issues). On balance: you can probably chance waiting until September to make next year's firm commitments, but don't be surprised if prices aren't much better than they are right now.

Battle over big lot zoning grows hotter

Eventually, say speakers who appeared before the American Society of Planning Officials this year (*see p 59*), snob zoning will have to give way to population pressures. If true, this seems to foretell a major struggle in state legislatures. The US Supreme Court last month failed to find a "substantial federal question" in New Canaan, Conn's test case four-acre zoning ordinance. It thereby seems to have thrown the question back to the states, where many builders say so many courts have upheld snob zoning that new laws offer the only possible relief.

In the New Canaan case, upgrading of 4,400 acres of semi-rural land from two-acre minimums was attacked by John L. Senior Jr, who said that it cut the potential value of his 436 acres from \$650,000 to only \$400,000. Retorted the Connecticut Supreme Court: "Maximum enrichment of developers is not a controlling purpose of zoning." Senior thereupon appealed to the US Supreme Court on grounds his property rights under the 14th Amendment were violated. Its refusal to hear the arguments is seen as strengthening the power of zoning boards generally.

Conditional zoning: flexible but safe?

The idea of granting variations only on specific development proposals—to make sure developers who promise extra-high standards don't renege—seems to be gaining headway. Maryland counties around Washington, D. C. are beginning to use it to meet pressures of the capital's growth. In Fairfax County, developers must give indentures binding them to their original proposals. Montgomery County has the idea under study because of a recent sour experience: a developer who promised to screen his shopping center from nearby homes with trees later sold the land they were to occupy and the new owner built apartments.

Why public housing is in trouble—as a friend sees it

At the housing conference called by California's Gov. Edmund G. Brown in Los Angeles last month, Charles Abrams, former New York State rent control boss, lawyer and peppery advocate of public housing and racial integration, had some peppery thoughts on the nation's programs:

"The failures of federal efforts stand out more dramatically than its accomplishments," he said. The reason: failure to fit the housing programs to new facts, needs, conditions. Public housing, for example, is based on, among others, these fictions: 1) the poor live only in tenements, don't want individual homes; 2) the poor are all renters; 3) solu-

tion for low-income families' housing problems is to tear down the slums they live in; 4) all slums are decrepit (many are sound but overcrowded); 5) when their incomes rise, public housing tenants should be turned out (they just go back to the slums); 6) cities can solve planning and housing problems by themselves (they aren't).

His view differs sharply from that of HHF Administrator Norman Mason, who told NAHB directors in Washington (*see p 45*): "This nation never had it so good in housing."

NEWS continued on p 42

NEWS INDEX

Housing policy	42
Best bet: a bland omnibus bill..	42
Chances for central mortgage bank	42
How Senate, House legislation compares	43
Military housing	44
NAHB directors	45
Builders rebuff no-down FHA terms	45
Housing market	47
1960 Census	47
Big gains in the suburbs; cities lose	47
Local markets	49
Community facilities	49
Illinois court upsets cash school fees	49
Mortgage money	51
A little more drop in discounts..	51
FHA to let in individual investors	51
Materials & prices	56
FHA approves first plastic pipe..	56
Labor	56
Are pay boosts growing automatic?	56
ASPO convention	59
Urban renewal	61
Reynolds cops giant Eastwick plum	61
Can Pittsburgh cut costs \$3,000/unit?	63
More troubles for FHA Sec 221 ..	65
Public housing	61
9% vacancies plague St. Louis projects	61
Codes	69
BOCA convention	69
People	71
Burnham Kelly named dean at Cornell	71
The legacy of slumfighter Gil Morris	71
Statistics & indexes	
Mortgage quotations	53
How Census changed its starts count	67
FHA, VA applications	67
Boeckh housing costs	67

Congress readies bland but costly omnibus bill

Veto threat for big spending measures
blacks out the Christmas trees this year

A little something for everyone, and not much for anyone, seems to be the ticket in housing legislation this year.

Nearing the end of a generally lack-luster session, the Congress has hurriedly shuffled together the record-breaking conglomeration of housing plans before it (some two dozen in the Senate alone), winnowed out the obvious veto candidates, and come up with a much reduced omnibus package.

One obvious reason: Democrats hope to win votes with charges the Administration is neglecting cities' housing needs, but hardly want to risk the blame if popular programs die in a veto. Another: the worries over what tight money might do to housing, which made an Emergency Home Ownership Act seem politically expedient in January, have dwindled away to polite murmurs of concern over failure to meet the decade's projected housing need. Symptomatically, builders who gathered in Washington for NAHB's spring directors meeting defeated a proposal to support lower FHA down payments, and did not even debate the recurrent idea of more special mortgage assistance from Fanny May. Their attitude, summed up by FHA Commissioner Julian Zimmerman: "Business is great, but sales are lousy."

With little to get their teeth into, the law-

makers have nibbled around the edges, typically missed the real causes of housing's troubles: unstable financing, rising costs.

At month's end the housing package was still in two parts—one each for House and Senate. But what the industry could expect was reasonably clear: slight easing of FHA terms; sweetening of some less-popular rental, co-op, and rehab programs; more Treasury money for college housing, aged housing, and for urban renewal.

Is Santa Claus dead?

Less certain were two ideas with real, if watered-down, significance. One is Sen John Sparkman's provision for an annual Presidential report on how many housing units should be built in the next two years and how to get it done—with collateral encouragement for research to provide data and techniques. Originally proposed as a mandatory measure, it drew fire as a forerunner of federal control of housing—possibly general economic controls—if the President is required not only to state a goal but also to seek laws to achieve it. As reported out by the Senate banking committee, the report is purely permissive. But if the President decides not to make the report, he must tell Congress why. Critics still wonder if this leaves the camel's nose in the tent.

Another idea, with broader support, would combine a liberalized Fanny May with a new secondary market for conventional mortgages in the Home Loan Bank Board as a way of approaching a central mortgage bank (see next page). As so often happens, these measures began with more steam than they had at the end, are not uniform in the House and

Senate measures so adoption is doubtful.

Notable by their absence are some past favorites of the liberal spending faction: public housing; direct purchase for low-price homes. Even so, the Senate version has a price tag, according to committee aides, of \$1.5 billion; the House, \$1.2 billion. These bracket the \$1.3 billion housing bill vetoed by Ike the first time around, last year, on the ground it was foolishly costly. Both exceed considerably the \$1.05 billion he vetoed the second time—and the third-try bill that was \$50 million under that.

... or just sleeping?

Two big spending items, proposed by Sen. Joseph Clark (D, Pa.) were: 100,000 units of public housing, beaten in the Senate subcommittee 6-3; \$600 million for urban renewal capital grants, beaten 5-3 (but \$350 million passed, 7-1). The biggest item—Rep. Albert Rains' \$1 billion Fanny May purchase proposal, part of his "emergency" act—was quietly and tactfully shelved in the Senate. Other measures that were set aside included Sen. Paul Douglas' (D, Ill) interest-labeling bill to require disclosure of the real costs of money charged to borrowers.

A controversial plan to finance middle-income housing with government credit, turned down by the Senate Housing subcommittee, was revived by the full banking committee—but safely insulated from the omnibus bill. It is Clark's proposal for a federal Limited-Profit Mortgage Corp, authorized to make and service loans to nonprofit or limited dividend housing corporations to build middle-income housing. Clark would have the Treasury buy \$100 million capital stock, let the corporation issue tax-free, guaranteed debentures up to \$500 million—extendable to \$1.5 billion with Presidential approval. The whole idea is a sure bet for a veto, if by some unlikely chance Congress adopts it.

Also reported out to the Senate was Clark's bill to give housing cabinet status by shifting all HHFA functions to a new Dept of Housing and Urban Affairs. More and more elements of the much divided housing industry approve this idea, but so far it is opposed by the Administration.

CONDOMINIUM: NEW IDEA FOR MULTI-UNIT OWNERS

A form of property ownership, rare in the continental US but common in Puerto Rico and Latin countries, would be eligible for FHA financing under provisions contained in both House and Senate versions of the 1960 housing bill.

It is condominium, or individual ownership of single units in a multi-unit structure, with common ownership of halls, stairs, elevators, lobbies, similar facilities. Units may be bought, sold, mortgaged and are taxed separately, much like private homes in subdivisions.

Proposed chiefly as an aid to housing in Puerto Rico, where condominium has been legal since 1955, FHA insurance would allow big-scale financing, offer a solution to urban sprawl and low-income home ownership. Testified Brown Whatley, past president of MBA: because of separate ownership and unlike co-ops, "each owner's property is liable for only his own mortgage debt, and the owner does not take the chance that he will lose his property by reason of the default of other parties having ownership in the same building . . . that is the main trouble with a multiple-unit building where there is ownership rather than tenancy. The condominium overcomes that problem."

Federal experience with condominium is limited to a few projects in Washington, D. C., New York City, and Stamford, Conn. But VA has guaranteed them since 1947. Enabling legislation would be needed in most states to permit it. But, said Whatley, once allowed, it "has the advantage of much greater simplicity than is found in the cooperative corporation or association."

FHA Commissioner Julian Zimmerman, surveying all the new ideas involved, differed. He urged further study before adoption "because of the many problems which must be considered." Sample: in case of foreclosure, FHA might find itself responsible for a pro-rata share of maintenance and operation costs for "a large number of the units . . . if it was unable to dispose of [them]."

Central mortgage bank idea gains

"It isn't everything we want, but at least it's a foot in the door."

So says NAHB 1st Vice President (and legislative chairman) E. J. (Jim) Burke of the central mortgage bank proposal that builders, along with NAREB and MBA, backed in Congress this year.

At midmonth, it was evident that Congress would buy only half the idea—if that. But it was equally evident that the central mortgage bank idea, long espoused by builders and others, is gaining momentum. It may not come to fulfillment this year or next, but that it will sometime seems more and more likely.

Just how far is the foot in the door? As set down at HOUSE & HOME Round Table nine years ago (Aug '51) and restated five years later at another Round Table (H&H, Nov '56), the objectives of a central mortgage bank were to:

1. Smooth out the flow of mortgage money by selling long- and short-term debentures to the public, use proceeds to buy VA and FHA mortgages in tight money periods.

2. Tap pension funds as a source of mortgage money by offering the far less involved debentures instead of mortgages to them.

3. Become in effect a central warehousing bank, lending money to mortgagees on the security of FHA and VA mortgages.

4. Regulate FHA-VA interest rates to keep them attractive to the private market, keep the CMB from becoming a dumping ground for them.

5. Have an independent board, removed from politics, much like the Federal Reserve Board.

6. Make firm advance commitments and

perhaps even advance a line of credit so builders can get construction money more easily.

Last year, when the central mortgage bank became a major objective of NAHB policy Past President Tom Coogan added three more points in a monograph submitted to Congress:

7. Be required to buy mortgages at less than par, to insure continued participation by private investors, avoid a primary position.

8. Use the bank's controls to spur housing in recessions and brake it when money is easy and overbuilding a danger.

9. Advise FHA and VA on their operations that affect the mortgage market.

The so-called "industry" bill introduced this year is more modest. Like some earlier proposals, including NAHB's, it suggested building on FNMA's present structure, giving it greater dignity with a three-man governing

board appointed by the President and Senate, with three new functions:

1. Make 12-month loans, renewable for another 12 months, for up to 90% of the unpaid principal balance of mortgages pledged as security, with borrowers required to buy FNMA stock equal to no more than 1/2% of the loan.

2. Increase borrowing authority from 10 to 15 times its capital.

3. Charter and supervise federal mortgage investment companies organized by at least five qualified persons, capitalized at no less than \$1 million. FMICs could originate, purchase, sell and service FHA-VA mortgages out of borrowings (up to 20 times capital) and capital, and do the same with conventional mortgages up to 75% of appraised value, but with capital only.

As reported out by the House committee, only the first two points are in line for

enactment this session (the Senate subcommittee shelved the whole idea). But the House also reported a pet project of the savings and loan industry: a secondary market facility for conventional mortgages within the Home Loan Bank system.

Charlie Wellman dissects 'easy outs' for housing

Buried among reams of testimony before committees in both houses were some of the year's sharpest thoughts about housing's chief problems and prospects.

Best of the lot: Charles Wellman, legislative chairman of the National League of Insured Savings Assns—a California Democrat who earlier blasted Rains' \$1 billion special-assistance idea as promising a windfall to builders, nothing to homebuyers.

continued on p 44

HOW ADMINISTRATION'S SPARTAN REQUESTS COMPARE WITH HOUSE, SENATE BILLS

ITEM	ADMINISTRATION	SENATE COMMITTEE BILL	HOUSE COMMITTEE BILL
FHA Title I	Removes both time and dollar limits	Extends it to Oct 1, 1961; removes insurance ceiling.	Extends it two years; lifts insurance ceiling from \$1.75 million to \$2.25 million.
FHA down payments	No proposal.	No proposal.	No-down to \$13,500; 10% to \$20,000; 25% to \$25,000 maximum; extend term to 35 years.
FHA insurance premium	No proposal.	Cuts it to 1/4% at discretion of the commissioner.	Cuts it to 1/4% at discretion of the commissioner.
FHA authorization	Removes ceiling.	Increase \$4 billion.	Increase \$4 billion.
FHA co-op housing	No proposal.	Re-establishes assistant commissioner; boosts Sec 213 loan limits in renewal areas to same as Sec 220; boosts FNMA special assistance for consumer-type co-ops by \$50 million.*	Makes use-as-a-cooperative the test of feasibility; cuts minimum units for management type from 8 to 5; re-establishes mutual insurance fund for cooperatives; restores FHA assistant commissioner for co-ops.*
FHA Sec 220	No proposal.	Makes it applicable outside certified renewal areas; down payments same as present Sec 203 scale.	Boosts maximum mortgage to \$25,000 at same down-payment schedule as proposed for Sec 203; creates assistant FHA commissioner for urban renewal and relocation housing.
Small rental projects	No proposal.	No proposal.	New program, Sec 210; minimum number of units: 5. Maximum mortgage: \$250,000 @ \$2,500 per room or \$9,000/unit of less than four rooms to 90% of value @ 6% interest; term set by FHA.
Housing for the elderly	No proposal.	Boosts direct loans \$25 million.	Boosts direct loans \$50 million; removes 2% equity requirement.
Fanny May	\$150 million more for special assistance subject to appropriation.	Boosts special assistance authorization available to President by \$550 million, with no appropriation required.	Control by 3-man board appointed by President; requires par purchase for special assistance; boosts authorization available to President by \$75 million; adds \$15 million for nursing homes, \$25 million for older neighborhoods; authorizes loans on security of FHA or VA mortgages; increases capitalization limit from 10 times to 15 times capital; allows issuance of commitments, purchase of mortgage participation. Requires purchase of all eligible mortgages.
Land development insurance	No proposal.	No proposal.	Lets FHA insure land development loans for residences.
Home Loan Bank Board	No proposal.	No proposal.	Sets up new secondary mortgage facility to buy conventional mortgages from members, financed by debentures sold on private market.
College housing	No proposal.	Boosts loan funds \$250 million on passage, plus \$250 million July 1, 1960.	Hikes loan funds \$500 million.
Urban renewal	No proposal.	Boosts capital grant authority \$350 million; authorizes pilot rehabilitation projects at 100% federal expense.	Boosts capital grant authority \$450 million; authorizes pilot rehabilitation projects.
Relocation	No proposal.	Lets HHFA approve higher payments than law allows, to be shared on two-thirds-federal, one-third-local basis.	Hikes payments from \$200 to \$300 for families; allows payment to businesses on a certified cost basis.
FHA Sec 221	No proposal.	No proposal.	Provides new 4%, 45-year loans from FNMA for non-profit corporations (up to \$100 million*).
Public housing	No proposal.	No new units; allows \$120/year/unit subsidy for aged tenants if required for solvency.	No proposal.
Community facilities	Increase loan limit by \$100 million, subject to approp.	Increases loan limit \$100 million, without appropriation.	Increases loan limit \$100 million, without appropriation.
Older neighborhoods.	No proposal.	No proposal.	New program, Sec 235: for houses in older neighborhoods, subject to all provisions of Sec 203 except valuation is based on "reasonable risk" instead of "economic soundness"; provides \$25 million FNMA special assistance to buy the mortgages.

* Provisions allow exclusion of nonresidential land improvements from cost when applying per-room or per-unit mortgage limits.

Discussing a stable, high level of housing production, Wellman said:

"Obviously, you cannot have a high level of production if there is not a market for the goods being produced. Second, the financial system must provide adequate funds to finance both producer and consumer in the production and the purchase of the product. Third, the prices paid for both the product and the needed credit must be in balance with the ability of producer and consumer to pay.

"In the postwar period, with minor exceptions, there has been little evidence of a lack of effective demand for housing. The principal limiting factors have been price and availability of financing and the increasing cost of land, materials, and labor going into the production of residential housing. If we are to serve our objective successfully therefore, this legislation must be weighted in terms of its contribution to expanding these two previously limiting factors.

"It is obvious that to deal with the problem the other way around would not only fail, it would in fact compound the problem. By that I mean this—if we make no successful assault on the problem of the flow of funds into residential construction and the price for such funds; if we make no contribution to halt or slow down the increasing cost of housing to the homebuyer, it certainly will do no good to increase the level of effective demand for housing. We will be in the position of merely increasing the pressure on already limiting factors. It will raise the demand for the limited supply of funds, thereby increasing the price paid for the use of those funds. It will increase the . . . demand on the limiting supply of materials and labor and land, thereby increasing the costs of those elements.

"The longer we travel the road of progressively lower down payments and progressively longer periods of amortization, the more we conceal from ourselves and—more importantly—from the homebuyer, the undeniable and unpleasant fact that the cost of buying a house has risen more in the postwar period than almost any other essential commodity.

"Continued annual liberalization of government housing programs in the economic climate of the postwar years has been a perfect alibi to this industry to avoid facing the harder, more difficult problem of fighting the price-cost squeeze. We have achieved about all the mileage available to us from traveling this road, the results of which are dubious at best and the detriments of which should be obvious to all."

Big plans for GI loans shelved for this year

In the face of Administration hostility and industry apathy, Chairman Olin Teague (D, Tex.) of the House veterans' affairs committee has mothballed ideas to extend VA guaranties to peacetime vets, finance GI loans directly with debentures and NSLIC funds. But extension of the World War II GI program and of the present direct loan program, seems certain.

Bills to do both are moving in both House and Senate, differing only in term. In the House, a two-year extension is provided. In the Senate, it is 4½ years—to the Korean GI cutoff of Jan 31, 1965. Direct loans are continued at their present \$150 million per year volume; one year in the Senate; two in the House.



Dan Weiner

BEFORE TROUBLES, BROTHERS HAL (c), W. RAY HAYES, CONFERRED AT EDWARDS AFB

Builder Hal Hayes' Capehart binge brings on a \$60 million hangover

So much smoke is beginning to pour out of the nation's Capehart housing program that Congress may yet be able to find a fire.

Densest clouds lately have been billowing from the \$60 million Capehart empire of Los Angeles Builder Hal B. Hayes, which last month ignited in a blaze of lawsuits. A good many builders are watching to see whether the fire is purely local or symptomatic of a bigger blaze still smouldering.

Hayes, 49, and self-styled world's biggest individual builder, scored notable success during the past two years as low bidder on military housing contracts, snagged nine of them totaling 3,515 units. They include projects at Mather and Beale AFBs, California; Grand Forks and Ellsworth AFBs, North Dakota; Ft. Bliss, Texas; Camp LeJeune, North Carolina.

Now, says Hayes in a \$4.1 million Los Angeles lawsuit, he has discovered the secret of this success: his bids were too low. Furthermore, he says, they are the fault of his bonding company, Continental Casualty Co of Chicago, which wrote \$60 million in performance bonds (with the help of a dozen other firms) on the jobs. Hayes says company representatives persuaded him he could make millions on the deals, but were only interested in bonding fees, and assigned an inept estimator to prepare his bids. Continental, which denies the allegations, has in turn filed suit in federal court, asking appointment of a receiver for Hal B. Hayes Construction Co, and an audit.

A sudden stop

Hayes troubles blew up in May when, with two of the projects completed, the rest ranging from 90% to 10% finished, all were halted by the Army Corps of Engineers. The reason: sub-contractors were filing mechanics' liens for nonpayment of their bills on all seven unfinished jobs. In El Paso alone, some two dozen suits were brought in state and federal courts asking payments on his \$6.5 million Ft. Bliss project. The subcontractor on the job, said the suits, was merely a front for Hayes.

Next, Hayes himself was reported missing, his whereabouts unknown for two weeks. Almost at once he appeared, announced that he

had been around the world by plane, stopped off at the Summit meeting in Paris to negotiate contracts for missile bases in far-flung overseas sites. His problems, he said, were the work of jealous competitors out to "get" him. Everyone, he said, would be paid. Then his doctor put him to bed, diagnosed his condition as "complete exhaustion."

A stern order

Meanwhile, FHA has halted closings on most of Hayes' completed houses, pending modification of the original bond to include Hal B. Hayes and Associates, and Hayes Cal Builders as principals, identification of all unpaid claimants and the amounts of their bills; and posting of cash to cover all of them. The Air Force has said it will move to cancel his contract for Beale AFB, and the Defense Dept has sternly told him to get back to work or face further legal action.

Hayes has long nurtured a reputation for diverse abilities and interests. In his lawsuit, he cites a 20-year construction career that brought him \$5 million in assets. He generated headlines last year when he gave Glamour Girl Zsa Zsa Gabor a 22-carat diamond to cement an engagement that came unstuck after two months. Earlier this year, he announced development of a sprayed paper-and-plastic house that is fire-and-flood resistant, climate-proof and could sell for \$5,000 in a two-bedroom model. "Give me enough paper and I'll house the world," he said then.

Bankers and mortgage men have mingled with screen stars at Hayes' lavish parties, at his six-level "house of tomorrow" in the Hollywood hills (main features: an indoor-outdoor swimming pool in the living room; a waterfall; a television set in a tree).

Whether Playboy Hayes' troubles draw a congressional investigation or not (Sen Lyndon Johnson's preparedness subcommittee of the Armed Services Committee has been eyeing the case), there are indications he isn't the only contractor having trouble with Capeharts. Murmurs that the Pentagon's penchant for over-inspecting make a profit almost impossible are growing. Perhaps the Hayes case will show how true—or false—they are.

NAHB DIRECTORS:

Builders reject move to back no-down FHAs—up to \$13,500

Should FHA down payments be cut even more?

No, says NAHB—at least not to nothing.

The issue came before NAHB directors when Legislative Committee Chairman E. J. (Jim) Burke read a resolution (approved by the committee, 26-16) urging NAHB to support Rep. Albert M. Rain's plan to drop FHA down payments to: nothing on houses up to \$13,500; 10% on the value between \$13,500 and \$20,000; plus 25% of the value in excess of \$20,000.*

President Martin L. Bartling Jr told the directors the executive committee opposed the resolution, 8-7. Chicago's Martin Braun summed up the majority view: "We in the housing industry are a little guilty of always asking for things. We didn't ask for this. We're already in the hands of the politicians. If we get no-down to \$13,500 today, what do we ask for next? No-down up to \$20,000, \$25,000, \$30,000? Next we'll want everybody who's 21 years old to have to buy a house every six years."

Braun said he was "not alarmed" by defaults so far (50,000 VA loans, 23,000 FHAs). "But costs are going up all the time," he warned.

* Present schedule, after the reduction in April: 3% of value up to \$13,500; plus 10% of value between \$13,500 and \$18,000; plus 30% of value over \$18,000.

"Low down payments are a trap. Right now we can't qualify buyers because sales prices have been moved up to cover discounts. Lower down payments would result in even higher discounts."

Builders who want to sell more homes ought to stress merchandising and quality design, not terms, Braun counseled. "I never worked so hard in my life (as the last six months) on design and merchandising. My sales are what they were last year." But Chicago starts are off 33%, he said.

Braun sat down to prolonged applause. Bartling recognized Wallace A. (Bud) Arters, Media, Pa. builder: "It would be irresponsible to approve this resolution," he boomed. He moved to table it.

Bartling pointed out a motion to table is not debatable, under NAHB's parliamentary rules. He called for the vote.

There was a loud chorus of ayes.

There was a loud chorus of noes.

"The ayes have it," announced Bartling, banging his gavel on the rostrum.

But, opening the following day's session, Bartling observed that some mention of "chicanery" and "rigging" had been made about his decision on the voice vote. Therefore, a motion to remove the resolution from the table would be entertained, he said. The vote on the motion would be a standing one, he added. The motion was made.

Morgan Earnest pointed out that the di-

rectors had yet to hear the legislative committee's reason for wanting lowest down payments. Ruled Bartling: no discussion could be held until after the vote on the motion to untable the resolution. The standing vote stood 82-75 to leave the resolution on the table. Said Bartling, announcing the vote: "I've learned my lesson."

There wasn't a sign of the rift between NAHB and FHA Commissioner Julian Zimmerman when he spoke at the opening session. "Nothing is more important to housing than to have a healthy, live-wire FHA," said Bartling politely. "It's a real privilege and pleasure for me to be invited to come over," responded Zimmerman, politely. He added: "Maybe you get tired of us sometimes—but, as I say, all of these things change." His impression of the housing industry, after talking to builders, he said, was "business is fine, but sales are lousy." FHA's data, he said, show "a significant strengthening over the country. We all share the hope that this proves to be true." He avoided mentioning mandatory FHA lumber grademarking, which had strained relations for a time.

At subsequent sessions, builders showed that while they are living with grademarking, they still don't like it.

Paul Bickford raised the issue with a resolution that since grademarking had been imposed on FHA through the efforts of lumber

continued on p 47

FHA moves to enforce quality rules

FHA is tinkering with its administrative machinery in an effort to get its two biggest policy changes in years put into practice throughout its sprawling empire.

1. Commissioner Julian Zimmerman has asked his aides to find the top six men on mortgage credit among the agency's 6,800 employees. They will be shifted to Washington, put through intensive briefing, and become FHA's first mortgage-credit supervisors. One will be assigned to each of the agency's six zones. Their role: monitors and educators to make sure local offices carry out FHA mortgage-credit directives. Some builders complain that field offices are still dragging their feet at putting into effect FHA's two-year-old directive (H&H, Jan'58) to loosen credit requirements on houses for higher-income families. The order spelled out in so many words that as a family's income increases, FHA should allow it more discretion, rather than less, about how to spend it; it suggested, as a "reasonable norm," that FHA should approve families' budgeting for housing expense "up to one-third of their first \$3,000 of after-tax family income, plus one-fifth of their after-tax family income above \$3,000."

Mortgage credit supervisors will report to the top command through zone commissioners and Asst Commissioner for Operations Graham Northup. This is a small but highly significant shift aimed at trimming the inde-

pendent authority of civil service underwriters, who, in years past, have sometimes seemed accountable only to themselves.

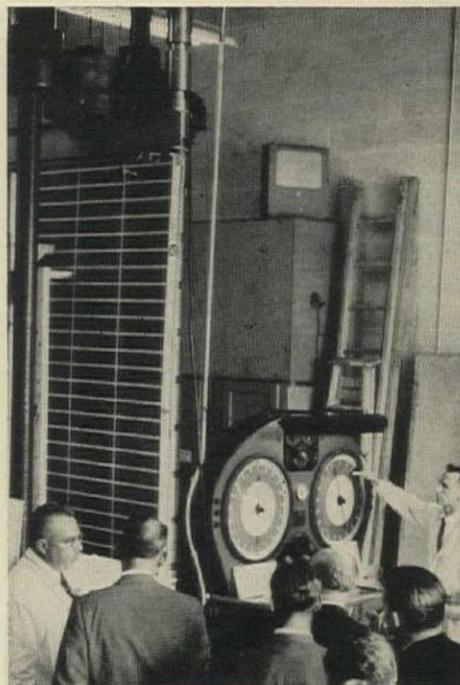
2. FHA is letting a few companies send top men around to field offices to explain how their products save more than they cost in new homes by yielding lower operating and maintenance expense. After their travels, the company experts come back to Washington and tell top FHA aides what kind of reception they got. The aim is to help make sure that the 75 field offices actually carry out Zimmerman's new directive (H&H, Mar) to require less income to buy a more expensive house if the price difference is due to quality construction and materials that make the more expensive house cost less instead of more to live in.

Mortgage-credit supervisors will also be told to ride herd on this new rule—which could be a flop if local FHA offices pigeonhole it or ignore it.

Signs are beginning to turn up that materials manufacturers are getting busy developing products to take advantage of the bonus for quality. Some lumbermen had grumbled. But Weverhaeuser is working on a prefinished siding to fit into the program. Paint manufacturers are talking about longer-lasting paints.

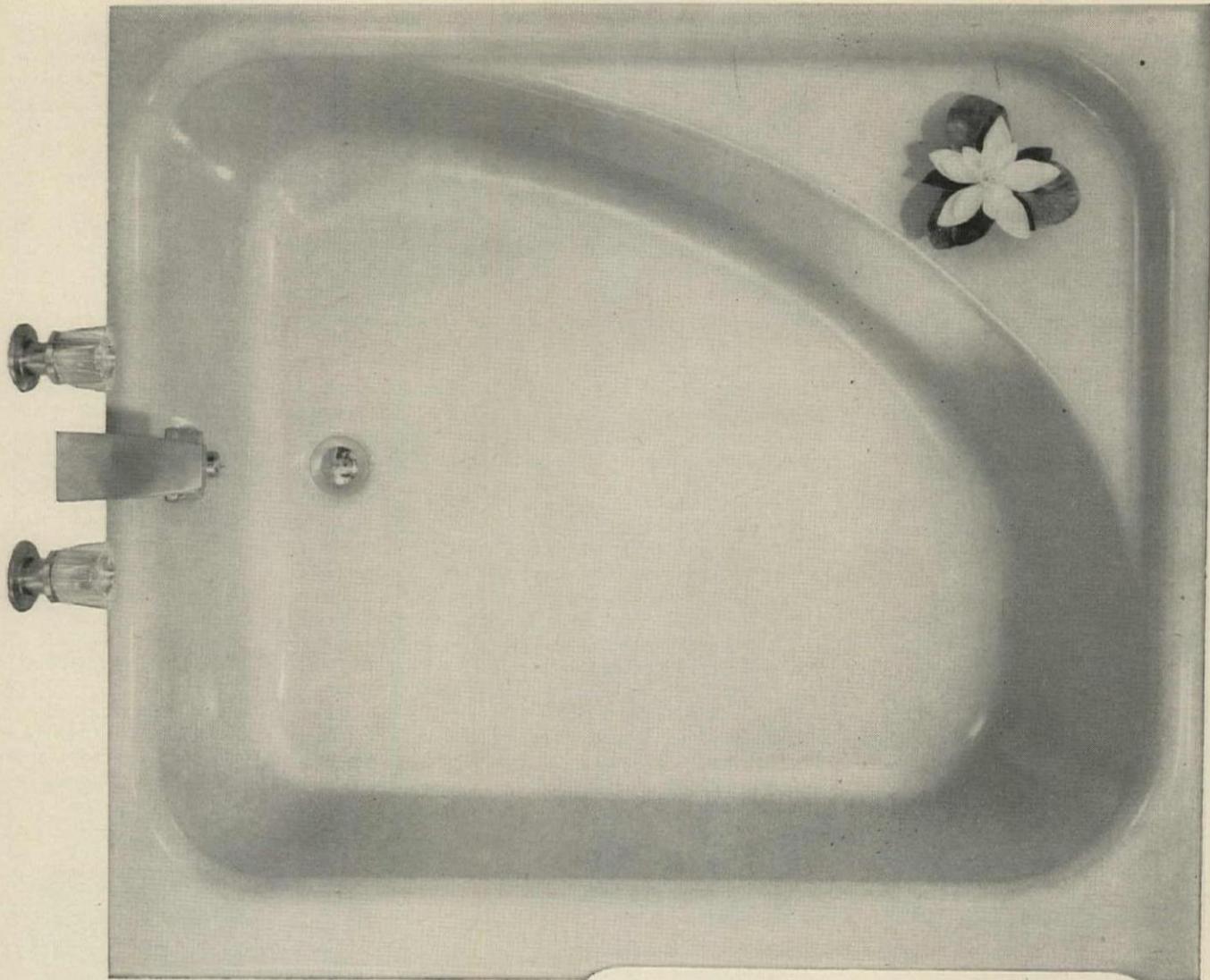
In the offing, says Zimmerman, is a possibility FHA may reverse its historic opposition to equity-accumulation plans for selling new homes. "We may be able to reverse our present policies to permit equity accumulation," Zimmerman told NAHB directors. "If so, then the tenant can become your best prospect."

H&H staff

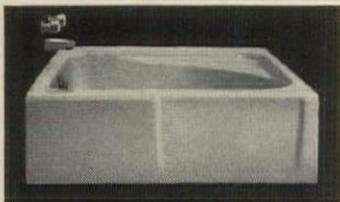


BUILDING RESEARCH at NAHB's new testing lab in Rockville, Md. is demonstrated to builder directors by NAHB research director Ralph Johnson (l), who explains the \$40,000 hydraulic press used to measure load-bearing capacity of wall panels, other structural members. Under test is sample foam-core, masonry-faced panel submitted by Koppers Co and proposed for use in NAHB's next research house. The lab was visited by busloads of directors at hourly intervals during first day of directors' meeting. Also under study are cost-saving floor systems for basement and crawl space construction; electronic gluing techniques for component wall and roof panels; long-span, lightweight roof trusses; supplementary framing systems for applications like window headers.

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trade groups, "all builders who build under federally insured programs should be members of a non-profit trade association." There was loud applause.

Bartling asked if everyone understood the resolution. There was a loud chorus of "no."

The resolution was reread and rephrased to say that all government agencies should require proof of membership in a non-profit trade association before issuing commitments for insured or guaranteed loans. Executive Committeeman Lloyd Clarke snapped that the resolution was out of order. "It violates our constitution. And the NAHB might not turn out to be a non-profit organization and you'll find yourself out of business."

A motion was made to withdraw the resolution and refer it to the executive committee. Leon Weiner said: "Before we do, let's clarify what this is about. The FHA is requiring trade association [lumber] marking. What we are saying is that we want grade-marked builders, too. I think the resolution was introduced in the spirit of levity and facetiousness to point out how silly the FHA regulation is." Compulsory NAHB membership was not really intended, he added.

Past President Alan Brockbank replied that the grademarking matter was a serious one. Replied Weiner: "I withdraw the remark about levity." Said Bartling: "The [grademarking] regulation is a clear cut abdication by federal agencies of their responsibilities to a trade association. The resolution may have had a facetious inspiration but the executive committee will treat it seriously." The directors applauded vigorously.

Other developments:

- "Our members ought to take a greater part in urban renewal," advised Lewis Cener, chairman of the urban renewal committee. "Opportunities in remodeling and conservation are not being fully exploited. It's also high time that FHA takes a good look at the possibility of insuring second mortgages for terms of up to 15 years so that rehabilitation and conservation can be given a shot in the arm."

- Directors resolved to oppose Sen John J. Sparkman's (D. Ala.) bill calling on the President to fix national housing goals including how many houses should be built.

ROW OVER ROOFING

Asphalt Shingle Magnate Lloyd E. Fry, who has long battled with FHA over what he contends are its too low standards for asphalt roofs, has taken his fight over the agency's head to Congress.

He told the Senate housing subcommittee: "It is ridiculous for FHA to permit a roof that has a life expectancy maximum of ten years and that has an average of seven or eight to be put on a house that is mortgaged for 20 years and longer."

Asked Subcommittee Chairman John Sparkman (D. Ala.): "What would be the additional cost of roofing for 20 years?"

Replied Fry: \$4 a square (100 sq ft). A \$13,000 house using better shingles would cost only \$13,040, he said. To back up his arguments, Fry gave the subcommittee samples of FHA minimum shingles from a 2,000-unit Navy Wherry housing project at Camp LeJeune, N.C. The shingles lasted only 6½ years, said Fry, now have to be replaced at a cost of \$500,000. His recommendation: make FHA change its Minimum Property Standards to require that all roofs, regardless of material, be bonded or reliably guaranteed to last 20 years.

Sales stay slow but surveys of plans, easing money suggest bottom is past

Thanks to Census' new figures on starts (*see p 96*), housing is now headed for a 1.3 million-plus year. This is no more than the 1.2 million starts most experts originally expected. It merely adjusts for the units Census says we have been building all along but not counting.

Now there is solid agreement, among the men who watch housing's course closest, that the easing of money rates promises a steady rise in housing activity during the second half of 1960. This easing has been taking place steadily all spring; it is merely underscored by the ½% drop in the Fed's rediscount rate.

The upturn does not rule out local disturbances, caused, say, by layoffs at the aircraft plant in Topeka. It also hinges on the general health of the economy.

Says HHFA Administrator Norman Mason: "If financing is available, and people are employed, then there is no problem in achieving a high level of starts. A man buys a house when he has a job, and when his neighbors have jobs, and when there is a feeling of confidence that goes along with a good economy. In a boom, housing gets in trouble because everybody is reaching for the dollar and the rates go up. In a sharp decline, nobody buys. For the rest of this year, I believe we will see a gradually ascending plane, in a good, moderate climate, for housing."

An NAHB survey comes up with the same outlook from builders themselves. Economist Nat Rogg's spring survey of his 700-member Builder's Economic Council (500 replies) showed most builders think the second-half starts trend will be up. More than half the builders "intend to increase their own starts this year," the survey finds.

Amid mounting reports of slow sales, the Economic Council's returns on unsold inventory are particularly good news for the housing industry. At the end of April, 45% of builders said the inventory was the same as a year earlier; 25% said it was lower.

FHA's March 15 survey uncovered a 4.8% vacancy rate in its rental units—highest since 1951's 5.8%. But the underlying US economy has probably been strengthened by the fact that it has 1) undergone a major recession in inventory this winter and 2) seen the stock market cool off. Both items should postpone any major downturn in business (and housing).

Census shows suburbs gain, cities lose

The much-predicted back-to-center-city movement by fedup suburbanites is still only a prophecy.

Population tides continue to run strongly the other way, the 1960 Census discloses.

In the last decade, the population in the suburbs of the nation's metropolitan areas appears to have jumped close to 50%, says Conrad Taeuber, assistant Census director. That is 6% more than Census expected before the big count began. So far (the count is still preliminary) no suburban area has lost population. A decade earlier, from 1940 to 1950, suburbs gained 35%.

But—for the first time in their history—leading American cities are losing population. The overall gain for center cities 1950-60 was a meager 1½%. And most of the cities that have lost most are the oldest, ugliest, most blighted. Some of them are among the worst governed.

New York's City's population fell 3% (7,891,957 to 7,650,000). But the suburbs shot up dramatically. Suffolk County at the outer end of Long Island gained 139% (276,129 to 659,817). Nassau County (between Brooklyn and Suffolk) doubled. Rockland County gained 52% and wealthy Westchester County 29% (625,819 to 806,386).

Chicago lost 4% of its population, dropping from 3,620,692 to 3,470,000. Two-thirds of the 150,000 loss was blamed on demolition for expressway construction.

Philadelphia, expecting a small gain, was shaken to find its population off 8% (2,071,605 to 1,923,940). The city's loss of 121,000 is offset by a gain of more than a half million in the suburbs. Except for the depression, it is the first time since 1790 that Philadelphia has lost population.

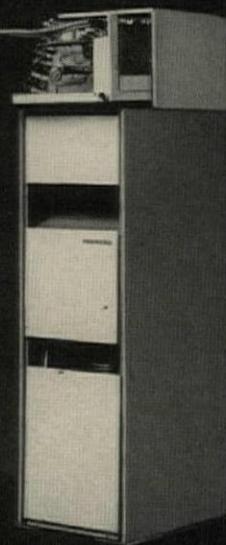
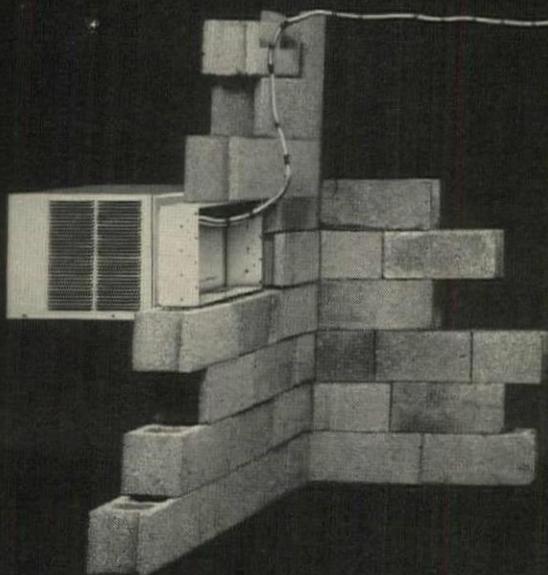
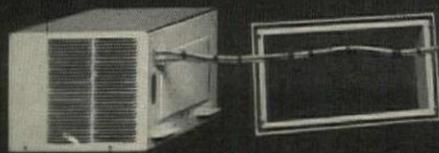
Five of the six biggest cities in New Jersey lost population. Minneapolis lost 7.8% of its population (from 521,718 to 482,804). St Paul gained 0.6%, but the surrounding areas outside the Twin Cities grew 115%. Rochester, N. Y. dropped 5% while its suburbs in Monroe County grew 20%. Wilmington, Del. lost 15% but suburban Newcastle County showed a 94% gain.

Many of the cities that have lost population are also cities which have experienced a huge influx of Negro or other minority in-migrants. Is the US undergoing the unprecedented spectacle (as one Washington expert has suggested) of a majority in full flight from a minority for the first time in history? Census tabulations of population by races will not be compiled for several months. By then, the answer should be clearer.

Detroit's population dropped 9% (1,849,568 to 1,678,613), while its Negro population grew from an official figure of 300,506 to an estimated 450,000. The city is now over one-quarter Negro. Washington, D.C. lost 6.8% (802,178 to 747,932), despite a pre-

continued on p 49

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dicted growth of 68,000 persons. Its suburbs shot up 78% (700,000 to 1,248,000). This leaves the metropolitan area with a 35% growth. St Louis showed a 100,000 loss to 760,000. Cleveland lost 4.7% but Cuyahoga County's total population (including Cleveland) gained 18.2%.

To no one's surprise, most big cities in the West, Southwest, and in Florida showed giant gains (San Francisco and Oakland showed a small loss). Los Angeles City

gained 25% (1,970,358 to 2,451,962). Los Angeles county shot up 44.2% from 4,151,687 to 5,987,246.

Dallas gained 54.7% (434,462 to 672,117), and Dallas County—the city plus most of its suburbs—gained 53% (614,799 to 944,513). Atlanta, which boosted its area from 37 to 127 sq miles during the decade, gained 47%. Tampa jumped 117% (124,681 to 270,610), leap-frogging Jacksonville to become the second largest city in Florida.

LOCAL MARKETS:

Best bet: \$7,000-\$8,999 family

Chicago: Biggest market for new homes is among families with annual incomes from \$7,000 to \$8,999, a survey of 1959 home purchases by the First Federal S&L shows. The overwhelming majority of families with incomes of under \$5,000 bought used homes. Surprisingly, people with incomes of \$12,000 or more were much more inclined to buy used homes, too. Here's how the survey found home buying by income:

Annual income	Average house price	% new homes	% used homes
Under \$5,000	\$14,000	19	81
\$5,000-\$6,999	16,000	24	76
\$7,000-\$8,999	19,500	40	60
\$9,000-\$11,999	22,700	39	61
\$12,000 and over	28,900	31	69

And here's how the survey pictured the average buyer: he made \$8,500 a year, bought a \$20,000 house with a 20-year, \$16,000 mortgage at 5¾%, paid \$110 a month on his mortgage, another \$40 for taxes. Land accounted for 17% of his house cost. The typical used house cost \$19,100, compared to \$21,900 for a new one.

Cleveland: The continuing slowdown in new house sales has put big Builder Marvin Helf on an unusual tack: building 167 single-family houses for rent.

The project (cost: \$2.5 million) is 25 miles southeast of Cleveland in a workman's neighborhood in Streetsboro. The houses—three-bedroom, 1½-bath, 1,170 sq ft ranches—will be financed with individual 24-year conventional mortgages.

The deal could turn out to be more profitable than outright sale, claims Helf Sales Manager William T. Peters—if Helf is right in believing money will be plentiful enough in the next couple of years (when tenants take up their options to buy) so conventional mortgages won't cost three points as they do now.

But the No. 1 reason for the rental venture is to build the 200 houses Helf must build to meet its overhead. Admits he: "If business was as it should be, we wouldn't think of this."

The houses will rent for \$115 a month. Tenants will sign three-year leases which allow cancellation after one year. The leases also will permit the renter to buy the house for \$14,990 any time during the three years by paying \$1,000 down. None of the rent will apply to the purchase price.

Tulsa: Demand—and starts—are picking up. Last December, a poll of Tulsa HBA (who do 97% of the area's housing) indicated they looked for 2,016 starts this year (compared to 2,197 last year). But now, says HBA Executive Vice President Charles McKinney,

1960 starts may reach 3,000.

From January through May, sales in a competitive, buyer's market followed closely behind starts: 920 to 954. There were 250 houses completed but unsold, down from last year's overhang of 285.

Miami: The house market is down about 30% this year, but there seems to be a limited demand for \$25,000 to \$30,000 houses near new shopping centers. Buyers appear to be businessmen ready to put down roots.

The project market is slow in Miami, but there is lots of activity in neighboring Broward County where builders have cheaper land combined with nonunion labor, which gives them a \$2,000 edge over Greater Miami. Sales in Broward are strong in the \$9,990 to \$11,000 bracket.

This month's Kiplinger Florida *Letter* has plunged investment men into gloom. The stock market has been downrating the Florida companies in a big way for the last four months. Miami's first FHA Sec 213 co-op highrise is still at the post after four weeks of selling.

Miami has lots of houses for rent, which is unusual. This is the result of buyers walking away from houses they got on resales—with high second mortgages and low equity.

Hank Cohen



Centex tears down models

"If the people in Florida don't like what we gave them," says Dallas Builder Tom Lively, "let's give them what they want." What they don't want, Lively found after putting up six models on a 3,000-acre tract west of Boca Raton, is a small house. With sales lagging on all but the two larger three-bedroom two-bath models (\$15,350-\$16,570), Lively ripped up the four smaller two-bedroom, one-bath (\$11,990 and up) models, will put up large ones. Says a Centex spokesman: "We underestimated the market. People want bigger, finer homes." Probable prices: \$14,000-\$20,000.

COMMUNITY FACILITIES:

Illinois high court holds cash school levies void

Is the judicial tide beginning to turn against suburban subterfuges to make subdivision developers pay for community facilities?

A new decision by the Illinois Supreme Court hints that it may be. The court has just held that the Chicago suburb of Downers Grove exceeded its powers by levying a \$325 per lot fee for schools as a prerequisite to plot approval by the local plan commission.

The decision is hailed by Ralph J. Finitzo, president of Chicago builders, as halting a statewide trend toward such cash levies. He says it opens the way to "a whole new approach" to financing school expansion. But he warns builders who have made such payments not to sue for their return. "It would bankrupt many school boards," he contends.

Although the Downers Grove case is the first to reach the high court, it is not the first of its kind. In 1958, a similar ordinance in the northwest Chicago suburb of Park Ridge was ruled illegal in Cook County.

Growth, not gouges

In the Downers Grove case, the supreme court says: "Plan commission approval of a plat of subdivision was designed to assist the orderly growth of communities. But . . . it does not follow that communities may use this point of control to solve all the problems which they can foresee." It found that school districts 58 and 99 had arrived at the \$325 figure "by taking into account factors totally unrelated to the proposed subdivisions, such as the time lag between the date when homes are occupied and the date when taxes are collected."

The suit was brought by Builder Herman Rosen and Firestone Realty Inc of Chicago, the subdividers, who refused to acquire "certificates of compliance" from the school boards involved, for their house development.

"The economic pressure upon such a large-scale developer is obvious and we think duress has been established in this case," said the court.

. . . but gifts are okay

The opinion does not affect voluntary payments by subdividers for schools, nor does it affect towns' power to require a "reasonable" reservation of land "for public purposes" by a subdivider.

Attorney Alan Hultman, for the school districts, said some \$5,000 paid under the ordinance by the plaintiffs will have to be returned. But the balance of some \$60,000 paid by other builders may be retained pending decisions as to whether it was paid voluntarily or not. All the funds have been in escrow since the suit was filed in 1958. Its prosecution was financed by the Northern Illinois HBA.

Builder Finitzo, whose chapter covers the area—surrounding Chicago—that is most affected by the decision, says there is a solution to school problems at hand. It is a \$10 million revolving loan fund, set up by the Illinois legislature in 1959, to aid school boards that have reached their bonding limit buy new sites, buildings, and equipment. Expanded to \$25 million, the fund could help boards bridge the two-year gap between completion of new homes and receipt of tax revenues, Finitzo says.

NEWS continued on p 51



AN OPEN LETTER TO EVERY MANAGEMENT THAT CONTRIBUTES TO PENSION FUNDS:

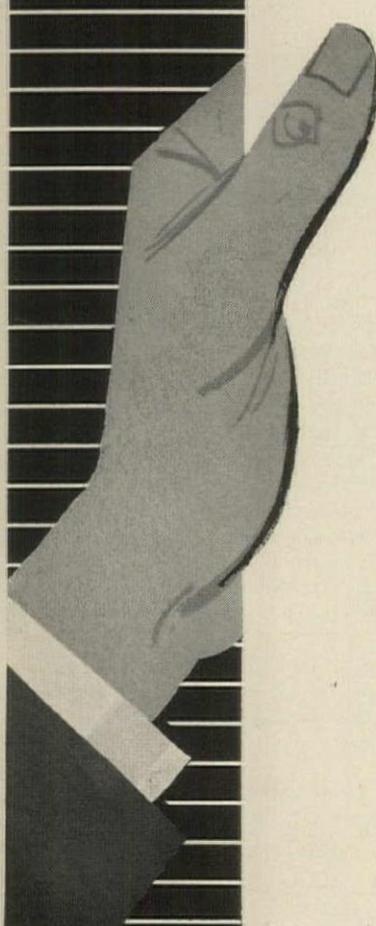
Pension fund accumulations now exceed 30 billions of dollars, and are increasing at a rate of more than three billions each year.

Less than 1% of this mammoth investment pool has found its way directly into the residential mortgage market. Something like 99% of pension fund accumulations do not contribute to the growth of America's largest industry — housing.

Imagine what sales of your products might now be, if even 10% of these funds were being invested in mortgage financing of new construction and remodeling! When you consider, also, that risk-free FHA and VA mortgages earn for your people a steady 1% to 2% more than other conservative investments, it is obvious that pension fund growth has suffered by this oversight.

Investment thinking of pension fund trustees must be updated — and management should encourage it now, not next year or five years hence. All parties concerned should take note of four demonstrable facts regarding FHA and VA mortgages as desirable pension fund investments: (1) *Newly-developed ease of investment*; (2) *High yield on investment*; (3) *Stability and safety through U. S. Government insurance or guarantees*; (4) *Continuous and known return of principal — a unique feature of special value to pension fund management.*

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MORTGAGE MONEY:

Discounts still slide slightly; experts predict gradual easing lies ahead

The outlook for more and cheaper mortgage money keeps getting brighter.

Discounts on FHA and VA mortgages and conventional loan rates are still easing. Eleven Federal Reserve Banks have cut their rediscount rates from 4% to 3½%. A cut in the discount rate—the rate at which federal banks make loans to commercial banks—usually means a general decline in interest levels.

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The 4th District Federal Home Loan Bank at Greensboro, N.C., slashed its interest rate from 5% to 4½% on loans to member S&Ls. Two others (Chicago, Pittsburgh) among 11 banks had already cut their rate to 4½%.

Yield-conscious investors are scrambling for mortgages (particularly immediates), finding there aren't enough to go around. Reason: house sales are slow (see p 47).

HOUSE & HOME's monthly survey—boosted to 17 cities this month with the addition of Honolulu—reveals price increases of ½ to 1 point for FHAs in five cities, for VAs in four.

For FHA minimum down immediates, prices in Houston moved up from 96-97 to 97; in Philadelphia, from 97½-98 to 98; in San Francisco, from 97½ to 98; in Washington, from 96½ to 97, and in St. Louis, from 93½-97 to 94-97. In two cities, prices slumped a little: in Detroit, from 96½ to 96-96½, and in a very limited New York market, from 97 to 96.

VA no-down immediates perked up in Washington, from 92 to 93; in Houston, from

92 to 92-93; in San Francisco, from 91½ to 92, and in Cleveland, from 91-92 to 92.

Conventional rates reacted similarly. In San Francisco, some S&Ls dropped from 7.2-7½% to 6½-7½%; in Chicago, from 6-6½% to 5¾-6¼%, and in Houston, from 6-6½% to 6-6¼%. Some banks and insurance companies shaved their rates in Chicago, from 6-6½% to 5¾-6¼%; in Houston, from 5¾-6½% to 5¾-6¼%, and in Newark, from 6 to 5¾%.

What will happen to prices this summer? Predicts NAHB President Martin L. Bartling Jr: "Discounts will shrink another half point to a point." Many mortgage men agree that the trend to smaller discounts is not yet spent. Adds President Oscar R. Kreutz of the Nat'l League of Insured Savings Assns: "A precipitous decline in mortgage rates is not likely this year. But home buyers can expect a slight decrease in the cost of money, coupled with somewhat better terms."

Does the Fed discount rate cut indicate the US is sliding toward a recession? No, assert economists in and out of government.

Traditionally, reducing the discount rate is a weapon used to pump more and easier credit into faltering economy. The last time it was used in the trough of the 1957-58 recession. This time, explain government officials, the situation is different: business, while sluggish in spots, is generally good. But inflationary pressures have let up so sharply that the discount reduction can be used to expand credit much earlier in the business cycle and give the economy a "little perking up," thereby prolonging the cycle.

Actually, point out sophisticated observers, the Fed action was merely confirmation of an easier money policy already in effect. Explains a top government economist: the discount rate was pushed up to 4% (highest in 27 years) by the Treasury's financing problems which drove it heavily into the short-term money market. This in turn boosted short-term rates to levels that the long-term situation did not justify. "If it was not quite a crisis, certainly it was a major problem," he says. Now, the short-term Treasury problem is over and so the Fed adjustment.

The Treasury will put little if any pressure on the money market for the rest of this year.

Vice President Roy M. Reiersen, chief economist for the Bankers Trust Co. of New York, says that the Federal government is expected to repay \$3 billion in debt this year, contrasted with last year's borrowing of \$10.5 billion in new money. Result: the total demand for investment funds will be only \$42.5 billion this year, a substantial reduction from last year's \$58 billion. He puts the total demand for long-term capital by business, consumers and state and local governments at \$30 billion, somewhat below last year's \$31.5 billion. Based on an anticipated 13% drop in housing starts, investment in home mortgages will be down 11.8% this year from last (from \$13.6 billion to \$12 billion). Pension funds will be the only investors boosting their purchases over last year (from \$500 million to \$800 million).

FHA gets ready to OK selling mortgages to individual investors

Mortgage bankers figure they have carved out a new niche for their sometimes-questioned business future by persuading FHA to let individual investors buy its mortgages.

At mid-month, FHA Commissioner Julian Zimmerman's office was flyspecking the last revisions on 1) the necessary changes in FHA regulations and 2) a purchasing-servicing contract for individual investors.

"We're getting close," Zimmerman told NAHB directors, "and we hope we tap a great amount of new mortgage money by this action."

Mortgage men have long eyed individual investors, business organizations, and pension funds as the big untapped sources of money to fuel the anticipated housing boom of the '60s. And with mortgage companies more and more pressed by their traditional sources of money—notably mutual savings banks—tapping new areas looms as one of the ways to avoid extinction. Builders and realtors back the idea precisely because it promises to tap more money.

FHA's big worry has been making sure that loan servicing remains in the hands of an approved FHA mortgagee, with a mortgagee's minimum \$100,000 capital and executive depth enough to assure prompt attention to delinquency and such tricky technicalities as fees, insurance premiums, and payment of charges. Under the proposed regulations, individual investors (to be known as participating-mortgagees) would get the income from FHA loans. But an approved mortgagee (to be known as sponsoring-mortgagee) would be directly responsible to FHA for carrying out its insurance requirements, including action on delinquencies and foreclosures. The individual investor and the seller-servicer would have an agency, not a trust, relationship.

The servicing fee would be the customary ½%. If the mortgage goes into default, the individual investor would get the FHA debentures.

Nobody knows how much money the new setup may snag. But mortgage men are optimistic. Says MBA President Bus Bass: "For many people, getting their money back in monthly installments will be an advantage, not a drawback. What about a man, say, who wants to set up a \$50,000 fund for his family, giving them income but not principal. What could be nicer than a 30-year mortgage at a yield of 5% or better with regular payments?"

MORTGAGE BRIEFS

S&L seizure brings probe

Seizure of the Long Beach (Calif.) Federal S&L (NEWS, June) by the Home Loan Bank Board has set off a Congressional investigation. The probe, by a House government operations sub-committee, could 1) lead to laws curbing the board's power, and, 2) even lead to a demand for the resignation of Board Chairman Albert J. Robertson.

Warned Subcommittee Chairman John E. Moss (D, Calif.): "If there has been an abuse of the law—and I make no prejudgment—it is highly possible and probable that we will send forth a modification of existing law."

Robertson has irked Moss by maintaining

continued on p 53



Plagued on the Patio

This contractor is dejected because his concrete patio was rejected... he neglected to reinforce it with welded wire fabric... Clinton that is.

A builder's most important asset is his reputation which springs from the quality of his work. You build a good reputation when your patios, driveways, sidewalks and garage floors retain their smooth-surfaced good looks for many years.

That's why smart contractors reinforce concrete with Clinton Welded Wire Fabric. Tiny fissures may develop in

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CF&I-Clinton Welded Wire Fabric is a steel skeleton that reinforces and adds years of life to concrete. It comes in a complete range of gages and meshes for all concrete construction jobs.

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 CF&I OFFICE IN CANADA: Montreal CANADIAN REPRESENTATIVES AT: Calgary • Edmonton • Vancouver • Winnipeg

that it would violate the board's judicial function to give facts on the seizure to the congressmen before an administrative hearing. The hearing will determine if grounds are sufficient for the HLBB to name a conservator for the S&L. Bristled Moss: "Robertson is trying to take an administrative Fifth Amendment."

The HLBB seized Long Beach Federal in April under its emergency powers. The board asserts that the \$130 million S&L had failed to pay insurance premiums on its deposits, failed to buy stock in the board as required by law, and paid dividends of 4 1/2% which were excessive in relation to earnings.

The board also accuses the S&L of making unsafe loans. Government Attorney Roy E. Doherty said one thing that triggered the seizure was \$25 million in contractors' loans made by the S&L for the plush \$67 million Bellehurst subdivision in Buena Park. Only half of the 600 homes (prices \$25,000 to \$125,000) were completed when work stopped in mid-1959; the rest were left partly built.

The seizure is the second for Long Beach in 15 years. It was trying to convert to a state charter when the HLBB took over.

S&Ls eye pension-fund money

The increase in pension-fund investments in government-insured mortgages has prompted savings & loan associations to make a pitch for some of the new money.

A US S&L League proposal: amend federal regulations to let its 4,700 members sell conventional-loan participations to pension funds. Under the proposal, now being studied by the Federal Home Loan Bank Board, an S&L would originate and service the mortgage loan which would be owned jointly by the S&L and the pension fund. Regulations now let S&Ls sell such participations only to other S&Ls.

S&Ls seek split-level rates

Federal savings & loan associations are pushing harder for permission to pay dual dividend rates, as do some mutual savings banks and state chartered S&Ls.

The latest proposal by the US S&L League would let federals accept "term savings accounts" in multiples of \$1,000. They would earn an extra dividend of 1/4% after three years. After five years, the bonus would

jump to 1/2%. The minimum balance for the bonus rates would be \$1,000. The plan, says League President Wallace DuVall, would let S&Ls attract savings at a lower overall dividend cost than if they pay the same dividends on all accounts. Moreover, he predicts, it would reduce "the switching of accounts from institution to institution" by making the rate on large accounts competitive. The proposal is being studied by the Federal Home Loan Bank Board.

Foes fail to halt Cal-Vet

California's Cal-Vet program of farm and home loans to veterans is assured of another two years of life. Voters approved a \$400 million issue of tax-free bonds in the June 7 primary despite strong opposition from some potent business interests.

It was the 12th issue voted since the program began in 1921. In 33 years, only 160,000 veterans have taken advantage of the low-down payment, low-interest loans made possible by use of the state's credit. But currently, Cal-Vet is making 1,350 loans a month, 3% of the state's home financing

continued on p 55

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to HOUSE & HOME the week ending June 10, '60.

FHA 5 3/4s (Sec 203) (b)						VA 5 1/4s				Conventional Loans				
FNMA Scdry Mkt ^{xy}	New Construction Only				Existing * Min Down 25 year Immed	City	FNMA Scdry Mkt ^{xy}	New Construction Only			Comm. banks, Insurance Cos.	Savings banks, S & Ls	Construction loans ^w Interest + fee	
	Minimum 30 year	Down* 10% or more down	Immed	Fut				No down	5% or more down	Immed				Fut
96	96-97	96	97-98	97	96-96 1/2	Atlanta	92	a	a	a	a	6-6 1/4	6-6 1/2	6-6 1/2 + 2 1/2
97	par-101 ^o	par-101 ^o	par-101 ^o	par-101 ^o	par-101 ^o	Boston local	93	98	98	98 ^b	98 ^b	5 1/2-6	5 1/2-6	5 1/2-6
—	95-96 ^e	95-96 ^e	a	a	—	out-of-st.	—	91-92 ⁿ	91-92 ⁿ	a	a	—	—	—
96	96-97 ^b	95-97 ^b	95-97 ^b	95-97 ^b	96-97 ^b	Chicago	92	90-92 ^b	90-92 ^b	90-92 ^b	90-92 ^b	5 3/4-6 1/4	5 3/4-6 1/4	6 1/4-6 1/2 + 1 1/2-2 1/2
96	96-97	95-96	96 1/2-97 1/2	95 1/2-96	96-97	Cleveland	92	92	91 ^b	92	91 ^b	6-6 1/2	6-6 1/2	6-6 1/2 + 1-1 1/2
95 1/2	95-97	94 1/2-97	96-98	96-97 1/2	95-97	Denver	91 1/2	92-93 ^b	91-93 ^b	91-93 ^b	91-93 ^b	6-6 1/2	6-6 3/4	6 1/2 + 1-2 1/2
95 1/2	96-96 1/2	96	97	96 1/2	96	Detroit	91 1/2	92	91 1/2	93	92 1/2	5 3/4-6	5 3/4-6	6 + 1
95 1/2	95-96	94-96	96-96 1/2	96	95 1/2	Honolulu	91 1/2	91 1/2 ^b	a	a	a	6 1/2-7	6 1/2-7	6 1/2 + 1 1/2
96	96-97	95-96	96 1/2-97 1/2	96 1/2-97 1/2	96-97	Houston	92	92-93	92	a	a	5 3/4-6 1/4 ^o	6-6 1/4	6-6 1/2 + 1-1 1/2
96	95 1/2-96	95 1/2-96	96-97	96-97	94-95 1/2	Jacksonville	92	91 1/2-92	91 1/2-92	92-93 ^b	a	6-6 1/2	6-6 1/2	6 1/2 + 1 1/2
95 1/2	95 1/2	95	96 1/2-97 ^b	96 1/2 ^b	94 1/2-95 1/2	Los Angeles	91 1/2	91 1/2	91	91 1/2 ^b	91 ^b	6 1/4-6 1/2	6.6-7.2	6-6 1/2 + 1 1/2-2 ^e
96 1/2	97	97 ^b	97 1/2	97 1/2 ^b	97 1/2 ^b	Newark	92 1/2	a	a	a	a	6 ^f	6 ^f	6 + 1
97	96 ^b	96 ^b	96 ^b	96 ^b	96 ^b	New York	93	93 ^b	93 ^b	93 ^b	93 ^b	6	6	6 + 1-2 ^b
95 1/2	95 1/2-96 1/2	95-96 ^b	97 1/2-98 ^b	a	95 1/2-97 ^l	Okla. City	91 1/2	91 1/2-92 ^b	90 1/2 ^b	91 1/2-92 ^b	90 1/2 ^b	6-6 1/4	6 1/4-6 1/2	6 1/2 + 1-2
96 1/2	98	97 1/2-98	98 1/2	98	97 1/2-98	Philadelphia	92 1/2	a	a	a	a	5 3/4-6	5 3/4-6	6 + 1-2
95 1/2	96	95 1/2	96-97	96	95	San. Fran.	91 1/2	92	91 1/2	92	91 1/2	6 1/2-6 1/2	6 1/2-7 1/2	6-7 + 1 1/2-2 1/2 ^d
96	94-97	93 1/2-97	94 1/2-97	94-97	94 1/2-97	St. Louis	92	a	a	a	a	6-6 1/2 ^f	6-6.6 ^f	6-6 1/2 + 1-2 1/2
96 1/2	97	96 1/2 ^b	97 1/2	97 1/2 ^b	97	Wash., D.C.	92 1/2	93	92 1/2	93	93	6	6 ^f	6 + 1 1/2-2 ^f

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

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wolbach, 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; Honolulu, Gordon Pattison, dir of mortgage financing, Bank of Hawaii; Houston, Donald McGregor, 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, Mercanti's Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington, DC, Hector Hollister, exec vice pres, Frederick W. Berens, Inc.

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

Footnotes: a—no activity. b—very limited activity. c—commercial banks do very little mortgage lending in Texas. d—S&Ls charging up to 4 point fees. e—S&Ls charging 6 1/2-7.2% plus 2 1/4-4 point fees. f—occasional loans available at 5 1/2%. g—bulk at 95 1/2. j—for better quality loans only. n—bulk at 91 1/2. o—at 5 1/2%. w—six-month construction loans unless otherwise noted. x—FNMA pays 1/2 point more for loans with 10% or more down. y—FNMA net price after 1/2 point purchase and marketing fee plus 2% stock purchase figured at sale for 50¢ on the \$1. z—on houses no more than 30 years old of average quality in a good neighborhood.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 5 3/4s	VA 5 1/4s	FHA 5 3/4 spot loans
Immediates: 94 1/2-96	Immediates: 90 1/2-92	(On homes of varying age and condition)
Futures: 94-95 1/2	Futures: 90 1/2-91 1/2	Immediates: 90-93

Prices for out-of-state loans, as reported the week ending June 10, by Thomas P. Coogan, president, Housing Securities Inc.

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

FNMA STOCK

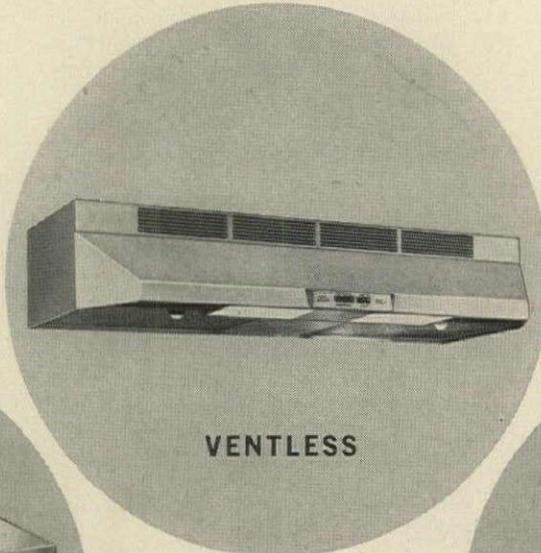
		Month's low		Month's high
	May 13	June 9		
Bid	55 1/4	57	54	57 1/2
Asked	57 1/4	59	56	59 1/2

Quotations supplied by C. F. Childs & Co.

The **complete** hood line...by *Trade-Wind*
quality—style—efficiency in every price range

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Under-hood ventilator
 frees cabinet space.
 Latest sheer custom design
 in genuine stainless steel or
 real hammered copper. Also
 Early American design in real
 antique copper. 4 lengths.



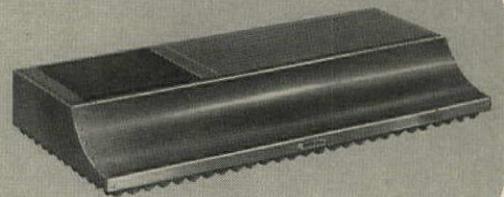
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For use with Trade-Wind Nos.
 3501, 2501 or 1501 Ventilator.
 Brilliant contemporary
 styling in stainless steel,
 brushed copper or antique
 coppertone. Also the colonial
 Salem in antique copper.
 5 lengths.

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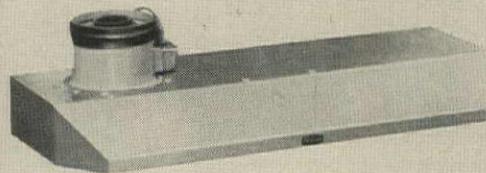
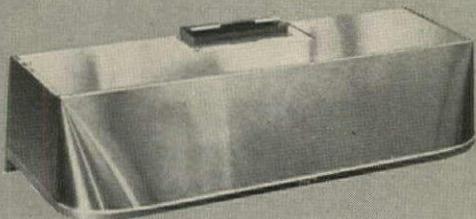
VENTLESS

PRE-WIRED

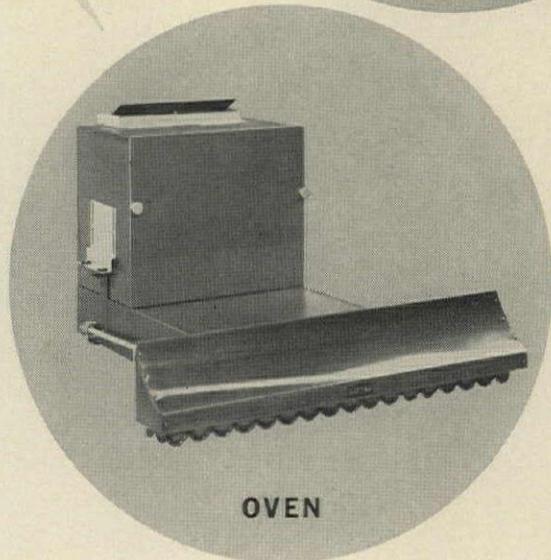


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For use where
 outside venting is
 impractical. Filters greasy
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 oversize filters. Plenum
 accessory for correct air
 recirculation. 3 lengths in satin
 chrome or coppertone.



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 assembly with axial flow fan,
 enclosed lights, filter and switches.
 5 lengths in satin chrome
 or antique coppertone.

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Highly efficient ventilation for
 built-in electric and gas ovens.
 Contemporary or Early
 American hoods in stainless
 steel, brushed copper or antique
 copper. 3 lengths, also
 for double ovens.

Trade-Wind

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(new and used).* And the bonds outstanding constitute 57% of the state's bonded debt.

Opposition centered in Los Angeles, where the Property Owners Tax Assn of California has long urged ending the program. New foes this year included the LA Chamber of Commerce, the California Taxpayers Assn, the LA Realty Board, the LA chapter of the Investment Bankers Assn, and, unofficially, commercial bankers and S&L men.

Supporting it were newspapers (apparently for the last time) and home builders. Says President Ray K. Cherry of the LA home builders, "We are for the program. It isn't real important, but it does help sales some. It is another financing tool."

Opponents, including Paul Sheedy, executive vice president of the Property Owner's Tax Assn, do not fault Cal-Vet's top-notch administration nor do they contend that it costs taxpayers any more *directly* (the program has been sustained by \$1.4 billion bond issues). They *do* contend that Cal-Vet bonds push up interest rates on all other state bonds and cut into the market for needed water and school issues. They note that at least 340,000 more veterans are eligible; if they took advantage of the program, it would create a tremendous bond—financing burden. But opponents are cheered by the drop in Cal-Vet support—from 4-1 majority in earlier elections to only 2-1 this time.

The Ten Percenters (cont'd)

For California's controversial Ten Percenters,† the lush days of unfettered trading in second trust deeds may be drawing to a close.

Spurred by spreading scandals in secondary financing of home purchases (News, May), both federal and state authorities are moving to curb such investment companies. Items:

- A federal court put the \$40-million Los Angeles Trust Deed & Mortgage Exchange (first and largest of the Ten Percenters) in receivership as insolvent. The receivership was requested by the Securities & Exchange Commission. SEC contends that LATD has been selling securities without a registration, advertising fraudulently, and lacks assets to cover its obligations to 8,000 investors.

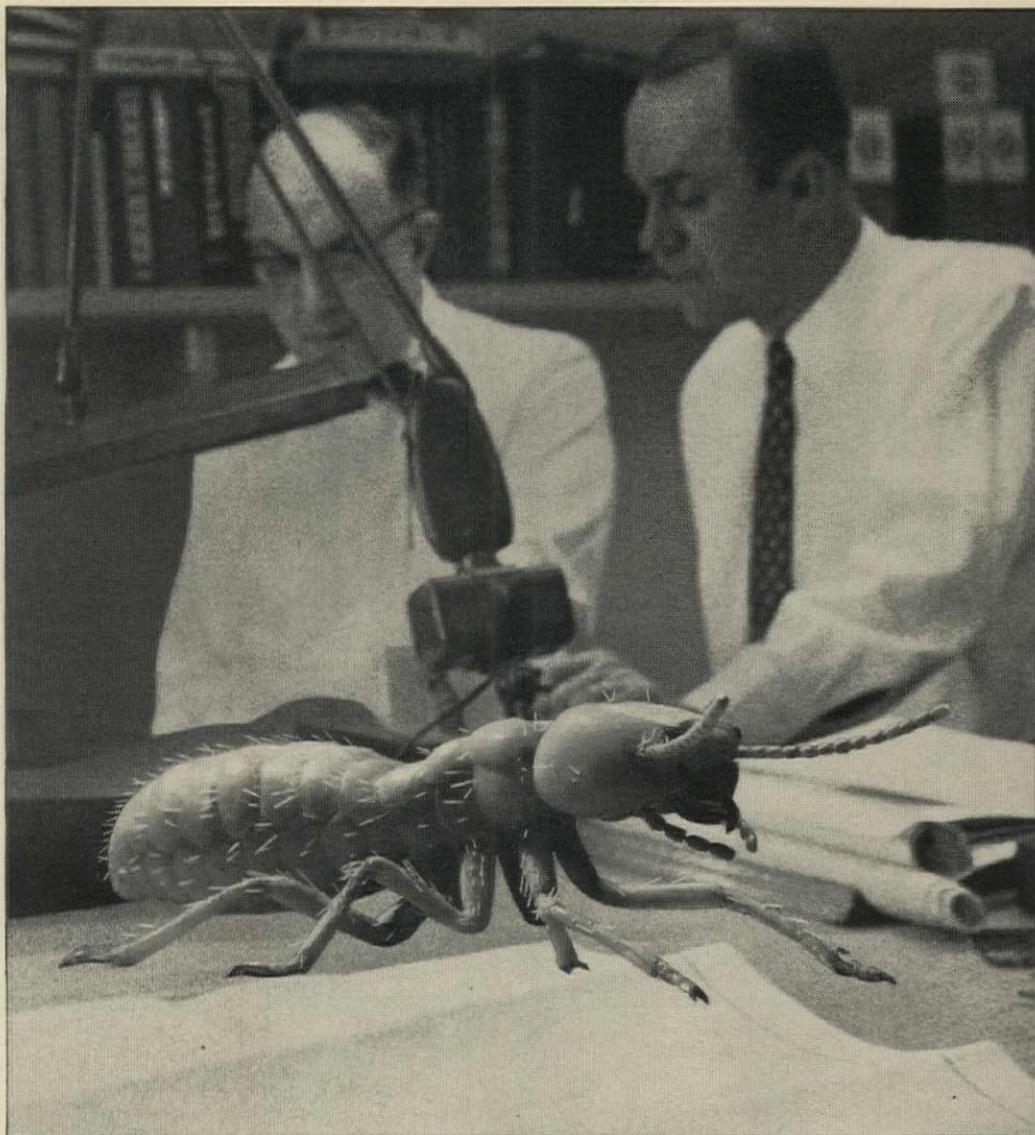
The SEC action against LATD, which began in 1958, is regarded primarily as a test case in a campaign to put all Ten Percenters under SEC regulation. But LATD has been a tough fish to net. The company maintains second TDs are not securities. A previous district court ruling in favor of the SEC was overruled by a US appellate court. So the judge stayed his latest receivership order pending another appeal.

- State Corporation Commissioner John Sobieski popped up with a plan to clamp drastic controls on the \$100-million-a-year second trust deed industry. He proposed these rules:

Promoters of the mortgage pool would have
cont'd on p 73; NEWS cont'd on p 56

* Actually, the Dept. of Veterans Affairs buys the home for the veteran, resells it to him on a contract, which precludes secondary financing. Maximum loan is now \$15,000, or 95% of value, whichever is less. Current terms: 4%, 25 years.

† So called because they promise investors a return of 10% on their money. The companies buy second trust deeds at steep (as high as 40%) discounts from builders, resell them to investors at enough less than face value to give, with interest, the advertised return. Ten Percenters make their profit in the difference between the high discount at which they buy and the lower one at which they resell.



FIRST—TAKE OUT THE "BUGS"

"Bugs" which develop during construction can usually be ironed out. It's after the building is erected and real honest-to-goodness bugs, such as termites and other wood destroying insects, show up . . . that problems really start.

Primary factors which set up the conditions conducive to insect and decay attack may be moisture, high humidity, nearness to soil or masonry contact. Whatever they are, the damage is done and wooden members of the structure are susceptible to failure.

One sure way to build in protection against termites and rot is to specify Wolmanized® pressure-treated lumber. This chemically protected lumber is first choice of architects and builders throughout the country because it has

proved itself through decades of trouble-free service. It has the added advantages of being clean, paintable, fiber-fixed and non-corrosive.

Wolmanized lumber is economical protection, too—costs only pennies per board foot more than unprotected lumber and gives decades of safe, certain service under all conditions.

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W-94



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MATERIALS & PRICES:

Breakthrough for plastics: FHA approves them for sewer, drain pipe

For the first time, FHA has authorized use of plastic pipe in residential construction.

The decision—which the plastics industry considers a major breakthrough—involves only sewer and drain pipe produced under a new commercial standard. But FHA technicians in Washington say it is likely the agency will permit use of polyethylene plastic for outside cold water lines “in the near future.”

FHA benediction (in *Materials Bulletin* No. 26) covers styrene rubber, solid plastic sewer pipe for house sewer connections and storm drain lines, as well as perforated pipe for foundation footing drains and septic tank absorption fields. The pipe must be manufactured and installed as detailed in commercial standard 228-60. But FHA requires a minimum crushing strength for solid pipe of 1,000 lb per linear foot vs only 800 lb per linear foot in the commercial standard. Explains an FHA technician: “We didn’t think 800 lb was enough. If sewer pipe flattens and clogs, a roto rooter will chew plastic pipe up completely.”

FHA requires a smooth foundation under plastic sewage laterals, including 2” of sand or dirt under the pipe if the trench has a rocky bottom. On the sides of the pipe and for 3” above it must go compacted fill, free from debris and rocks. FHA will permit no more than 8’ of cover above solid pipe. For

perforated pipe, it will permit no more than 5’ of cover, but perforated pipe needs a minimum crush resistance of only 600 lb per linear foot.

Plastic sewer pipe to meet FHA standards must be at least 4” in diameter—and the commercial standard itself covers plastic pipe only up to 6” diameter. Footing and storm drains may be 3” minimum diameter.

Is plastic sewer pipe cheaper than fiber or clay pipe? “Prices are competitive,” says Bert Montell, secretary of the thermoplastic pipe division of the Society of the Plastics Industries. But polyethylene pipe for cold-water lines—if and when FHA approves it—should be as cheap as galvanized iron and cheaper than copper, he says.

Use of plastic pipe for sewers or water lines still faces code barriers in most areas. But, says Montell, “the picture is improving.” Six states (Calif., Ill., Maine, Ky., Wis., Ark.) have approved plastic pipe for cold-water service lines and/or wells under stipulated conditions. Florida approves plastic pipe for private swimming pools, an abundant item there.

In Needham, Mass. the first plastic sewer main in the nation has been in service for a year, won approbation from town officials. The project involved 300’ of 8” main and 150’ of 4” house-connection pipe.

MATERIALS BRIEFS

Flintkote buys Sealzit

Flintkote has made another move in its \$50 million program to integrate building materials producing all the way from natural resources to finished goods. For \$1 million, it has bought Sealzit Co., Riverside (Calif.) maker of tools to apply resins, binders, and plastics in making boats, trailers, and furniture. One of Sealzit’s products is a gun designed for Flintkote’s new monoform system for roofing—in which asphalt (or other materials) and glass fibers are simultaneously laid down in a film. Flintkote says the process produces quicker and cheaper monolithic membranes, can also be used to apply side-walls, insulation, sound deadening, pipe coating, and corrosive protection.

Plywood prices go pfffft

For disconsolate Northwest Fir plywood men, eyeing big inventories and dwindling orders, the picture was clear: the hoped-for spring spurt in homebuilding was not materializing.

Then came a shocker. The Roseburg (Ore.) Lumber Co posted a price of \$60 per M sq ft for 1/4” sanded stock, \$4 under the going price of \$64 and the lowest since World War 2. Snapped a Roseburg official: “We’re just meeting competition.” He charged that other companies were cutting prices by giving extra discounts while piously posting a \$64 price.

Some companies followed Roseburg’s example, but most—including major concerns like Weyerhaeuser, Georgia-Pacific, and International—stuck to \$64, maintaining it was

the absolute minimum. Said one company official: “When we can’t get \$64, we’ll quit making plywood.” Some companies did. In all, around 35 shut down or curtailed production.

By midmonth, \$60 stock was hard to find and most companies were back at \$64. But inventories—set up by a record first-quarter production of 2.1 billion sq ft—were still high. Moaned a wholesaler: “It’s been a sick market all spring and it looks as if it’s going to stay that way all summer.”

Other lumber prices were softening too. Green fir dropped to \$58.36, down \$14.32 from a year ago. Dry fir was faring a little better at \$90.96, down \$5.40 from a year ago.

Mergers (cont’d)

Weyerhaeuser has taken another step to diversify its line, make more products sold to consumers.

The giant of US forest products (\$458 million ’59 sales) has just arranged a stock swap to buy Roddis Plywood Corp (\$61 million ’59 sales). The move will put Weyerhaeuser into hardwood plywood for the first time, provide its first lumber and veneer plants in Eastern Canada. Moreover, Weyerhaeuser will pick up a chain of 78 warehouses across the US and in Toronto, plus an aggressive sales organization. Roddis’ plant at Arcata, Calif. makes only 25% of the fir plywood Roddis sells, so Weyerhaeuser will get a sales outlet for its own plywood.

Plans call for the Roddis organization to

remain intact as a separate division. But the merger should put more pressure on the forest industry to step up its trend toward diversity and integration.

The deal is subject to the approval of Roddis stockholders.

LABOR:

Are building pay hikes getting more automatic?

Judging by the pattern of wage pacts set by construction labor so far this year, they are. Some signs:

- Wage hikes also seem to be running higher than last year. Few one-year packages run less than 10¢/hr. Lowest reported so far by the Bureau of National Affairs is 7½¢/hr straight wage hike for carpenters in the Beaumont-Port Arthur, Tex. area. Average nationally is around 12½¢/hr for all trades, including fringes. Two-year packages range from 15¢ to 50¢, with an average around 35¢. Generally, these include a higher proportion for fringes than the one-year settlements (but carpenters and trowel trades in Orlando got the maximum amount as a straight wage boost in four bites). The three-year contracts are more often than not all straight wage hikes. They range from 30¢ for the period to 60¢, (for cement masons in Seattle) with an average around 40¢. These amounts compare with an average annual hike computed by the Labor Dept. in 1959 of 15.6¢.

- Settlements for more than a year continue to increase. Two-year settlements are now twice as common one-year pacts; there are as many for three years as there are for one (but four-and-five year pacts are still rare).

- In disputes leading to strikes, the issue is almost never whether there should be an increase, but only how much. In a few cases, wages are reported no issue at all. The dispute is over fringes. In Buffalo, for example, building trades and contractors had set a bargaining timetable aimed at avoiding strikes, but it broke down. Reason: construction unions rejected an employer offer of 55¢ for three years plus all fringe demands *except* payment of parking fees for carpenters. And in Chicago, plasterers remain one of three trades on strike because employers refuse to continue payments for health, welfare and promotion to the Chicago Plastering Institute, which they are contesting in court (NEWS, Nov).

Notable among liberalized health-welfare payments is a proposed settlement in Milwaukee, where nine of 11 trades have agreed to an all-union welfare plan offered by employers. The Allied Construction Employers’ Assn found in a study that soaring hospital and medical costs have made plans in the entire industry “outdated and running in the red.” They offer to hike their present 7¢/hr contribution to 10¢ if the eight-year-old group of local plans are consolidated.

Biggest settlement reported so far this year is a 70¢/hr, three-year wage hike for some 50,000 carpenters, cement masons, operating engineers, metal lathers, excavating and paving laborers in New York City. It calls for 15¢ now, 10¢ in each of the next three years, and 20¢ at the end of the period. Affected are about a fifth of the city’s building trades workers, in seven of 22 unions whose contracts expired last month.

NEWS continued on p 59



Harris BondWood Flooring — Par Oak

Many combinations of Oak, Maple, Walnut and Cherry are available.

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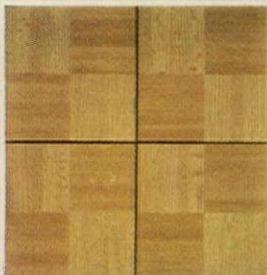
and sometimes at less cost than ordinary parquet.

All the centuries — old tradition of expert parquet craftsmanship is exemplified by Harris BondWood in gleaming expanses of pleasing geometric patterns. Sturdy Oak . . . durable Maple . . . fashionable Walnut . . . and distinctive Cherry. Easily and permanently installed in adhesive on concrete or wood sub-floor. And the beauty is deep — a lifetime of service — slats

are 5/16" of solid hardwood, not tongued and grooved.

Write for color booklet illustrating the sales possibilities. HARRIS MANUFACTURING COMPANY Dept. HH70, Johnson City, Tenn. The Finest in Flooring since 1898. See our catalog in Sweet's.

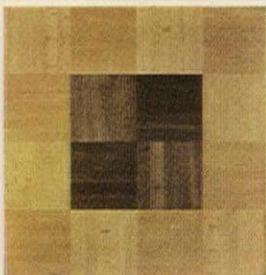
WITH DIVIDER STRIPS



CHECKERBOARD DESIGN

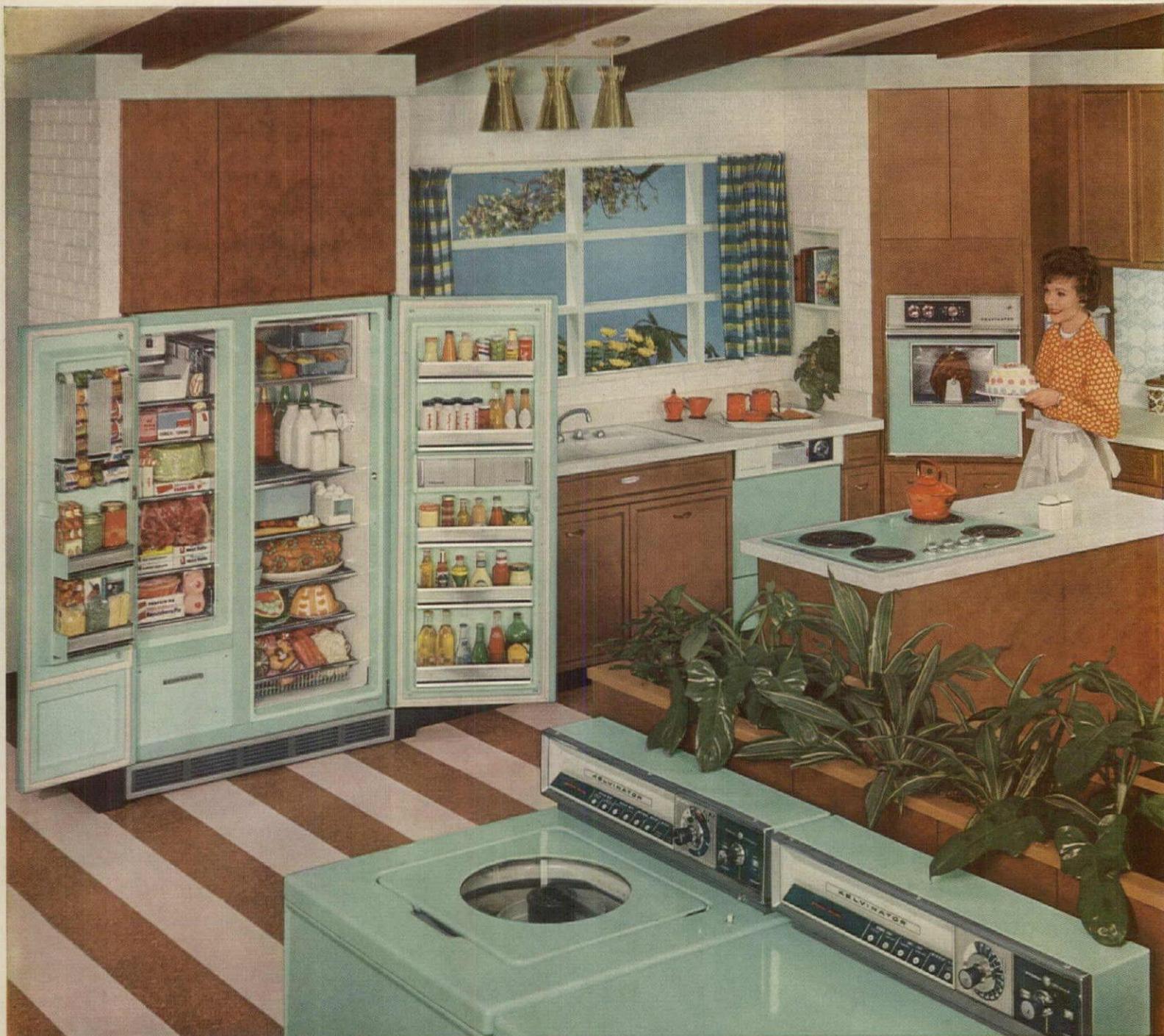


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Photos: H&H staff

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RESEARCHER MEIER
Will job competition cut birthrates?



LAWYER CRAIG
Zoning: tollgates for bribery?

Is urban renewal rebuilding cities the wrong way?

'Terrible mistake,' father of new towns tells planners, to build high-rise for mid-income

At its annual conference in Miami Beach, the the American Society of Planning Officials presented a visiting Briton, Sir Frederic J. Osborn, with its highest award, then applauded enthusiastically as he lambasted the kind of planning many of them are doing: urban renewal.

For ASPO, such behavior is no paradox. Planners are men who love talk—their own and others' (provided it comes laced with graceful epigrams). Sir Frederic, 75-year-old prophet and promoter of dispersal, greenbelts, and new towns, had this to say:

"It is a terrible mistake, in our city renewal policies, to attempt to copy on a meaner scale for large numbers of city workers the compact high-rise environment that suits the few super-urban types. In England we are increasingly doing this, along with more intelligent things, using enormous government housing subsidies in the process. We are deceived by the temporary willingness of the underprivileged to accept high-rise dwellings at subsidized rents as a way of escape from squalid slums or doubled-up family situations. With the widening distribution and rise of real income, these people will want to join the flock seeking their own homes in or beyond our precious city greenbelts. In the long run they could only be held in these compressed surroundings by wholesale frustration of common human desires, not in the long run practicable in a basically democratic society—whatever may be possible in other types of societies."

People love suburbs

Sir Frederic, the planner largely responsible for persuading Britain to try to cut the size of London and disperse part of its population to garden cities, maintained that man's desire for quiet and simple beauty is as much responsible as the auto for the metropolitan explosion.

"The outward movement of the well-off is nothing new," he noted. "What is new is the spread of wealth to far more numerous classes who can afford what Susannah's husband provided for her in Babylon and great senators took for themselves in ancient Rome—a suburban home in a garden.

"There is a percentage of genuine addicts of high urban culture to whom space and green surroundings make little appeal—types who like to live in city centers with their rich assemblies of theaters, concert halls, art galleries, restaurants, night clubs, snack bars, and hamburger stands—and who are reassured by

the bustle of crowds, traffic noises, flashing signs, and the insistent impact on their senses of commercial vitality . . . But they are a tiny minority—especially when you deduct the two-dwelling householders who have an apartment downtown for part of the year and a country retreat for the other part."

The "simple and obvious corrective," Sir Frederic suggested, is to limit the size of great cities—a step US citizens seem to be taking on their own, judging from the surprising results of the 1960 Census (see p 45). He said new towns have cost far less than the alternative of high-rise rehousing downtown and are "socially far more satisfactory."

Zoning: twisted tool?

ASPO, whose 4,000 members make it the world's largest planning group, ranged over the gamut of planning problems during its four-day session at Miami Beach's Americana Hotel. Among the provocative topics:

• *What's the matter with zoning?* Planners do not seem to realize that "their zoning tool has been distorted into just one more legal device to protect narrow private property interests," charged Lawyer David Craig, chairman of the Pittsburgh plan commission. "One out of 100 communities," he added, seem to have adopted zoning "to provide a barrier which the politicians could let down when it became worth while . . . sort of a toll-gate for bribery." Too many towns use zoning "to make sure the people in the next community stay there," for instance with devices like minimum floor areas for homes. And sideyard requirements get in the way of planned residential developments. The trouble? "We planners have not put forth a real message," said Craig.

• *Can the suburbs keep their magnetism as places to live?* Speakers attacked this from both ends. Dean Jefferson Fordham of the University of Pennsylvania law school com-

plained the use of acreage zoning by some suburbs to exclude families of modest income was merely "Ivy League socialism." He predicted: "This sort of thing is doomed." But Dean Donald C. Stone of the University of Pittsburgh graduate school of public affairs conjured up a picture of the suburban dwellers more and more "beset by traffic jams, sewage in his cellar, double school shifts, a gas station erected on the next lot, and three hours commuting time." His villains: 1) the bucolic grip of farmers on state governments, 2) "unyielding" county governments—"headless and bereft of leadership." Mayor Ben West of Nashville said: "The slums of tomorrow are being created right now in the unplanned, haphazard growth of subdivisions." If present trends continue, more than 40 million Americans will live in slums by 1975, he predicted.

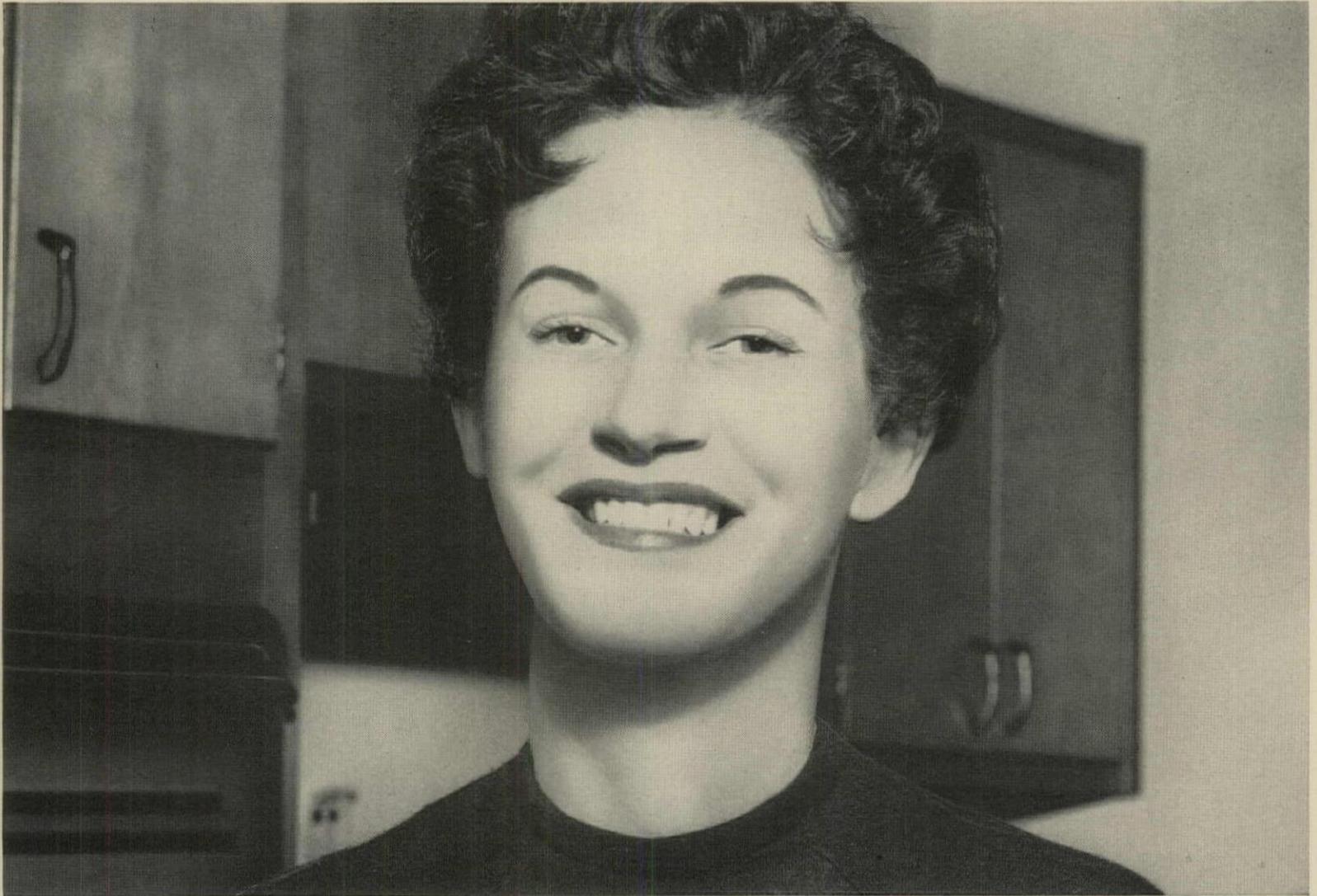
• *Is anything going to be done about it?* Dean Stone ventured that the next decade (no matter who is President) will see the federal government "move into the urban problem in a big way"—probably by expanding HHFA into a cabinet-level department of urban services. Mayor West drew an ovation with a talk in which he ripped into the Eisenhower budget: "It asks every American to give \$34 to the farm program and 83¢ for slum clearance. Put another way, federal per capita expenditures on farm families are \$3,000 annually against only \$84 per slum family. Bear in mind that 65% of the people live in cities where 75% of the tax money is collected."

• *Is the building boom of the '60s really a safe bet?* Research Scientist Richard L. Meier—surely one of planning's most intriguing thinkers—raised the question this way: when the wartime baby crop begins looking for jobs, about 1963, they are not going to find nearly as many good ones as the last few college generations. "Cutthroat competition" for jobs may cut early marriages and drop birthrates to levels of the '20s and '30s. The upshot might even be loss of "three to four million households by 1970," Meier forecast. If this happens, vacancy rates "would zoom quickly when building starts its anticipated expansion in 1963-65. Construction might then fall flat when other businesses are [also] touching bottom." His point? "The economy seems exceedingly vulnerable to a change in family and career expectations."

• *Are planners doing enough planning?* No, warned Executive Director Dennis O'Harrow of ASPO. He said the proliferation of "strong citizen planning agencies is evidence" that "again we are lagging behind our own citi-

cont'd on p 65; NEWS cont'd on p 61

OHIO HOME BUYER SAYS:



"Air conditioning sold me on my new home"

"My husband and I had been looking for a home in the \$15,000 range around Columbus for a long time," says Mrs. Robert Hart. "But when we went through the Homestead model homes of Jewel Builders, we knew our search was over—almost instantly.

"These homes were air conditioned and were so cool and comfortable. Then we learned that the filtered air meant less pollen, healthier living and easier housekeeping. That's important with three small children! We certainly liked the layout and modern kitchen of the homes—but air conditioning was the feature that *really* sold us!"

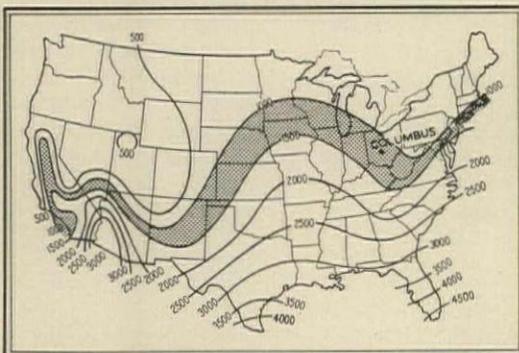
Jewel Builders reports over 50% of the buyers in their Homestead tract cited air conditioning as the key influence in their buying decision. All 300 homes in the tract had it. Mr. Julius

Cohen, president of Jewel Builders, says: "All the nearly 1,600 homes we plan to build during 1960 in Columbus, Pittsburgh and Youngstown areas will have air conditioning. They'll be priced from \$13,750 to \$17,000."

There's proof that air conditioning can help sell homes in northern as well as southern tracts. Summer temperatures for the Columbus area average 85°F., and they range up to 100°F. Pollen count averages 75. These climatic conditions are very similar to those in other northern cities such as Pittsburgh, Chicago, Minneapolis and Detroit.

Top-quality air conditioning units are charged with dependable Du Pont Freon* refrigerants. Call your equipment manufacturer for details about the sales power of air conditioning.

DOES YOUR TRACT FALL IN A CLIMATE SIMILAR TO COLUMBUS, OHIO?



If so, air conditioning can help you sell, just as it did for Jewel Builders. Look at the shaded area on map to left. It includes Columbus and hundreds of communities across the country with the same climatic conditions. Is your tract in this area?

*Freon is Du Pont's registered trademark for its fluorocarbon refrigerants.

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PUBLIC HOUSING:

St. Louis blames crime for 9% vacancy rate

St. Louis is struggling with a 9% vacancy rate in its seven public housing projects.

The 9% rate—enough to put a private project into financial trouble—was first reported by the St. Louis Housing Authority last December. At the end of May, with an eighth project underway and several more on paper, vacancies still stood at 9% and showed no signs of dwindling.

A temporary situation, contends Deputy Director James T. Drought. He blames adverse publicity about crime in two projects (NEWS, Mar) for scaring prospective tenants away. Moreover, only 15% of the displaced families from the latest slum clearance area chose public housing—confounding official expectations.

Now, says Drought, crime has been cut 59% in the two troubled projects, which were and are almost entirely Negro-occupied. The authority hired private watchmen with dogs in January. And he reports that the authority is trying to teach tenants from rural areas how to cope better with urban life (eg how to shop, how to use gas stove, refrigerator).

Drought expresses surprise at how many displaced families have bought homes instead of moving into subsidized apartments. "With a 5% vacancy rate in rental property in the city, this type of housing wasn't hard for them to find," says he.

Last January, the public housing vacancy rate had sliced its operating reserves some \$312,000 below the reserve standard set by PHA. The financial picture is "no better now," say authority officials.

Scattered sites appeal to PHA boss, he says

Public housing should step up its efforts to house the aged, says Public Housing Commissioner Bruce Savage.

In his first interview since taking office May 24, the former Indianapolis realtor also expressed these views:

- "There are many things wrong with the public housing program—and they should be changed." (But he shies away from citing a single specific.)

- Scattered-site projects of new public housing strike him as a good idea, but he is skeptical of rehabilitating old apartments, as New York City has begun to do to cut the cost.

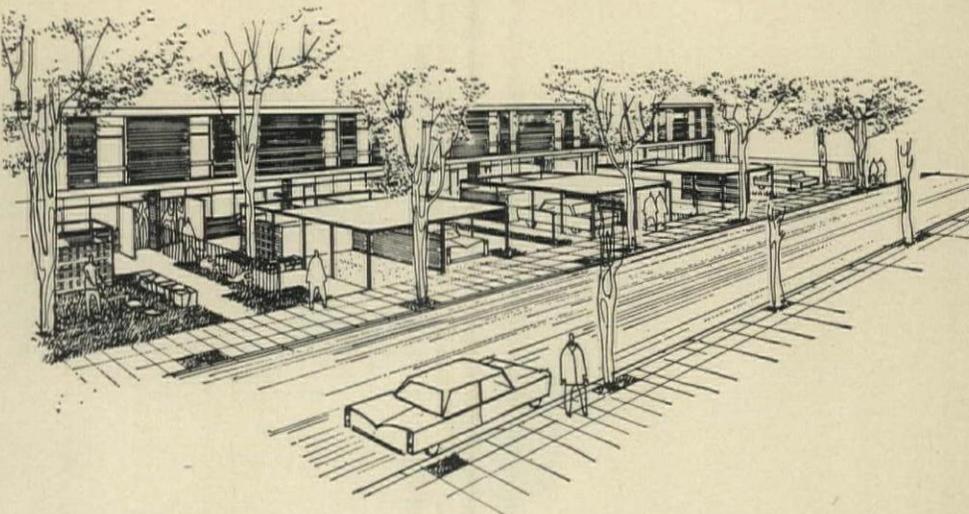
Builder Joe Eichler buys first renewal site

Homebuilder Joseph L. Eichler has become San Francisco's biggest redevelopment customer.

He has just bought four blocks in the city's Western Addition redevelopment area for \$1.4 million (\$134,600 per acre). The site, on the fringe of the downtown area, is in the midst of the city's oldest and most decrepit housing, untouched by the 1906 fire and now largely Negro-occupied. Eichler, only bidder for the parcel, plans to build some 500 apartments in high-rise and three-story frame buildings, may use FHA Sec 213 co-op financing for some.

Eichler made his maiden bow in renewal earlier this year when he became one of nine bidders for the city's big Golden Gateway renewal project, (NEWS, Apr) which is still unawarded.

URBAN RENEWAL:



HANDSOME VARIATIONS on a row-house theme in Eastwick are these four-bedroom models with streetside carports. Some 600 are planned in the initial presentation, at around \$13,990.

Surprise decision gives Reynolds Philadelphia's big Eastwick job

Reynolds Metals Co, newest entry in the national redevelopment sweepstakes (NEWS, June), has won the nation's biggest redevelopment prize: Philadelphia's 2,500-acre Eastwick project.

The decision ends more than six months of fumbling by the city's redevelopment authority in trying to decide between Reynolds and a powerful group of local builders. In January, the authority threw out all bids in hopes of negotiating a combine of the two top contenders. Now, with surprising abruptness and a split 4-1 vote, it has decided the task was impossible, picked Reynolds on the basis of its original bid.

First earmarked for renewal in 1950, Eastwick is a sprawling, largely vacant hodgepodge of marshes, dirt roads, open drainage ditches and housing that ranges from neat brick bungalows to ratty squatters' shacks. It lies only 3½ miles southwest of downtown Philadelphia. Federal planning aid was granted in 1952, a capital grant in 1957. In '58 the city council approved the project and condemnation began. Total acquisition and site preparation cost (including \$5 million in fill) is an estimated \$96 million. The city hopes to recover \$45 million through resale to the redevelopers.

The winning plan, drawn by Greek Planner Constantine Doxiades, calls for 10,000 new homes at \$11,000 to \$14,000 on two-thirds of the site, industrial development on the other third. Sound housing on the site will be saved, some of it moved to fit the plan, which features a cul-de-sac street pattern split into sectors by main roads, thus separating auto and pedestrian traffic. Reynolds' redevelopment subsidiary, Reynolds Aluminum Service Corp, with its local partners, Builders Samuel and Henry Berger, figure the whole job should take ten years. Construction will begin in 1961. Estimated final investment: \$360 million-plus.

Lone dissenter in the redevelopment authority is Mrs. Goldie Hoffman, who criticized Reynolds as a redevelopment novice, acting through a "thinly financed" subsidiary. "To me, the selection of Reynolds is scarcely better than an abdication of the Authority's responsibility to select a redeveloper," she said.

But if the choice (which still must be approved by the city council) stands, it will

be the fifth—and biggest—contract won by RAS since former HHF Administrator Albert M. Cole took over its reins last year (NEWS, Feb '59 et seq). Banking on a combination of local building talent, outstanding land plans, and Reynolds' money (an initial \$750,000 is earmarked for Eastwick), the company has projects in Washington, D. C.; Kansas City, Kans; Kansas City, Mo.; and Cincinnati.

Some builders feel it re-raises the question of how wise local homebuilders are to compete with national redevelopers. The reason: bulk of Eastwick housing will be row houses, an ideal kind for homebuilders to put up. Yet a \$50,000 investment in planning and presentation did not win the job for the all-local syndicate.

State prosecutor enters New York City slum fight

Where can slum fighters turn when city officials consistently fumble the ball in enforcing health and safety laws?

One answer has just been given by New York State Attorney General Louis J. Lefkowitz. He has stepped in to crack down on a flagrantly decayed slum on Manhattan's Upper West Side that city inspectors have stalled over for two years. In doing so, he may have unsheathed the sharpest weapon against slums in a decade: court orders bidding slumlords to mend their buildings or face contempt proceedings.

The building was first spotlighted by cries from The Rev. James A. Gusweller, slum-fighting West Side Episcopal clergyman whose parish is in the area. In 1958, he complained of dangerous and insanitary conditions in the tenement. But City Investigation Commissioner Louis I. Kaplan said his men could find no violations. He challenged Gusweller to "produce a single cockroach" in the building. Last November, Gusweller again complained of conditions there, charged that inspectors were purposely overlooking them. Newsmen who checked his charges found a

continued on p 63

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The brilliant marbles used by the ancient Greeks are beyond most modern budgets. But, happily, modern builders can give home buyers the same rich effects with Matico's new Antiqua Vinyl-Asbestos Tile. Antiqua glows with marble-like pattern and tone variations that distinguish each tile from every other. And Antiqua is a homeowner's dream...cleans easily, resists stains, holds its beauty for years.

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clutch of violations, none of them shown on city records.

Investigators from Lefkowitz' office had no trouble finding violations. They characterized the building, in affidavits in New York Supreme (county) Court, as "a slum tenement and a public hazard and threat to the entire area," added they had seldom seen one "as filthy, unsanitary, dangerous, unsafe and in such disrepair." On this basis, Justice Samuel M. Gold ordered the owners—a partnership of ten persons—to halt their "willful and continuous disregard" of the building and health codes.

Foundation grant to aid renewal area

Pittsburgh's privately-supported Buhl Foundation, is investing \$45,000 to help efforts to save an aging neighborhood threatened by the backwash of slum clearance elsewhere in the city.

The money will be used to hire a full-time renewal manager for the Homewood-Brushton neighborhood, an area of large, once-fashionable homes that has been in a decline since World War I. In 1956, when the city began clearing 95 acres of slums near downtown, Negro displacees found the area one of the few where they could go. Over-crowding, with collateral strains on houses and community facilities, followed.

Early this year, Pittsburgh's Action-Housing Inc sparked a move to make the neighborhood the city's first non-assisted (with federal funds) renewal areas. Since then, 60 block groups have been formed, business, civic and municipal forces mobilized to create and carry out a renewal plan. Action-Housing officials hope the entry of Buhl into the field will give other foundations similar ideas.

Will unshackling technology let costs drop 30% for new housing tracts?

New building methods that may cut costs as much as 30% have been offered to Pittsburgh's unique demonstration of what technology can do to make middle-income housing feasible in big cities.

Carl Koch & Assoc, one of three architectural firms working on the 1,600-family project, has developed a new system of precast concrete panels, expects it to lower the cost of a five-room apartment from \$11 to \$7.62 a sq ft. This would mean savings between \$3,000 and \$4,000 per unit from what conventional methods now yield in Pittsburgh.

"None of these figures are firm yet," says Leon Lipshutz, senior planner for Koch. "They're based on a lot of assumptions, and we don't have all our outside costs yet. But they shouldn't be too far off."

If they are not too far off, the East Hills project (News, Mar) will be well on its way towards fulfilling its purpose: to show what modern building methods can do if unfettered by local codes, zoning, make-work restrictions, and red tape.

Although East Hills' 130 acres lies within the city limits, Action-Housing Inc, main sponsor of the project, has won assurances the city will waive its notorious plumbing and building codes. It may have trouble with union practices that might hamper the cost-cutting production system. Allegheny County's largest homebuilders operate in the suburbs, with non-union labor. Already, building trades unions are objecting to city plans to have Sampson Bros, a suburban home-builder, put up 160 homes in another redevelopment project.

If all the cost-cutters are used, figures Seymour Baskin, Pittsburgh lawyer and housing finance specialist, East Hills should be able to:

- Offer two-, three- and four-bedroom row houses (each with its own terrace or private yard) on FHA co-op terms for \$15,191, or a net monthly cost of \$108 plus utilities.
- Offer five-room apartments for \$14,124 per unit and \$123 a month. These would have 1,200 sq ft of space, go in three-story walkups.

The prestressed concrete panels developed by Carl Koch will include heating, ventilating, and electric equipment, says Lipshutz. These other ideas also will help cut costs:

- Electrical, plumbing and heating components prebuilt into walls, ceilings and floors.
- Eight-story apartment buildings with no elevators. The steep site makes it possible to reach any level with no more than one flight of stairs.
- Use of building walls as retaining walls for the steep slopes.
- Use of basement area as living space (a la Koch's Techbuilt houses).
- Back-to-back units with entrances on two different levels.

"Our most immediate problem," says Lipshutz, "is to find a company that will set up to mass-produce the panels. They're big—some of them weigh up to seven tons—so we need a plant not more than 100 miles from Pittsburgh."

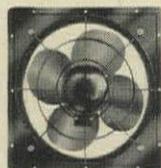
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EMERSON ELECTRIC...

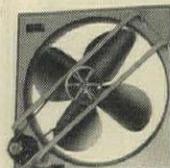


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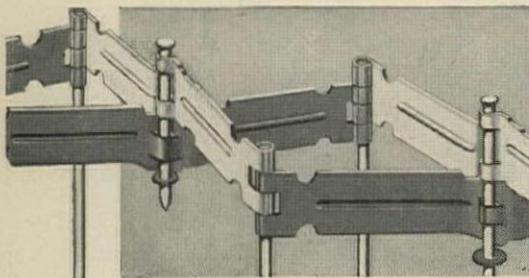
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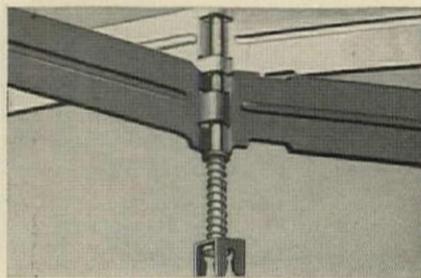
In short, you'll get no call backs once you make that quick and simple Modernfold installation. These features guarantee it:



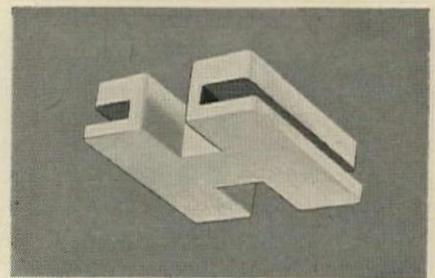
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HHFA slashes quotas on Sec 221: units don't go to displacees

Despite avowals of more liberal policies, FHA's handling of Sec 220 and 221 renewal and relocation financing continues to draw fire. And authorizations for Sec 221 housing are so embarrassingly in excess of use that HHFA has begun quietly cutting them back.

• Before Senate and House housing subcommittees, John A. Haas, executive secretary of the Metropolitan Assn of General Improvement Contractors, lambasted 220 and 221 as "near-flop" as far as rehabilitation is concerned. Rep tape, delays, arbitrary conservatism by FHA in approving, FNMA in buying, the loans are the trouble, he said. Despite Congress' intent to encourage borderline cases, "in spite of all promises and pronouncements, we are getting less rehabilitation done now than ever before . . . FHA has chosen to completely reverse this intent . . . has instituted . . . prerequisites, conditions and underwriting principles which resulted in a portfolio of mortgage insurance as gilt-edged, economically sound and riskless as gold bullion in Ft Knox . . . to obtain a Sec 221 commitment, not less than 19 signed documents have to be produced, most of them in duplicate or triplicate . . . this does not include inspection reports, affidavits, title insurance . . . (plus) 45 to 60 days of processing time."

• In Chicago, FHA's new district commissioner (and former heating contractor) John Waner bluntly called Sec 220 a failure under high labor costs. Rents in a renewal area, he said, could not support—at half those in a non-renewal area—a feasibility finding for the full 90% of value allowed by law.

• Just as a few scattered builders are beginning to catch onto its market potential, HHFA is quietly cutting back its lagging 221 program. The reason: too many of the too few houses produced are going to buyers who don't need them. First cuts are in five cities: Atlanta, Jersey City, Auburn, Ala.; Redlands and Sanger, Calif. They follow a months-long survey of 221 operations ordered by HHH Administrator Norman Mason.

In Atlanta, where some 2,000 Sec 221 houses have been built, a 5,000-unit current authorization was cut to 3,100 for 1960-61. Of those built, about half were where (Negro) displacees would not move, drew only 30% qualified White buyers. The rest went to non-displacees after a 60-day waiting period (though 98% of the half built where Negroes would move drew qualified buyers). In Milwaukee, authorizations for 2,068 units have attracted only 177 applications. Where officials object, FHA points out that authorizations can be restored "within three hours" of establishing genuine need.

Planners tell what's wrong with selves

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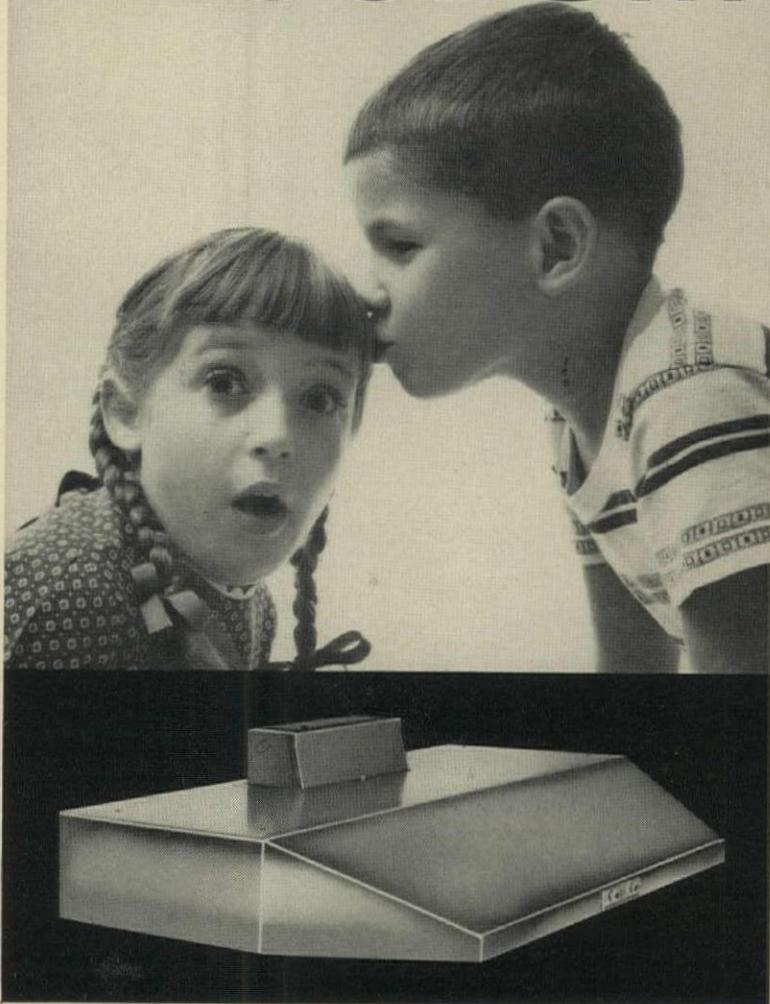
zens." He added: "More and more we find the strong citizen organization clearly dominating the planning, development, and especially redevelopment programs in cities. More and more they go after—and get—top planning and development personnel. The businessman is accustomed to paying whatever it takes to get the kind of help he needs. He doesn't hesitate to offer a \$20,000, \$25,000, or \$35,000 salary. Why do we bypass government? The answer is too clear in too many cities. Government is not moving as rapidly, as boldly, as citizens believe is necessary."

• Are planners too much concerned with process of planning, not enough with what comes out in the end? Yes, complained Grady Clay, associate editor of *Landscape Architecture* quarterly and realty editor of the *Louisville Courier-Journal*. As a result, he charged, "planned environment" today is more often "the widespread uglification that goes under the name of progress."* He cited suburbs and urban renewal projects as the foremost examples. "The 'planned suburb' is usually planned for maximum return on the contractor's investment. . . . A suburban area is one in which we substitute traffic jam for forest preserve. It is farmland held by speculators long enough to double their money; the place where city folks seek to pay off mortgages in genteel company; where five acres are made to do the work of one; where one husband does the work of five servants; where the straight furrow has been replaced by the wrinkled brow; asters by ulcers; where man and Nature can live in harmony only so long as the power mower keeps running."

* Sample: The 264-year-old town of East Norwich, L.I. is fighting to save its charm by preventing highway engineers from smashing a six-lane road through its tree-lined main crossroads. Last month, residents put up signs along Route 25A—painted black on yellow like official markers: "Notice. This town to be destroyed by plans of the N.Y. State Dept. of Public Works . . . Your Town May Be Next!"

NEWS continued on p 67

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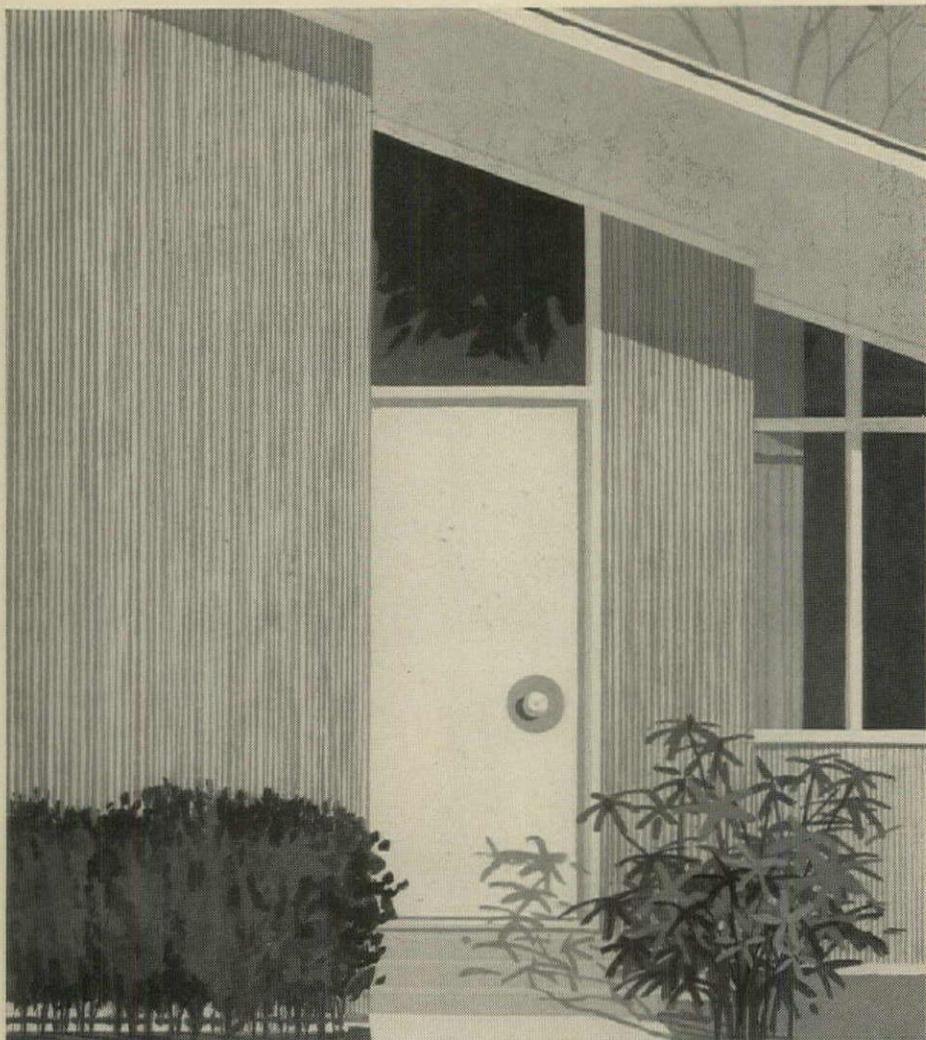


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STATISTICS:

How and why the US changed methods to get a better count of starts

Behind the disclosure that the government has been greatly undercounting housing starts (see p 96) lies almost a year's work by the Census Bureau to come with the new—and more accurate—figures.

This effort began when the Secretaries of Labor and Commerce, ending several years of staff squabbling, agreed in 1959 on a new division of statistical responsibilities for housing. Commerce's Census took over from Labor's Bureau of Labor Statistics the responsibility for housing starts, building permits, and residential construction expenditures. BLS took from Census the analysis and publication of the labor data accumulated by Census field work.

The roots of this swap go back to the National Housing Inventory of 1956—\$1 million intercensal house-count which disclosed that 24% more nonfarm units had been started between 1950 and 1956 than BLS had tallied in its month-by-month reports. Whatever the shortcomings of its statistics, BLS had one unassailable alibi: Congress had never voted it enough money to correct the shortcomings it already knew about. Not until last year, when Census took over the job, did Congress boost the appropriation enough (from \$528,500 to \$1 million) to make a start at counting the nation's housing—3% of the total national output—with accuracy.

With more money, Census has made these major changes in statistical technique:

1. Census gets reports from 51% more permit-issuing localities than before (10,000 vs 6,600). It does not get data from all of them every month, but it does get a monthly report on permits from 3,500 localities which account for over 90% of the new houses built with building permits (which is almost 85% of all housing starts). From this it projects the probable number in the other 6,500 small towns that account for only 10% of the permit-issuing total.

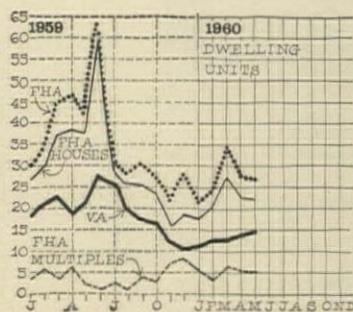
2. Instead of using a rigid formula to adjust for lag and lapse of permits, Census makes a huge sample survey of what actually happens. Under the old system, BLS assumed about 58% of permits became starts the month they were issued, 23% the next month, 7% the third month, and so on for seven months. BLS had money enough to recheck these assumptions only once every year or two. When Census dug into this, it discovered the actual pattern of permit usage varied sharply from month to month. So starting in January, it took a fresh monthly sample of permits issued for some 6,000 to 8,500 units in 250 cities. It follows every permit up, month-by-month, until the builder begins construction or says he won't.

It was this new technique which uncovered the drop in March starts because of unseasonably bad weather (nonfarm starts showed up as 91,500 in the new count vs 97,800 under the old). And the recovery in April (116,200 nonfarm starts in the new count vs. 110,400 under the old) was largely the delayed use of March permits. The old lag & lapse adjustment proved too mechanical to reflect unseasonable weather.

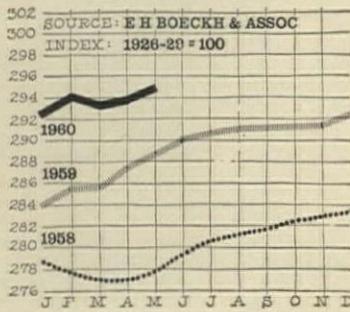
3. Census has completely revised the method of estimating how many units are sneak-built without permits in permit-issuing areas. It calculates that these total 4.7% of reported permits. This is based on a fresh field survey from November to March of localities which started issuing permits after 1954—the six-year-old basis of the BLS' figures.

4. Census has refined the methods for counting starts in areas where no building permit is required. In 56 areas, it asks local experts (tax assessors, city officials, health and sanitary inspectors, builders, lenders, material dealers, utilities) what is being built. Then it verifies their reports by field visits. Finally, enumerators drive over every road in designated smaller

continued on p 69



FHA APPLICATIONS on new units fell again in May—to 27,467, off 1.9% from April and off 33.7% from May of last year. Home applications were 22,438, off 0.2% from last month and 41.2% below May 1959. Project applications of 5,029 were 8.5% below April. New unit applications for the first five months were 136,232, down 29.7%. VA appraisal requests on new units rose 5.1% from April to 14,396, down 30.6% from last May.



RESIDENTIAL BUILDING COSTS: May was the month for many new labor contracts to go into effect, and a flurry of wage increases across the country (see p 56) boosted costs. Boeckh's index rose 0.8 points during the month from 293.9 to 294.7. And, predicts Col E. H. Boeckh, the index should rise even higher because June is the time when most labor pay increases in the new contracts become effective.

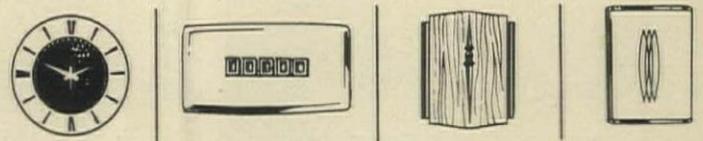
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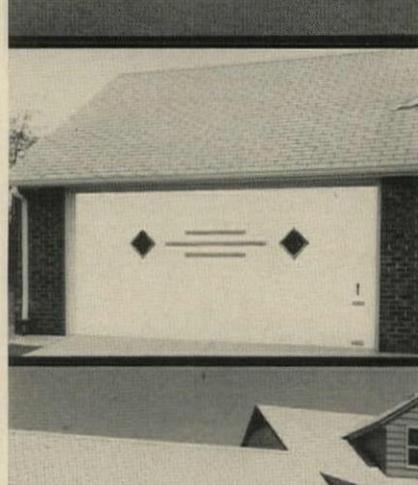
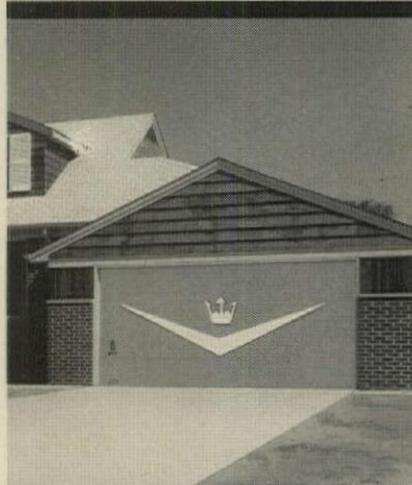
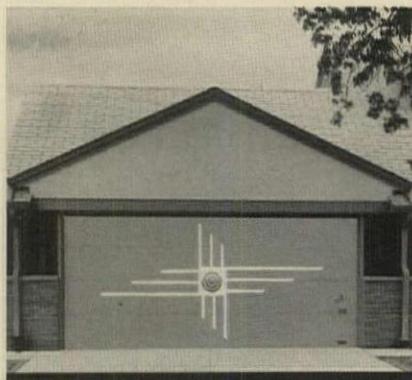
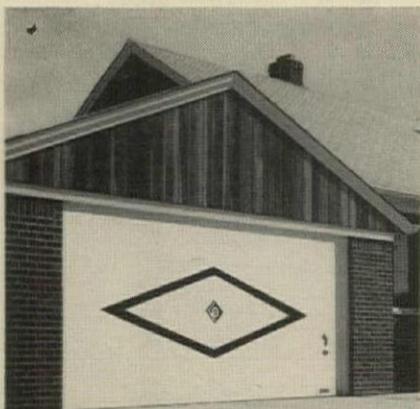


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areas to count new houses visually. The final figure is then corrected by adding 1) the verified starts reported by experts and 2) an estimate of what they overlooked, based on how much undercount Census has actually detected by driving around to look.

Experts were so shaken by the undercount revealed by the Housing Inventory that they were prepared for a much bigger difference between the old and new counts than has now turned up. The difference for 1959 turned out to be only 13%—and 2½% of that is accounted for by the fact that Census now includes farm starts and starts in Hawaii and Alaska. Where the differences lie:

ITEM	DIFFERENCE
Inclusion of farm starts	2%
Inclusion of Alaska and Hawaii	½%
Inclusion of non-permit building in areas where permits are required	3%
More permit-reporting areas and better coverage of starts in non-permit areas	7½%

CODES:

BOCA reports 400 adoptions

The 10-year-old Basic and Abridged Building Codes of the Building Officials Conference of America have now been adopted by 416 cities.

So reported Executive Secretary Paul E. Baseler to BOCA's 45th annual conference at Miami Beach's swank Eden Roc Hotel. The last year brought 57 new adoptions*, he said, mostly in Connecticut, Missouri, and New Jersey. A year earlier, BOCA reported 374 communities were using their codes; how 374 plus 57 equals 416 remains unexplained.

Such gradual gains are only normal for codes. Moreover, BOCA operates on an annual budget of only \$65,000 and a full-time staff



BASELER & McCONNELL

H&H staff

of Baseler, a technical aide, and three stenos. One big plus: two years ago, it moved its headquarters from New York to Chicago, where it is affiliated with the joint headquarters of most other local government groups like the Intl Assn of City Managers, Governor's Conference, NAHRO, ASPO, ad infinitum.

As usual, most of the five-day meeting was devoted to proposed code changes. Eighty-eight were adopted, including one aimed at encouraging grade-marked lumber in housing. BOCA revised its codes to accept NLMA joist-design tables when grade-marked lumber is used. If it is not, much stiffer requirements are imposed.

BOCA President S. Logan McConnell, head of the division of regulatory inspection in New Orleans, plugged for code uniformity inside metropolitan areas. BOCA, he said, "recognizes the substantial advantages of uniformity of building regulations and format to the official, industry, and public . . . The problems resulting from differences are most acute in metropolitan areas . . . BOCA proposes that the same code should be used by all communities in any such area."

This stops a long way short of the regional uniformity that must be achieved before housing can take advantage of the economies of mass production technology which now promise to achieve a significant cut in the high cost of housing during this decade. But it would be a step forward from the waste and overdesign produced by today's chaos of conflicting rules. Industry groups, rebuffed two years ago in efforts to leap to a single national standard for one- and two-family house building, now are backing efforts of BOCA and other regional code groups to spread the use of model codes. Item: Both AIA and NAHB sent staffers to the meeting.

McConnell, 65, was routinely reelected president but delegates reverse a year-old upset by unseating Alfred H. Schroeder, city architect of St. Paul, as first vice president and presidential successor-apparent. In his place, by a 65 to 42 vote, they installed Ben Saltzman, peppery borough building superintendent of Brooklyn. Saltzman had been ousted from the officer stepladder by Schroeder at last year's convention.

* BOCA has worked out a model ordinance so localities can adopt its code by reference, thus sidestepping the big cost of printing a detailed ordinance. Baseler says it should be legal even in the 19 states which still lack specific legislation permitting adoption of codes by reference. This route cuts the cost to \$3.75 each (for the abridged code for towns up to 25,000) or \$5.75 (for the basic code—for bigger communities) for the few copies of the codes needed for local study. For more data: BOCA, 1525 East 53d St, Chicago 15, Ill. *NEWS continued on p 71*

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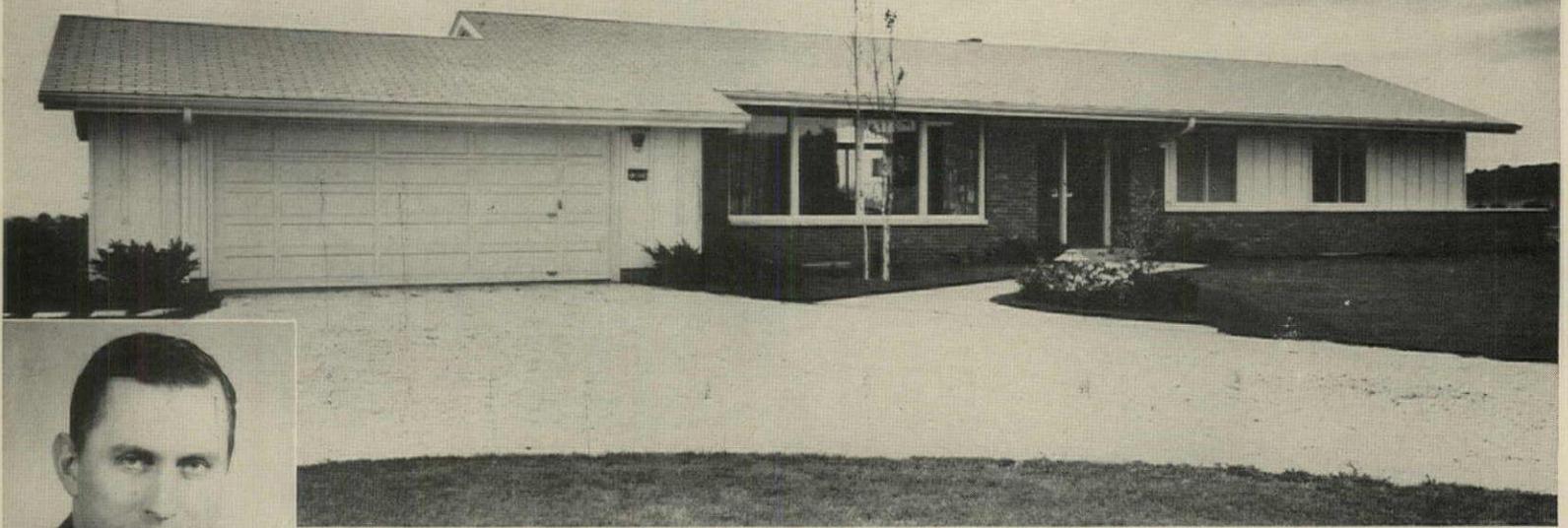
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was built with a **Bird Wind Seal roof**—
“of course”



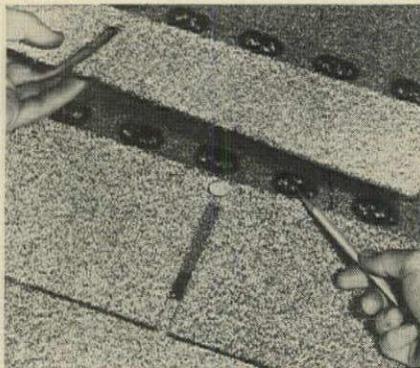
“Of course” are the words of Joseph D. Starck, secretary of the well known Wisconsin building firm . . . “The roof of this home is of course a Bird Wind Seal roof.”

Topped by a Bird Wind Seal roof, this Model Home by Math Starck & Sons of Hales Corners, Wisconsin won two important magazine awards in '59.

“MY CUSTOMERS RESPECT THE QUALITY BEHIND THE BIRD NAME” is one of the reasons Mr. Starck gives for installing Bird Wind Seal shingles on the fine homes he builds.

He goes on to say, “As a builder I like the *progress* that Bird builds into its products” — a pat observation, because Bird & Son has been making good building products since 1795, and pioneering product improvements all along the line.

Mr. Starck further adds, “My customers know their purchase (of a home) is backed up by the experience of responsible manufacturers.”



- powerful seals spaced for drainage
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PEOPLE:

Burnham Kelly named dean at Cornell

Cornell University's college of architecture has a new dean: Lincolnesque **Burnham Kelly**, formerly associate professor of city planning at MIT. He replaces **Thomas W. Mackesey**, who resigned to devote full time to teaching.

Kelly's appointment is something of a surprise because he is not an architect. Academically, his field is city planning, but homebuilding knows him best as its foremost prophet of industrialization. In two definitive books on the subject, *The Prefabrication of Houses*, and *Design and Production of Houses*, Kelly calls it inevitable that housing will evolve into a small number of big companies. "In a few years you are all going to be dealers for a few large corporations," he told a builder group recently.

Kelly was born in Evanston, Ill., grew up in Providence, R.I., graduated from Williams in 1933 and won a law degree from Harvard. After practicing for two years he shifted to city planning, took a masters degree in that subject in 1941. From 1942 to 1945 he worked for the National Research Council, lectured on city planning at Michigan. He returned to MIT to teach in 1945.

In April, **John Rousselot**, 32, former Los Angeles publicist, resigned as FHA public relations chief to seek the Republican nomination for Congress from California's 25th



KELLY

H&H staff

district. Last month, he got it. He led a field of five candidates with 34,106 votes out of a total 92,253. His opponent is the Democratic incumbent, Lawyer **George Kasem**, who squeaked into the seat two years ago with a 605-vote majority, won renomination this year against a single opponent, drew 48,174 votes of a 67,690 total.

Emil Seliga takes post with Great Western S&L

Emil J. Seliga, 43, who resigned abruptly as president of the \$300 million Talman Federal S&L, Chicago, after a difference of opinion with Founder & Chairman **Ben F. Bohac**, (News, Mar), has a new job: executive vice president of Great Western S&L (assets: \$325 million) in Los Angeles.

Seliga, who went to work as an office boy at Talman after graduating from high school 23 years ago, has earned a reputation as a bright light in the new school of S&L executives. He will have plenty of scope in his new post. Great Western is the eighth largest S&L in the nation. It is a subsidiary of the Great Western Financial Corp, a holding company which owns a half a dozen S&Ls. Lehman Bros, New York investment banking firm, is a major stockholder.

AIA's department of education and research is losing **Walter A. Taylor**, its director for the past 13 years. Taylor is returning to private practice, will also become director of the new school of architecture at Ohio University, Athens, Ohio. The school, which offers a five-year course to a limited enrollment, may give Taylor a chance to work towards one of his

pet educational projects: a school to train all building professionals—architects, engineers, and contractors.

Graham Morgan steps up to president of US Gypsum

US Gypsum has named **Graham J. Morgan** as its new president. The 42-year old Morgan steps up from the executive vice presidency, succeeding **Oliver M. Knode**, 81, who is retiring. He thus becomes heir-apparent to **Clarence H. Shaver**, who remains chairman and chief executive officer.

Morgan's company is the giant of gypsum. It is not only big (\$330 million in assets), but profitable ('59 net, \$46 million) and growing (\$37 million is earmarked for expansion in 1960).

"The trend," says Morgan, "is towards more gypsum in more places. Fifteen years ago, gypsum board was 1/4" or 3/8" thick. It went to 1/2", then 3/4", and last year we began to make 1" board. It's going into more places in the home, like the basement and the attic and the garage. And systems like the new studless partitions are increasing the use of gypsum board in commercial, industrial, and institutional construction."

Morgan, son of a congregational minister, joined USG as a sales trainee in 1939, after graduating from Carleton College, Northfield, Minn. He became a salesman, then sales manager, district sales manager, division sales

continued on p 73



MORGAN

Austen Field

The legacy of Gil Morris

Los Angeles' building code chief was do-it-yourself slum foe

"There is no permanent solution to our slum problems unless the local desire for self-improvement is generated and cultivated. The helping hand is desirable, but must be used to produce local strength, not create a dependent satellite . . ."

Enunciating that credo before a House subcommittee investigating housing in 1955,



MORRIS

Bob Forester

Gilbert E. Morris, now 60, square-jawed boss of Los Angeles' department of buildings and safety, could point to some impressive proof of it right at home. In just three years, a rehabilitation program led by his department and free of the "helping hand" of federal subsidy had produced 12,000 repaired homes.

Exclaimed the subcommittee chairman, Rep **Albert Rains** (D. Ala.) after a tour: "The best I've seen . . . one of the brightest spots in the country."

This month, winding up 35 years in city government, Morris stands as one of the most eloquent spokesmen for urban self-help in renewal, against subsidies that most cities beg for. His Los Angeles program, grounded on

the principle that "The property owners must pay their own way," stands as an international model. And at home it is still the only one that has produced solid results. While the city's \$315 million Bunker Hill redevelopment project is still bogged down in legal problems, its Skid Row rehabilitation drive has brought demolition of a third of the buildings in it, expenditure of \$4.45 million for new ones, and \$3.5 million for repairs to the balance. Result: tax collections have soared by \$1.14 million a year, with the project only 65% complete. In other areas, six residential slums have been rebuilt, or razed and converted to commercial use.

A registered civil and structural engineer, Morris entered city service shortly after he graduated from the University of California in 1924. In 1941, he became head of the building and safety department. Defeat of a public housing law in 1952 gave him a chance to put his ideas about fighting blight into practice. With other city officials, he began pushing slumlords around with stiff inspections, rigid enforcement—and made them like it. Many found that razing their profitable slums enabled construction of even more profitable buildings in their place.

"We started urban renewal in Los Angeles before the pork-barrel politicians even thought up their schemes of spending the taxpayers'

money," he says with salty vigor.

Morris has held top offices in his profession, is a past president (1953) of the International Conference of Building Officials and American Society of Building Officials, in 1956 received a resolution of appreciation from his city. Today, looking forward to "an extended vacation" with his wife, and consultant work in building, he sees the rehabilitation program as his second-best achievement. The first: raising building engineering and inspection to professional levels, establishment of strict standards to safeguard citizens in an earthquake-prone city. In his view, slum fighting is merely a logical extension of such work:

"The culprits . . . are the cities themselves. Through timidity, lack of moral fortitude, ignorance or lack of foresight, our city governments have failed in their duty to the citizen, namely the protection of his health and property from damage.

"There is only one cure—an alert, aggressive city administration which understands the problem of blight and has the courage to awaken the citizen to his danger. Without such an administration, no amount of federal spending, no amount of tearing down and rebuilding will ever make more than a superficial dent in the progressive disintegration of a city."



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manager, merchandise manager for insulation and hardboard, then general merchandise manager, vice president of merchandising, and then vice president and assistant to the chairman of the board. Last year, he became executive vice president.

Morgan is a tall (6') man with an athletic build (185 lb) and a deep, well modulated voice. He is usually at his desk on the 11th floor of USG's Chicago headquarters at 300 W Adams St from 8:30 to 5:30. He generally works Saturday, too. His reading runs to business magazines and US history. His hobbies take him outdoors to hunt, fish, or play golf ("I'm lucky if I break 100").

Morgan lives in Evanston, with his wife, Vernile, and 17-year old daughter, Heather. He is president of the board of Roycemore School, from which his daughter has just graduated, and a trustee of the Chicago Theology Seminary.

Knodel's career with USG spanned nearly half a century. He joined the company as assistant operating manager in 1902, retires after serving as president for 16 years.

Mortgage bankers pick Tharpe, Stallard, Thompson as heads

For its next president, the 2,100-member Mortgage Bankers Assn has nominated **Robert H. (for Hollis) Tharpe**, president of Tharpe & Brooks, Atlanta. He could succeed **B. B. (Bus) Bass**, president of American Mortgage & Investment Co, Oklahoma City at the MBA convention in Chicago Oct 3-6.

Carlton S. (for Sherman) Stallard, president of the Jersey Mortgage Co, Elizabeth, N.J. has been picked to follow Tharpe as first vice president. Named for second vice president is **Dale M. Thompson**, president of City Bond & Mortgage Co, Kansas City. In the customary MBA succession, both men will step up next year. Georgia-born Tharpe, now 47, grew up in Moultrie, where his father was in the mule and wagon business. He captained the football team at Georgia Tech ('34), won All-America mention as a tackle. He recalls that in Moultrie during the depression anyone in mortgage lending was regarded as "the next best thing to a rattlesnake." But his view changed. He first went into the insurance business in Atlanta with his older brother, Mack. Then, seeing the possibilities in mortgages, Bob Tharpe went to work for Metropolitan Life to get experience. When World War 2 started, he and his brother both joined the Navy, planned to set up their own mortgage and insurance firm when they got out. Bob came out a lieutenant commander, but Mack, an aviator, died in the sinking of the carrier Bismarck Sea. So Tharpe formed the company in 1946 with **J. L. Brooks**, his brother-in-law. Last year, they serviced \$80 million of loans, originated \$14 million. They still stick by their early decision not to branch out beyond mortgages and insurance; they handle no realty sales, subdivision or construction loans. As MBA chief, Tharpe expects his No. 1 job will be to find new sources of mortgage money for the housing industry. His eye is chiefly on pension funds.

Besides mortgages, Tharpe's passion is flying. He got a pilot's license five years ago, now combines business with pleasure by flying his own plane, a Cessna 180, in his work. As MBA chief he expects to log upwards of 150,000 miles. Says Tharpe: "It's a broadening opportunity for a country boy."

Married, Tharpe has two sons, Bobby, a Tech freshman and football candidate, and

Mack II. Tharpe's younger brother, Ernest, a retired Navy captain, has taken charge of T&B's office at Columbus, Ga.

Stallard, 57, has been in the mortgage business since 1927, when he graduated from

Jack Sharin



THARPE

Fabian Bachrach



STALLARD

Brown. Starting as a bookkeeper, he became vice president of Jersey Mortgage in 1937 (when it was reorganized after a Depression checkup), executive vice president in 1948, and president in 1957. Last year, the company serviced \$129 million, originated \$24 million.

His views? "FHA did more for builders and the industry than anything else," says Stallard. He is a booster of minimum-down-payment FHA loans, blames conventional lenders' demands for big down payments for today's splurge of second mortgages.

A round-faced, chubby man ("I'm down to 186 since I've been on a diet") with a resonant speaking voice, Stallard makes a hobby of helping education. He organized and taught a real estate mortgage course at Upsala College and is a trustee of the New Jersey MBA educational foundation.

Mortgage men face a fight to stay in business Stallard predicts. "The boom days are over," says he. "We can't be just mortgage brokers any more. We'll have to take risks." His advice: mortgage men should improve their capital positions, diversify into land development and construction loans.

Ken Taylor



THOMPSON

1948. He also heads Western City Mortgage, San Francisco and finds time to be a trustee of the philharmonic orchestra, art institute, and music conservatory.

OFFICIALS: Mrs. **Helen Holt**, widow of Sen **Rush T. Holt** (D, W.Va.), resigned as assistant commissioner of public institutions for West Virginia to become special assistant to the commissioner for FHA's nursing homes program. She was previously West Virginia's secretary of state, a member of the legislature, and a college teacher.

Two international conferences drew five housing industry figures to Geneva last month. Deputy HHF Administrator **Walter Rosenberry** and Past NAREB (and NAHB) Presi-

dent **Robert P. Gerholz** of Flint, Mich. were housing advisors to the United Nations' International Labor Organization meeting. In Rosenberry's absence, HHF Administrator **Norman Mason** designated URA Commissioner **David M. Walker** as acting deputy—raising speculation that Walker might be in line for a bigger federal job if Mason decides to make a move.

To the Economic Commission for Europe Housing Committee went Asst HHF Administrator **Dan Hamady**, as US delegate. His advisors included **Harry P. Osgood**, renewal staff man for Sears Roebuck, and **Zachary Fisher**, New York mortgage investment man.

California probes deals of 'ten percenters'

continued from p 55

to have adequate capital, keep a specified amount available in cash.

Trust deeds placed in the pool would have to meet specified standards of quality, be paid off by the homebuyer on a monthly basis only and be diversified by area and type of homebuyers.

The pooled deeds would be held by an acceptable custodian, such as a bank.

Promoters could take only expenses out of the pool, must defer taking profits until after the investor has received his promised return.

All advertising by promoters would have to be shown to the state for approval 24 hours before use.

His plan would cut the cost of new homes by \$1,000, Sobieski claimed. President Ray K. Cherry of the Los Angeles home builders disagreed—promptly and publicly. Cherry backed the idea of more state control over security offerings and mortgage companies. But Sobieski's controls will not bring house prices down, Cherry forecast: "Any builder who tried to raise his price to absorb the high discount on second mortgages couldn't sell his houses. The buying public is discriminating. It knows in a moment if a house price is out of line."

• A state Assembly subcommittee began hearings on how to supplement or revise stopgap controls for Ten Percenters voted by the last legislature. The probers spent most of the first-day's session in Los Angeles poking holes in Sobieski's plan. Said Chairman Richard T. Hanna (D, Garden Grove): "I am concerned lest we create a new competitor to primary financing. Secondary money is higher risk but higher yield. To give it a cloak of respectability might put too much money in the hands of marginal and speculative builders rather than good primary financing in the hands of fiscally sound operators." Instead, counseled Hanna, "we should be looking into how to make primary financing more attractive."

As things stand now, cried Hanna, some builders are using price-packing and make-believe payments to get second trust deed loans. He said the system works this way: a man buying a \$20,000 house has only \$2,000 for a down payment. He can get a \$12,000 first mortgage and a \$4,000 second. But this leaves him \$2,000 short. So the price of the house is kited \$2,000. Its appraised value for loan purposes goes up accordingly—if the lender plays the game. Then the buyer is given a receipt saying he paid \$2,000 "outside of escrow."

Financing costs, fees, and charges account for \$5,000 of a house selling for \$20,000 in California, Hanna charged. He suggested a law to force sales contracts to include a run-down of all mortgage fees, discounts, closing costs, and escrows that go with a house.

Add beauty plus more efficient ventilation

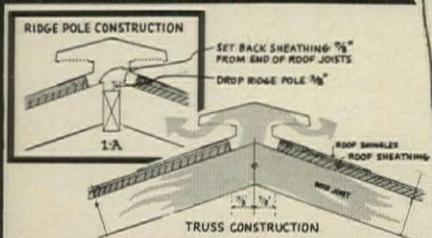
with *Vent-a-Ridge*®



Controls condensation in Winter
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A practical, attractive low-silhouette installation of Vent-A-Ridge is a more-to-show, more-to-sell feature. Thousands of homes have added the saleability of additional comfort and beauty with a Vent-A-Ridge installation . . . at no premium in cost.

CUTS CONSTRUCTION COSTS



● ECONOMY IN CONSTRUCTION

Vent-A-Ridge eliminates cutting and framing openings and ridge shingles. Reduces labor, installs in minutes. Simply leave 1-1/2" air gap at the ridge and cover with Vent-A-Ridge.

● INCREASED VENTILATING CAPACITY

18 sq. inches of net free area per lineal foot increases air circulation and cuts attic temperature. Heat and moisture rise. Vent-A-Ridge provides a natural escape route.

● WEATHER PROTECTION

Exclusive, (Pat. Pend.) 1/8" reversed louvers on the under side of Vent-A-Ridge provide excellent protection from rain and snow. Tested under hurricane conditions. Vent-A-Ridge minimized rain infiltration.

● AVAILABLE IN 8' 9' & 10' LENGTHS

Vent-A-Ridge is available in 8', 9' and 10' lengths and can be compounded to any length to provide the maximum amount of free ventilating area for any attic space.

May issue

The story [H&H, May] about realtor-builder cooperation is the finest material on this subject that I have seen. The examples you give can be emulated in every city—large and small—to the benefit of the homebuying public, if the realtor and the builder will realize their respective responsibilities as an efficient producing and marketing team.

EUGENE CONSER, executive vice president
National Assoc of Real Estate Boards

We're just starting a new subdivision and I'm going to put up some of those "Trees are sacred" signs right away. I have marked at least 15 pages where there are ideas we can use. All our signs at the point of sale need beefing up and we're going to use the ideas you suggested. We're also going to use many of the exterior presentation ideas you showed.

TOM MCGOVERN, builder
San Antonio.

After reading what you said about the importance of salesmen we've put in new methods for keeping our good men, including a new hospitalization plan and profit sharing. We get 40 copies of HOUSE & HOME for all our key people.

DALE BELLAMAH, builder
Albuquerque.

There are dozens of ideas we can put to use right away. I've ordered ten extra copies for our salesmen.

CHARLES CHEEZEM, builder
St Petersburg.

The wonderful presentation of salesmanship and merchandising impressed me so much that I am ordering six extra copies so we have one for each sales office and for our loan, insurance, and management departments. It is chock full of good ideas.

OLIVER M. WALKER, president
Walker & Dunlop Inc,
mortgage bankers, realtors
Washington, DC.

Electric living

The April issue is most outstanding with respect to Medallion Homes and electric living generally. Your readers will get a much clearer picture of the advantages of electric living. We have ordered extra copies for our sales promotion use.

ROBERT McMURRAY, vice president—sales
Public Service Co of Indiana Inc.

Congratulations for your leadership in getting the insulation people, the electric heat manufacturing people, and the serving utilities together in this first step of a long-range program to improve electric home heating in the US.

V.F. MARTIN, residential sales planner
Southern California Edison Co
Los Angeles.

Seattle realtors

I brought my April issue to the office this morning to share with the men in regard to "How the realtor can help builders do a better job of merchandising housing." Your articles are so well written, so pertinent, and they give enough detail so that you thoroughly understand what is going on. All in all, we are deeply grateful to you.

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Preston Cooke & Co, real estate brokers
Columbus, Ohio.

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Princeville, Illinois

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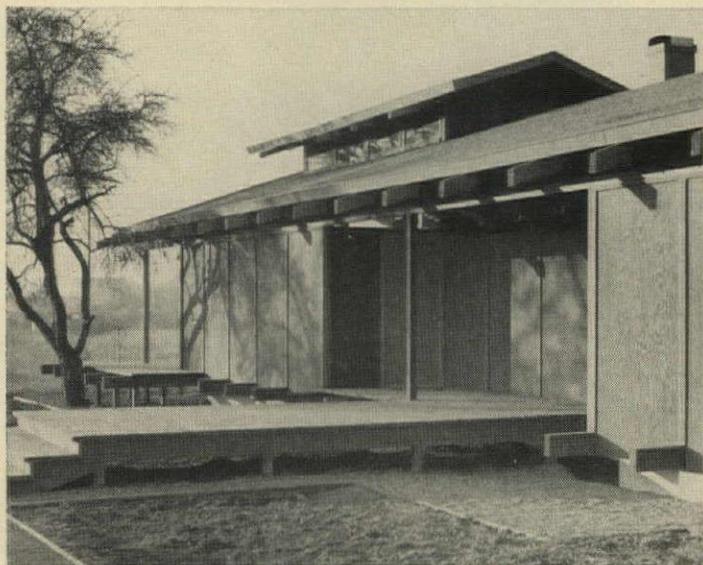
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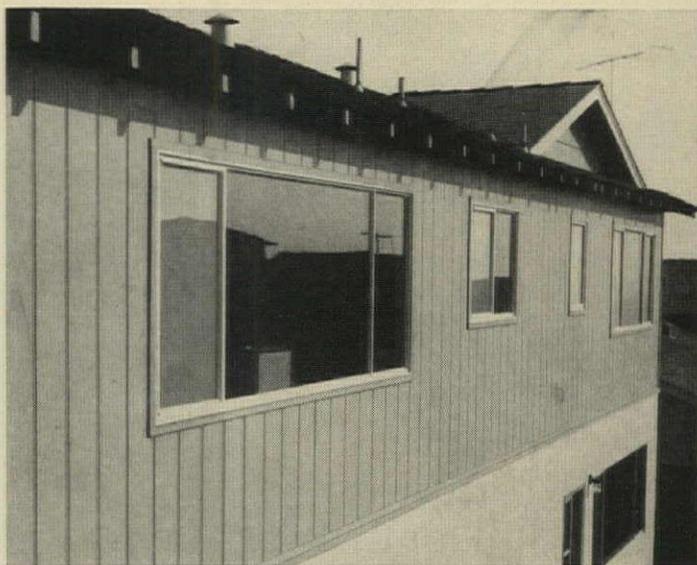
money on siding and sheathing? does both jobs in one step

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



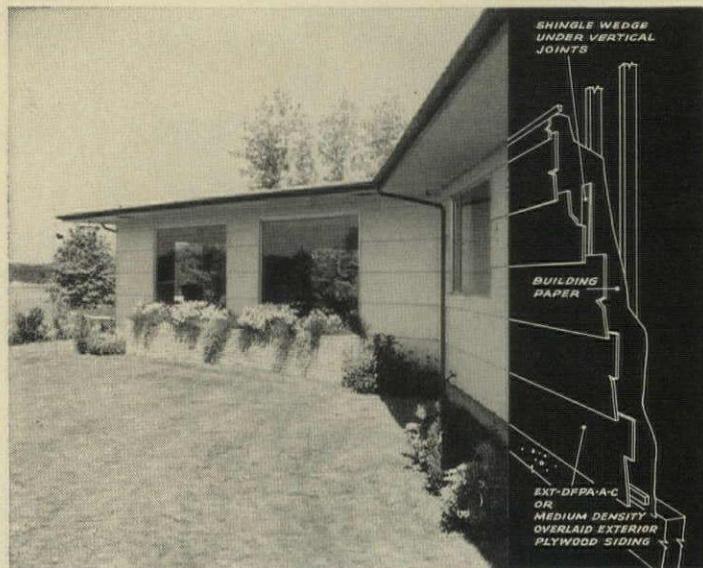
2

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



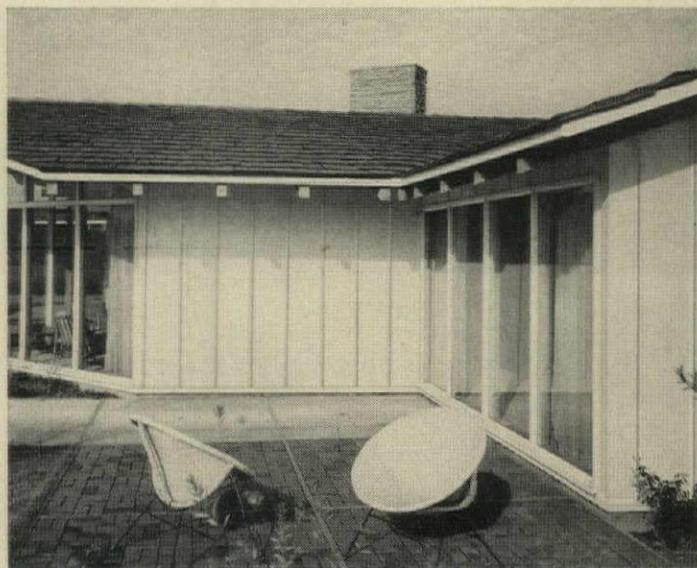
3

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



4

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



5

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

22 WAYS TO BUILD

MORE HOUSE

FOR THE MONEY



Fir plywood sheathing a quality house



6

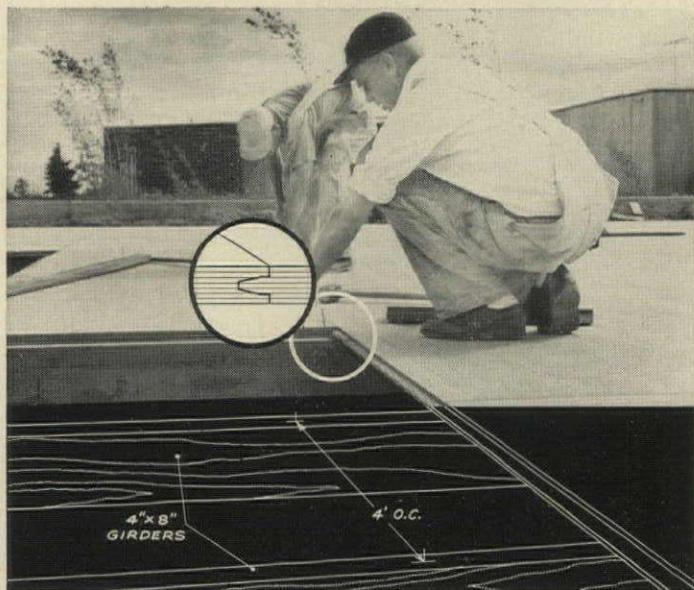
California builder's plywood roof decking makes attractive exposed-beam ceiling

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



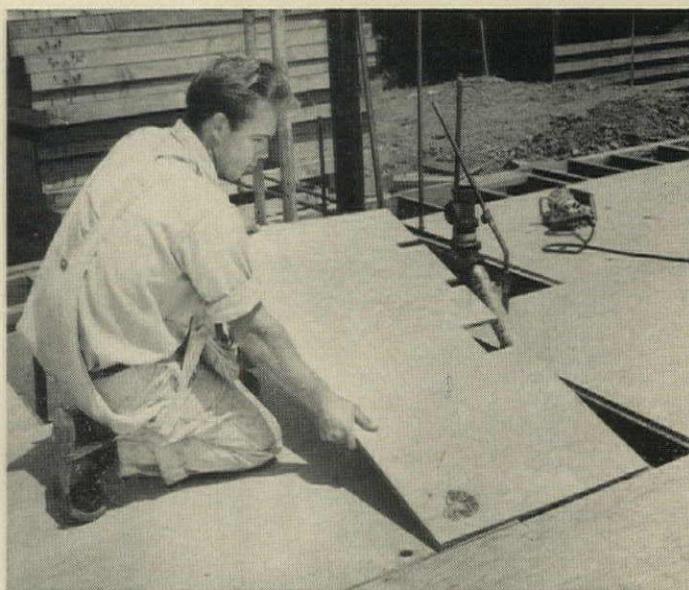
Exposed plywood-and-beam ceilings are popular with home buyers. For more information about fir plywood sheathing and subfloors, write Douglas Fir Plywood Association, Tacoma 2, Washington.

and subflooring help you build at lower in-place cost



7

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



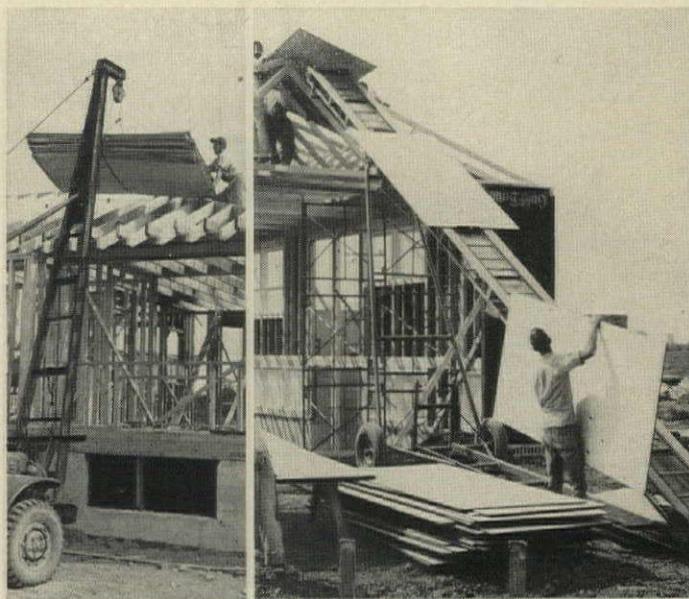
8

Fir plywood subfloors have cut floor installation costs in half for Andy Oddstad, big-volume builder in northern California. Using $\frac{5}{8}$ -inch Ply-Scord[®], one man can install the average floor in one day. It used to take two men the same time to do the job. Waste is negligible and DFPA-inspected PlyScord makes a solid base for finish flooring.



9

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



10

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

22 WAYS TO BUILD

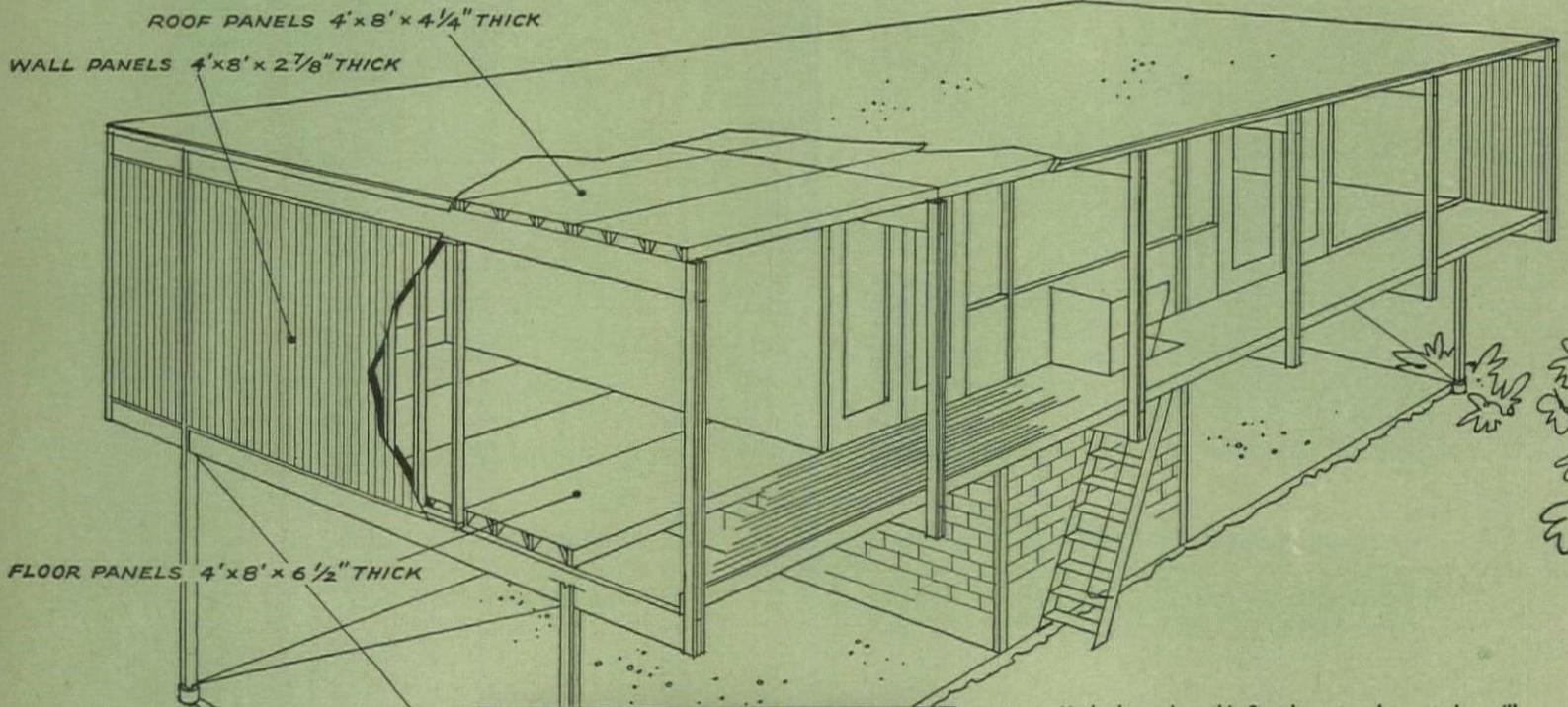
MORE HOUSE

FOR THE MONEY



Plywood components build a better

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



Methods used on this Seattle custom house today will be standard practice on tract houses tomorrow. Floor, walls and roof were quickly erected with stressed skin fir plywood panels on simple post-and-beam supports.



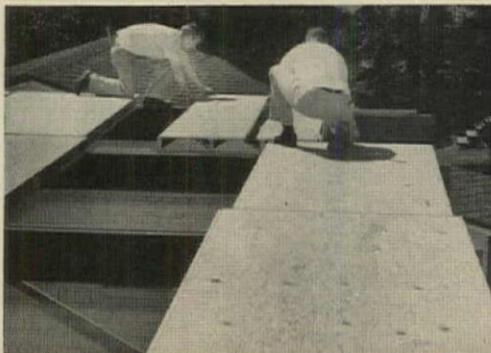
12

Wall components, also plywood panels, took 17 man-hours to install. Outer skins served as siding; inner skins, paneling. Plywood was of two types: vertically grooved Texture One-Eleven®, which was stained; or medium-density overlaid, smoothly painted.



11

Floor panels took only 7½ man-hours to install. All components were 4x8 fir plywood “sandwiches” containing insulation and with lumber framing and stiffeners. Plywood type and lumber dimensions varied with application. Panelbild Systems of Lynnwood, Wash. was fabricator and installer.



13

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

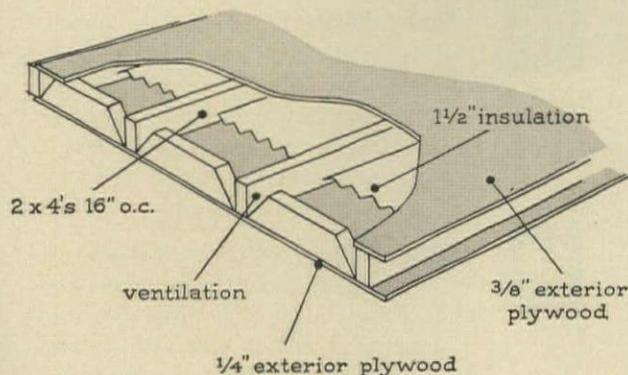
cut on-site labor up to 80%, house with closer cost control

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

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



Cutaway shows construction of stressed skin roof panel at left



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

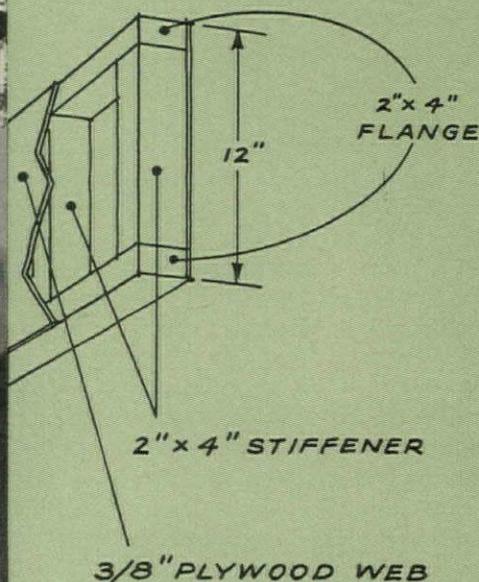


16 Vaulted roofs like the one on the Redi-Gas building in Parkland, Wash. are being adopted by more and more builders for home construction. Components were four-foot-wide arched stressed skin panels of Exterior fir plywood with paper honeycomb core. Lightweight, easily handled, each spans 16 feet. Component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

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



Plywood box beams high in

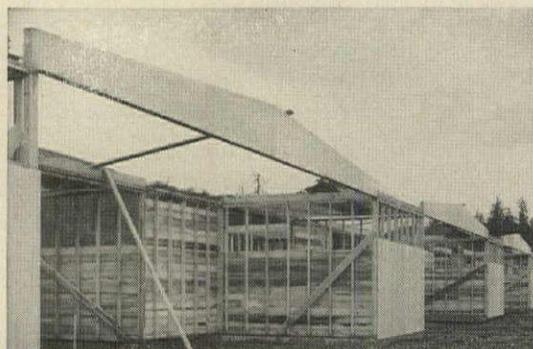


17 Case study house proves plywood beams "best and cheapest way to do the job"

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



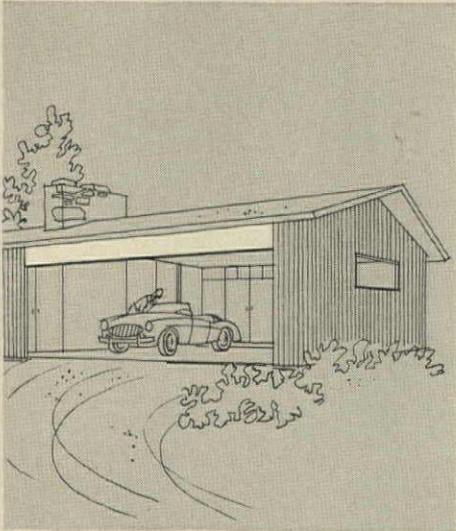
18 Floor supports in custom houses of Robert Kronenberg, Hinsdale, Ill. builder, are fir plywood box beams. He finds them strong, stable, shrink-proof. He gets longer spans than with available lumber beams.



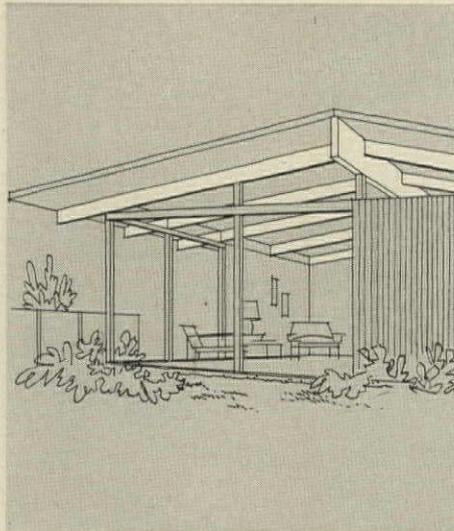
19 Door lintels of these small aircraft hangars in Tacoma, Wash. are peaked fir plywood box beams. Strong, economical beams span 40 ft. and support 375 lbs. per lin. ft. Other logical applications for similar beams: garages, marinas and warehouses.

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

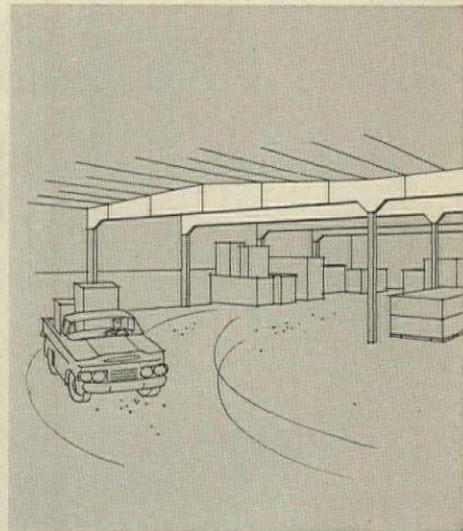
Plywood box beams can be fabricated in any length or shape, for any load or span



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



21 Ridge beams and exposed ceiling beams of fir plywood are smooth and attractive. Long-span beams make sense in home building because they permit maximum design freedom.



22 This warehouse illustrates use of low-cost, strong plywood beams to create a 40' x 80' clear area free of supporting posts or walls. Four peaked beams, spaced 20 ft. o.c., span 40 ft.

INSIST ON DFPA GRADE-TRADEMARKED FIR PLYWOOD

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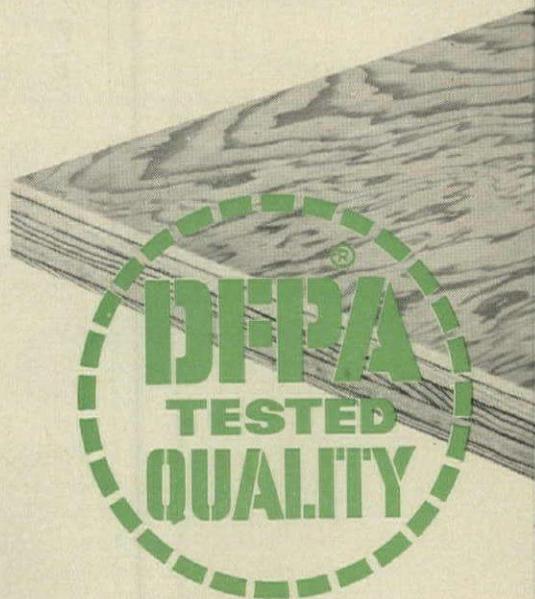
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TACOMA 2, WASHINGTON

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



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

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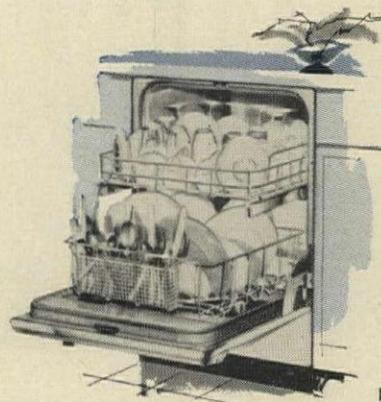
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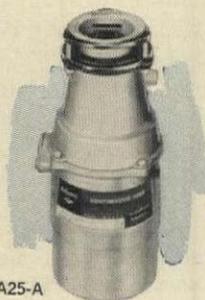


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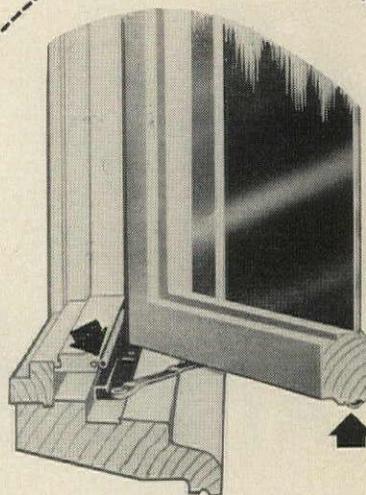
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JULY 1960

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MODERNIZATION

- 98 *America's need for new housing is far too great to meet through new construction alone*
- 101 *The new house sets the pace for modernizing of the old*
- 112 *What you need to know to make money as a one-stop modernizer*
- 123 *Start with good planning and it's easy to keep up to date*
- 126 *How to take advantage of hidden market opportunities in urban renewal*

ROUND TABLE

- 136 *The use of wood in tomorrow's houses*

TECHNOLOGY

- 130 *The world's most advanced all-modular, all-component houses*

MARKET REPORT

- 96 *New Census figures show more housing starts than previously reported*
- 144 *When your houses have enough exciting features today's buyers will queue up for them*

NEW WAYS TO BUILD BETTER

- 183 *Faster, cheaper way to build h-p roofs*
- 195 *What the leaders are doing*
- 207 *New product news*
- 236 *Reviews of technical literature*

NEWS

- More signs appear of cheaper mortgage money*
- Are pay boosts for building labor growing automatic?*
- FHA gets ready to approve individuals as mortgagees*
- 41 *Index to these and other News reports*

DEPARTMENTS

- 74 *Letters to the editor*
- 248 *Advertising index*

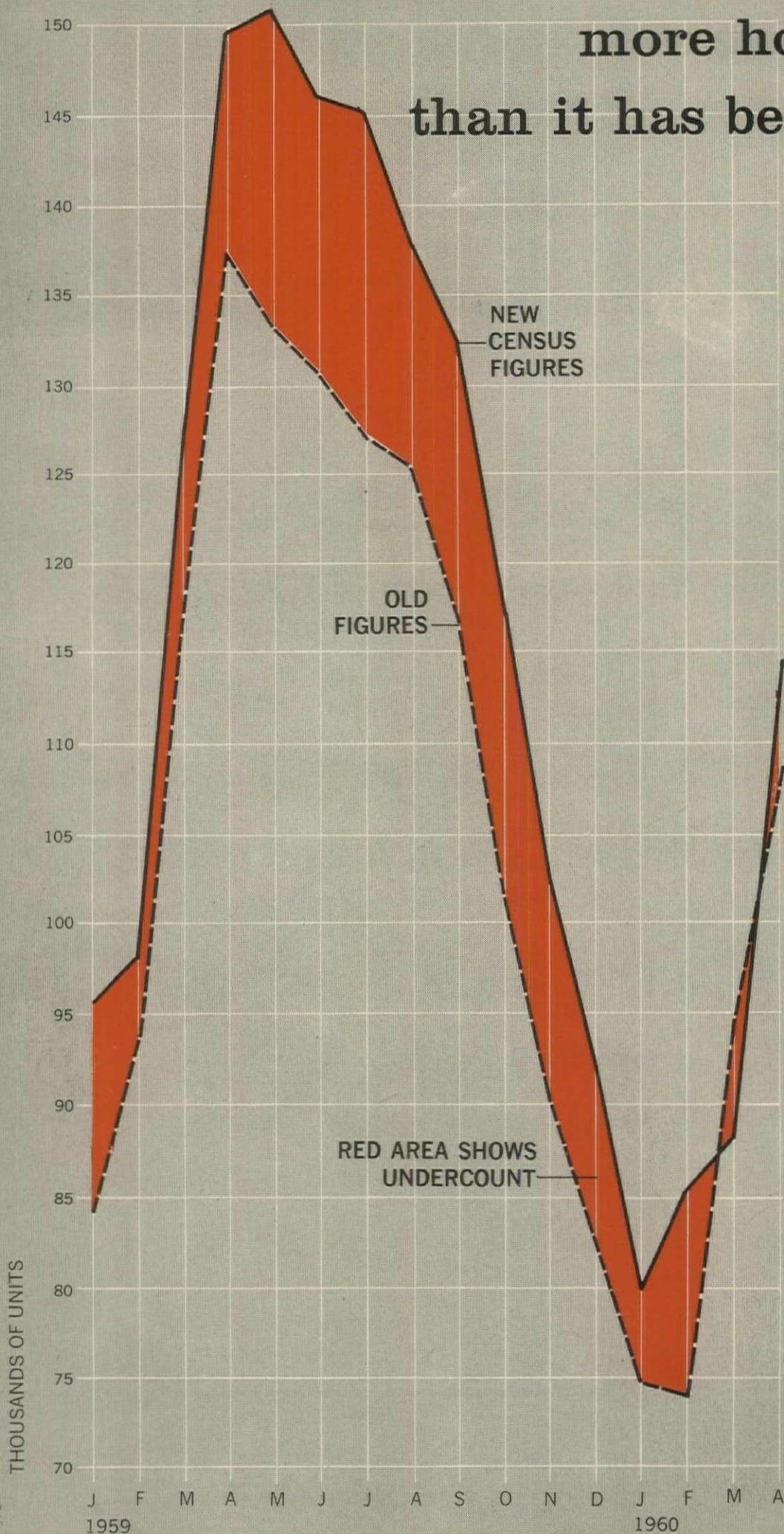
COVER

Design and photograph by White Studio

COMING NEXT MONTH

How to get better land for less and how to use good land better

The US has been building more housing units than it has been counting



Private nonfarm housing starts counted by the old and new systems are shown by this graph. The old system's total for 1959 is 1,342,800 units. The new system—more accurate because it is based on improved statistical techniques—boosts the '59 total to 1,494,500. For the first four months of 1960, the count by the old method is 352,800, the new count 368,900. The new system also raises the totals for public nonfarm starts (not charted) from 25,700 to 36,400 for 1959 and from 8,200 to 8,400 for the first four months of 1960. The new count of farm starts (also not charted) is 22,200 for 1959 and 7,900 for the first four months of 1960.

This important news was revealed by new housing-start figures released last month by the Census Bureau.

The new figures—compared in the chart with the old ones—result from a new counting system started by Census a year ago (see News).

The total undercount in the old figures will never be known. It may have been even greater than the 11.3% average error shown by the chart for private nonfarm starts in 1959. It probably was never less than the 4.6% average error shown for the first four months of 1960.

The new figures for 1960, unlike the old ones, reflect the building slowdown caused by bad weather late this winter. So there was less undercount in the old 1960 figures than in the old 1959 figures.

This year's new figures—based on field observations of actual starts—are immediately sensitive to unpredictable influences like unseasonable weather and materials shortages. So they provide the first accurate month-by-month picture of housing starts.

Not so the new 1959 figures—although they, too, are based on improved statistical techniques. Says Housing Economist Miles L. Colean, chairman of the advisory committee that helped Census revamp the system: "The new '59 figures were necessarily derived after the fact. They give a generally accurate picture for the whole year, but are not reliable on a month-to-month basis. So any comparison by months be-

tween the '59 and '60 new figures is not valid. But whether the new figures are for '59 or '60, they are more accurate than the old ones."

Comments NAHB Economist Nat Rogg, an advisory committee member: "The new statistics don't change the situation, but they do revise our notion of what the situation is."

Says Economist Colean: "The most immediate need now is for revised estimates of dollar volume." His corrected estimate for 1960 nonfarm starts: about \$19¼ billion, up \$2 billion from his former forecast (H&H, Nov '59).

Here, according to Colean, are other ways we need to correct our old ideas of the market:

1. Starts are more concentrated in metropolitan areas

than previously thought. "Last year the old system overlooked 129,700 starts in metropolitan centers but relatively few in small towns," says Colean. One reason: Recently designated metropolitan centers were not included in the old calculations of metropolitan-area starts. The new figures show that the proportion of starts in metropolitan areas rose from 70% in 1959 to 72.5% in the first four months of this year."

2. Single-family starts make up a slightly larger share of all housing

than previously thought. "For 1959, the vast majority of nonfarm starts not counted by the old system—133,800—were single-family homes. So the new figures increase the ratio of single-family starts to all nonfarm starts. And the proportion of 1959 multifamily starts is less in the new count (15.9%) than in the old (16.8%)."

3. FHA and VA financing account for a smaller share of starts

than previously thought. "The combined total of FHA and VA starts—441,700 in 1959—was 32.9% of all starts reported under the old system, 29.6% of starts reported under the new one. In the first four months of 1960, FHA and VA starts accounted for 27.7% of the total.

"Unlike other housing-start figures, FHA and VA totals are based on a unit-by-unit count—not a sampling. The government knows down to the last unit how many houses are started under the two programs."

4. The home-improvement market is smaller

than previously thought. "We can now be fairly sure that a smaller volume of output has been going into the improvement of old houses and a larger volume into new construction. More new light will be shed on this in the next month or two by another major advance in housing statistics—the publication of new estimates for improvement work."



America's need for better housing is far too great to meet through new construction alone

More than a quarter of today's 46 million family-sized dwelling units are substandard. More than half of them are obsolete or obsolescent, built more than 30 years ago, before any of today's better materials, components, and equipment were available.

Nowhere near enough manpower, nowhere near enough materials, and nowhere near enough money is available to replace all these substandard or obsolescent housing units in our generation. All we can hope to achieve is a great increase in home improvement and modernization to make these aging units more livable and more attractive.

Estimates of the cost of bringing this old housing up to today's standards of health and comfort go as high as \$69 billion—and more houses are deteriorating every day to add to the size of the job.

However, our spending for modernization is also increasing. But at a modest rate. In 1956 the HHFA Administrator reported that the US was spending \$10 billion a year on home improvement. By 1959 Housing Economist Miles Colean put the annual figure at \$12 billion—a 20% increase—and the *Saturday Evening Post* noted that estimates “run as high as \$14 billion.” But the higher figures (reckonings by some “experts” go all the way to \$20 billion) include expenditures for normal repainting and other maintenance and repair work that is not part of modernization, alterations, and additions. All figures on the volume of modernization—whether high or low—are at best only estimates, and all of them now need some reduction as a result of the Census Bureau's revelation that the US has been undercounting its new housing starts (*see p 96*).

Says Robert Lear, chairman of the Producers' Council distribution study committee: “The news that there has been more new housing built than the government previously reported means that

OLD NEIGHBORHOOD in Pittsburgh is typical of one of housing's biggest problems. Right now, about 20% of Pittsburgh's half million houses are substandard, by 1980 28% may be unlivable, according to studies made by the Allegheny Conference on Community Development. But Pittsburgh's big modernization effort, ACTION-Housing Inc, now three years old, hopes to generate enough interest among housing professionals to assure that city renewal programs, both public and private, can eliminate city blight in 20 years.

continued

a vast amount of building products and equipment which we thought was being used in modernization work was, in fact, actually going into new construction. So we must cut down all our old estimates of the size of the modernization market."

But no matter how big—or how small—the experts estimate today's market to be, they all agree that tomorrow's market is *potentially* much bigger. Economist Colean, for example, believes there is "a growth potential of 40% to 50% in the next decade." Taking Colean's estimate of \$12 billion as a base, this calculation sets up a modernization target of \$18 billion per year.

Here are five goals to help the housing industry reach tomorrow's much bigger modernization market:

1. Better service to the homeowner public.

Today a new kind of businessman, the one-stop modernizer, is offering homeowners modernization service that includes materials, installation, and financing all in a single package at a single firm price (*see p 113* for details).

For convenience and efficiency new one-stop modernization is not to be compared with a conventional set-up where the homeowner may have to deal with 10 or 15 different retailers and subcontractors on a single modernization job.

2. Better selling and promotion.

Better selling can overcome the public's exaggerated idea of the cost of home improvement and better selling can help homeowners visualize what modernization can do for their homes. Today's new one-stop modernizers are adopting many of homebuilding's merchandising methods and the results are often as spectacular as in the

new-house market (*see p 121* for details).

Successful modernizers avoid high-pressure tactics and never cut prices to meet competition. They advertise, but they count heavily on referrals from old customers. One California remodeler reports his "hottest market is the seasoned tract, vintage 1945-50."

3. Better control over the gyps.

FHA vigilance and vigorous prosecution of violators have greatly reduced frauds in FHA Title I loans. Other areas of activity by suede-shoe boys are being policed by Better Business Bureaus, local newspapers, and industry groups. Principal weapon: publicize the gyp tricks and educate the public to do business only with reputable local firms. But much still needs doing to create more public confidence in home improvement.

in cities from coast to coast. In most places complaints are increasing this year. Some involve fraud, but most are simply sharp practices—legal but unethical. The two most prevalent: 1) "bait" advertising that features low prices without the intent to sell at the advertised price; 2) deceptive advertising that creates the impression that the prices advertised apply to the illustrations when, in fact, they do not. Other complaints include misrepresentation, unreasonably high prices, undue work delays, failure to honor guarantees, misuse of completion figures, and failure to pay suppliers—leaving the homeowner with mechanics' liens on his property.

In 1959—as in every year since 1954—home improvement led all other subject classifications in the number of complaints and inquiries (219,470) received by Better Business Bureaus

4. Better organization within the industry.

Home improvement needs the support of a strong national association. A strong association offers: 1) the most effective means for curbing the unethical activities of the marginal operator, and 2) one of the best means for spreading much-needed management know-how.

provement Council, which now has about 1,700 members; NAHB, which accepts modernizers as regular or associate members in about 50 chapters. In addition, there are strong local groups like the Metropolitan Association of General Improvement Contractors (with more than 50 members in Washington, D.C.) and the American Building Contractors Assn (about 100 modernizers in Southern California).

Home improvement has at least three starts on a strong national organization: NERSICA, which has been established for many years; Home Im-

5. Better appreciation of the opportunities in private urban renewal.

As the example cited on p 126 show, some of the most profitable possibilities open to the housing industry today lie in buying and rehabilitating slum and near-slum housing. Only a limited

amount of capital is required to start. Private urban renewal not only offers rewards to remodelers but holds out the promise of raising housing standards where they are lowest.

So this issue of HOUSE & HOME is researched, written, illustrated, and edited to give the architects, builders, dealers, contractors, mortgage lenders, appraisers, and realtors who make up the housing industry a better understanding of the needs and opportunities in today's home improvement market.



Jerome Drown

The new house sets the pace for modernizing the old

Model houses are a showcase for new ideas, products, and materials. To the 40 million people who visit them yearly, they are an education in what new-house living can be like.

And all the ideas and products that make a new house new also set standards for the modernization of old houses and old apartments. You can see this effect of the new house on the old by the way even apartment dwellers want the newest kitchens, with disposers and built-in ovens and ranges (for an example, see *pages 127-129*).

For a review of some of today's most popular new-house ideas and examples of how they can be used to make old homes and apartments like new, see the following pages.

These ideas make a new house different
from an old house—

and send many a model-house visitor home

to modernize



LIVING ROOM FIREPLACE

Julius Shulman

1



CONVENIENT NEW LAUNDRY

2



Jack Swearingen

3

FAMILY ROOM DINING

- 1: Carl Maston, Architect
- 2: Charles Jennings, Architect
Fox & Jacobs Construction Co
- 3: Charles Goldsmith, Architect
Rutenberg Construction Co
- 4: Dennis & Slavsky, Architects
- 5: Donald Panushka, Architect
- 6: Dinger & Pedersen, Architects
- 7: Keyes, Lethbridge & Condon, Architects
Bennett Construction Co
- 8: Charles Jennings, Architect
Fox & Jacobs Construction Co



SCREENED OUTDOOR LIVING

R. Wenkam

4



AMPLE STORAGE

Douglas M. Simmonds

5



HIGH-COMFORT STANDARDS



MODERN KITCHENS

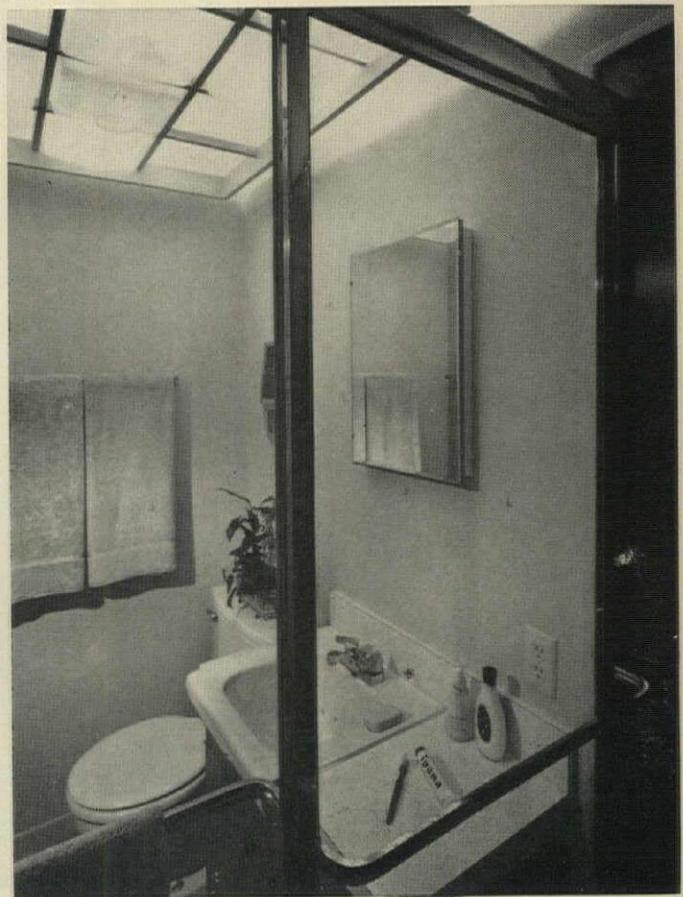
6



STUDY, DEN, OR EXTRA BEDROOM

Robert C. Lauffman

7



SECOND OR THIRD BATH

8

BUT

if you want to make an old house like a new one

DON'T

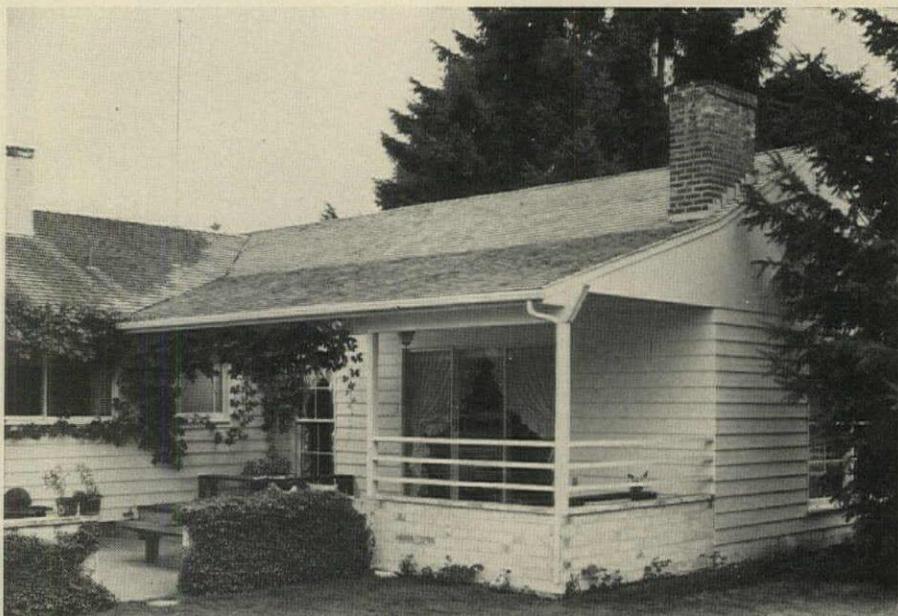
rip it apart and rebuild



DO

add the new on top of the old

Photos: Richards Studio



In this example of the add-on principle, a whole new wing was built as an extension of the existing walls and roof, to give this small house a third bedroom, a second bath, and a lot more storage, as well as a covered terrace off the new bedroom (photo, right). The new floor framing is post-and-girder, with a fir plywood subfloor. The roof framing is 2x4s, 2' oc, with 1/2" plywood sheathing. The wall framing is conventional. Architect: Donald Burr; Builder: Winston McCall. In Tacoma.



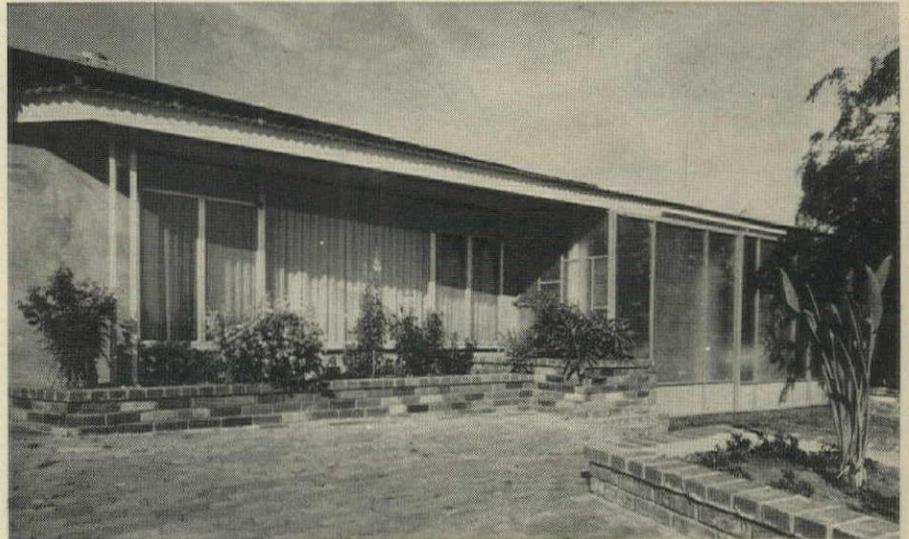
Add a new entrance. Two gracefully curving stairs now lead up to the entrance porch of this New Orleans house; two new slim columns support the existing roof. Windows and doors were left in place, but neat louvered shutters, traditional in New Orleans, replace old sagging awnings for sun protection. New brick veneer wall below the porch gives new basement apartment a pleasant entrance. Other exterior additions: three-car carport, screened patio, complete repainting. This house, done under the LIFE Modernized Model House Program, was also modernized from basement to attic inside. Builder: Southern Hardware & Lumber Co.



You can easily add on to the outside



Add enclosed outdoor living. In this case, a plastic roof was added, to cover the outdoor living area. New roof line extended the length of the house to remove the old roof line's jagged look and shade the large windows. Brick planter also extends the length of the house to soften the appearance of the stucco finish. New outdoor living room has sliding glass doors and (not in photo), barbecue fireplace.

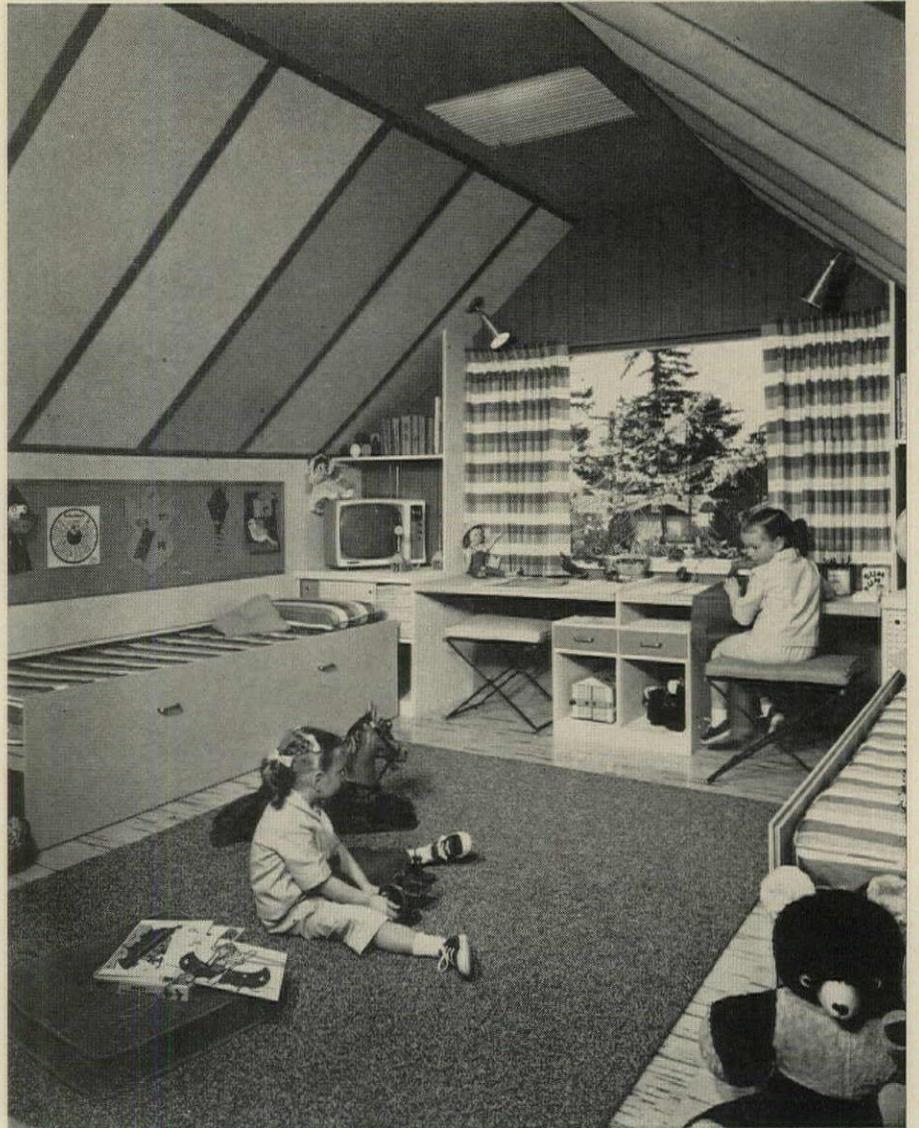


Add on a garage, especially when it can be a two-car garage, like this. With the garage set away from the house, the space between is closed in, to become an up-north Florida room. This is part of a modernization program that refinished the entire house, inside and out, in the LIFE Modernized Model House Program. Cost of garage: \$1,838; of the Florida room (with electric heat): \$4,500. Builder: Mt Clemens Construction Co.



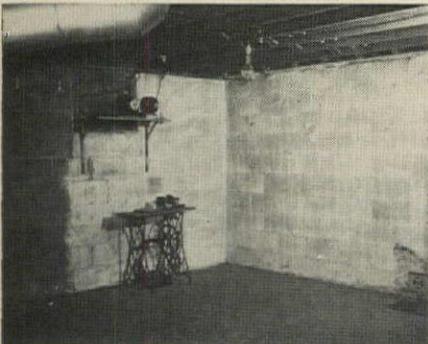


Add bedrooms in the attic. The attic shown here was turned into a bedroom and a den-sewing room, with plenty of storage between them. The attic was unfinished, but already insulated. The roof ridge was adopted as a lighting trough; plastic sheets cover the light bulbs and cut the glare. New wider window replaced the existing one. Battens to cover joints of painted plywood sheets give finished room a panelized look. Architect: Walter Widmeyer.



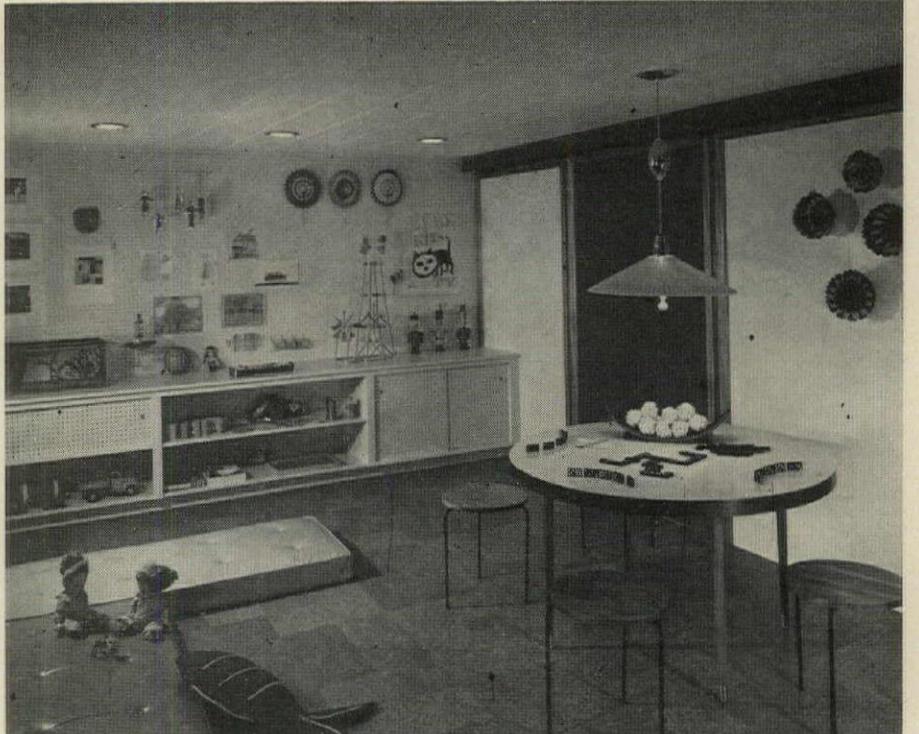
You can add new rooms in empty space

Portraiture Studio



Add a playroom in the basement. In this basement, the ceiling was finished with acoustical tile, the floor with asphalt tile. The walls were furred out, and the end wall finished with perforated hardboard, the side wall with panels of plastic laminate (except for the center panel in the photo, which is a blackboard). The 13' length of cabinets and shelves contains plenty of storage space for toys and games and hobbies. This is an aboveground basement, so the existing window was filled in, and the aboveground side of the room (out of photo, left) was made into a window wall. The heating is now supplied by a baseboard radiator that runs the length of the window wall.

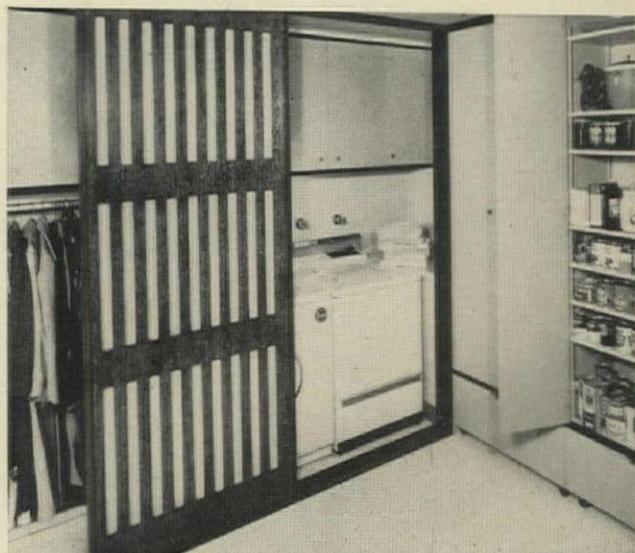
Hedrich Blessing, McCalls





Photos: John Bickel

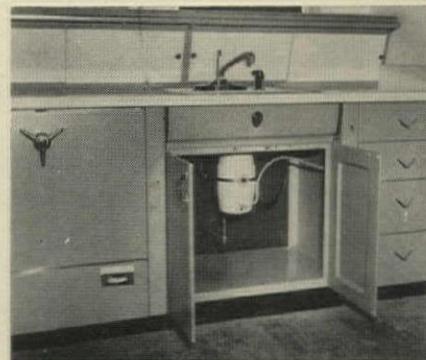
Add two small rooms one to another to get one big kitchen. The small, crowded kitchen and dining room in this case were combined to make a big living-kitchen. The wall between the two small rooms was nonstructural, so it could be removed. Slatted sliding doors were set across the far end of the new room; behind them is storage and a laundry area. There is plenty of space in the center of the room for an island cooking unit and family dining. The kitchen also got all new equipment and cabinets. Architect: Allan Liddle.

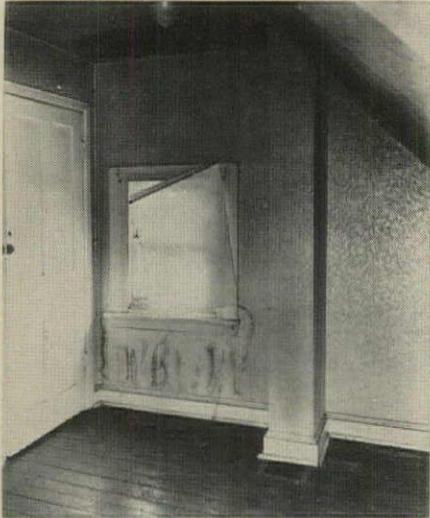


You can turn old kitchens into new rooms



Add new equipment. This old kitchen was modernized by replacing the old equipment with new. The vintage 1925 sink was replaced by a built-in sink and cabinet, complete with garbage disposer. The new sink has a single-lever faucet. The new equipment also includes a built-in dishwasher, undercounter cabinets, and low storage between the counter and the window sill.





Add a second bath. This second bath was added to a house in Philadelphia that was modernized in LIFE's Modernized Model Home program. The bath was added at the end of an upstairs hall. It includes a new shower as well as a new lavatory and toilet. The shower was put in a former closet (see photo above), which had been refinished with ceramic tile. A new shower door was set into the existing door jamb. A new partition closed off the undereaves space. Modernizer: Walter Ford.



You can build in better baths

John Hartley



Add luxury to an existing bath. This bath, in a North Hollywood apartment, was turned into a glamorous room by some very simple changes. A new lavatory was installed in a vanity counter. The counter, faced with white unglazed ceramic tile, has a mirror its full length and storage cabinets below. The lighting soffit over the counter runs the length of the room. Architect: Lucille Raport.





Add an entrance closet. The large staircase in this Massachusetts house was closed in so a good-sized hall closet could be built in next to it and near to the entrance. Closing in the stair made a new handrail a necessity so it was made as simple as possible, in keeping with the rest of the modernization. Architect: Frederick Bruck.

Add a linen closet. The one in the photo, right, is part of an addition of an entire new wing (see page 104). Located off a bath, it combines linen storage with dressing room storage. Built-in drawers are fir plywood, covered with high-gloss enamel.



Richards Studios

You can build in better amenities

Lisanti, American Home



Add a modern fireplace. In the case shown here, it was easy; the existing fireplace was left intact and painted to match the walls. A new mantel was added, at a lower height. The surrounding walls were furred, plastered, and then wallpapered in a light colored paper. Architect: Frederick Bruck.





John E. Kuhlman

Add a large dining room. To turn this high-ceilinged second living room into a dining room, the mantel was stripped away. An opening was cut through the fireplace to make a passthrough to the kitchen. (The flue and its brick casing were left and covered.) Also added: dropped ceiling, new paneling over old walls. Modernizer: Walter Ford.



John E. Kuhlman

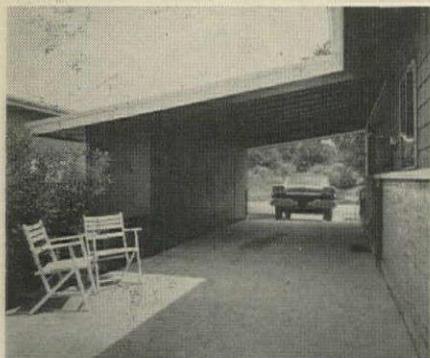


Add a large living room. This one in Pennsylvania is big enough to have a dining area at one end (photo, right). To make the room big enough, a nonstructural archway was removed and a door closed up. With redecoration—new wallpaper, repainted trim, and refinished floors—the new living-dining room was complete.

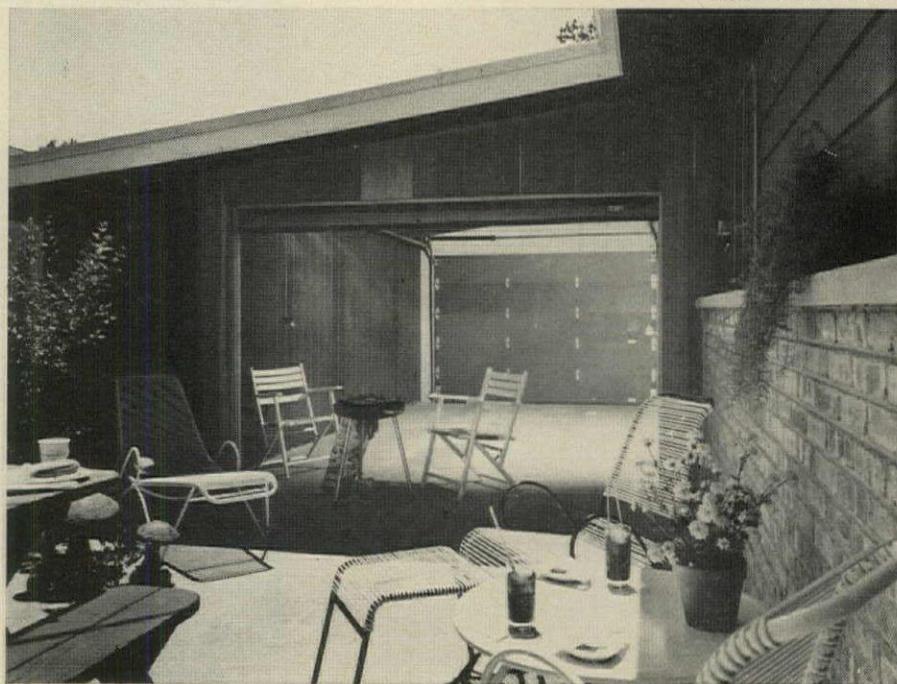


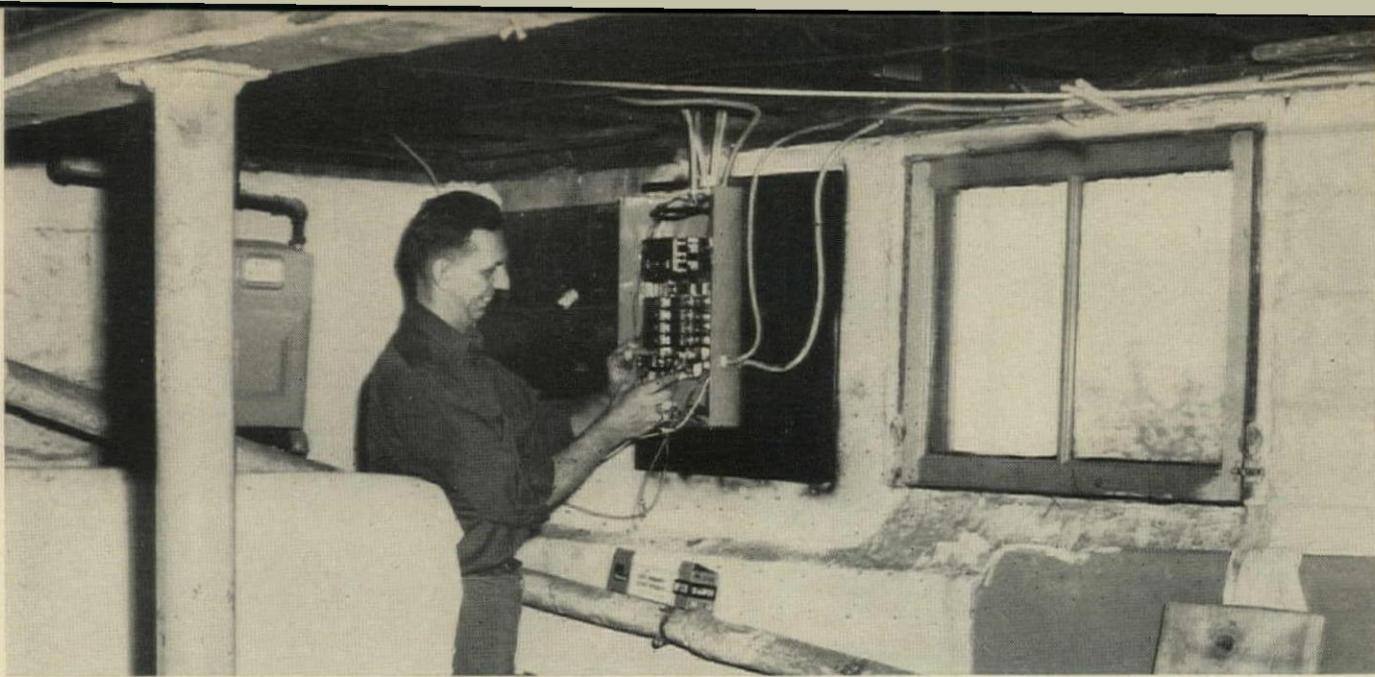
You can make better use of old space

Photos: Kranz Studios



Add a double-duty garage. Overhead doors installed at both ends of the carport above turned it into a combined garage-playroom. With the street-side door closed, the rear terrace is completely private. With the door on the terrace side closed too, the garage can be used as a rainy-day playroom. The only changes required: Lintels were added above each door, the walls were framed out top and sides to form the header and jambs for the doors, and new siding was applied to match the existing siding.

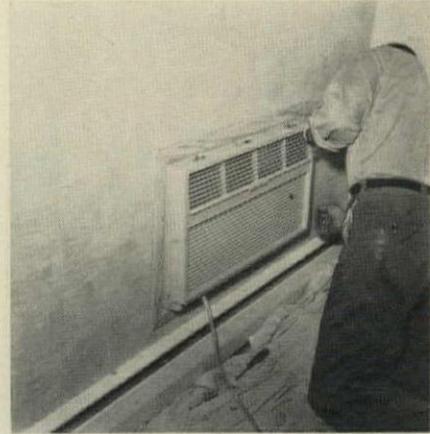




Add more wiring. With all of today's new kitchen appliances, plus all of the other things like air-conditioning and television and home workshops (with their electric tools and small motors), there is no such thing as an old house with

adequate wiring. The best of new houses have 100-amp service, with No. 12 conductors. This is a minimum standard for adding hidden values to old houses. Even more power will be needed if the house is to be all-electric.

Photos: Ross

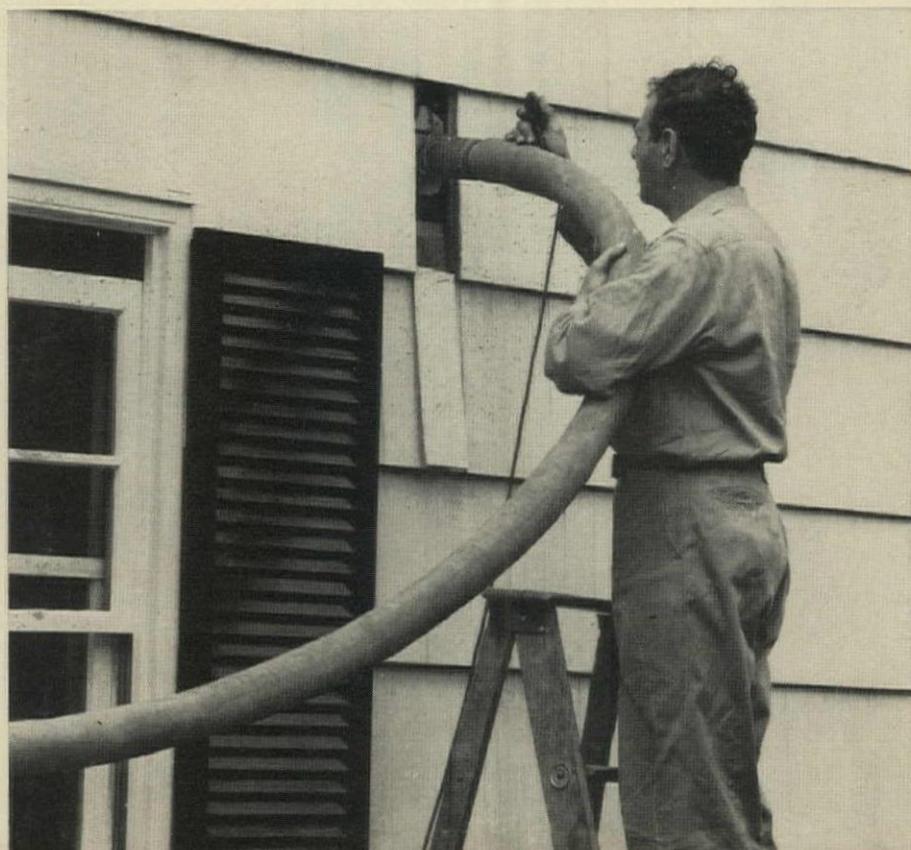


Add air conditioning. One easy way to do this is with room air conditioners. The photos above show three steps in the simple process. Left: the interior drywall is cut out and a matching cut (not shown) is made on the exterior.

Center: the new opening is framed with a steel casing. Right: the air conditioner is set in place and the surrounding joint sealed with a molding, inside and out. If the house has warm-air heat, cooling may be added at the furnace.

You can raise the comfort standard

Add adequate insulation. Almost no old houses have any insulation, and what they might have is far below today's comfort standards (see H&H, Apr). Insulation can be added to attics in batts, rolls, or as loose fill. But about the only way to cut heat loss through the walls is to make cuts between studs in the siding, and blow in loose fill. /END





BEFORE-AND-AFTER HALVES show dramatic change in house modernized by Wolf's Supply Co, York, Pa under LIFE's Modernized Model Home program.

Modernizing houses is one of the fastest ways to go broke.

It is also one of the best ways to make money.

The difference is management.

Here, the country's top modernizers tell you

What you need to know to make money as a one-stop modernizer

A new kind of housing-industry professional—the one-stop modernizer—is now doing business from coast to coast.

New firms—set up to handle every step in modernizing a house—are offering homeowners a service unavailable only a few years ago, when the modernization field was monopolized by specialty contractors, odd-job men, and, unfortunately, the suede-shoe boys.

Today, the potential of one-stop modernizing is enormous. In six and a half years, Herbert Richheimer has built a business that last year grossed \$4 million in four east coast markets. Charles Abrams, who started in New York's Westchester County only four years ago, last year grossed \$1 million. Los Angeles' biggest (\$1½ million gross), Modernizer Harold Hammerman predicts: "There may be no limit to how big a modernizer can get. Certainly there is no limit to the market."

And—since this part of the housing industry is so new—there is plenty of room for newcomers.

The logical candidates to enter the modernizing business are men who are already in the housing industry

If you are a lumber dealer, you are already involved in modernization, if only because you supply the materials. As an established businessman, you have the community's confidence (important in a field loaded with fly-by-nights). With your capital assets, you are in a fine position to work with local lenders to get customer financing.

If you are a realtor, and especially if you handle trade-ins, you have a ready-made supply of work. So it may make great sense for you to set up a subsidiary to handle one-stop modernization.

If you are a sub-contractor—in carpentry, plumbing, heating, air conditioning or electrical work—you are probably already doing some modernization, and it should be reasonably easy for you to expand and offer one-stop service.

If you are a builder, and again particularly if you take trade-ins, one-stop modernization is a natural extension of your business. It can fit easily into your purchasing, subcontracting sales, and accounting pattern.

On the next ten pages you will find the basic trade secrets of managing a one-stop modernizing business—a dozen rules derived from the experience of the country's most successful modernizers.

"Pricing is the key to success in modernizing"

Rule 1

Establish a price for every element on any possible job

"A price book with a detailed breakdown of prices is essential to any successful modernizing business," says highly successful Modernizer Charles Abrams of White Plains, N.Y.

"Every year," Abrams estimates, "well over half the firms in the home modernizing field go broke. Most of them fail because they don't know what their costs are so they don't know how much to charge for their work."

The highly successful firms like Abrams, Richheimer, and Zane Construction in Baltimore—who have figured their prices to the penny—report that their costs for new additions to houses average between \$17 and \$22 a sq ft, exclusive of plumbing. (These sq ft averages are not used to figure a job but serve as "rule of thumb" checks to be sure total job prices are within a reasonable range.)

Aside from eliminating the hazards of rough estimating, a complete price schedule has two other important functions:

1. It is a very effective sales tool. In a field loaded with "gyps" and, therefore, with wary prospects, the salesman who can show a prospect, on the spot, how the price is figured has a big advantage (for more details, see Rule 7, p 121.)

2. It provides a permanent and detailed cost record on every job. A salesman working from his price book can use form sheets that list every element involved. These records can then be used to spot changes in unit costs (see below), explain the job to lenders and handle any complaints from the homeowner.

The price schedule should include not just labor and materials, but profit, overhead, and commissions

The unit prices the top modernizers show their prospects are the total prices that will be charged to the customer—they include all commissions, overhead, and profit. (See box, far right.)

This makes it easier for the salesman to figure his price, and lets him do it in front of the customer without letting the customer know just how much is overhead, commission, and profit.

To make a normal 5% profit, top modernizers report their price must include a 30% gross profit (this means a 43% markup on labor and materials). The gross profit includes the salesman's commission (8%), other sales costs (5%), overhead (12%) and net profit (5%).

Any prospective modernizer with enough building experience to know labor costs can develop a price schedule by working out his labor and materials costs and adding the mark-up. But you can also get the benefit of the leading modernizers' experience in pricing at an unusual new school (see box below).

The price schedule should be broken down in great detail so the salesman can figure any job

The price schedules of the top modernizers give prices in terms of small elements—per sq ft of partition, per linear foot of wall, per lighting fixture (see box, right). This means that the salesman can build up the total price, step by step, no matter what the job requires (and, in modernization, no two jobs are alike).

For example: a salesman establishing a price for converting a big closet into an extra bath might work with these cost elements:

1. Demolition (removal of shelves, moldings, old light fixtures);
2. Per unit prices for opening the exterior wall for a window, and for the casement window, interior door, medicine cabinet, fluorescent lighting fixtures, tub and hardware, toilet and hardware, basins and hardware, holders for soap, toothbrushes, tumbler, and paper;
3. Per sq ft prices for ceramic wall and floor tile and painting;

You can get help in setting up a price schedule from this unique new school

Starting this November, two of the country's top modernizers, Charles Abrams and Herbert Richheimer, will conduct a school to teach the pricing and operating methods they use.

Name of the school: Richheimer Modernizing Systems Inc.

Tuition: \$2,000.

Despite the high fee, 150 builders and lumber dealers have already signed up, Richheimer says. Another 250 dealers, builders and contractors are reported to be interested. (Abrams has, for some time, been selling a management manual for \$500.)

For this fee, a subscriber gets three weeks in-

tensive training in estimating, unit pricing, cost control, selling techniques, scheduling, purchasing, subcontracting, contracts, financing, and record keeping. Training will be both in-class and on the job (at Richheimer or Abrams projects).

Each person attending the school (to be held in New York City) will get a complete price schedule, plus management, promotion, financing, and advertising manuals. And "graduates" will be offered continuing advertising and merchandising surveys and consulting services.

In time, RMS plans to franchise trainees to sell manuals and set up other training schools.

4. Per lineal foot prices for a new partition; plus per lineal foot prices for new waste line, vent stack, and water supply lines.

The price schedule must be revised continuously to reflect changes in costs and methods

Your costs can vary for three reasons:

1. Labor rates change. Most labor on modernization jobs is subcontracted (see Rule 2), and when your subcontractor has to pay more for his labor he will pass this increase on to you.

2. Materials costs change. Some materials change in price continuously, and—to avoid the necessity of constantly changing your unit prices—you should allow some cushion in your prices to take up small increases. But even for more stable materials you will still have to revise your prices every few months.

3. Construction techniques improve. When you or your subcontractors find better ways to do jobs, the savings in labor cost should be passed on to you and to the customer through lower prices. A good job superintendent will always be able to tell you how many man-hours a sub took to do a particular job. This is your management control.

Most of the top modernizers use a relatively simple system to check on their unit prices: as mentioned above, their unit prices are set at a level which should give a 30% gross profit. When a salesman comes in with an order, the cost department figures actual material costs, gets a price for labor from the subcontractor. If the actual gross profit on the job comes out between 28% and 32%, the unit prices quoted the prospect are assumed to be in line. But if the actual gross profit is outside these limits, either the salesman made a mistake in quoting on the job or one or more unit prices are out of line. The cost department then finds out which unit prices are out of line and adjusts them. (What happens to the contract with the customer when prices are out of line? Richheimer refunds to the customer any excess over a 32% gross profit. If the gross profit figures to less than 28%, the salesman must take a cut in commission or renegotiate the contract with the customer.)

And when you have a price schedule, stick with it—don't try to match a competitor's bid

Says Los Angeles Modernizer Harold Hammerman: "Bid a job on the basis of your price schedule—not your competitor's bid. I've seen a lot of firms go broke because they cut their profit to beat a competitor's bid. They take jobs below cost because they think it's important to keep busy. You can't stay in business long this way."

Says Baltimore Modernizer Joel Zenitz: "You can't bid against either the dishonest operator or the mechanic because their prices are impossibly low. The mechanic's bid is low because he works for less than wages and often doesn't know what his other costs are. The gyp's price is almost always low because he doesn't intend to finish the job."

The consensus of the experts: Don't worry if your prices seem high. As your reputation for reliability and good work grows, you will get the business. Abrams sums up: "Remember that the guy with too-low prices will not be in business in a year or so—and you will be. People don't mind paying for a good modernizing job. They do mind paying for a bad job, even if they get it at a bargain price."

Here are typical prices from schedules used by leading one-stop modernizers

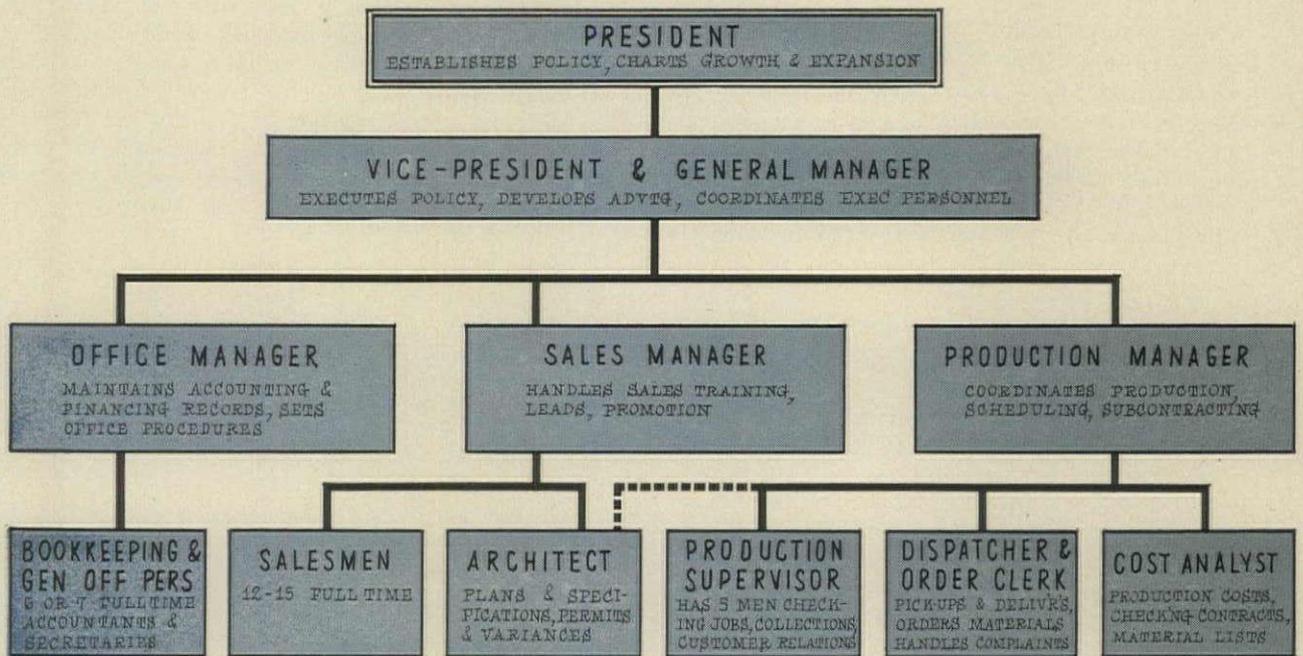
This list of unit prices covers less than 5% of the items a complete schedule should include. Each price covers costs for material, labor, travel time, sales, commissions, overhead, profit, and insurance. Because costs vary from city to city and from time to time, these sample prices (obtained from a number of different sources) should not be interpreted as recommended prices.

Excavation under house; per cu yd.....	\$ 8.00
Poured concrete footing: 12" thick x 30" deep; per lin ft.....	4.20
8" block wall: stucco exterior; per sq ft.....	1.35
4" concrete slab, no reinforcing; per sq ft.....	.85
New electric entry: 120/240v, 100-amp main switch, meter board.....	185.00
Convenience outlets; per outlet.....	8.50
New floor: 2x8 joists, 1x6 subfloor; per sq ft.....	1.50
Exterior walls: frame, sheathing, wood siding, dry-wall; per sq ft.....	2.50
Exterior walls: frame, sheathing, asbestos siding; per sq ft.....	2.20
Brick work: 9" wall w/backup; per sq ft.....	4.30
Partitions: 8', finished drywall 2 sides; per lin ft.....	10.50
Ceiling: rock lath and plaster; per sq yd.....	5.00
Partition (one side): rock lath and plaster; per sq yd.....	4.00
Patching plaster; holes, cracks, calcining; per room.....	60.00
Brick up 3'x4' window opening, plaster interior.....	90.00
Passage door in new partitions: w/jamb, trim, hdwr.....	54.00
Front entrance door: w/frame, trim, brass hdwr.....	185.00
Single double-hung sash & frame: 2½x4' opening, w/hdwr.....	75.00
Bathroom casement window, in existing opening.....	42.00
French door: w/trim, hdwr, in existing opening.....	58.00
Plywood underlay for tile floor; per sq ft.....	.40
¼" asphalt tile; per sq ft.....	.50
⅛" vinyl tile; per sq ft.....	1.45
Hardwood floors, finished; per sq ft.....	1.05
Acoustical ceiling tile; per sq ft.....	.95
Colonial open string stairs: hardwood, complete, in existing well.....	580.00
Knotty pine paneling, unpainted; per sq ft.....	1.30
Plywood paneling, unpainted; per sq ft.....	1.40
Kitchen base cabinets, without counter; per lin ft.....	38.00
Kitchen wall cabinets, 3' high; per lin ft.....	22.00
Plastic-laminate counters: back splash, bullnose; per sq ft.....	6.80
Interior paint (incl woodwork): 2 coats; per sq ft.....	.17
Exterior flat paint: 2 coats (no burning or wire brushing); per sq ft.....	.23
New water service, main to house; per lin ft.....	6.50
New waste & vent: 3" copper; per lin ft.....	2.70
Water lines ½" copper; per lin ft per pair.....	1.75
Medicine cabinet w/2 fluorescent tubes, recessed.....	75.00
Lavatory: 17"x19", white, w/hdwr.....	125.00
Bathtub: 5' recessed, white, w/hdwr.....	260.00
Toilet: close-coupled, white, w/hdwr.....	145.00
Oil furnace: 100,000 Btu w/5-ton air conditioner, no ducts.....	1,160.00
Gas furnace: 85,000 Btu forced warm air, no ducts.....	580.00
Water heater: 60-gal electric, automatic, copper-lined.....	280.00
Water heater: 40-gal, glass-lined, automatic.....	215.00

For rule 2, turn the page

“Control of labor, materials, and scheduling is as

Here is the organization chart of America’s biggest modernizer



ALL FUNCTIONS needed to run Herbert Richeimer Inc. a \$4-million, multi-state modernizing business, are shown

here. Richeimer gives full responsibility to department heads, devotes most of his time to new market areas.

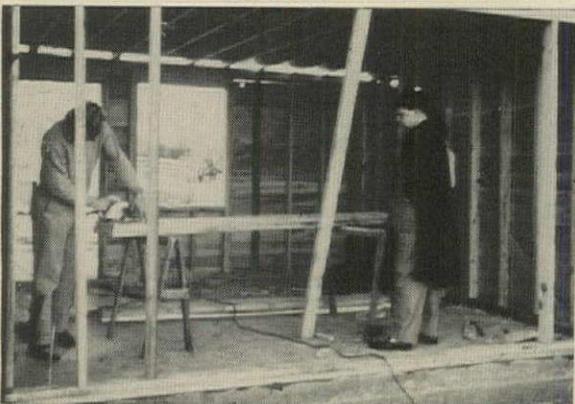
Here are some of the expert’s tips for handling subcontractors



CONSTANT CONTROL is essential: Modernizer Charles Abrams spends three hours a day checking jobs in progress.



SCHEDULE BOARD at Richeimer’s main office helps production manager move crews around on close timetable.



DAILY VISIT to every job is made by Richeimer salesman or supervisor to check progress and iron out any problems.



WORKMEN ON JOB are constantly in contact with the homeowner, must be polite and able to answer questions.

important in modernization as in new-house building'

Rule 2

Keep your payroll low by subcontracting all labor

There are two reasons for this, say the experts:

1. Unless you are very well capitalized, a large payroll can strip you of working capital in a few months of slow business. So your permanent payroll should be limited to salesmen, supervisors, an accountant, secretaries, and a draftsman.

2. "You get better work by subcontracting labor," says Charles Abrams. "We have a number of good subs in the mechanical trades and a few good crews in each of the other trades. We try to keep all of them working regularly, even though we contract with them for each job. We have established a good working basis because we schedule our jobs so carefully [see Rule 4] they can keep busy all day and all week, going from job to job."

If you pay your trades on an hourly basis, the experts point out, there is nothing to prevent them from stretching the job, since your job supervisor must cover several jobs a day and, typically, modernizing jobs are scattered across town. "With subcontracts and close scheduling the men work harder—but they make a lot more money than they could working for wages," says Abrams.

Finding good subcontractors is not easy. Several modernizers report that they have had to find good

mechanics, then help them build a subcontracting business by providing training and buying tools.

When you select a subcontractor, remember that the cleanliness, courtesy, and character of his men can be as important as his prices and workmanship. On modernizing jobs (unlike new-house work) the customer is almost always on the site. And your subs' workmen are your representatives to the customer just as if they were your own employees.

Smart workmen can even work as salesmen for you. They have a good opportunity to sell because they are often invited into a house, are trained to spot modernization needs, and are looked on as experts by the homeowner. It is a good idea to offer a bonus or a premium for sales resulting from leads your subs' men produce.

How do you control the quality of your subcontractor's work? Herbert Richheimer holds part of the payment for each job in escrow until there is no possibility of customer complaints. The escrow may run as high as 25% of the total subcontract price. If a customer complains, the subcontractor must either make the repair at no charge, or Richheimer will do it and deduct the cost from the sub's final payment.

Rule 3

Buy your materials from your local lumberyard

This will save you all the headaches of setting up a separate business: 1) to maintain storage and warehouse facilities, 2) to handle materials to and from the job sites, and 3) to expedite delivery, servicing, inventory, and quality checks.

The experts' consensus: Leave all these problems to your lumber dealer, who is in the business of handling them.

Of course, a lumber dealer who expands into modernizing already has a materials business, so he can buy from himself. And similarly, a big-volume new-house builder often has his own channels of supply which he can use in his modernizing business.

But for all others, argue the experts, the service that a good lumber dealer can give you is worth

more than any difference in price you might get by going into the materials business yourself.

As in new-house building, mechanical subcontractors usually supply their own fixtures, hardware, and materials, because the established distribution channels for this equipment are through these subs. If you want to cut costs in this area, you have to go into the plumbing, electrical, heating and air-conditioning business. And you should be big to do this. Herbert Richheimer, for example, has just decided he is big enough (at a \$4-million-a-year volume) to go into the plumbing business—he is buying out a licensed plumbing contractor who controls supply channels. This move should, he figures, cut his costs for installed plumbing.

Rule 4

Set a tight timetable—and make subcontractors keep it

Without a good time schedule you will make an enemy of your customer and a mess of your job.

For example, in modernizing a kitchen as many as eleven trades may have to be coordinated. (The eleven trades: demolition, junk pick-up, carpentry, masonry, electrical, plumbing, flooring, plastering, tile setting, paperhanging, and painting.) Unless each trade is given a definite hour to be on and off the job (and unless your supervisors see that the schedule is kept), they will get in each other's way and boost costs out of line. And unless the job is done as quickly as possible, the homeowner—usually at home while the job is going on—will be unhappy.

Figuring just how long each subcontractor should take is a job that requires experience. Even so, Charles Abrams reports he sometimes spends as much as two hours in the office planning for every hour of work done on the job.

In order to assure subcontractors a fair profit, jobs must be scheduled so the various trades get a full day's work. It is always hard to get a subcontractor to give a reasonable price for a single, two-hour job. But if you can line up three or four jobs for him, in a sequence that will not interrupt other trades working on the same projects, you can limit his downtime and get a better price from him.

For rule 5, turn the page

"The so-called cash sale is the bane of this business"

Rule 5

Set up a fast financing service for your customers

"Too much of my business is cash," moans Modernizer Abrams, whose Westchester Modernization, Inc does \$1 million a year in the well heeled exurbs around New York City. His trouble: too many customers take up to six or eight months to pay "cash"—far longer than those who finance their jobs.

"The cash customer," says Abrams, "is the biggest gamble of all. He's good for the money, but he takes a long time to pay. Too many like that can break you." So one big reason you should offer—and push—financing for your customers is to turn your capital over faster, get your profit out quickly, avoid getting capital tied up in slow-pay jobs.

Another big reason is that financing makes sales with-a-fair-profit easier, minimizes comparison shopping. "Auto and appliance men learned long ago that the customer is interested only in the monthly payment, not the total cost," says Joseph Ekkers of Universal CIT Credit Corp. "The contractor who is a smart merchandiser quotes his total price with a break down of monthly payments." Here are eight ways to handle your customers' financing:

1. Use FHA insured improvement loans for small to middle-sized jobs

Of all the ways your customer can borrow, FHA's Title I repair-loan program is the simplest for you to handle. In 1959, it accounted for 56.8% of such loans reported to the Federal Reserve. As this is written, it was due to expire Sept 30 unless Congress acts to extend it, which seems likely.

Under it, FHA insures approved lenders against 90% of their loss on defaulted eligible loans. In return, it imposes a discount limit of 5% per year (effective interest of 9.72% per year) on loans up to \$2,500, 4% on those up to the \$3,500 limit for single-family homes. Repayment times may vary, but loans under \$601 must be repaid in three years; none may run more than five. Multifamily dwellings are eligible for up to \$2,500 per unit to a limit of \$15,000 with a seven-year term, same discounts. Unlike FHA mortgages, FHA repair loans do not require the customer to pay the insurance premium. The lender does. So this extra cost—currently .55% of the loan—is not passed on to your customer.

You can use this program by going to the authorized lender nearest you, and establishing yourself as a qualified, reliable dealer or contractor. "Every community in the US has a lender qualified to lend FHA," says Roy Cooke, FHA's property improvement loan chief. "Some 13,600 are approved now."

Under his contract with FHA the lender is pledged to investigate and pass on your qualifications and reliability. Assuming you pass, you may:

1. Send or take your customer to the lender and arrange a loan direct to him. This way, the lender pays the money to the customer, who may then pay you anyway you agree—before, during, or after the job. Some remodelers, especially those with a large volume of work and a need for fast capital turnover, prefer this method.

2. Formally contract with the customer for the

job, specifying materials and prices, and take his credit application to the lender. When the loan is approved, the lender notifies the customer, but withholds payment to you until the customer signs a completion certificate.

2. Use lenders' own finance plans for flexibility, broader terms

Lenders prefer their own plans because they can charge more for their money. The giant Bank of America, which started its plan in 1954, now does 93% of its fix-up loans this way, only 7% FHA.

One advantage of lender's own plans is their greater flexibility. Such jobs as swimming pools, barbecue pits, which are considered luxuries and hence ineligible for FHA insurance, can be financed this way. One big drawback is that banks limit the distance they will lend—in Ogden, Utah, for example, the limit is 25 miles—so contractors operating over a wide area may need to work with a half-dozen or so. Another is the very high interest rates concealed behind the discounts, which some mathematically minded customers may resist. In Philadelphia, for example, going rate currently is 8½% discount—effective annual interest of 15¾%. In many areas, 8% (including 1% for credit life insurance) is not uncommon. But many lenders argue that if the customer can carry the monthly payments involved, this kind of financing is still cheaper than spreading the debts over a long term at lower interest—as in mortgage refinancing.

For you, using this kind of financing is virtually the same as FHA. You must satisfy the lender that you are reliable and competent and your customer's credit must meet his standards.

Finance companies are becoming more and more active in home-improvement lending. Contractors who have used them like their speedy answers, simple rules, and flexible policies. One of the biggest is Universal CIT, which makes loans up to five years at 7% discount—including credit life insurance—and imposes no dollar limit on loans. With 400 offices across the country, the New York City firm is soliciting contractors' business, lets them telephone customer credit information, okays loans by phone. Some other big companies making home-improvement loans: First Bankcredit of Minneapolis; Allied Building Credits of Los Angeles.

3. Use insurance loans if your customer has the right policy

If your customer has a life insurance policy with enough cash value to pay for his remodeling job, he can borrow the amount from his insurance company at much lower rates than he can borrow anywhere else. Current rates run around 5%, seldom more than 5½% annual simple interest. There is no question of customer credit rating involved, since the loan is covered by the premium payments he has already made. And the only payment he must make is the interest—the principal can be simply deducted when the policy matures through death or as a fixed-date endowment. Insurance companies discourage such loans because they seldom are

repaid and families sometimes suffer from the reduced payment upon death. But they also consider it an obligation to make such loans where needed. Borrowing on insurance is getting more and more popular (new policy loans jumped 42% in the first quarter of 1960 over the first quarter of 1959—to \$360 million from \$253 million). Arranging the loan may take as little as a week.

4. Use your own credit in a pinch, or to put excess capital to work

Where all else fails, you may want to devise your own credit program. Some remodelers offer a kind of extended cash plan that reduces the amount of capital tied up in the job. Typically it calls for $\frac{1}{3}$ down when the job is sold, $\frac{1}{3}$ on completion, and $\frac{1}{3}$ in 30 to 90 days. Thus in effect they use their own credit with subcontractors and suppliers to carry the customer. And some complain that customers often hold up the final payment—where the profit lies—until some dissatisfaction is corrected.

If you have capital to invest, and your business grows big enough, you may want to organize a separate credit company to finance your remodeling and bring in other capital sources to help. "But you need at least $\frac{1}{2}$ million to start," says Abrams.

5. Expand an open-end mortgage for big jobs—if the lender will allow it

Nearly everybody agrees that the ideal way to finance major remodeling is the mortgage, with its longer term, lower interest rate and payment schedule. Where a customer cannot carry the high payments of short-term personal loans, the higher dollar cost of his mortgage loan may well be offset by his need—and possibly by savings made with the improvement itself (like new insulation).

But nearly everyone also agrees that—especially in a high-interest period—mortgages are harder to use for financing. Best and easiest, for example, is the open-end mortgage, which lets homeowners borrow additional funds without the expense and bother of recasting the whole instrument. But FHA rules say any open-end borrowing must be at the same interest as the original loan, and VA rules let interest on the new amount rise only to VA's frozen-below-the-market rate.

If you find your customer has an open-end mortgage, your first step is to take him to the lender who holds it or the institution that services it, to learn if an additional advance can be arranged, how much, and under what terms (they may vary depending on how the mortgage is written). But, says Abrams: "Open-ends are involved. There's too much red tape, and it ties your capital up too long."

6. Refinance an existing mortgage if open-end won't work

Refinancing an existing mortgage is more complicated and costly than using an open-end mortgage. But it lets the mortgage be increased to include the new value of the improvement. So where the increase would exceed the limit of an open-end mortgage, refinancing may be preferable.

Refinancing may be done by the original lender or a new one. In either case a whole new mortgage is written, and the proceeds used to pay off the old balance, finance the improvement. "The process is nearly the same as originating a new mortgage," says William Kenny of Island Federal Savings & Loan, Syosset, Long Island. So are the costs. And in the case of FHA mortgages, there is an additional

one point penalty for prepaying the old loan.

Obviously, such trouble and cost are worthwhile only for substantial improvement jobs. But "It can open up an immense new market for the remodeler—put him in a class with the builder," says Remodeler Herbert Richheimer, who has used it widely.

First rule for remodelers going into refinancing, says Richheimer, is "find a good mortgage broker who can deal with the lenders."

With conventional refinancing, the contractor is usually eligible to receive interim advances as the job progresses, just like a new-house builder. But under FHA Sec 203, payment is held up until the job is completed and approved. "Builders aren't too crazy about that," says Kenny.

Another hazard is the increased cost of the new mortgage in interest. New conventionals will usually bear the market rate for the whole amount, and insured mortgages will usually have to carry the going discount rate—on the whole amount, not just the new money. The advent of discounts on Long Island, says Richheimer, "has cut my refinancing business 70%. We found before that refinancing costs on mortgages around \$13,000 to \$15,000 ran \$550 to \$600. With the points added on, it raised the cost of refinancing to over \$1,000—and priced it out of our customers' means." In refinancing, unlike new-house financing, the customer must pay the discount points under FHA.

7. Use Sec 220 assisted loans in aging city neighborhoods

If your customers are in older, blight-threatened city neighborhoods where mortgage finance is hard to get (but where most authorities agree the biggest untapped modernization market lies) you may be able to make a special, extra-attractive kind of refinancing available to them. It is FHA Sec. 220 rehabilitation financing, which allows loans on existing houses of up to 97% of the first \$13,500 of replacement costs, 85% of the next \$2,500, and 70% of the balance up to a maximum of \$22,500 for a single-family house.

Sec 220 loans are eligible for FNMA special assistance, for purchase at a current combined discount-and-service fee of $2\frac{1}{2}$ points. Up to now, they have been little used because they are limited to areas certified for urban-renewal treatment. But a new, simplified procedure has just been established to help cities set up non-assisted (ie, where no federal renewal funds are involved) projects to make more neighborhoods eligible for Sec 220 financing. Instead of reams of documents, cities need now only submit a few pages outlining a general program of public improvements for such an area. Processing time has been cut to 30 days.

If you are in one of the 25 cities where FHA has just hired specialists to help push rehabilitation (NEWS, May), you can find out more about how to use Sec 220 by talking to them. And in your regional Urban Renewal office, special rehabilitation staffs can tell you more about the program.

8. Refinance an unencumbered house with a new mortgage

Some 60% of the homes in the nation are unencumbered by any kind of debt. The bulk of them are older houses, ripe for remodeling. So there is a good chance that some of your customers will have no mortgage at all. If they and their houses offer satisfactory risks to lenders, there is nothing to prevent a new mortgage being written, either conventionally or under FHA.

For rule 6, turn the page

"Your success can be no better than your selling techniques"



CONSULTATION is prime selling tool: here, Richeimer salesman explains solutions to prospect's problem.



DISPLAYS of products and materials help salesman sell quality. This is Richeimer's display room in Levittown, N.Y.



MODEL MODERNIZED HOUSE built by Wolf's Supply Co, York, Pa with LIFE's help, drew 5,000 families opening day. Cornie Vanderkan



"BEFORE" PHOTO, set on easel in modernized model by Walter Ford of Philadelphia, dramatizes upgrading.



MODEL NEW HOUSE is used as showcase of modernizing ideas by Smith Lumber of Portland, Mich.



TELEVISION ADVERTISING is used by Community Builders in Chicago to show how dormers can be added to old house.

“Every prospect is a person with a problem”

Rule 6

Help your prospects make the right decision

Today only the gyps try to push prospects into a fast close.

“You must show your prospects that you can and want to be of real service to them, that you are thinking about their problems,” says Modernizer Earl Robinson Jr of New Orleans.

The best way to show your prospects what they can do with their house is to show them a photo album of your past jobs. In fact, before-and-after pictures are the best way to sell any kind of improvement product—whether it be a toupee, a slenderizing program, or a remodeled kitchen. Says Charles Abrams: “Pictures of one game-room job produced \$100,000 worth of business in two months.”

Your before-and-after pictures can be glossy

photos, stereo color slides, or snapshots. (One idea: carry a Polaroid camera with you to all jobs, take pictures before, during, and after.) But to work best, the photos should show jobs your prospect can visit to see for himself.

Squires Construction Co, Cleveland, carries this idea a step farther: along with their stereo slides, the salesmen bring a mimeographed list of 15,000 jobs. The jobs are arranged by area so the prospect can easily find friends or neighbors who have had work done by Squires. This way the prospect sells himself.

Says Abrams, who does not close 70% of his sales till the second time round, “The man who pushes to close the job on the first visit invites the suspicion of the homeowner.”

Rule 7

Let your prospects see how you figure the job

This is one reason your complete price schedule (with commissions, overhead, and profit included in unit prices—see Rule 1) is so important. As the salesman checks prices, the customer sees his job being totaled—item by item—with no rough estimating and no mysterious figures tacked on to cover profit, overhead, insurance, etc. This, say the experts, impresses the prospect.

The system has two other advantages:

1. The schedule serves as a careful checklist, assures that nothing is left out of the job. In going through the schedule the salesman will be reminded to include unit prices on items (eg, moving trees and bushes out of the way of new construction) that he might otherwise overlook.

2. The schedule helps the salesman upgrade the job because it includes unit prices for the various grades of products. Says Modernizer Walter Ford of Philadelphia: “People don’t settle for the cheapest fixtures and materials when they see the quality of better fixtures in a salesman’s schedule and can see the usually small price difference. Instead they buy near the top of the line.”

The salesman should figure a job from a plan. He should make a rough sketch for this plan on his first visit. And on his second visit he should bring with him a finished plan drawn by a draftsman. (The leading modernizers always work with carefully drawn plans or renderings. Rough sketches, they say, suggest poor workmanship.)

Rule 8

Use a model house just as a new-house builder does

More and more modernizers are buying old houses, modernizing them, and then displaying them: 1) to whet homeowners’ appetites to improve their houses, and 2) to demonstrate the quality of the firm’s work. And they are finding it pays.

Item: Modernizer Paul Litvin of Mount Clements (Mich.) Lumber Co opened a modernized model in June of last year. In the next five months, the firm got \$141,000 in modernization business—about four times the volume for the same period in 1958. Says Litvin: “We believe the model has been responsible for at least 75% of our new business.”

Item: “7,000 people went through our modernized model during April,” says Philadelphia Modernizer Walter Ford. “This did more to build up our name than all the advertising and promotion we have done during the 6½ years we’ve been in the business.”

Item: Los Angeles Modernizer Harold Hammerman bought two identical houses side-by-side, modernized one of them and got more than 100,000 prospects to view the “before-and-after.”

Here are the experts’ rules for running a model:

1. Have at least three dry runs with your salesmen before you open. Be sure they know every detail of the house.

2. On opening day, and for as long as there are big crowds, use “before” pictures on easels to show people what you started with (see photo opposite).

3. Make it easy for prospects to ask about your services by including a lead card in your brochure.

4. Contact any leads immediately and arrange an appointment. Any lead that is not followed up within 48 hours may lose interest.

5. Use the basement of your model as an exhibit room to show various products used on the job and to offer literature from your suppliers. (Most big modernizers also have a permanent showroom where they exhibit products and materials.)

If you need help in setting up a model-house program, you may be able to tie in with LIFE’s Modernized Model Home Program. (For details, see Rule 12, p 122.)

For rule 9, turn the page

“New-house merchandizing ideas can work for modernizers”

Rule 9

Use the same kind of advertising a new-house builder does

And like the new-house builder, you should advertise to build your standing in the community as well as to make a sale.

Most leading modernizers budget about 2% of gross for advertising. They don't spend more, they say, because so much of their business comes from referrals by satisfied customers (see Rule 11, below). But, they point out, you cannot budget much less than 2% without risking the business that adver-

tising does generate—about 40% of the total.

Modernizers use the same media as new-house builders: newspapers, radio, television, direct mail, billboards, and the telephone book.

San Francisco Modernizer Morris Leavitt offers this special piece of advice: “You should be a member of the local Home Improvement Council, and stress this fact in all your advertising so prospects know you aren't a fly-by-night.”

Rule 10

Visit the job often to prove your active interest

Says San Francisco Modernizer L. J. McDermott: “This is essential for two reasons 1) it builds your reputation and good will with the homeowner, and 2) it keeps a tight check on subs and their work.

“But it is also one of the toughest parts of the business,” McDermott says, “because every homeowner becomes an architect and his wife becomes a superintendent. And you must handle them with kid gloves.”

When and how often should you visit the job?

Says Herbert Richheimer: “Our salesmen are not finished with a job when they've sold it—they go out at least once a week to see if everything is going along to the customers satisfaction.”

Says Arch DeLancy of T.D. Gustafson Co, Minneapolis: “Our men are expected to spend 30 hours on sales and followups on a \$3,000 kitchen job from the first visit to job's completion.”

Rule 11

Work hardest on the leads you get from your customers

“Over 60% of our work comes from referrals made by customers,” says Modernizer Willis Foster, Albany, Calif. “These leads sometimes are hard to handle because the prospect has been led to expect a lot of you, but they are the meat-and-potatoes of a modernizer's continuing success. A referral lead is almost always a good lead.”

If you are just starting out and have no satisfied

customers, you can create them as Philadelphia Realtor-Modernizer Robert Trump did. He bought two very rundown town houses near Independence Hall, completely refurbished them in authentic detail, and sold them. That job attracted so much attention that it started a whole chain of neighborhood improvement in the area, and Trump was called in frequently to modernize other old houses.

Rule 12

Tie in with promotions the way new-house builders do

New-house builders get a lot of promotional help from manufacturers, utilities, magazines, and trade associations (H&H, May). Modernizers can, too.

Modernizers can qualify for manufacturers' promotional programs (like Owens-Corning Fiberglas' Comfort Conditioned Home and Johns-Manville's Seven-Star programs) which provide sales, promotion, and advertising help. For example, early this year Smith Lumber Co of Portland, Mich. tied in with Masonite to promote a model new house Smith built to sell its modernization service. Masonite designed the house, gave construction advice, helped plan advertising and promotion. The program worked so well that Smith drew as many as 4,000 visitors a week, sold 46 modernization jobs in three months.

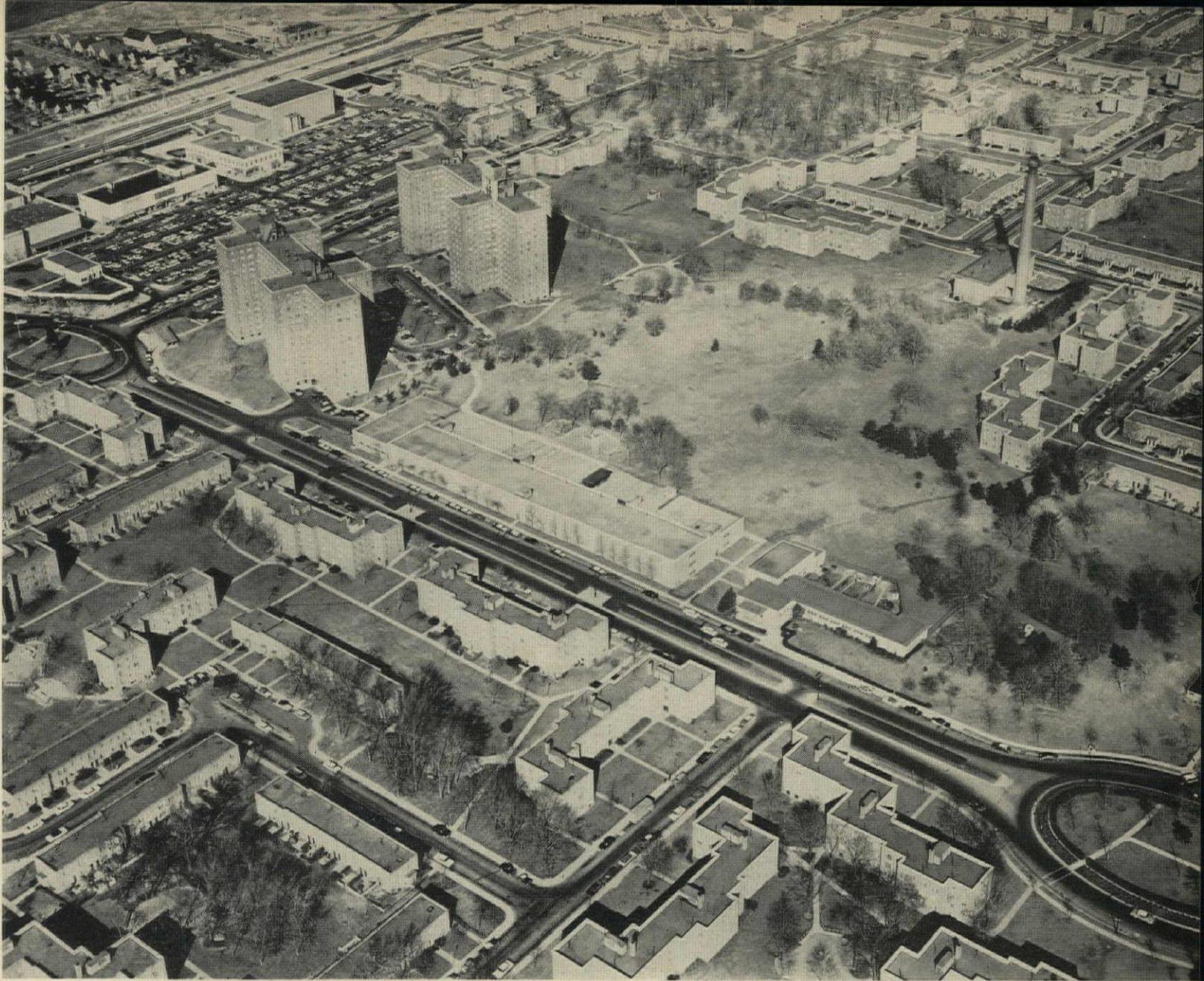
Modernizers can also qualify for LIFE's Modernized Model Home program. Says LIFE Building Products Merchandising Manager David Burnes, “All the dealer needs to do is write to us. To qualify he must use in his model modernized house 12 basic building materials advertised in LIFE and he must

satisfy us that he knows his business. After we check his credit rating and community standing, we go to work with him.”

Since the program started two years ago, LIFE has worked with over a dozen modernizers, helped them plan their model houses, and arranged for tie-ins with LIFE building product advertisers (like American-Standard, Andersen, Armstrong Cork, Celotex, Edison Electric Institute, Flintkote, Frigidaire, General Electric, Johns-Manville, Kentile, Masonite, Owens-Corning Fiberglas, Sherwin-Williams, US Plywood, Wall-Tex, and Westinghouse.)

“The program,” says LIFE's Burnes, “has at least doubled sales for most participating modernizers. Some have almost tripled their volume.”

Modernizers can also work together to create special promotions. For example: in Oakland, Calif. and St Louis (where 25% of the builders do modernizing work), the local NAHB chapters formed Home Improvement Councils to promote the work of their members. In both cities, HIC advertising almost quadrupled members' business. /END



FRESH MEADOWS plan provided park-like setting, varied housing units, and convenient community facilities.

When you start your project with good planning it is easy to keep it up-to-date



MODERNIZATION PROGRAM assures project's long life by renewing the parts that get old first: kitchens and wiring.

New York Life's Fresh Meadows housing is a fine case in point.

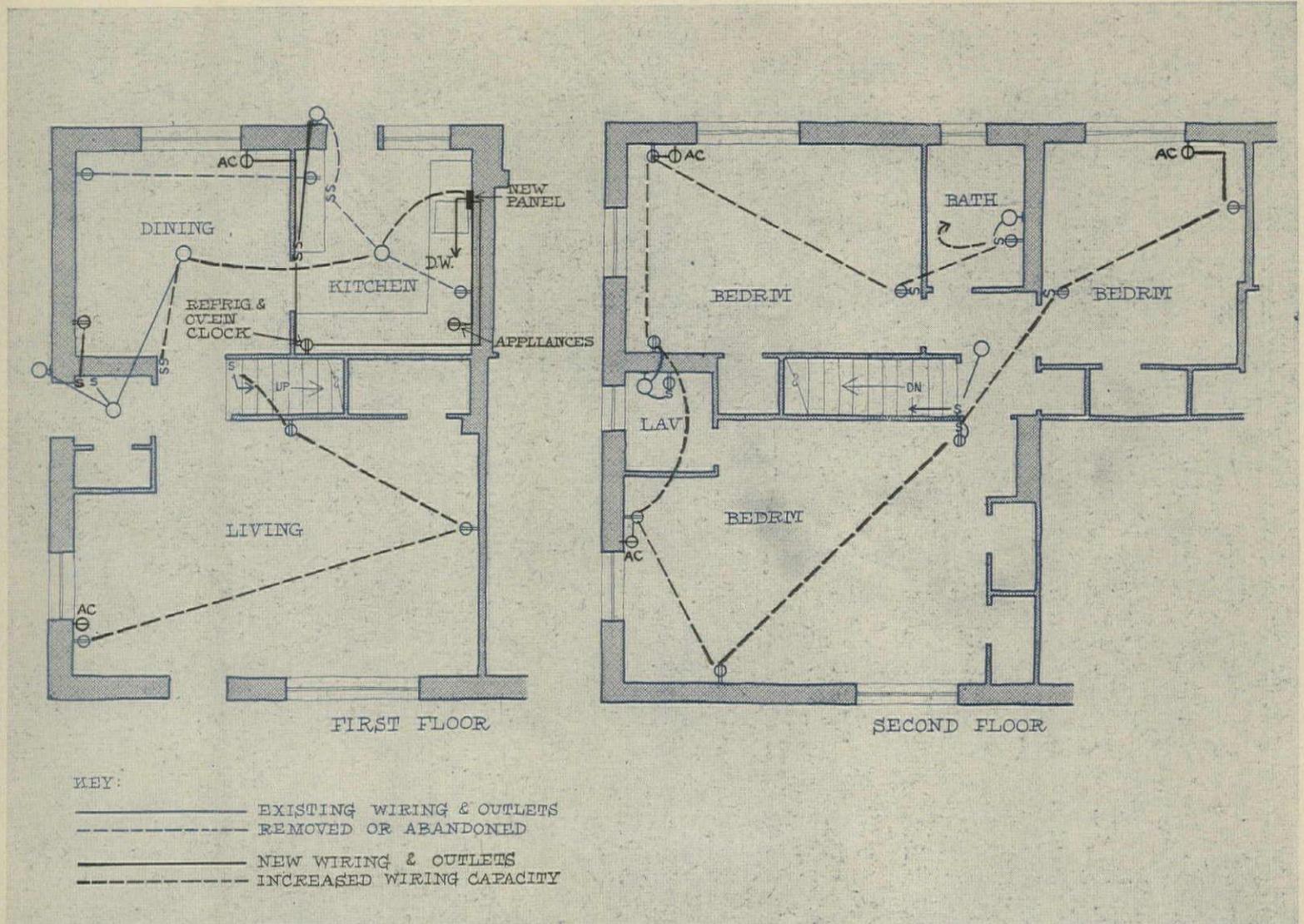
Built in 1948, Fresh Meadows is being completely modernized by just two basic changes: entirely new kitchens and complete rewiring of every apartment. The original planning was so good—and so far ahead of what was common practice at the time—that these are the only two improvements necessary to make Fresh Meadows competitive with the best of today's new rental units.

What set Fresh Meadows apart? It was designed as a complete community.

Common goal of architects and owners was to provide a community environment second to none. So Fresh Meadows offers a variety of housing to attract a variety of people. It provides shopping facilities, a community theater, and schools. And it has plenty of open space, with trees and grass—and no keep-off-the-grass signs.

Good planning is important because it includes all these things. But as the Fresh Meadows modernization program proves, good planning is important for another reason: it can create housing that is just as desirable after 12 years as it was when first built.

continued



REWIRING adds kitchen appliance outlets and separate circuits for refrigerators and dishwashers. Air conditioning outlets will be installed in every major room but tenants must supply own units.

Complete rewiring and complete new kitchens will eventually go into every garden apartment



EXISTING KITCHENS have been outdated by new equipment.

The rewiring program will give each apartment from eight to 12 circuits—an increase from 30 to 60 amp for a 3½-room apartment, from 45 to 150 amp for a six-room apartment.

Kitchens will be new from the vinyl flooring up. New equipment includes: built-in ovens, range tops and range hoods, refrigerators, wall and base cabinets, dishwashers, and plastic countertops and backsplashes.

Modernization is scheduled for each of the 2,400 apartments in the low-rise (two- and three-story) buildings in Fresh Meadows—about 80% of the apartments in the development (the remaining 20% are in high-rise buildings). So far, apartments are being modernized only as tenants move or as they request the change.

New York Life expects that the total modernization program will cost about \$2 million. Rent increases will average \$16 per month—an increase from \$130 to \$146 for a typical 3½-room apartment, from \$160 to \$176 for a 4½-room apartment.

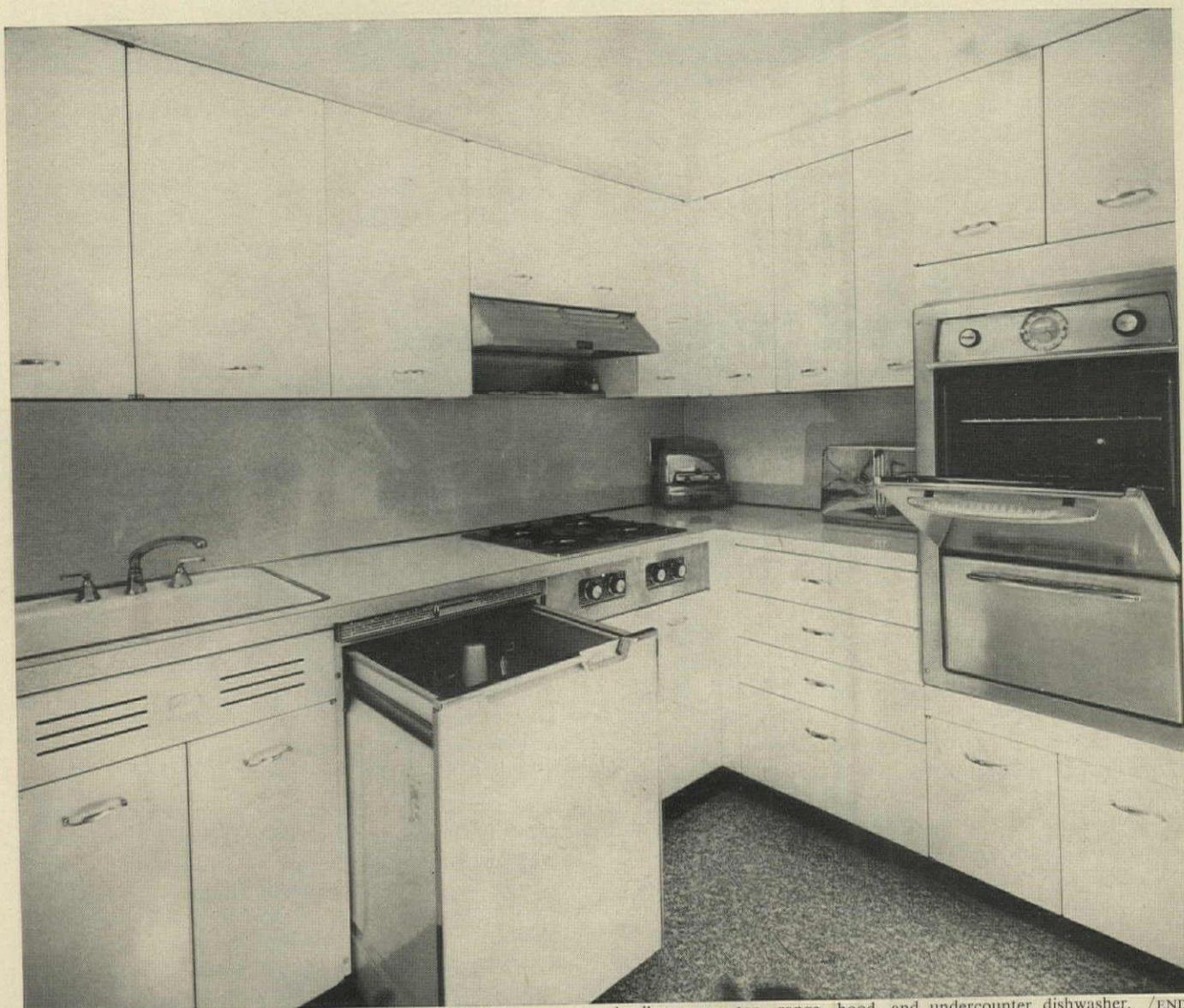
Architects for the original planning of Fresh Meadows were Voorhees, Walker, Foley & Smith. Now practicing as Voorhees, Walker, Smith & Haines, they are in charge of the modernization program.



MODERNIZED ENTRANCE to kitchen gets louvered doors to fit new style trends, set tone for changes.



MODERNIZED STORAGE includes full run of wall and base cabinets on two walls. Kitchens will get all the storage there is room for.



MODERNIZED EQUIPMENT includes the newest of built-ins: an oven-broiler, range top, range hood, and undercounter dishwasher. /END



REMODELED ROW HOUSES in Washington, D.C.'s Foggy Bottom typify what can be done with no subsidy in areas ripe for upgrading. Realtors

Woodward & Norris bought these six units for \$5,750 each, spent \$11,500 a unit to rebuild. Two sold for \$22,500 each; others rent for \$150 a month.

How you can take advantage of hidden market opportunities in urban renewal

If the goal of the 1949 Housing Act—"a decent home in a good living environment for every American family"—is ever to be achieved, a lot of housing modernizers are going to make a lot of money.

You may have written off urban renewal as a morass of red tape, but renewal is not just a federal program to subsidize removal or repair of blighted areas. It is also the natural economic process by which cities continuously slough off worn out parts and come up with new ones.

This is a growing market, and the record of successful pioneers shows it can be worked on a large scale. Moreover, it can be highly profitable for the entrepreneurs who get there first. What you need most is imagination and appraisal horse-sense. Many of the nation's showcase examples of urban renewal involve not a nickel of federal

planning or subsidy for land seizure. They are the result of private enterprise exploiting a private market—the kind you can get into without red tape.

Start with the worst house, not the best in its neighborhood

If you are buying property to renovate and resell or rent, this is almost the No. 1 rule-of-thumb. The standing of the neighborhood will probably put a ceiling on how much you can get for the modernized house. If your acquisition-cost-plus-renovation punctures that ceiling, profits may vanish. But even the worst house in many neighborhoods can be made livable and salable. And it should be much cheaper to buy. When it is restored, the neighborhood itself will give it added value.

Use a system to find the right houses to work on

Rundown houses that can be bought at the right price do not just walk in on modernizers. You have to seek them out—aggressively. Some big-scale operators watch auction sales and probate courts. Some have snagged valuable property in tax delinquency sales (but these are growing rarer now).

Here is the system used by a successful Ohio remodeler (100 to 150 houses a year) to acquire 90% of his property for renovation and resale:

1. Hire two full-time salesmen to drive around town looking for buyable homes. On January 2, for instance, they drive down a given street, jot down the addresses of dilapidated houses—"the worst ones we can find in good neighborhoods." Then the salesmen go to the court house, to get the owners' names. The boss writes the owner a letter offering to buy the house. Knowing that rundown property usually is tenant-occupied, the pitch is: "You are probably not making much money on this property, with high taxes, maintenance costs, and the uncertainties of tenant turnover." Returns from the first mailing are small. But the office made four carbon copies at the first typing, so on April 1, a carbon of the original letter goes to the owner, with a handwritten note telling him the offer stands. The second carbon goes out in July, the third in October, and the fourth the next January. By the following February, it is time to drive down the street again and start over. By such mechanized persistence, the modernizer is able to acquire about 35% of his property. The salesmen earn up to \$18,000 a year on straight commissions, he says.

2. Hire a third man to keep in touch with probate courts and lawyers handling estates. Once a week, this man gets the names of the new deaths (usually ten to 15) recorded at the court house, finds out what lawyer is handling the estate, and writes or phones him offering to buy the property if a house is to be sold. Enough property comes in this way to pay the court-buyer \$12,000 to \$15,000 a year in commissions, the remodeler says.

3. Enlist other brokers to find property. How? By letting them know you will buy used homes for cash, and give them not only a full commission on the sale but also a 90-day exclusive to resell the same property after modernization.

Do a complete modernization job rather than a patch-up repair

A case in point is that of Joseph Frame, 57, and Melvin Gerber, 41, who have bought some of the worst homes in northwest Baltimore's Negro slums, stripped them to frame and brick, refurbished them, and turned

them into properties yielding 18%.

"Most landlords don't understand there is more profit in completely rehabilitating a house than in letting it sit and rot," says Frame. The secret is the cost of service calls and the type of tenant the rehabilitated house attracts. Last week, for example, I got only four service calls from 800 tenants. If I hadn't rehabilitated my houses I'd have had 800 service calls."

Big Landlord Label Katz of New Orleans agrees. "In the vast majority of cases, you get more return on your capital after you renovate than you did before," he says. Lawyer Katz should know. When his father died in 1951, he left Katz and two sisters some 3,000 units of slum dwellings—mostly Negro occupied. This made him one of the city's largest rental property owners. He voluntarily began renovating his basket-case hovels ten years ago—about the same time the city itself created a division of slum prevention to compel slumlords to fix property.

Katz says he spends from \$2,500 to \$3,000 per unit to renovate a decrepit one-story frame house like the ones shown on p 128. Typically, he installs a complete bathroom, kitchen, gas outlets in each room, removed broken-down fireplaces and chimneys, replaces worn steps and windows. Sometimes, the toilet must be moved indoors. But rents go up from \$20 or \$25 a month to \$50 or \$60—and occupancy rates remain high. Katz figures his outlays for modernization return him 15% to 18% a year gross. That means he gets his investment back in something between 6 and 7½ years.

Says a widely respected Midwest realtor who got his start in modernizing slum property and made so much money he has now branched out into

land development and investment: "Our return was 15% to 16% net—and we were able to turn over our money about four times a year for a 60% gross profit. Modernizing has always been the most profitable item of our business for the dollar volume."

Pointing to the tenant factor, Baltimore's Joe Frame recalls: "We bought a block of eight houses in 1958 that were vacant, vandalized, and totally uninhabitable. When we went to work on them people in the neighborhood came out to watch and by the time we finished we had 25 applications for each house. These were not people we lured away from the suburbs. They were slum dwellers who yearned to get a decent deal for once in their lives. We rented the eight houses as soon as they were finished at \$12 a week. We haven't had a vacancy since and our service calls are nil. Given a chance to live like a human being, a man will act like a human."

Develop your banker's confidence—and get a full line of credit

"Too many people in this business have a limited amount of capital because they have a limited amount of brains," says one remodeling expert who has netted as much as \$75,000 a year in the field. "They forget that the real trick in making money is financing to multiply their own capital."

How? First, show your banker that you are an honest man doing an honest job. Point to a growing financial statement. Show that you have always had enough cash on hand to pay current bills. Then convince your lender (local S&Ls are the No. 1 source of modernization credit almost everywhere) that the \$6,000 house you want to buy is a real bargain. Why? Because with only \$2,500 of modernization, you can resell it for \$10,000.

It will probably be denied officially, but the fact is that some S&Ls find it good business to make a mortgage loan based on the prospective resale price of the renovated house. Such deals go like this: the modernizer buys a bargain house for \$6,000, figures on \$2,500 for fixup and a \$10,000 resale. He negotiates a 65% loan from an S&L—\$6,500. That's more than he paid for the property. But he gets only \$4,000 immediately. This leaves him with \$2,000 invested on a deal that should net him \$1,500 profit after three months. The remaining \$2,500 of the loan is taken down in construction draws as the modernizing proceeds. Lenders like this setup because it gives them firm control, makes it hard for a financially strapped contractor to divert the money to pay other bills.

Be ready to act when you find the right opportunity

Nothing eats up profits like stalling around on a modernizing job, waiting

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Buffalo Home-Remed. Service		
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TEAMWORK can spur big-scale modernization, as this sign suggests. As a result of the demonstration fixup of two rundown homes in Buffalo, some 500 homes in the neighborhood were modernized. In Oakland, Calif. and St. Louis, builders have also spurred big-scale modernizing with similar model homes.

continued



John H. Herrmann

BEFORE

New Orleans: a big showcase of modernization's extremes

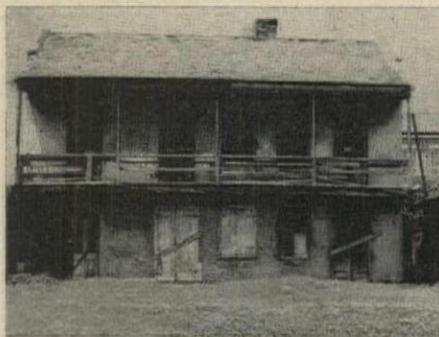
After the Civil War, New Orleans' Vieux Carré—the old section where the Creoles built their homes before the Americans came—began to decline. By the 1920s it was almost wholly a slum, squarely in the center of the city. About ten years ago, it began to make a real comeback. Today, it is leaping from rockbottom to smart-set neighborhood.

A leader among its renovators is Clay Shaw, managing director of International Trade Mart. He began by buying a six-room house for \$9,500. He spent \$1,500 for improvements, sold it for \$15,000. That was in 1950. This year, the same house was resold for \$30,000. In another deal, Shaw picked up four houses on a rectangular site for \$22,000, devised private gardens for each with a common patio and swimming pool, sold them for \$122,000. He says he grosses 14% and nets 10% to 12% on such investments. "The French Quarter is unique," he notes. "You can disregard most of the rules for realty investment. People spend up to \$75,000 to restore mansions next door to Negro-occupied slums."

At the other extreme, Landlord Label Katz, in an ordinary blighted neighborhood, spent \$6,300 to remodel a decrepit frame house on St Louis Street, but raised rents from \$25 to \$50 a month to keep his net at 10%. He has rehabilitated hundreds of similar units.

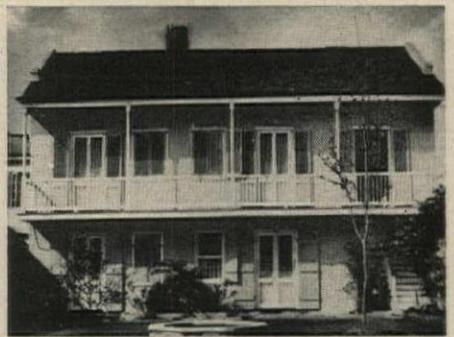


AFTER



Leon Trice

BEFORE



AFTER



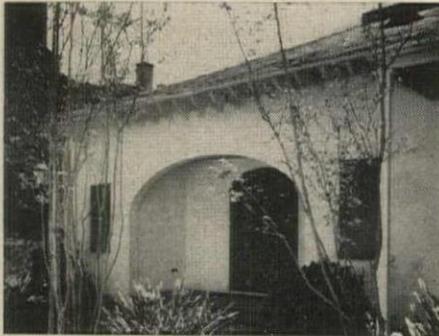
BEFORE



AFTER



BEFORE



AFTER



AFTER



Leon Trice

BEFORE



AFTER

for title to clear, waiting for FHA to process papers, waiting until a bottleneck sub gets his work done. If there is any secret to his operations, says Philadelphia Realtor Earl R. James, it is: "A complete organization ready to go." James' company, Robert J. Nash Inc, specializes in houses in rundown but centrally located neighborhoods. Here's a sample of how speed pays off:

In 1959, James paid \$11,000 for ten slum dwellings in a court off an alley. Putting a team of subcontractors to work as soon as title cleared, James rebuilt the interiors with tile baths, hardwood floors, gas heat, modern kitchens, and new millwork including windows and doors. He put \$75,000 into modernization for a total investment of \$86,000. But four months later he was moving new tenants in. And instead of \$12 a month rents, he was getting \$90 and offering to sell for \$9,950. So far, he has sold half, had no trouble renting the rest.

One modernizer in the central states figures he can cut the turnover time of his capital down to ten weeks, like this: buy a house May 1, take title May 15, move in with renovating crews May 16, finish work June 15, allow four to six weeks to resell the house and pass title. If the profit on each job runs only 10%, a modernizer should gross 40% in a year at such speeds!

Study when to sell property when to keep it for rental

No. 1 question is: can you afford to tie up any capital. Most modernizers can not. A rule-of-thumb: if you want \$25,000 a year income for yourself, you need to keep your first \$50,000 of capital rolling over in your business. After that, you can keep some renovated units as a hedge against inflation or an income-producing nest-egg for your old age or your children.

Keep for investment, property which can be bought and renovated below the cost of building an equivalent unit new. This governs how much money you can make on it. The breakpoint for deciding which is which is about 10% net, which means about 15% gross. It's hard to find a detached one-family house you can renovate and rent for such a yield (except for by-passed areas where rocketing land values accompany major upgrading). Ordinarily, the problem looks like this:

You buy an old unit for \$6,500, spend \$2,500 fixing it. If you can get \$10,000 for it, sell it. Why? You would need \$100 a month to make only 12% gross or 7½% to 8% net (figuring 35% of your gross to cover taxes, management, and upkeep). After you take off 3% depreciation, you pay tax on a 5% net, which is not a good investment. And you probably can not rent an old house for \$100, anyway, in your city of 500,000 because the new form of tenancy lets families drive 15

minutes out of town to a low down-payment subdivision and pay only \$85 a month.

It is much easier to make the arithmetic work for two-, three-, and four-family structures. Here, you may be able to produce modernized dwellings for \$5,000 to \$7,000 per unit—in neighborhoods of \$10,000 single-family homes. Keep them.

Look for by-passed neighborhoods where rents can jump greatly

This is the easiest area in which to make rehabilitation click. When the convenience of central location makes a dilapidated neighborhood of ancient houses ripe for renovation and a much higher rent level, rising land values normally make almost any buy a profitable one for the modernizer. The trick is to figure out which neighborhood will first appeal to upper bohemians and then—as it seems to be working out in cities like Washington, Philadelphia, New York, and San Francisco—to upper-bracket families of all types who want elegant in-town abodes. The next trick is to get in early, before the rising status of a newly popular area drives property prices up too high. Washington, D.C.'s Georgetown is the classic example. But it has been followed by the same kind of no-subsidy natural renewal through modernization in Foggy Bottom and, most recently, on Capitol Hill, where some senators now live in remodeled 16' row houses that were Negro slums seven years ago.

Do not overlook the easy selling offered by FHA 221 financing

It has taken the housing industry almost six years to discover what a goldmine it has been neglecting in FHA's Sec 221. Under 221, you can sell a new or used house on something close to give-away terms: 40 years, 100% loans for new units; 30 year, 100% loans for used units.

These fabulously easy terms were conceived in the Housing Act of 1954 to provide urban renewal displaces with cheap housing. Generally, displaces either spurn what has been built or are not in the market at the precise minutes the housing is offered. So the law provides that 221 houses may be sold to anybody after they have been held 60 days for displaced families. Existing houses may be sold on the same easy terms to non-displaces if the builder or realtor has spent 20% of the mortgage loan on rehabilitation.

Last year, because the program was little used north of the Ohio and east of the Mississippi (where construction costs run higher), Congress boosted mortgage limits 20% for Sec 221 in designated high-cost areas. The legal limits for one-family homes are now \$9,000 in normal areas and up to \$12,000 in high-cost areas. Instead of

its traditional blanket designation, FHA has recently refined its high-cost area allowances to tie them to local construction costs. And 221 has also been extended to cover two-, three-, and four-family units and rental property (the latter is eligible for 90% loans if rehabilitated).

The trouble with this gravy-covered deal has been 1) red tape and 2) Fanny May's reluctance to buy 221 mortgages, even though Congress has directed that it do so under its special assistance program. This currently means FNMA buys 221s at a 2½ point discount—about half what other lenders charge if they are willing to take 221 loans at all (few are).

Two distinctly different markets fit 221, says John Haas, executive secretary of the Metropolitan Assn of General Improvement Contractors of Washington, D.C. One market is deficiency rehabilitation, for the owner-occupant threatened with code enforcement eviction if he doesn't repair his house. The other is speculative relocation housing. Haas has rehabilitated a dozen 221s, insists the program has "a terrific future. Anything but a real slum will do as long as it isn't a commercial neighborhood," he counsels. His rule of thumb: if there is not more than one house condemned in the block, property values should be high enough to make 221 work for rehabilitation. In Washington, such deals typically involve a six-room-plus-bath brick row house, 60 to 100 years old, bought for about \$3,000. Haas figures on \$4,000 for repairs; \$1,000 for loan fees, title, tax, and closing costs; \$2,000 for overhead and profit. "All the house needs to have is a good shell and floors. The more you replace, the more the life expectancy of the property grows, and the better off you will be arranging the loan."

Look for possibilities next to subsidized urban renewal areas

Beauty can spread as well as blight. Nowhere is this truer than on the fringes of slum clearance projects, where federal and local governments are pouring in big subsidies to reclaim bad neighborhoods. For years, housing on the west side of Manhattan, in the 40s and 50s, has been almost wholly tenements. Now, this area, with the cheapest midtown New York land, is bordered by major renewal projects: the \$205 million Lincoln Square cultural center to the north, the controversial \$57 million Coliseum development to the northeast, and the \$54 million Penn Station South middle-income housing to the southwest. One result: pioneering remodelers have begun buying up vacant tenements in the west 40s, remodeling them into posh town houses with courtyards. Rents go up to \$500 a month for a four-room studio. /END



These 15 units are the world's most advanced, all-modular, all-component houses

They were built by the US Government in Austria with Marshall Plan counterpart funds. Less than \$100,000 was spent to develop plans, details, and specifications; and another \$100,000 to put up 15 pilot models on a site outside Vienna (opposite).

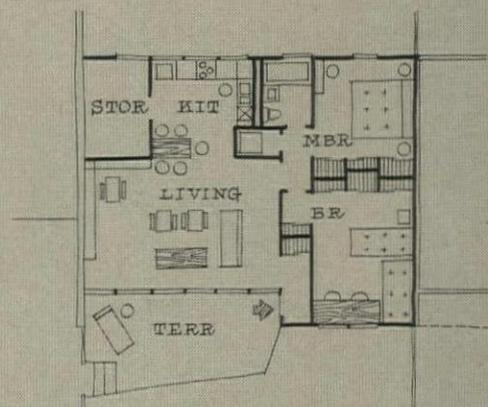
These 15 houses go far beyond the LuReCo system: their components include not only the structure, but also all partitions, storage units, plumbing, wiring, and heating.

And these 15 houses are almost the exact opposite of the usual prefabs bought from a single supplier: each modular component was designed to mesh easily with components bought from any number of other suppliers!

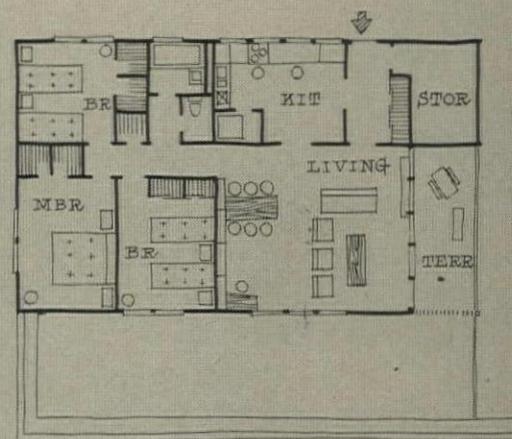
The designers of the Vienna system—William K. Witausch (US) plus a team of Austrian architects including Carl Auböck—based all their plans on a one-meter module. Next, they broke down their houses into 17 “families” of components, each “family” having anywhere from two or three to two dozen members, and each component conforming, exactly, to the one-meter module. (Next time around, the designers say, they would cut the number of parts by almost two-thirds!) Finally, they got 108 different manufacturers to bid on these 17 component types and awarded contracts to six major and 25 minor suppliers.

They save 60% to 80% of on-site time

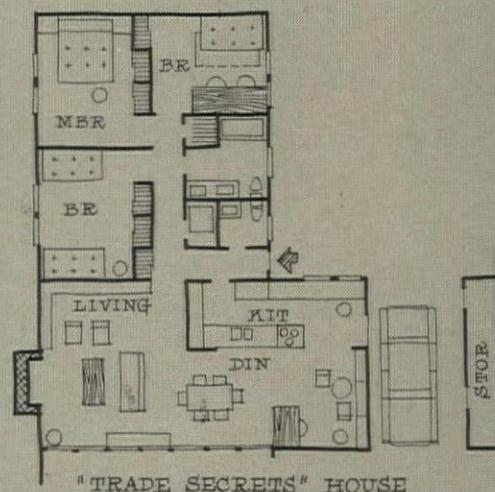
It took the designers a year to develop their system; it took workmen on the site only three days to catch on to the advantages of modular component building; and it took only four months to complete these—to Austrians—unfamiliar pilot houses. (Normal construction time in Austria: one to two years.) Some 800 similar houses were shipped, in components, to US airbases in North Africa, where they were put up by semiskilled, native labor.



ROW HOUSE
(2-BEDROOMS)

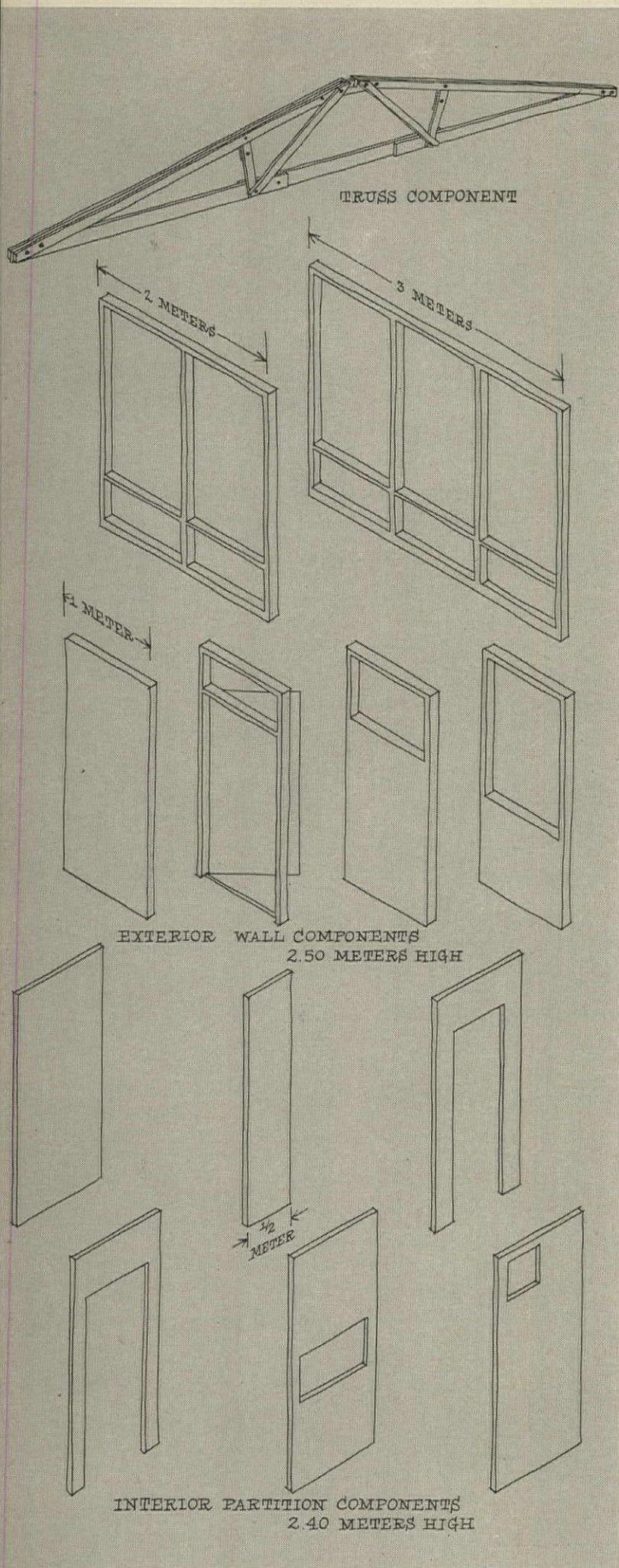


3-BEDROOM HOUSE



"TRADE SECRETS" HOUSE

THREE ENTIRELY DIFFERENT HOUSE PLANS built at Vienna show the flexibility of the system. In all, 15 different plan-types were built in the pilot project. All plans are based on the one-meter module, all use the same components for walls, partitions, storage, roofs, plumbing, heating, and wiring. (Sole exception: the copy of the 1952 "Trade Secrets House"—bottom plan—which does not use the standard plumbing core. Interior view on opposite page shows living area of Vienna's "Trade Secrets House.") Top plan is a row-house variation, using the same components.



All 15 pilot houses were built out of 17 "families" of modular components

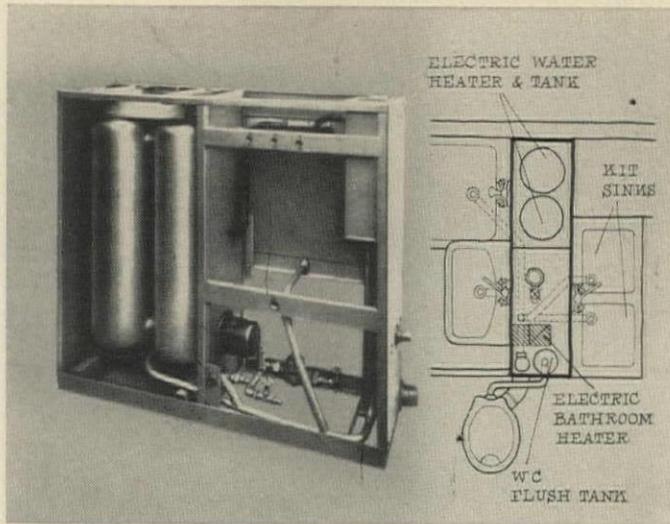
Three of these "families" are shown in drawings at left. They are: roof trusses (three varieties), exterior wall panels (six) and interior partitions (six). In addition, the Vienna system employed seven kinds of roof panels, five ceiling panels, 14 storage units (see *p 134*), one plumbing core, one typical warm-air heating installation, one typical wiring system—plus a few, unavoidable, on-site operations.

Prime objective of the system was complete interchangeability of parts

This was achieved in three ways: 1) by agreement on a common module; 2) by agreement on a common set of components; and 3) by a system of bidding made possible only because of prior agreement on module and components.

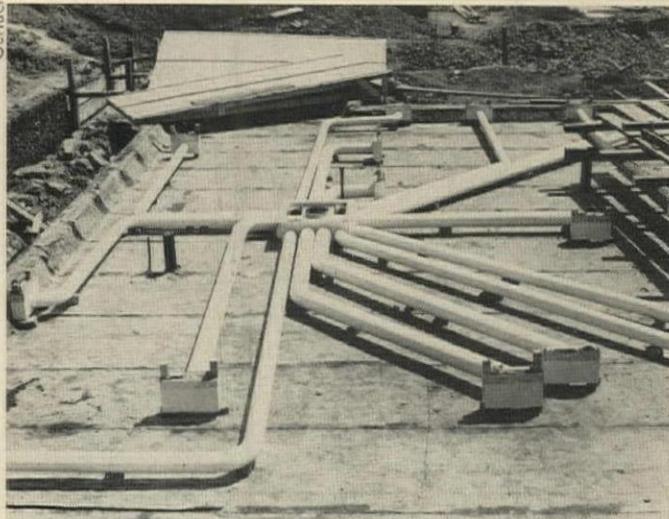
This bidding system was designed to fit Austrian conditions, but the principle applies to US housing as well. Bidders were not given bulky working drawings or specifications; instead they were furnished with simple sets of plans and elevations, simple diagrams showing the different components required, and simple *performance* standards which these components had to meet. After that, each bidder was on his own: so long as he met the modular requirements and the performance standards of the system he could use any materials or methods of construction that best suited his particular operation. In short, each supplier was encouraged to use his own ingenuity to cut costs and, at the same time, improve performance. Instead of wasting his time thinking up ways of making his product "different" from every comparable product on the market, each bidder concentrated on making it better and cheaper. One result was that almost anybody could get in on the act—and did; and the competition among would-be suppliers (of all types and sizes) greatly benefited the final product.

In taking bids on unavoidable on-site operations (foundations, landscaping, etc) the Vienna designers used a system similar to one long in use in Britain: they asked bidders to figure on specific quantities, rather than the whole job. As a result, the builder was assured that all bids were based on identical assumptions.



PLUMBING CORE contains electric water heater (with storage tank), plumbing tree, electric heating unit and exhaust fan for bathroom, flush-tank for toilet. Fixtures are attached on site.

Gerlach



HEATING COMPONENT is an under-slab, warm-air duct system with a furnace unit attached (not shown here). This combination of warm-air and radiant heating system was a major innovation for Austria.

USIA



EXTERIOR WALL COMPONENTS, shown here during assembly include a blank wall panel, exterior door panel, two small window panels and two windowwall units. All window panels arrive on site ready glazed.



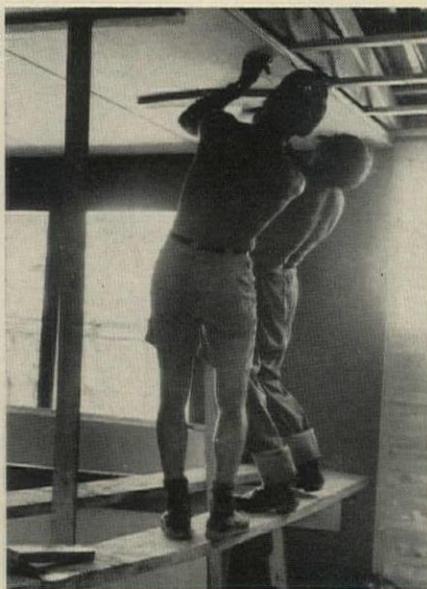
ROOF TRUSSES being erected here come in three sizes (7, 8, and 9 meter spans). In the pilot models, trusses were topped either with panels, or with "Fural" aluminum roofing on purlins (see below).

Gerlach



PARTITION COMPONENTS, in six varieties, fit into splines between floor slabs and roof trusses. Wiring is distributed through attic.

Gerlach



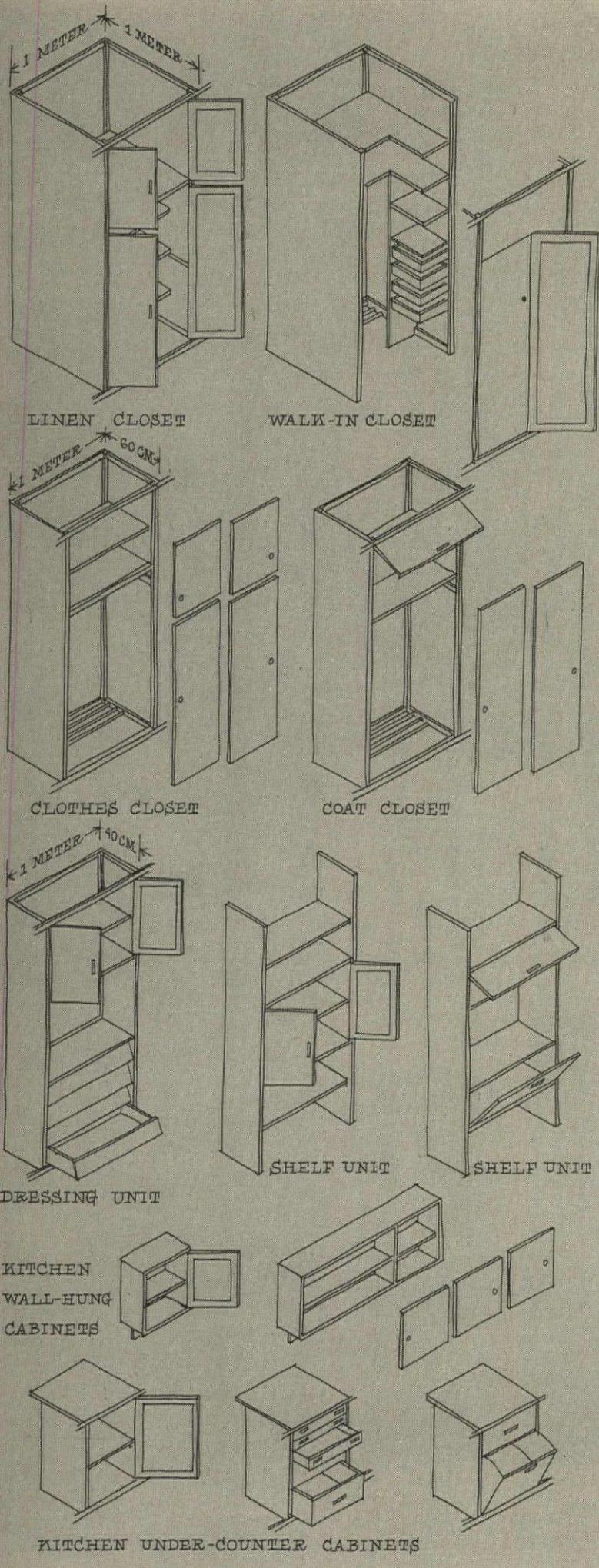
CEILING PANELS come in five modular sizes, some for application to roof overhangs, others finished to resist condensation in bathrooms.

USIA



ALUMINUM ROOF COMPONENT is a patented Swiss system called "Fural," requires only purlin support, "zippers" together.

For the significance of the Vienna experiment, turn the page



The component system includes all furniture except tables and chairs

These storage units (shown in drawings at left and in photos opposite) all follow the one-meter module in width. However, they vary in depth from one meter for walk-in closets, to 40 centimeters for shelf units. But when dissimilar units are placed back-to-back, they do add up to the standard one-meter depth—thus maintaining the modular logic of the system (see plans on *p 131*).

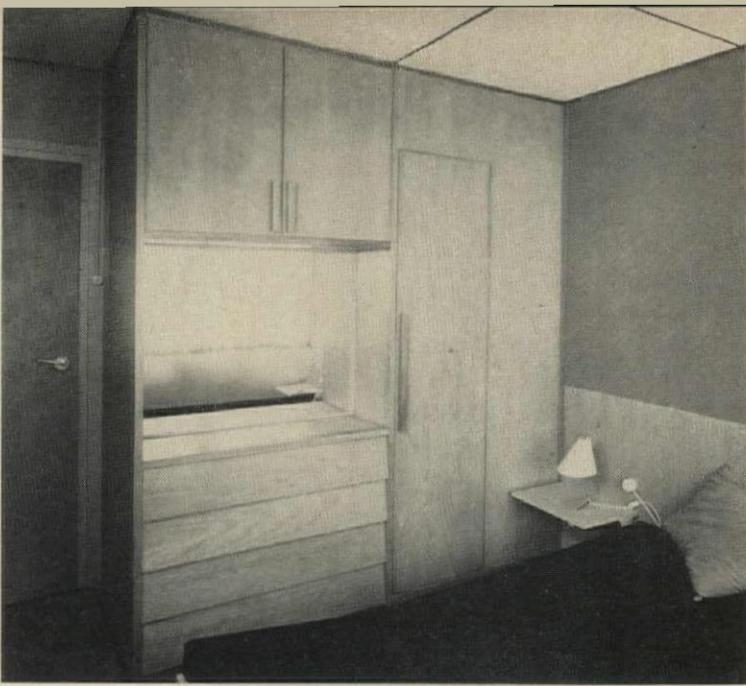
The "family" of storage components includes just about all furniture except chairs and tables. So, with the storage components in place, the houses are complete and ready for occupancy.

This standardized dimension system is basic to the technology of all modern industry

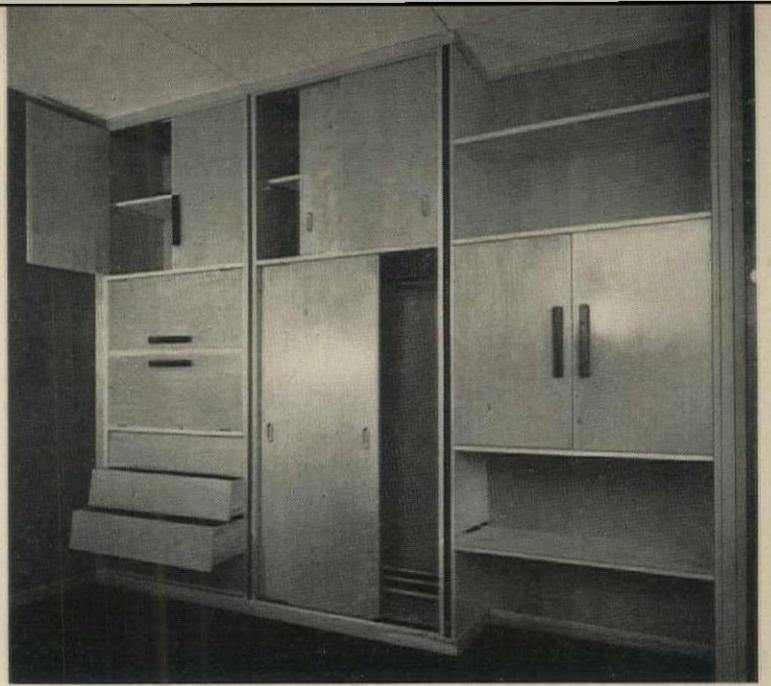
Every other modern industry subcontracts for precisely dimensioned parts; every other industry specifies, exactly, what performance standards those parts must meet; and every other industry uses dozens of different suppliers to bid on and furnish the same parts to fit together with all the other parts that ultimately make up the finished product.

Only in housing is it still the custom to prepare drawings as complicated as the dress-patterns for an 18th century ball-gown, and to confuse the issue still further by describing those drawings with specifications written in triple-talk—while saying virtually nothing about *performance* standards (which are, after all, the only characteristics anybody cares about in the long run).

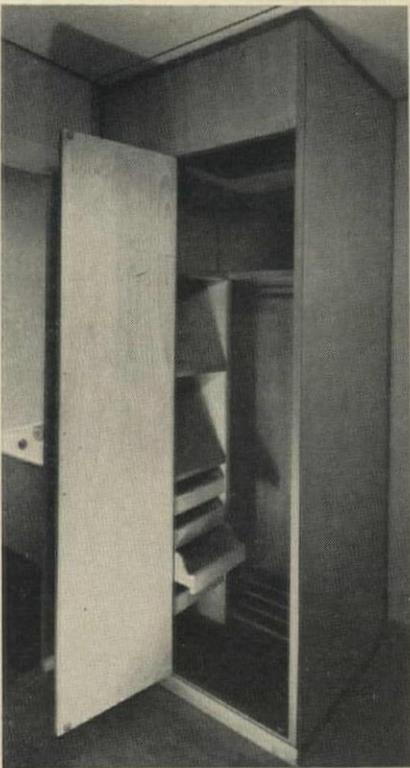
Since this project was government-sponsored and government-run—outside the US—it was possible to impose modular standards from above, as it is not possible or desirable in the ordinary course of business in the US. Obviously, before completely modular component building can become a reality for the US housing industry, a way must be found to achieve voluntary agreement on a similar set of standards.



BEDROOM STORAGE consists of two, one-meter wide units, includes drawers, dresser, and hanging space. Doors were specified either hinged or sliding.

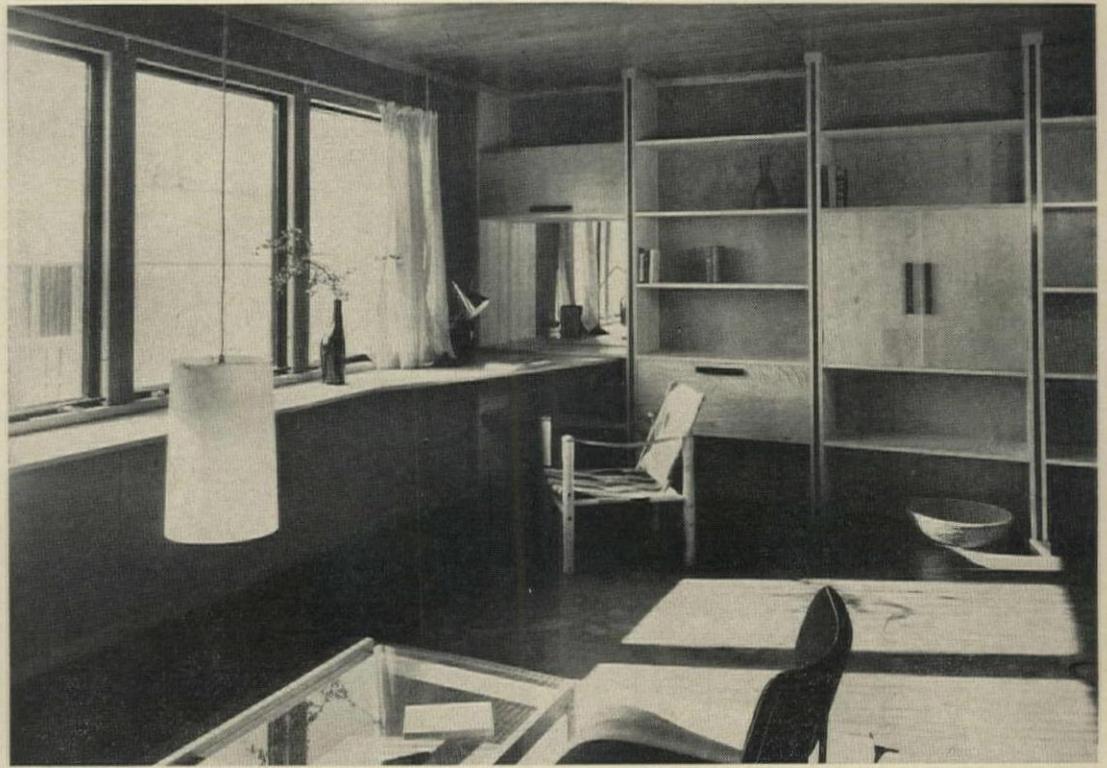


TYPICAL STORAGE WALL UNITS, all one-meter wide, were designed for use in many areas. Coat closet shown at center has sliding doors with recessed pulls.



Photos: Gerlach

WALK-IN CLOSET is square in plan, contains sliding trays, shelves, hanging space.



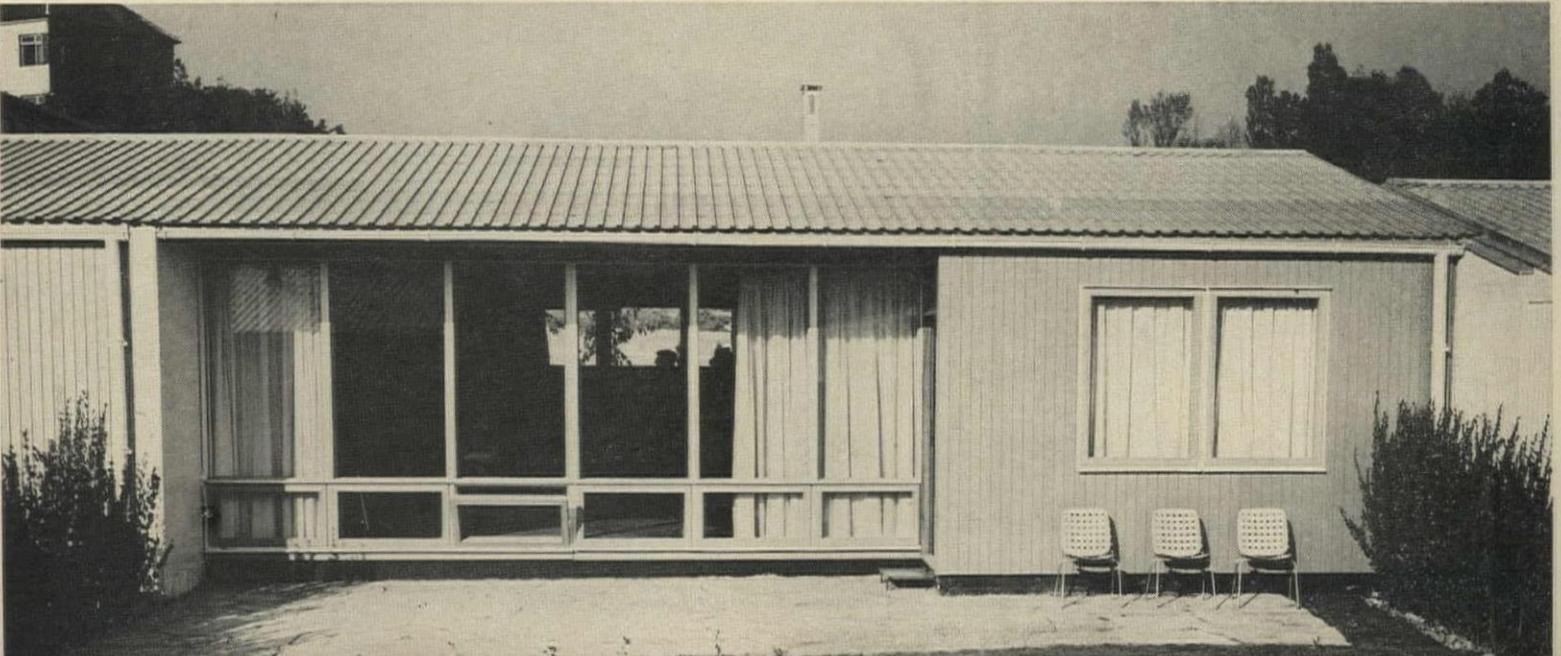
LIVING ROOM STORAGE consists largely of modular shelf units. Vertical reveals between prefabricated

units are elegant as well as practical: they can take up dimensional "slack" that might show in assembly.

GARDEN SIDE of typical component house has trim, custom-tailored look. Panel joints disappear into the modular pattern.

/END

USIA



THE PANEL:

FROM THE NATIONAL RETAIL LUMBER DEALERS ASSN

Paul DeVillie, *president*
(*President, Northern Indiana Coal & Lumber Co*)

H. R. Northrup, *executive vice president*

Paul Ely, *past president*
(*President, Ely-Hoppe Lumber Co*)

Watson Malone III, *past president*
(*President, Watson Malone & Sons*)

J. A. O'Malley, *past president*
(*General Manager, O'Malley Lumber Co*)

FROM THE LUMBER DEALERS RESEARCH COUNCIL

S. B. Slaughter Jr., *1st vice president*
(*President, N. R. Construction Co*)

FROM THE NATIONAL LUMBER MANUFACTURERS ASSN

Thomas McHugh, *president*
(*President, Atlantic Lumber Co*)

Mortimer Doyle, *executive vice president*

FROM THE RESEARCH INSTITUTE OF NAHB

Alan Brockbank, *chairman*

Robert Schmitt, *past chairman*

FROM THE ARCHITECTS

Robert Anshen
Anshen & Allen
San Francisco

FROM THE CALIFORNIA REDWOOD ASSN

Russell Johnson, *president*
(*President, Union Lumber Co*)

FROM THE DOUGLAS FIR PLYWOOD ASSN

G. H. Bacon, *president*
(*Vice President, Simpson Timber Co*)

John Ritchie, *advertising director*

FROM THE HARDBOARD ASSN

F. M. Hughes, *president*
(*President, Forest Fiber Products Co*)

FROM THE NATIONAL AMERICAN WHOLESALE LUMBER ASSN

J. Philip Boyd, *past president*
(*President, J. Philip Boyd Co*)

FROM THE NATIONAL INSTITUTE OF WOOD KITCHEN CABINETS

Arthur M. King, *president*
(*Vice President, The Mengel Co*)

FROM THE NATIONAL OAK FLOORING ASSN

Walter Wood, *president*
(*Director, E. L. Bruce Co*)

FROM THE PONDEROSA PINE WOODWORK ASSN

George M. Curtis, *president*
(*Chairman, Curtis Companies*)

FROM THE RED CEDAR SHINGLE BUREAU

Frank S. Barker, *director*
(*President, Shakerstown Corp*)

FROM THE SOUTHERN PINE LUMBER ASSN

T. L. Latané Temple III, *director*
(*Vice President, Southern Pine Lumber Co*)

FROM THE WEST COAST LUMBERMAN'S ASSN

N. G. Gustina, *past president*
(*President, Gustina Bros Lumber Co*)

FROM OTHER MANUFACTURERS

Charles Gray, *president*
American Forest Products Co

H. M. Reed Jr., *president*
General Plywood Co

Robert B. Pamplin, *president*
W. H. Hunt, *vice president*
Georgia Pacific Plywood Co

F. E. Hammes, *vice president*
Edward Hines Lumber Co

Stanwood A. Murphy, *exec vice president*
Pacific Lumber Co

Thomas Gleed, *president*
Simpson Timber Co

A. Bristow Hood, *vice president*
Ralph Smith Lumber Co

To give the lumber and wood product industries a better understanding of their customers' needs and problems in housing . . .

To give these customers a better understanding of the many new ways wood can now be processed to make it more economical and more usable . . .

To help the wood industries foresee and meet the fast-changing, fast-growing needs of the housing industry . . .

To help the housing industry make better use of wood to sell more houses . . .

HOUSE & HOME joined the National Retail Lumber Dealers Assn and the National Lumber Manufacturers Assn in sponsoring an industry-wide

Round Table on

F. R. Smales, *vice president*
US Plywood Corp

George Weyerhaeuser, *vice president*
Weyerhaeuser Co

FROM THE RESEARCH LABORATORIES

R. I. Leininger, *asst chief of chemistry*
Battelle Memorial Institute

H. A. Liska, *chief, Div of Physics & Engineering*

H. O. Fleisher, *chief, Div of Timber Processing*
Forest Products Laboratory

R. H. Bescher, *asst general manager*
Wood Preserving Div
Koppers Co

H. B. McKean, *director of research*
Potlatch Forest Products Co

A. Kenneth Beggs, *senior economist*
Stanford Research Institute

William H. Scheick, *vice president*
Timber Engineering Co

A. S. Gregory, *director of research*
Weyerhaeuser Co

FROM THE RAILROADS

William Peoples, *vice president*
Southern Pacific Railroad

MODERATOR

P. I. Prentice, *editor & publisher*
HOUSE & HOME



All photos: Harry Redl

the use of wood in tomorrow's house

To this Round Table came:

The president, the executive vice president, and three past presidents of the National Retail Lumber Dealers Assn, together with the upcoming president of the Lumber Dealers Research Council and a past president of the National American Wholesale Lumber Assn;

The president, the executive vice president, and the promotion committee chairman of the National Lumber Manufacturers Assn, together with the research vice president of its engineering affiliate;

The presidents or top vice presidents of 17 of the biggest and most progressive lumber and millwork manufacturers, including the president of the Douglas Fir Plywood Assn, the president of the National Oak Flooring Assn, the president of the Ponderosa Pine Woodwork Assn, the president of the Hardboard Assn, the president of the National Institute of Wood Kitchen Cabinets, the president of the California Redwood Assn, the past president of the West Coast Lumbermen's Assn, a director of the Southern Pine Lumber Assn, and a director of the Red Cedar Shingle Bureau;

The chairman and the immediate past chairman of the Home Builders Research Institute;

A top-flight housing architect;

The leaders in wood product and wood market research from the Forest Products Laboratory, from Battelle Institute, from Stanford Research Institute, and from some of the big manufacturers, and

The vice president in charge of freight traffic of the railroad which is doing most to cut the cost of shipping wood products by rail.

continued

The Round Table agreed that:

Wood is the best natural material for building houses, because . . .



McHUGH
We can no longer take our markets for granted.



BACON
We must do all we can to help the builder reduce his on-site costs.



BROCKBANK
NAHB wants to help every builder in America build a better house for less money.



WEYERHAEUSER
Gluing opens up all kinds of potential for us.



DEVILLE
The progress of this industry will depend upon improving our teamwork.

Wood is the only natural material that meets almost every homebuilding need—framing, roofing, flooring, subflooring, sheathing, siding, surfacing, doors, windows, shelves, cabinets, insulation, even foundations if properly treated with preservatives.

Wood is a pleasing material. Homebuyers like wood. They like its looks and they like its feel. They like its texture and its warmth. They like the soft translucence of its unpainted surface. They like its grain, different for every species, and often beautiful.

Wood is a practical material. It is strong. It is light. It is easy to nail and easy to glue, easy to cut and easy to mill, easy to finish and easy to paint. It has good insulation values. It is a natural plastic.

Wood is a durable material. Rightly treated, it will last for hundreds of years and be just as good at the end of that time as it was at the beginning. Some of the finest new houses are framed with lumber taken from century-old houses and embellished with wood paneling taken from century-old houses.

Wood and housing are interdependent and need to know much more about each other's progress

Before FHA the housing industry was largely dependent on the lumber manufacturers and particularly the lumber dealers for its financing. So in those days it could almost be said that housing was a part of the lumber industry.

Since FHA this relationship has been reversed. Today housing has more and better financing of its own than any other industry, and housing has grown up to be the biggest of all American industries, far bigger than the lumber industry of which it was once a part. So today it could almost be said that a large segment of the lumber industry is part of the housing industry which provides its principal market.

Thirty years ago the wood industry had a near-monopoly in housing; almost every dollar the housing industry paid for non-masonry building materials was spent for wood framing, wood shingles, wood flooring, wood doors, wood windows, wood sheathing, wood siding, and other wood products.

But today wood's monopoly in the housing market is challenged at almost every point, and year after year wood has won a little bit smaller share of the housing dollar. Wood has lost much of the window market to metal; much of the subflooring market to concrete; much of the door and door-buck market to steel; much of the flooring market to asphalt and

plastics; much of the roofing market to asphalt. Other industries are already challenging wood for siding, and soon wood will face a new and critical challenge from the new sandwich panel—a challenge to the basic market for lumber, the market for framing.

Some of wood's loss may have been inevitable, but some could have been avoided and some of the lost markets might be regained. . . .

1. If the wood industry had kept better informed about the revolutionary changes that were taking place in the housing industry and in what and how the housing industry wants to buy, and . . .
2. If the housing industry had been kept informed on the revolutionary progress that was taking place in the wood industry and the many new and improved products the wood industry can now provide.

Much more wood could be sold into every new house if the wood industry would do a better job studying the housing industry's fast-changing and fast-expanding needs and a better job telling the housing industry what the wood industry can offer to meet those needs.

For more about the twin revolutions in the wood industry and the housing industry, see pages 141-2.

Here are some ways more wood could well be used in tomorrow's house

1. *Building more space could use a lot more wood.* More space is the cheapest thing a builder can add to a house, and more space is what every homeowner and every homebuyer wants. Lack of space is the No. 1 complaint against today's houses. Four out of five new houses have bedrooms smaller than the minimum the Metropolitan calls "acceptable" for its mortgages.

2. *Providing adequate storage could use a lot more wood.* Lack of adequate storage is the No. 2 complaint against today's houses. Storage experts say that: Every clothes closet should have one more shelf for dead storage. Every closet should have ceiling-high doors. Master bedroom closets should be twice as long. Every linen closet should have full-depth shelves instead of today's 12" shelves. Every kitchen cabinet should be extended ceiling-

high. Every attic should be floored across its usable height to provide 500 sq ft or more of fine storage. Every attic should be made accessible by a folding stair. Every living room should have at least one built-in bookcase.

3. *Providing an adequate overhang could use a lot more wood.* And almost every house needs a big overhang to 1) integrate its design; 2) keep the sun and rain off the glass; 3) protect the wall finish so the walls will need less maintenance and repainting. Adding a 4' overhang to a 1,000 sq ft house would call for 58% more roofing, 58% more roof sheathing, and 58% more roof framing, plus 600 sq ft of soffit! Because big overhangs cut maintenance costs, FHA now requires less income to buy a house with an adequate overhang than it would require to buy the same house at a lower price without the overhang.



ELY
Our problem was to sell the architect, the builder and the consumer.



SCHICK
The dealers are likely to be tomorrow's fabricators.



O'MALLEY
Good design will provide better overhangs and use more lumber.



GRAY
Better understanding is the prerequisite for better team work.



LISKA
Too often our research results do not get the distribution they need.



GUSTINA
If two-thirds of the houses are built by 10% of the builders, they need products they can use all year.

4. *Closing the carport could use a lot more wood*—and so would making the garage big enough for a second car.

5. *Building a basement equivalent above ground could use a lot more wood.* A basement is mostly masonry and concrete, but when a builder provides space above ground for the activities that used to be below ground, the chances are he will build it mostly with wood. The wood industry's bread is buttered on the side of the basement-less house—especially the

basement-less house built over crawl space.

6. *Roofing over part of the patio could use a lot more wood*—and it would let the home buyer enjoy the patio on many days when it would otherwise be useless. The panelists at McCall's Women's Housing Congress were almost unanimous that a roof would double the patio's value and sales appeal.

7. *Accent paneling could use a lot more wood*—and give more character and interest to both the living room and the family room.

Freight costs and handling costs must be cut with better equipment and better loading

Freight costs alone add nearly 50% to the fob price of lumber; handling in the lumber yard eats up half the lumber dealer's profit.

These costs could be cut much lower if:

1. The lumber dealers and lumber manufacturers would all accept unitized load standards and order and ship by the unit instead of by the piece or packet. They have been working to develop such standards for three years now. The NRLDA Materials Handling Committee has recommended a standard 4'x4' unit (which could also be broken down into four 2'x2' units or six McCracken packets).

These units would fit the customary 4' module of the lumber dealers' yards. They could be stacked two wide and two high in a box car, permitting heavier loading than the 6' height which is customary in loose-loaded cars. They would also fit the maximum 8' width for road trailers. It is high time these standards were generally accepted and used by everybody.

2. If the railroads would provide wide-door box cars to permit loading and unloading these unitized loads with fork lifts. (One man with a fork lift can unload and stack 30,000 board feet unitized in 26 minutes—a job that would take two men two days for loose lumber.)
3. If all the railroads would offer incentive rates for fully loaded cars. (The Southern Pacific set a fine example by charging 25% less per cwt for cars loaded with 70,000 lb than for cars loaded with the 40,000-lb minimum.)
4. If all the lumber dealers would study their costs, look at their yard layouts, and equip their yards with the necessary mechanical devices to receive the unitized loads.

Lumber is a natural for shipment by rail because it is a heavy and bulky commodity moving in volume from mills that have sidings to yards that have sidings. It is tonnage the railroads can ill afford to lose for lumber is second only to coal as a source of freight revenue; it gives some major lines more than one-fifth of their total income. It is high time more railroads took more aggressive action to get back the lumber shipments they have been losing so fast to trucks. The Southern Pacific's success in getting back the bulk of the surface shipments from Oregon and northern California mills shows what can be done if the carriers provide wide-door box cars and offer attractive incentive rates for fully loaded cars.

Two years ago only a small percentage of the lumber shipments down the west coast were moving by rail and the average lumber loading was only 65,000 lb. Since the Southern Pacific introduced its incentive rates, it has gotten back most of the surface shipments in California and the Southwest and the average lumber loading has risen to 80,000 lb per car, making the shipments much more profitable to the railroad as well as to its customers.

The other railroads serving the Northwest have adopted similar incentive rates. Now they need the housing industry's help to get all the connecting lines to extend these rates to through shipments to the East and Middle West.

Since 1950 the Southern Pacific has bought no box cars (except PF type) without wide doors that can be opened to 16' to permit fast and easy loading (which saves money for the carriers, too, by cutting the time lost on sidings).

The high cost of painting and repainting threatens the future of wood for siding

Painting by today's methods with today's common paints is the most expensive, inefficient, and wasteful

of all homebuilding operations. It is so inefficient that the average house takes as many painter man-

continued



PEOPLES
For any haul over 400 miles railroads can beat trucks for economy.



GLEED
The customer is going to run our business — the home-buyer and the architect.



MALONE
Wood houses have lasted for hundreds of years.



BARKER
If the thing is finished in the factory then you have a factory control.



BESCHER
How many colors must we add?



JOHNSON
Redwood goes mostly into quality houses.

Round Table

continued

hours as carpenter man-hours. It is doubly and triply expensive because the same wasteful operation has to be repeated every three to five years. It is so wasteful and expensive that it threatens not only to price paint itself out of the new-house market, but also to price out all the products that require frequent repainting, first among which would be wood siding and wood trim.

Already FHA is encouraging the use of substitute materials by requiring less income to buy a more expensive house with asbestos or aluminum siding than it requires to buy a cheaper house with wood siding because the finish is supposed to last two or three times as long.

Here is a problem in whose solution the wood industry has a bigger stake than the paint industry itself because more wood than paint is involved.

There are four ways to minimize this wasteful expense. The wood industry would be well advised to promote all four:

1. Good paints can be applied better and faster with a spray than with a brush. (One man with a spray gun can apply two coats to a 1,500 sq ft house in a little over half a day.) This would change painting overnight from the most inefficient to the most efficient of all on-site operations.
2. Doors, windows, millwork, and even siding can be prefinished in the factory. (This would permit a much better finish.) Alternatively, they could be given all but the finish coat before erection.
3. New alkyd and acrylic paints are now available that are said to last two or three times as long as any of today's common paints. So far, however, only one of the big paint companies has spent any money to promote their use in homebuilding.
4. Wood siding will need much less repainting if the builder provides a good vapor barrier on the warm side behind it, good drainage below it, a good overhang above it, and good wall ventilation through the top plate.

Building codes should be modernized to let wood be used more efficiently

When wood had a near-monopoly in homebuilding, the wood industry may have profited by codes that made builders use 30% to 50% more wood than made any sense for framing, sheathing, etc.

But in today's market, where wood is everywhere challenged by competing materials:

1. The wood industry can no longer afford the competitive disadvantage imposed by senselessly excessive code requirements. Where wood cannot be used efficiently and economically, it may cease to be used at all. It makes no sense to require by law trusses spaced closer than 24" oc. It makes no sense to require studs spaced closer than 24" oc in one-story construction. It makes no sense to require studs bigger than 2x3 in non-load bearing partitions. It makes no sense to make builders waste costly man-hours putting short studs (less than 24") under a continuous header over door and window openings, where they serve no useful purpose. It makes no sense to require plywood wall sheathing thicker than 5/16" where approved by FHA.
2. The wood industry can no longer afford the competitive disadvantage imposed by code conflicts that forbid the use of wood components in one community that are perfectly legal in the next. One of the biggest LuReCo dealers was forced to stop making panels for builders by the high cost of making a different wood panel for almost every town in his territory. As homebuilding industrializes, wood will lose more and more of the market if code conflicts block the broad use of standardized wood components.

The National Lumber Manufacturers Assn and the Douglas Fir Plywood Assn have two of the largest

and best code staffs in the country. Up to now their efforts have been devoted primarily to commercial construction; ie, to getting codes changed to let wood compete in a market that takes less than a quarter of the wood that goes into building. We believe they should shift more of their efforts to the residential field, where most of the wood sold for building is used.

Best place to begin this work is to fight for a sensible and economical uniformity in the wood use requirements of the five "model" codes, one of which (International) actually requires 16" stud spacing in one-story dwellings unless the builder provides engineering data to show that his wider spaced members are designed as columns! Once the "model" code requirements have been streamlined and coordinated it should be much easier to bring deviating local codes in line.

The National Lumber Manufacturers Assn has started a systematic analysis of the wood use requirements of the model codes, which will be followed by a similar study of local codes. It is also working with the Forest Product Laboratory to develop and sponsor a uniform national standard for wood-frame construction. These two projects should speed the day when builders everywhere can make more economical use of wood and uniform wood components.

Wasteful codes can price wood out of thousands of good houses, and wasteful codes can price thousands of good houses out of the market. That explains why the National Association of Home Builders is making code reform and code coordination its No. 1 goal for 1960.



TEMPLE
We must understand clearly who will do what in this completely new set-up.



LEININGER
Dimensionally stable wood will be used first for doors and windows.



FLEISHER
Prefabrication will help the wood industry engineer its products to the end use.



CURTIS
We are all the housing industry—architects, builders, retailers, wholesalers and manufacturers.



HAMMES
With edge- and end-gluing we can furnish thousands of carloads perfectly clear.



PAMPLIN
Some times it is good to have competition, because it makes you smart.

Where and by whom should the components be prefabricated and prefinished?

As homebuilding industrializes and as more and more big question will be: who should make the parts and houses are built with parts instead of pieces the next where?

Some wood components can and will be made by the lumber mills themselves. Significantly, two of the biggest have already started developing coordinated components while a third is setting up a prefabrication subsidiary.

More can and will be made and prefinished by the millwork companies who have done such a fine job in the past twenty years developing complete door and window components.

But most of the parts will have to be made and finished not very far from the erection site, partly to save the high cost of shipping air, partly to minimize transit damage to the finishes. The biggest builders

can set up their own shops to make and finish their own components, but most builders will turn to nearby lumber dealers for the most economical solution of this problem. One builder member of the panel is already buying his components from a lumber dealer forty miles away; one dealer panelist is shipping components made in his yard into five other states.

Components construction seems sure to increase the homebuilding role and importance of those dealers who elect to add component manufacture and component finishing to the services they offer builders (and cut down the sales of those dealers who elect not to).

Today more than 80% of the new houses are built with supplies bought from less than 20% of the dealers and this concentration will be speeded by the shift to building with components.

The wood industry has been achieving revolutionary progress in recent years

Here are some of the biggest advances everyone in the housing industry should know about:

The big change through better forestry:

By investing many millions of dollars in scientific tree farming, tree planting, and tree thinning, the wood industry is putting timber on a sustained yield basis and making timber a permanent national resource, thereby realizing one of the most visionary American dreams. The tragic waste from forest fires is being minimized by faster firefighting over better roads and by getting the scorched trees cut and used before they can rot in place; and now the tree farmers are tapping the new science of genetics to develop new and more useful types of trees.

The big change from mechanization:

Today a small man with a power saw can cut down a big tree faster than Paul Bunyan could fell it with his mighty axe. A log loader and a big truck can get the wood out over paved roads many times faster than yesterday's horses. New and bigger conveyors and new and bigger saws and peelers in the mills are converting logs into lumber with far less labor man-hours than were needed just a few years back; so the wood industry has absorbed a 41% increase in wage rates since 1950 with only an 11% increase in its wholesale price index, compared with a 22.9% increase in the price of all building materials.

The big advance in fiber utilization:

Said one lumberman at the Round Table: "We have almost tripled our utilization of the fiber we cut. What we can't use for lumber we use for broom handles or for chips; what we can't use for chips we use for insulation board, or for paper, or for wood flour, or for acoustical tile; and the bark we can't use for any of these needs we use for mulch for soil-conditioning."

The big advance in new products:

New products like plywood (over seven billion board feet last year of a product almost unknown in 1929), fiberboard (for insulating sheathing), hardboard (strong and easy to work for use indoors and out), particle board (fastest-growing new use of wood), laminated lumber (stronger than the grade from which it was made), edge-and-end-glued board ("it lets us make what the dealer can sell instead of selling the dealer what we can make").

The big advance through research:

Already research has shown that—

1. Wood can be impregnated with preservatives to defy termites and decay and even to challenge the use of masonry for foundations;
2. Wood can be heat-treated to fuse the lignin in its fibers to form a beautiful low-cost natural plastic surface;

continued



MURPHY
I came to listen and learn.



GREGORY
Our research has spent too much time solving problems that aren't important.



NORTHUP
Which components should be prefabricated by the dealer to save shipping costs?



DOYLE
Let's talk about how we can do things right in the future.



HOOD
We need to get more engineering taught in our universities.



SMALES
We have been trying to sell our product as it is, instead of selling it as it should be.

Round Table
continued

3. Wood can be made virtually non-combustible. This costs about twice as much f o b mill (\$90 mbf more) on today's small volume, but wider use could bring the added cost way down. Non-combustibility could lead to much more use of wood in apartments, which are now one-fifth of the entire housing market.

Research may soon show how wood can be made dimensionally stable which would add much more than its added cost to the value of wood for windows, doors, drawers, etc.

What is most needed now is system research into the best and most economical way to build wood and wood components into houses. This system research is beyond the scope of any one company. It must be pushed on an industry-wide basis by such groups as the National Lumber Manufacturers, the Lumber Dealers Research Council, and the Research Institute of NAHB, which offers manufacturers a unique opportunity to pre-test their new products, their fabrication plans, and their marketing programs on some of the smartest builders in the country.

The big change in millwork:

Thirty years ago most windows and window frames, most doors and door frames, most kitchen cabinets and most storage units were assembled on the job by on-site labor.

Today you can buy far better windows prefabricated in many new types and better types from window makers with national reputations. You can buy far better doors and door assemblies from door manufacturers with national reputations; you can buy far better cabinets and storage units factory-made and factory-finished than most local fabricators can match.

Most of these doors and windows are treated with water-repellent preservative that improve paint performance and minimize shrinkage, swelling, and decay.

The big advance in prefinishing:

Many wood products (notably hardwood flooring, windows, and cedar shade panels) are now available at little or no extra cost with factory finishes far better than on-site labor is likely to apply.

The big change in market approach:

Thirty years ago the lumber mills and the lumber fabricators may have been sitting back waiting for orders; today they are all out hustling for business. Perhaps the best evidence of this all-important change is the national advertising many manufacturers are sponsoring individually or through their species associations and the big cooperative promotion they are all supporting through the National Lumber Manufacturers Assn.

But the lumber industry must open its eyes to the simultaneous revolution in housing

Too many lumbermen have been so preoccupied with their own revolution that they have failed to understand that the housing industry was changing and advancing just as fast, so they have been slow to adjust their production, their dimensioning, and their merchandising to the vastly different market in which wood products must now be sold. Among the most important changes and advances in the housing industry are these:

The big change in who builds the houses

Thirty years ago most houses were built by small builders, most of them self-employed carpenters. Today most houses are built by businessmen builders. One-third are built by about 1,000 builders of more-than-100 houses each; two-thirds are built by some 10,000 builders of ten-or-more-houses each.

Yesterday's carpenter builders were not too interested in labor saving. Much of the labor they saved would be their own, so they were often willing to waste labor in order to pay less for their materials. Today's businessmen builders know very well that on-site labor costs 10¢ a minute, so they are willing

to pay more for materials if by so doing they can cut their labor costs and achieve a lower cost in place.

This is the biggest change in the housing market for wood products.

The big change in whom the houses are built for

Thirty years ago most houses were built on order to be lived in by the family who had them built. Today five houses out of six are built for sale to an unknown buyer. These unknown buyers can accept or reject what is offered them, but they play no direct part in product selection; and their choice is limited to what the architects design, the builders build, the lenders finance, the dealers stock, and the realtors sell.

This is the second biggest change in the market for wood.

The big change in how construction is financed

Thirty years ago most houses were built on a line of credit extended or arranged by the lumber dealers who were supplying them. Today FHA advance commitments and their savings and loan counterpart)



SCHMITT
We can pay a lot more for a material that helps us cut our on-site labor costs.



BOYD
The wholesaler exists to bring 50,000 lumber mills and 30,000 lumber dealers together.



McKEAN
The lumber industry still has a lot to learn about the housing industry.



BEGGS
Only in framing has lumber been able to maintain its relative position.



HUGHES
Hardboard has an almost unlimited potential.



SLAUGHTER
The future of housing lies with building with components instead of with pieces.



WOOD
This is a two-way street, and we need your help just as much as you need ours.

make it easier for builders to finance 20 houses on bank credit than it was to finance five houses on dealer credit in the old days. This change has led to a great change in customer relations between builder and dealer, giving the builder much more freedom of choice.

The big change in how house sales are financed

Thirty years ago most homes were sold with a 50% or 60% first mortgage and a short-term second mortgage that had to be paid off fast. Today most new houses are sold with high-percentage first mortgages (up to 100% VA, up to 97% FHA, up to 90% savings and loan) with 20- to 30-year terms. This makes it easy for homebuyers to commit for much more expensive homes and thus doubles the market for quality homes and quality construction.

The big change in where houses are built

Since the war, most of the new houses have been built in the 168 metropolitan areas where more than most of US population growth is concentrated. Most of the building has been in the suburbs. The small towns and farm areas have been losing population, so the only homebuilding there has been for the trade-up market.

The big change in what buyers can afford

The whole net population increase from now to 1970 will be families who could qualify FHA to pay at least \$17,500 for a good house, and 60% of this increase will be families who could afford to pay at least \$23,500 for a better house. So the housing industry's No. 1 problem has ceased to be how to build a good house cheap enough to get down to the market. Today's problem is how to build a house good enough to make homebuyers pay what they can afford to pay for better living at home.

The big change in the Government's attitude

As late as eight years ago, the whole pressure of federal housing policy was exerted to make builders build for the low-income market. Today this pressure has been almost reversed. FHA now requires less cash to buy a \$20,000 house than FHA required in 1952 to buy a \$12,000 house; less cash to buy a \$13,000 house than FHA required in 1952 to buy an \$8,000 house. FHA requires less income to buy a \$20,000 house than FHA required as late as 1957 to buy a \$15,000 house; less income to buy a \$15,000 house than FHA required in 1957 to buy a \$12,000 house. Almost equally important, FHA requires less income to buy a more expensive house built with low-maintenance quality products than to buy a cheaper house built with higher-maintenance components.

The big change in how houses are built

As late as ten years ago, most houses were built one-piece-at-a-time with on-site labor and fastened together on the job with an average of 65,000 nails. Today, more and more builders are cutting their labor costs by building with parts instead of pieces—

factory-made or shop-made components built to standard dimensions to fit together at the site with a minimum of on-site labor. Some builders are assembling the components of their houses in less than 18 working days from slab to completion.

From now on, the wood industry should figure that more and more of its products will go into components. Specifically, more and more houses will be built with trusses and more and more houses will be built with panels. The trusses will be built almost entirely with 2x4s and 2x6s, minimizing the need of 2x10s and 2x12s for joists. The 2x4s and the 2x3s used in the panels will be shorter than the framing members used in conventional construction.

The big change to dimensional standards

Already most merchant-built houses have standardized on a wall height of 8' plus a small tolerance; and already most horizontal dimensions are standardizing on 2' and 4' increments.

This standardization will be speeded by the change to component construction so the lumber mills should restudy all their standard lengths. Almost nobody uses an 8' stud (stud lengths under an 8' ceiling range from 7'6" to 7'8", depending on the method of construction). And 12' and 14' joists create odd-width rooms (11'4" or 13'4") that do not conform to the wall modules.

The big change in how houses are sold

More than half of all the homes built for sale last year were sold from model houses. These model houses were visited and shopped by some 39 million different adults, according to a Politz survey. They are the finest showcase for housing products, and the wood industry would be well advised to cooperate with the 3,000-odd builders who undertake the heavy expense of operating these model houses and getting out the crowds, and well advised to help them make a more effective selling feature of the wood products they use.

The big change to the complete house

Thirty years ago most built-for-sale houses were stripped-down models; the only equipment items they included were the toilet fixtures, the sink, the furnace, the wash tubs, and perhaps the stove.

Today, more and more houses are being sold fully equipped with all the labor-saving appliances the housewife would want, and an increasing amount of built-in-furniture. The package mortgage lets the builder include all these features for a minimum added down payment, with 20 to 30 years to pay off the balance. FHA requires no more income to buy the house fully equipped than FHA requires to buy a stripped-down model of the same house. The complete kitchen has become the most successful selling feature of the new house. It is selling many thousands of homes that could not otherwise be sold. This is another way of saying it is selling millions of board feet of lumber and other wood products for the wood industry. /END.



ANSHEN
Wood is one of the most magnificent materials for homes.



HUNT
We can't expect to have any markets handed to us on a platter.



REED
The dealers and jobbers will have to do more fabricating.



KING
At least 88% of the kitchen cabinets are made of wood.



When your houses have enough exciting features, today's buyers will queue up for them

That's the report coming in from builders' 1960 openings, from early Parades of Homes, and from a spot survey of industry leaders in 25 major markets.

While many builders are having their toughest selling job in years, there are builders in every market who are selling better than ever before. One big reason for this is quickly apparent:

Houses that are selling best are loaded with exciting new features—features that spell convenience, luxury, livability, and just plain fun to today's selective buyers. By contrast, houses that are selling slowly have nothing that distinguishes them from houses built two, three, or even five years ago.

Not all the best-selling houses have all the same features. Not all the same features are seen in every part of the country. And not all the features appear in all price classes. But enough of the same features are repeated in enough of the best-selling houses—in the \$15,000-and-up price range—to show a clearly discernible pattern.

Taken alone, these features do not make a slow seller a best seller or make a bad house a good house. Architect Hank York makes the point: "A good house must be more than a collection of features. You must start with a sound plan and a good design and integrate the wanted features into the whole house."

To meet the 25 industry leaders surveyed in this market report, and to see the features they report are "today's best sellers," turn the page.

MAY 8, 1960. Crowds queue up in front of models at Houston Parade of Homes. In 15 days, 169,000 people came out to see 31 models (for details, see p 196). "I'll hold up this Parade as a goal for all associations to follow," said NAHB President Martin Bartling.



Illinois Builder Neil Medema who is selling faster than any competing builder."



Rochester Builder Jerry Cook, whose sales are "a little ahead of last year."



N. J. Builder Jake Lefferts: "Sales are running 50% ahead of last year."



S&L Executive Gare Reid, who is president of the national appraisers group.



St. Louis Builder Burton Duenke, whose sales are up 20% over last year.



Jacksonville Builder Paul Lazeau, who has sold 100 houses since January.



Buffalo Architect John Highland, who has builder clients in five cities.



Salt Lake City Builder Alan Brockbank who is a past president of NAHB.



Florida Builder Gene Fisher, who has best sellers in Miami and Orlando.



Dayton Builder Charles Huber, who expects to sell 1,300 houses this year.



Peoria Builder Clarin Howe, who is having "the best year ever."



Charlotte Builder Charles Ervin, who sold 85 new houses during May.



Seattle Realtor Murdock MacPherson, whose firm sold 130 new houses in May.



S&L Executive Elwood Knapp, next president of US S&L League.



Wilmington Builder Frank Robino, who is selling ahead of construction.

H&H asked these 25 industry leaders:

What features are helping sales the most?



N. Y. Realtor Irving Kern, who represents 20 builders four states.



Ft. Wayne Builder Ralph Shirmeyer, who is selling "harder but not slower."



Kalamazoo Builder Dave Satin: "Sales of \$25,000 and up homes are best."



N. Y. Architect Herman York, who has 45 builder clients across the country.



Houston Builder Paul McConnell, reports "business has never been better."



Robert Morgan of Massachusetts Purchasing Group: 100 investors in out-of-state mortgages.



Arizona Builder Bernie Young, this year one of Phoenix' most successful custom-price builders.



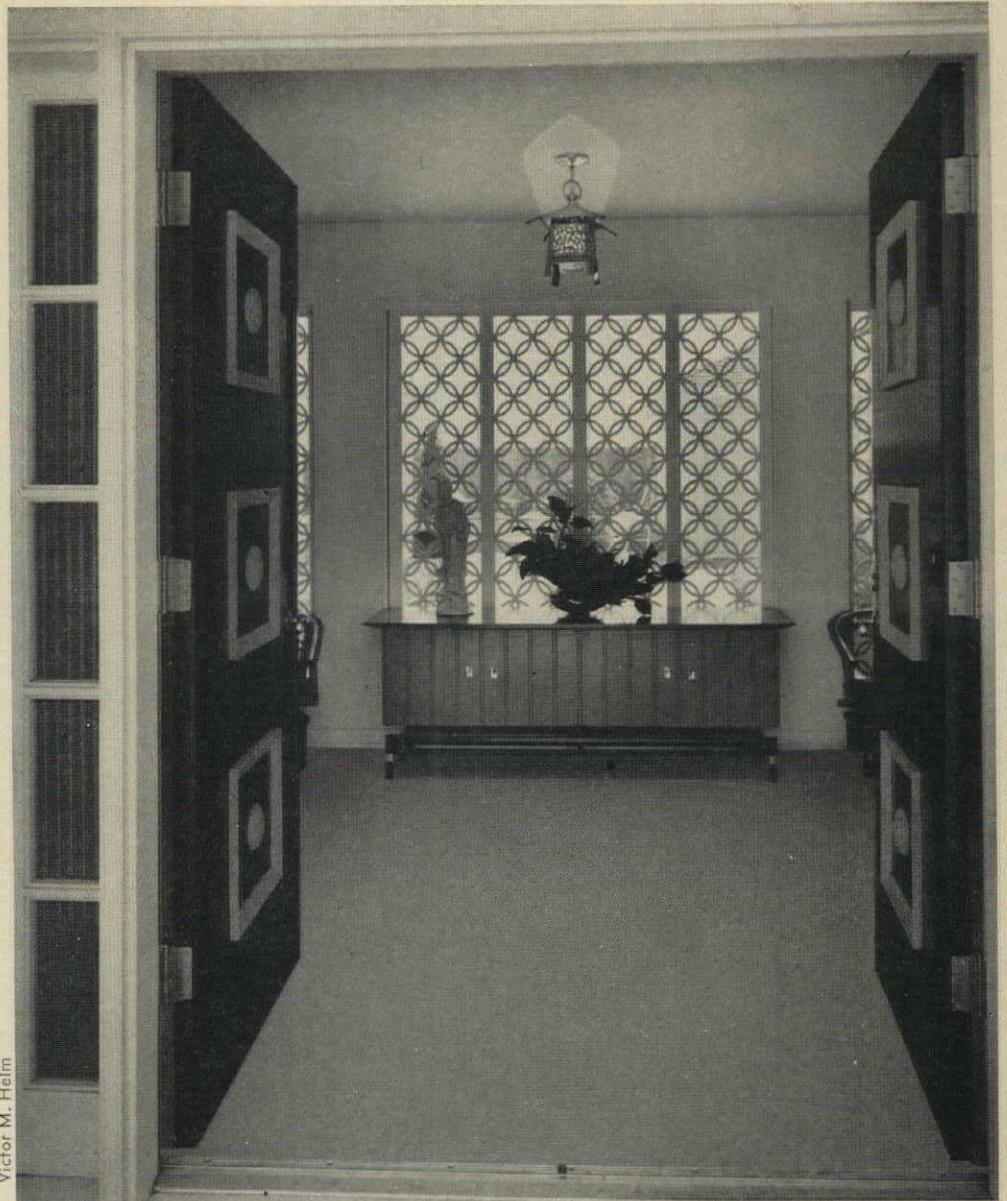
Denver Builder Ed Northway: "we're selling at a 520-house-a-year rate, vs 450 last year."



San Antonio Builder Tom McGovern, who reports he is having "the best year I've ever had."



Washington Builder Herman Greenberg: "We'll sell twice as many houses this year as last."



Victor M. Helm

DOUBLE-DOOR ENTRY adds walk-in appeal to Lakewood Building Co's house in Houston Parade. Visitors get a view through patterned window to a landscaped court between wings of the house.

The leaders report houses that are selling best have:

1. An attractive entryway

"A pleasant entry is most important because it makes a good first impression," says Architect John Highland of Buffalo. Adds Chicago Builder Neil Medema: "Buyers want a foyer that doesn't pop visitors right into the living room."

The experts sum up: In every price class, it pays to offer as much "walk-in" appeal as you can. An entry hall provides an inviting look into the rest of the house, gives a sense of anticipation. You can hide a direct view into the living room with a grille or screen. Often, a central hall is not only attractive, but improves circulation and helps zone living and sleeping areas.

SINGLE DOOR ENTRY opens through block-floored area to living room. This entry way is a Brown & Kauffmann trademark.

Ernest Braun

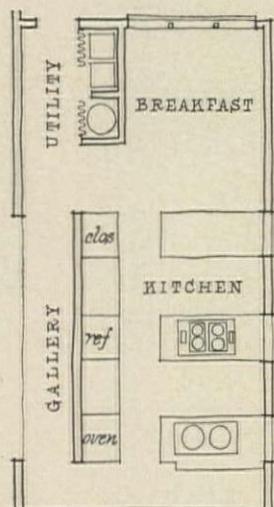


To see ten other "best-seller" features, turn the page



Bel-Air

BIG OPEN KITCHEN is divided by three counters into preparation, serving, and dining areas. Houston Parade house by PaceSetter Homes uses furniture-like cabinets, luminous ceiling.



Houses that are selling best have

2. A kitchen to entertain in

"Visitors always gravitate to the kitchen," says Builder-Realtor Alan Brockbank of Salt Lake City. "So our buyers want the kitchen to be big enough for a party and have cabinets finished like fine furniture." Adds St Louis Builder Burton Duenke: "Women want a glamour spot to work in and entertain their friends in."

The experts sum up: First, a kitchen must be efficiently planned and well equipped. Then, to make it pleasant for entertaining, it should have color, attractive lighting, lots of counter space, handsome cabinets, some paneling or wallpaper, perhaps even a barbeque or fireplace. And it must have space enough for visitors.

Victor M. Helm



EXPENSIVE LOOKING BATH in Houston Parade house has wall-length mirror, recessed ceiling lights, undercounter storage, toilet and tub behind louvered doors. Builder: Herbert Outlaw.

Houses that are selling best have

3. Baths that look luxurious

"We know that people want luxurious bathrooms," says Banker Robert Morgan of Boston, "and the extra bath is now more important in all price ranges." Says Builder Frank Robino of Wilmington: "We're giving the luxury look: dramatic vanity, more lights, more mirrors."

The experts sum up: Most fast-selling houses have bathroom features once found only in expensive houses. These include plenty of space (even though it is not necessary), luminous ceilings, plenty of tile, good lighting for make-up or shaving, a long counter with built-in basins, lots of storage space in enclosed cabinets, big mirrors, splashes of color, fancier hardware, a tub or shower enclosure instead of a shower curtain. And more and more baths are compartmented to hide the toilet.

Victor M. Helm

Photo right: Zintgraff



BREAKFAST NOOK in Houston Parade house by Paul McConnell shows new trend to separate room with uncrowded space, paneled walls, and a large window (often a bay) facing a rear porch or patio.

SEPARATE DINING ROOM can be closed off from kitchen with louvered doors in San Antonio house by Builder Tom McGovern. Additional dining space is in the family room at other end of kitchen.

Houses that are selling best have

4. A separate dining room

Victor M. Helm



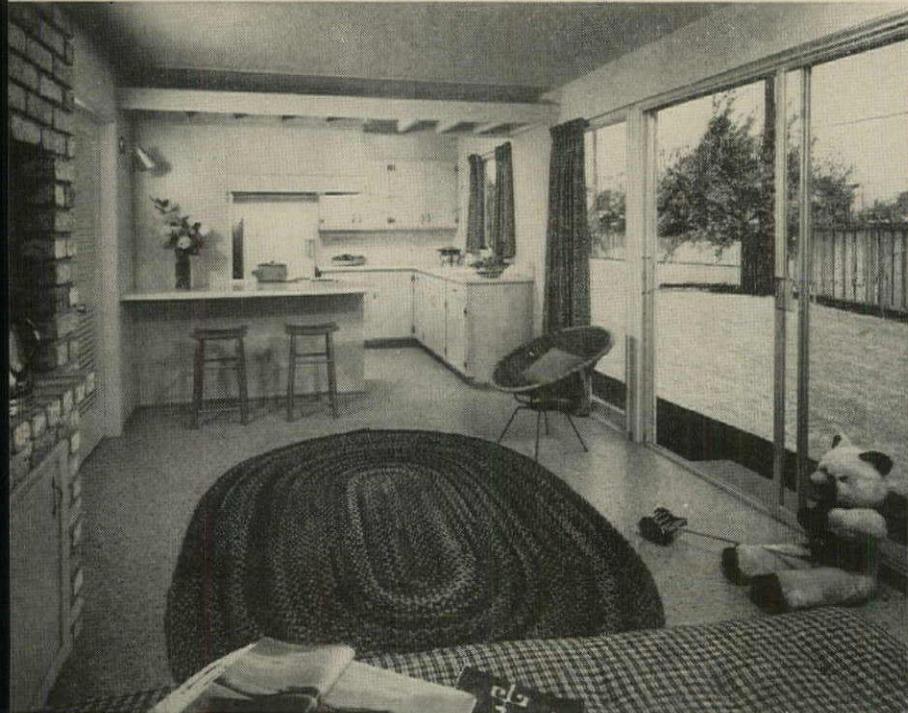
"There is an overwhelming trend to a separate dining room," report Builders Meyers & Lazeau of Jacksonville. Herman Greenberg of Community Builders, Washington, agrees: "Every woman wants one." In Peoria, says Builder Clarin Howe: "If you don't have a separate dining room, you don't sell."

The experts sum up: The dining room sells houses because, to most families, it is the symbol of gracious living. To a family moving up to a better house, the separate dining room is a chance to take the dining table out of the living room or the kitchen area. It is so important to some families that when Fisher & Rosen of Miami offered a choice of a family room or a dining room, 70% of buyers took the dining room.

This separate, relatively formal, dining area is almost always supplemented by a pleasant informal dining space, either in the kitchen or in an adjacent family room. And here's another idea to watch: some of the houses in the Houston Parade had a breakfast nook built between the kitchen and family room but separate from both (photo, upper left).

FORMAL DINING ROOM is partly open to a step-down living room in Builder Maggie Plumb's Houston Parade house. The pilasters framing the archway and mural above wainscot carry out colonial feeling.

continued



FAMILY ROOM, planned as informal living area and children's playroom, is open to kitchen and outdoors so housewife in kitchen can supervise children indoors and out. Builder: John Mackey, Sacramento.

Houses that are selling best have

5. A second living area

"A good second living room is the room that sells the house," says Seattle Realtor Murdock MacPherson.

The experts sum up: In every area of the country, fast selling houses have one or another version of the family room. In California, the family room is next to the kitchen and usually open to it. In Texas, the "den" is always at the back of the house, is often larger than the formal living room. In the Northeast, buyers want a small, private den; in Florida, a big screened porch.



LIBRARY-STUDY, decorated here as quiet room for teenagers, is increasing in demand as postwar families grow up. Architect Earl Fey designed this room for St Louis Builder Norman Schuermann.



FINISHED PORCH, once a warm-weather living center, is coming back as a place to dine and entertain. This porch (or Florida room) is in a Mackle Bros model, Port St Lucia, Fla.

Houses that are selling best have

6. Spacious rooms

"Everyone wants more space and roomier rooms," says Ed Northway of Hutchinson Homes, Denver. Adds Banker Gare Reid of Detroit, "Everyone is after space these days. If a builder can advertise he's got more space, he'll sell his houses."

The experts sum up: While space is a luxury that all American families want, they do not want just big unplanned space. They want it where it counts—usually in the living areas. Women want space that helps make a house look gracious—so smaller rooms that give an illusion of space can sometimes be as effective as larger rooms.

LONG (52') LIVING AREA in Houston model by Bob Pine is divided into living and family rooms. See-through screen separates formal and informal activities while giving visitors full impact of overall area.



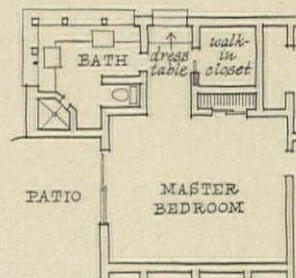
MASTER BEDROOM SUITE in Houston Parade house by Craft & Sons has dressing alcove between master bath and walk-in closet. Bedroom also opens to private terrace at left. Plan of suite is below.

Houses that are selling best have

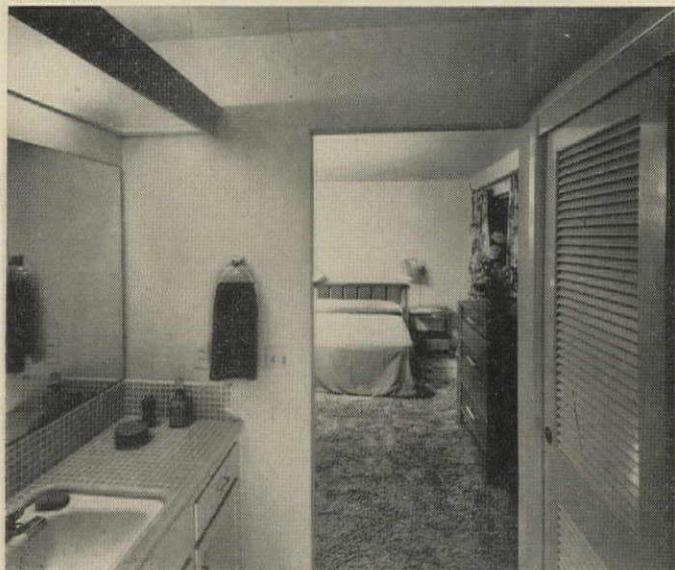
7. A master bedroom suite

"Master bedroom suites are coming in strong," reports Builder Bernie Young, Scottsdale. Adds Dayton Builder Charles Huber: "The master bedroom in our newest model is the largest we've ever built, has a dressing room, a walk-in closet, and a private bath."

The experts sum up: This is a selling idea borrowed from expensive houses to help sell less expensive houses. An owner's suite "must have a dressing room area, a dressing table, a lot of closet space (preferably separate for the man and woman), and a handsome bath."

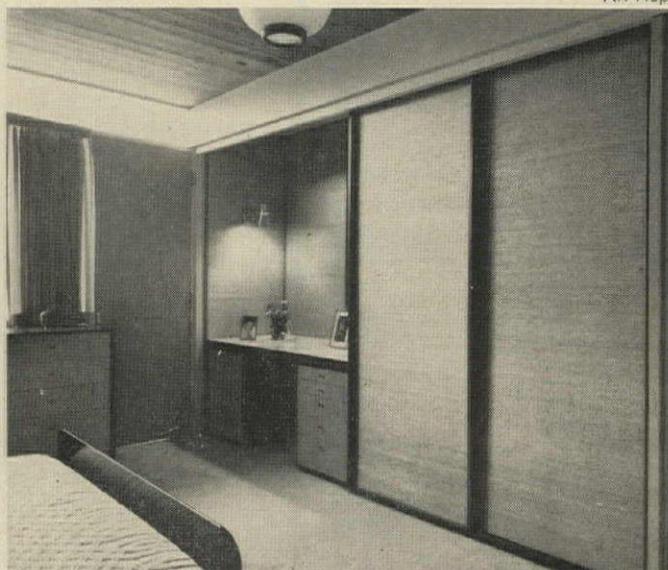


Ernest Braun



LAVATORY-DRESSING ROOM in fast-selling model by Brown & Kauffmann, Palo Alto, is directly accessible to master bedroom, is compartmented, has large closet behind louvered doors.

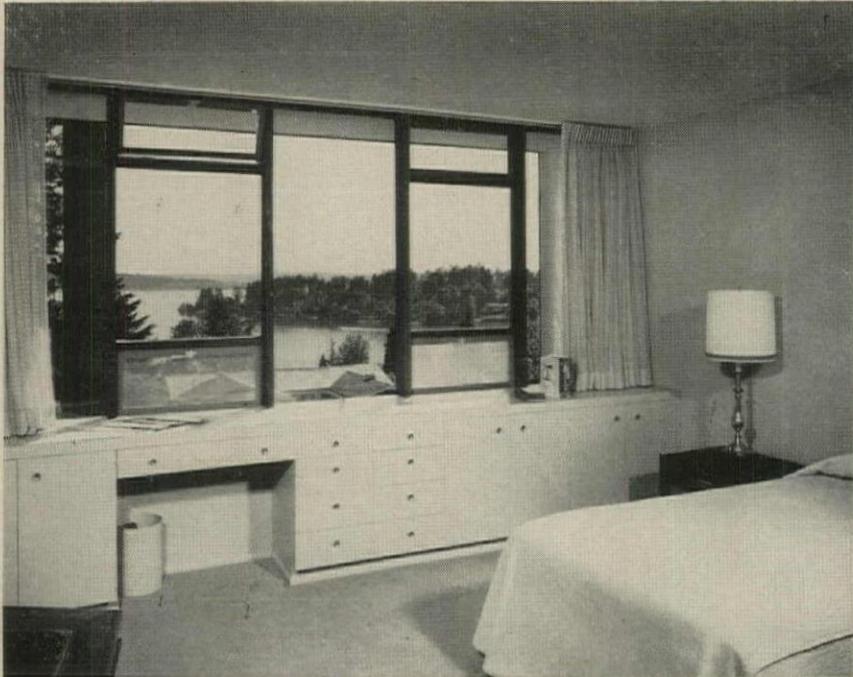
Art Hupy



DRESSING TABLE, built into storage wall, is simple, effective convenience in master bedroom designed by Architects Mithun, Ridenour & Cochran for Raymond Construction Co, Lake Sammanish, Wash.

continued

Charles R. Pearson



BUILT-IN BUREAUS unified under long countertop provide all drawer storage needed for a master bedroom in a Bellevue, Wash. house built by J. W. Carden. Architects: Mithun, Ridenour & Cochran.

Victor M. Helm



BUILT-IN FURNITURE in family room—desk, shelves and cabinet—shows the extent to which some builders are going to provide storage for everything. Builder: Herbert Outlaw. Location: Houston.



Jack Swenningren

TWIN CLOSETS with double bi-fold doors form "his" and "hers" combination in St Petersburg Parade house by Bob Casey. The folding door for closets is one of today's fastest growing trends.



Victor M. Helm

PULL-DOWN STAIRWAY gives access to 500 sq ft of dead storage area. Stair is pulled down into corridor flanked by four big closets. House was built by Mascari & Sumner for Houston Parade.

Houses that are selling best have

8. Plenty of storage in every room

"Third- and fourth-time buyers want more storage because they didn't get it in their earlier houses," says Builder Ralph Shirmeyer of Ft Wayne. Says Prudential's John Jewett: "Lots of storage is more important than ever."

The experts sum up: It is not enough to give bulk storage in garage or basement. Today buyers want *organized* storage for particular things and they want it in every part of the house. In the kitchen they want more cabinets for china, glasses, silver, barbecue equipment, and picnic

articles. They want pantry space for cases of canned foods and bottles of soft drinks, over-sized broom closets and cabinets near the washer-dryer for soaps, etc.

They want an extra linen closet, lots of storage in each bath, far more bedroom storage, and—if they can afford it—walk-in closets. (Adds Jewett: "More builders should follow Bill Levitt's idea of putting in double shelves plus racks for hats and shoes.") In the family room, buyers want storage for games, records, card tables, odds and ends.

Houses that are selling best have

9. A big fireplace

"A fireplace is a must," says Builder Tom McGovern, "not just because it is pleasant but because it is a symbol of home." Says Builder Burton Duenke: "We put a fireplace in every house and two in a lot of houses."

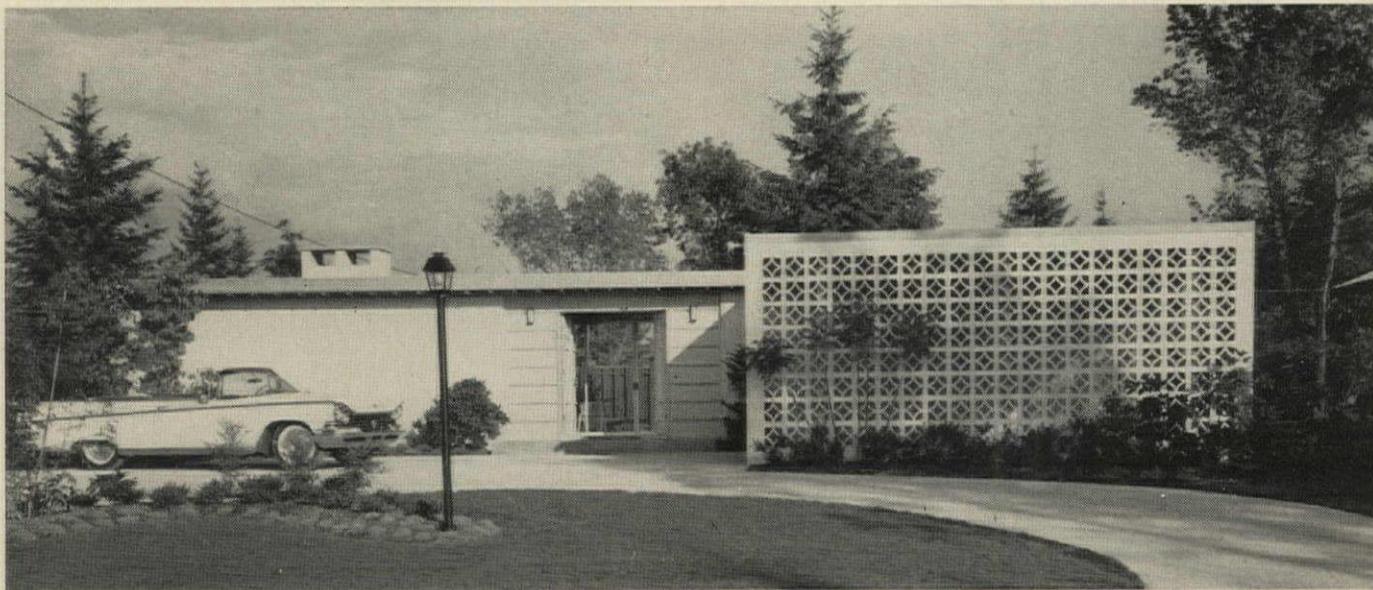
"Even in Florida, fireplaces are a big sales feature," says Builder Paul Lazeau. "We usually make them an optional extra, yet one-third of our buyers want one."

The experts sum up: The major trend is to put the fireplace in the room most used for living—often the family room. In Texas, where the formal living room is considered a parlor, the fireplace is usually in the den.

ARCHED BRICK FIREPLACE with a raised hearth is center of interest in paneled library-den in Houston Parade house built by John Daly. Used brick is one of the most popular fireplace materials.



Yang



GARAGE IN FRONT is screened from street by a decorative concrete grillwork in this show house built by Bell & Valdez, Seattle. Curved drive makes backing out onto street unnecessary.

Houses that are selling best have

10. A garage that is screened from the street

H&H staff



GARAGE IN REAR is linked to Carlton Corp.'s Houston Parade house by covered walk. Most Houston houses had rear-lot garages so untidy contents are never an eyesore.

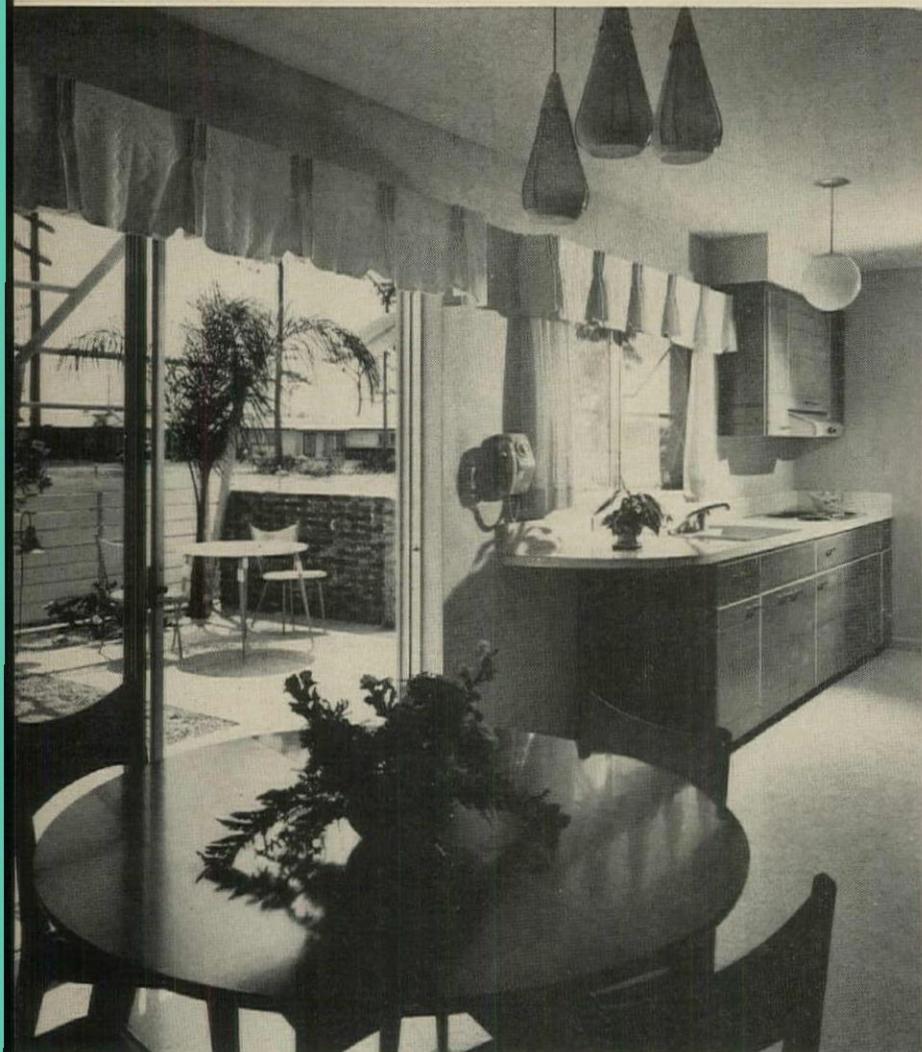
"We always try to avoid garage doors that open right into the street," says Builder Charles Ervin of Charlotte, "because the doors are never closed." Says Bernie Young: "Ninety-five percent of our garages have a side entrance."

The experts sum up: Buyers prefer a garage hidden from the street because, "everybody collects junk, but they don't want the neighbors to see it."

In most best-selling houses the garage is located so that the passerby can't look in. The garage may be in an L, at a right angle to the street. It may be in the side, or in back of the house with a rear turnaround.

In Houston, the newest trend is to detached garages. Almost all large houses have separate garages at the rear. The style is so popular there that it is hard to sell houses over \$25,000 with front-facing garages.

continued



PATIO OFF KITCHEN and family room gains privacy from wood fence topped by trellis for climbing vines. Open-pattern brick walls enclose each end. Builder: N. P. Cox, St Petersburg.



MASTER BEDROOM PATIO is surrounded by 7' stone wall in Dick Coneway's Houston Parade house. The other two bedrooms also have an enclosed court, and there is a patio off the living room.

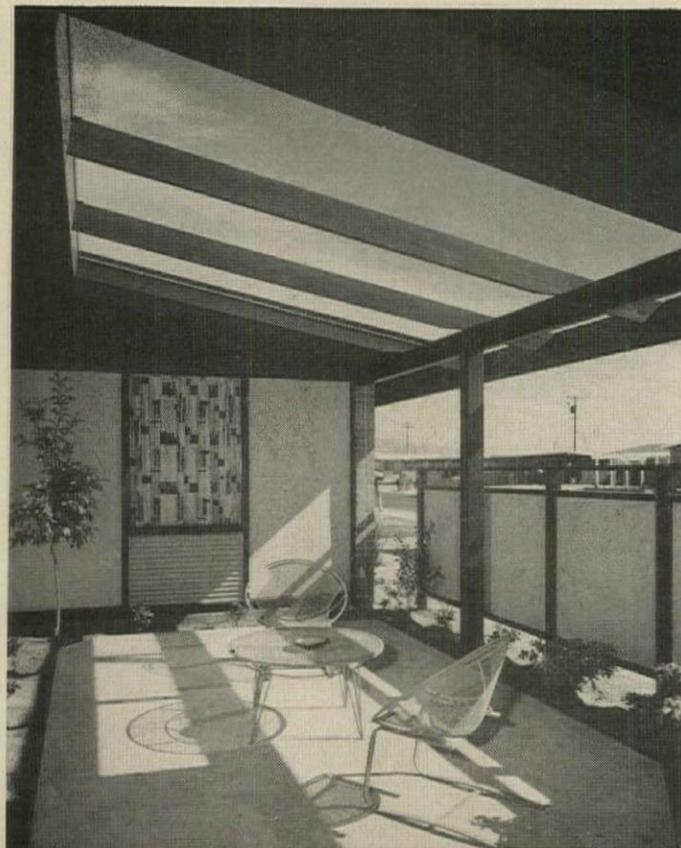


COVERED SCREENED PATIO has fiberglass roof and screens, is built in a U between bedroom wing, right, and double garage, left. This \$34,500 house was built by Houston Parade Chairman Paul McConnell.

Houses that are selling best have

11. Private outdoor living areas

Bill Sears



"Buyers love a patio with a privacy fence around it," says Builder-Realtor Alan Brockbank of Salt Lake City. Says Banker Elwood Knapp of Pittsburgh: "We like to see patios that are more than just a concrete dot."

The experts sum up: Three things are happening to outdoor living areas:

1. They are getting bigger.
2. There are more of them per house. More and more houses are being built with patios outside the main living area plus a separate dining patio and a patio opening to the master bedroom.
3. They are more private—for no one wants outdoor living in a goldfish bowl. One way to give a patio privacy is with landscaping. But more builders are including in the price a fence of wood, plastic, brick, solid or decorative block, or screening.

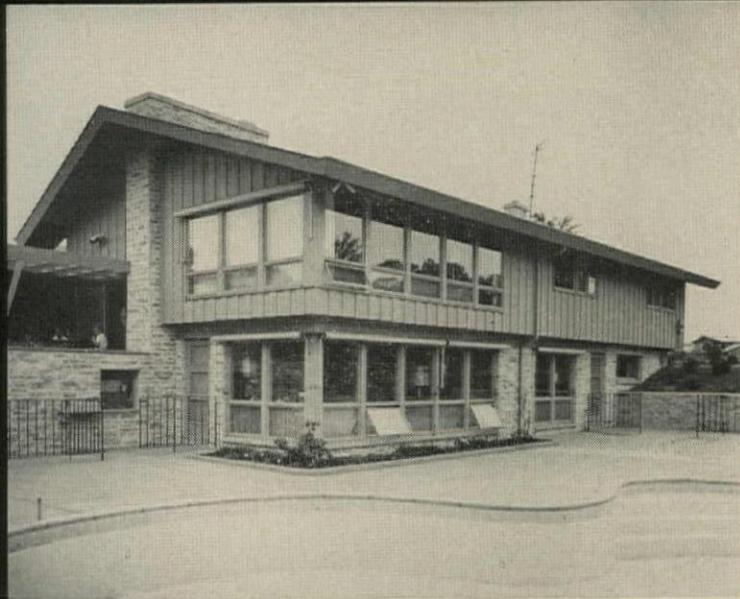
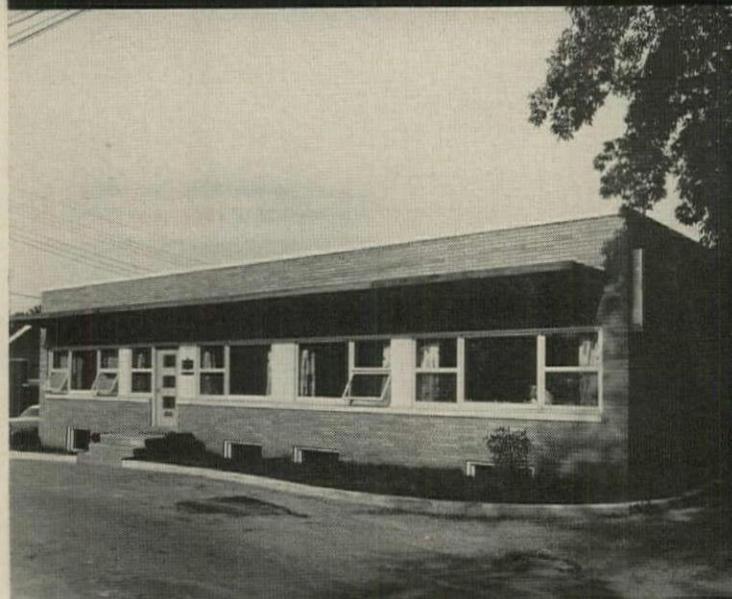
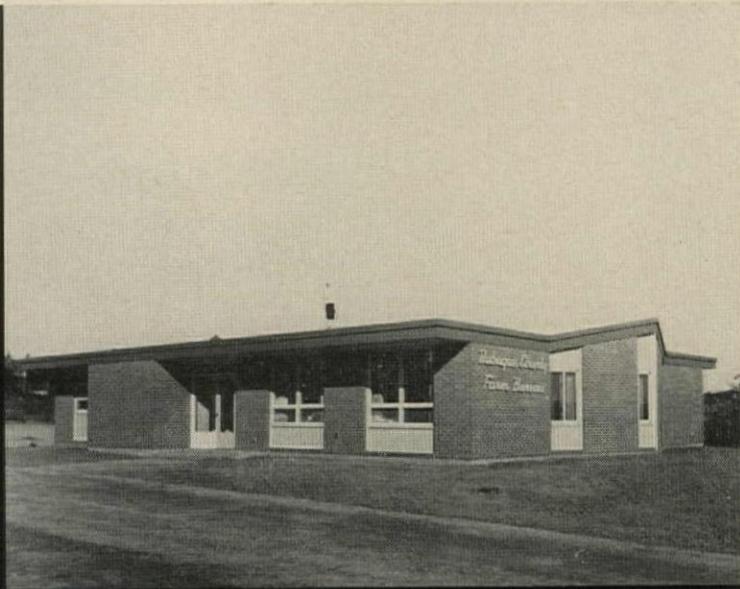
FRONT PATIO has open roof, privacy fence; adjoins living room and two bedrooms. This Tucson house by Builder Dave Markham also has a large rear porch and patio. Architect: Edward H. Nelson.

This chart tells you "the best-seller features" in 25 cities

It tabulates the opinions of experts (see p 146) in 25 market areas. Check marks indicate that leaders in that city reported that the listed feature is a significant help in selling new houses today.

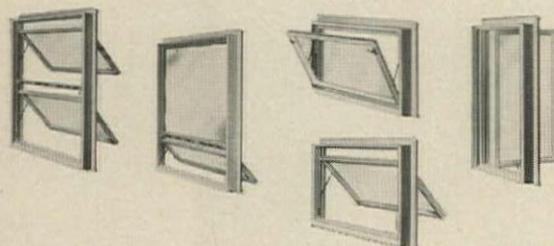
	BOSTON	BUFFALO	CHARLOTTE	CHICAGO	DAYTON	DENVER	DETROIT	FT. WAYNE	HOUSTON	JACKSONVILLE	KALAMAZOO	LOS ANGELES	MIAMI	MIDDLEBURY, N.J.	NEW YORK	PEORIA	PHOENIX	PITTSBURGH	ROCHESTER	SALE LAKE	SAN ANTONIO	SEATTLE	ST. LOUIS	WASHINGTON, D.C.	WILMINGTON
1 AN ATTRACTIVE ENTRYWAY	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
2 A KITCHEN TO ENTERTAIN IN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3 BATHS THAT LOOK LUXURIOUS	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	
4 A SEPARATE DINING ROOM	✓	✓		✓		✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓	✓		✓	✓	✓	
5 A SECOND LIVING AREA		✓	✓	✓		✓	✓	✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
6 SPACIOUS ROOMS		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
7 A MASTER BEDROOM SUITE	✓	✓	✓		✓	✓	✓	✓	✓		✓			✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	
8 PLENTY OF STORAGE		✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
9 A BIG FIREPLACE						✓		✓	✓				✓		✓	✓		✓	✓	✓	✓	✓	✓	✓	
10 GARAGE SCREENED FROM STREET		✓	✓		✓		✓	✓	✓	✓		✓			✓			✓	✓						
11 PRIVATE OUTDOOR AREAS		✓		✓	✓	✓	✓	✓		✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

/END



One window line does all this...and costs less to do!

4-WAY
Qualitybilt
WINDOWS®



There's no other wood window line so right for so many situations as the Qualitybilt 4-Way line! The photographs above vividly demonstrate the unique ability of these windows to fit in anywhere . . . and almost magically enhance the appearance of each and every building, residential or commercial. Hundreds of pleasing combinations derive from only two basic series — TWO-SASH and SINGLE SASH — to make Awning, Hopper, Outswinging Casements, or Fixed Units. And, the finest of hardware and glazing are available to suit any building requirement. Each window is completely weather-stripped and toxic-treated. You'll be pleased at the price, too! Write or call for complete details TODAY.

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

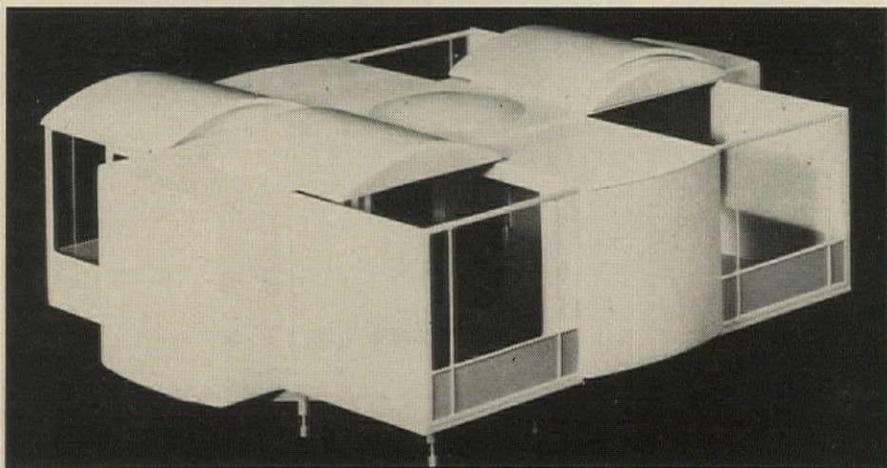
Be sure to see

NEW WAYS TO BUILD BETTER

A monthly report on home building ideas, products, and techniques

Starting here

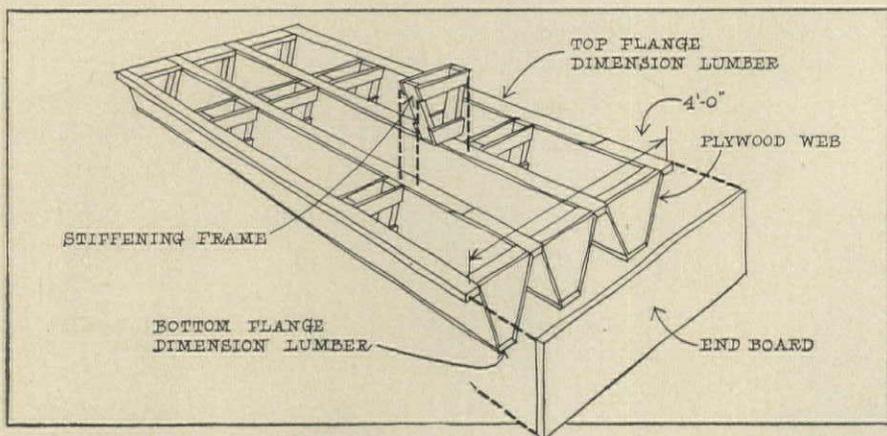
Technology



How some future designers see the house of the future

The house of 1980 may look like this scale model, say Pratt Institute students who designed it. The house would be shipped in a mobile-home-size package—one rectangular shell within another.

At the site, the inner shell would be pivoted at right angles to the outer shell. Wall panels would fold out from both shells and arched roof sections span the corner rooms.



Here is a new roof component for spans up to 50'

This trough-deck component (designed by Plywood Fabricators Service, Chicago) supports 100 times its own weight. Plywood webs with lumber flanges and stiffeners form troughs 16"

oc. Trough depth (6" to 16") and plywood thickness ($\frac{3}{8}$ " to $\frac{3}{4}$ ") depend on span length. A 100 sq ft panel with 6" deep troughs can be handled by two men.

And on the following pages

More Technology

Faster way to build hyperbolic paraboloids. . . . New vinyl works for hot-water pipe. . . . Warm-air systems move into the electric-heat market.

see p 183

What the leaders are doing

Temporary school turns into apartments. . . . New way to market-test a model. . . . Crane saves \$50 a house. . . . Smash-hit Parade of Homes.

see p 195

New Products

New partition-panel system goes in place fast. . . . Efficient furnace installs where you want it. . . . New luminous ceilings. . . . New kitchen appliances, panels, wallboards, flooring, plumbing.

see p 207

Publications

New planning ideas for bathrooms. . . . New specification manuals for lighting, flooring, wallboard. . . . Catalogs of tile, doors, decorative plastics.

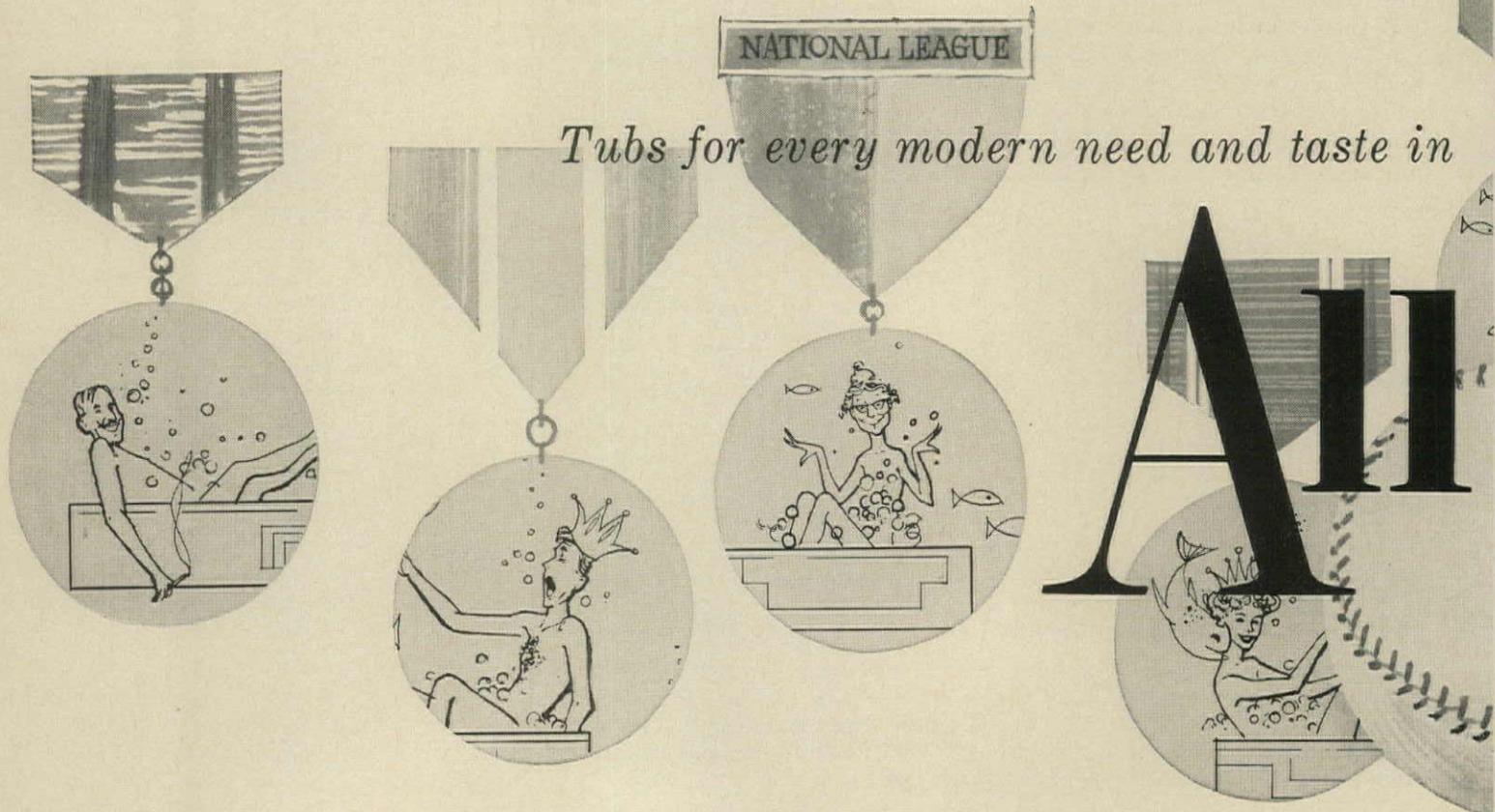
see p 236

MILWAUKEE

another growing AllianceWare market!

Hats off to Milwaukee! There's a promising future for AllianceWare in this dynamic city that has real meaning to you. Genuine features to help you sell and install. Here they are.

Read them. Your city, too, can be another growing AllianceWare market.



AUKEE

Installation time cut 50%. Much lighter than cast iron tubs, AllianceWare steel bathtubs are quick to install. Installation is a one-man instead of a two-man job! Patented wall-hung installation.

Strong sales features. AllianceWare *slip-proof* tub floors are twice as safe, yet comfortable and easy to clean.

- Permanent tub-to-wall seal
- Full-length grab rail and wide seat
- Permasheen porcelain-on-steel resists acids, stains, dirt
- Lifetime guarantee

Most complete line. In colors and sizes, stylish AllianceWare offers the most *complete* line of bathtubs.

Write for details. Alliance Ware helps stimulate Milwaukee sales with concentrated promotional activities—the sort available to you under our new 5-by-5 Plan. Address: AllianceWare, Inc., Box 809, Alliance, Ohio.

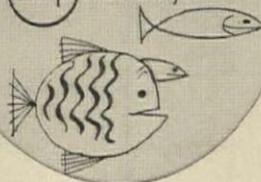
the longest line in America



AllianceWare[®]

Fast deliveries from 3 strategically located plants
Alliance, Ohio • Kilgore, Texas • Colton, California

an amp subsidiary



“I wouldn't build a home without putting

says Howard R. Byers



Howard R. Byers



William Stein

Byers & Stein, Fort Wayne, Indiana.

Howard Byers is copartner in Byers & Stein—a firm with a solid reputation around Fort Wayne, Indiana. TWINDOW helped them build that reputation. Byers & Stein use it in every window of every home they build. They feel no home is well insulated without it. “TWINDOW is just as important as wall and roof insulation, if a builder really wants to build a quality house.”

TWINDOW is two panes of glass with a layer of air sealed between. It insulates; keeps a home warmer in winter, cooler in summer . . . cuts heating and cooling bills to the bone. TWINDOW minimizes window frosting, steaming and condensation. And there's no need for storm windows. TWINDOW is a permanent storm window.



Make sure your homes have the extra sales appeal that TWINDOW in every window gives you. TWINDOW Glass-Edge and TWINDOW Metal-Edge come in all popular sizes for a wide variety of window styles. Our free TWINDOW booklet has the big story. Write: Pittsburgh Plate Glass Company, Room 0170, 632 Fort Duquesne Blvd., Pittsburgh 22, Pennsylvania.

... the window pane with insulation built in

TWINDOW Insulating Glass in every window,"



Fifteen lights of TWINDOW form a bay window that fills the living room with daylight.



TWINDOW keeps the kitchen comfortable—makes it a bright, cheerful place to work.



TWINDOW panes form an arresting frame for the fireplace by bringing the outside view inside.

TWINDOW[®]

 Pittsburgh Plate Glass Company

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

Shown below: 793 — 3 bar disappearing towel rack
 790 — 14 hook disappearing pan rack
 796 — Disappearing wastebasket rack



K-V Kitchen

Fixtures

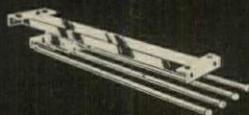
save stacking, lifting, clatter and clutter!

K-V fixtures make kitchen living more carefree, more comfortable, so much more convenient. Low-cost, easily-installed, they turn hard-to-reach, unhandy spaces into neat storage areas — and ball-bearing, easy-glide K-V kitchen fixtures save stacking, lifting, clatter and clutter. Women love the remarkable efficiency of K-V kitchen fixtures. When they try one — they want them all. Write for complete information.

**KNAPE & VOGT
MANUFACTURING COMPANY**
Grand Rapids, Michigan



791 Disappearing Cup Rack
Holds 12 cups



798 Disappearing Towel Rack
4 bar model

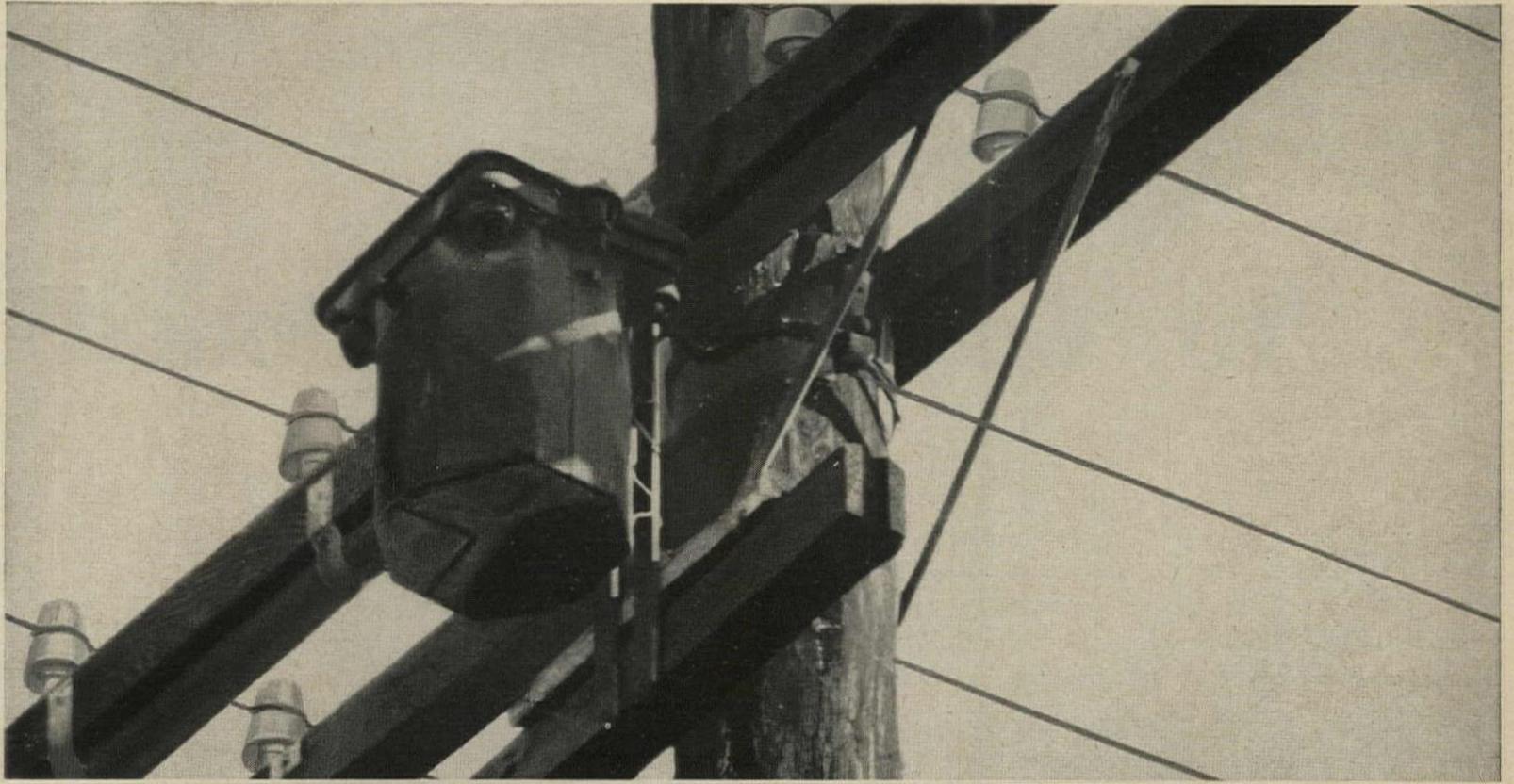


690 Disappearing Pan Rack
Holds 7 pans



792 Disappearing Towel Rack
2 bar model for limited space

Manufacturers of adjustable shelf hardware, sliding and folding door hardware, closet fixtures, sliding drawer hardware, Tite-Joint Fasteners and Handy Hooks for perforated board.



When poles and palms don't mix...

No poles or overhead wires will mar the beauty of Arvida's Royal Palm Yacht & Country Club residential community! With 742 homesites, this distinguished Boca Raton, Florida community is putting *all utilities underground*. For the job Arvida selected Orangeburg Fibre Conduit—the best known, best-selling Brand in America. And for good reasons: Orangeburg Conduit is lightweight, easy to install. Its self-sealing joints and impermeable walls keep water out for good. Its 100% smooth fibre raceway adds years to cable life. Get all the facts on Orangeburg Fibre Conduit. Write Dept. HH-70 for Catalog 52.

ORANGEBURG® **FLINTKOTE**
Fibre Conduit



Architect's drawing—Arvida home of Dr. and Mrs. John F. Pearl. Architect: Arthur H. Rude, of Ft. Lauderdale.

Orangeburg Fibre Conduit is distributed by Graybar Electric Co. and General Electric Supply Company with branches and stocks in principal cities. ORANGEBURG MANUFACTURING CO., Orangeburg, New York. Division of The Flintkote Company, Manufacturer of America's Broadest Line of Building Materials.

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.

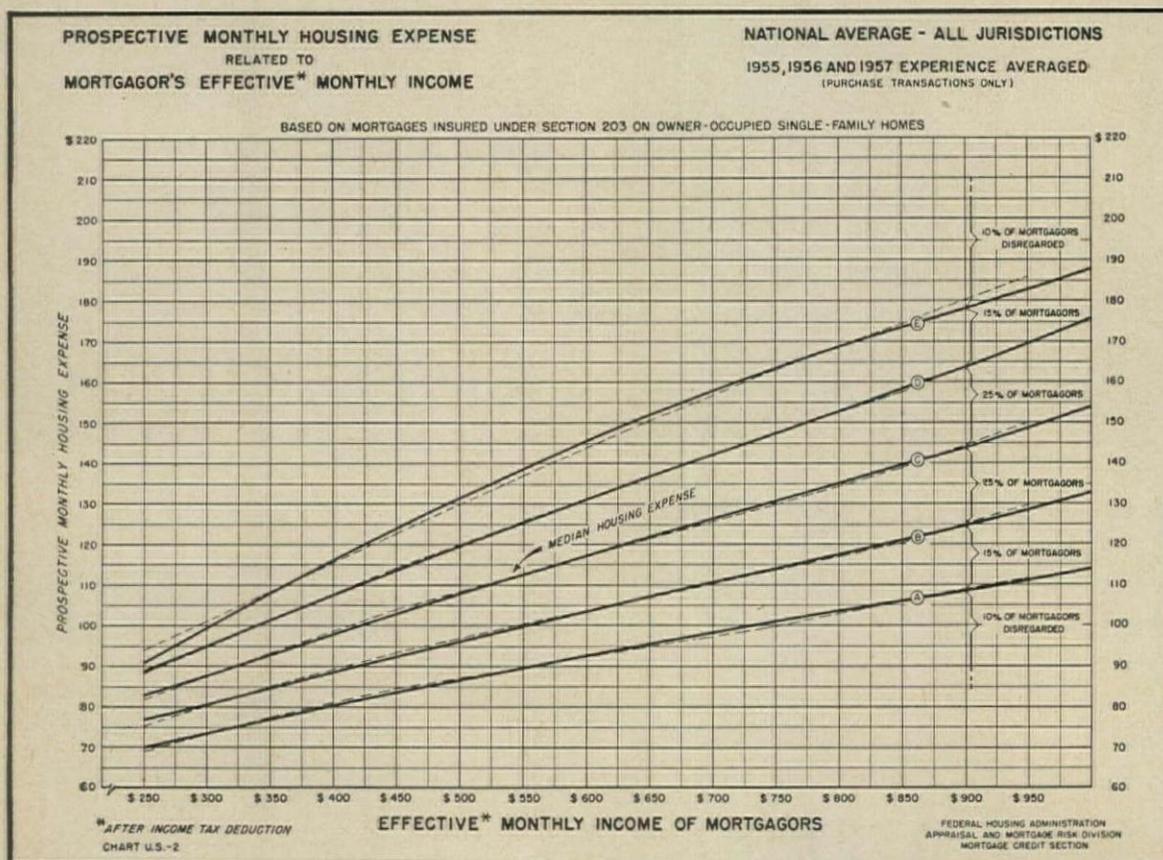
Take these two simple steps to qualify more buyers for your Comfort-Conditioned Homes:

- 1 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.
- 2 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:

- 1 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).
- 2 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.
- 3 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 →



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, Ill.	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.
3. 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.
6. The added cost of the extra insulation at 5% 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.

Beautiful

music at age tips

Now Air-Condition Your Home With Low-Cost Gas!
And—come winter—the same compact SUN VALLEY* All-Year* Unit
becomes your heating system.

Now you can beat the heat—economically—with Gas. An Arctic-Serve! Sun Valley All-Year Gas Air Conditioner cools every room in the house, yet keeps the monthly bills low—lower, in fact, than many of your friends may be paying to cool only one or two rooms.

And then, when winter comes, your Arctic-Serve! provides the most dependable—and economical—heating system you can have. Your family will enjoy comfort they've never known before, with indoor weather that's spring-like all year long. Clean, filtered air circulates constantly through all the rooms at exactly the temperature you select. In Summer the air is dehumidified.

Carefree Operation
Your Sun Valley is a cinch to operate—just one easy-to-use thermostat. A single, compact unit cools in summer, heats in winter. And because it works with Gas, there's no need for fuel storage, no worry about fuel deliveries. Your Sun Valley provides low annual maintenance and long life, too, because there are no moving parts in the cooling cycle. In fact, you can remove the lid of the unit in the life of your home.

See your Arctic-Serve! dealer now. There's a Sun Valley available in models and sizes to fit any home. For your nearest...

ONLY GAS  **does so much more...for so much less!**

Trademark Product of Arctic Air Conditioning Corp. - Boston Sales Office, Little Rock, Arkansas

A.G.A.* Sells Year 'Round Gas Air Conditioning to the House Beautiful Pace-Setter Market

A massive *quality* market...over four million pace-setters...see the American Gas Association's year 'round campaign for year 'round gas air conditioning in the pages of House Beautiful. These perfect prospects (average income: \$15,714) for quality homes are alert, active, responsive to new ideas. And they demand the best in products from you because House Beautiful shows them how to better their homes, better their living. If you'd like to learn more about the gas industry's builder merchandising program, write to Dept. HB, American Gas Association, 420 Lexington Avenue, New York 17. And for a special reduced rate trade subscription to House Beautiful, write on your letterhead to House Beautiful Magazine, 572 Madison Ave. New York 22, New York.

House Beautiful

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Oak Floors give
buyers freedom
in decorating

The freedom to choose their own colors in fabrics and furnishings can be a big factor in prospective buyers' acceptance of your homes. You give this choice when you install Oak Floors, because Oak is harmonious with any color scheme, any style of furniture. The warm, rich wood-tone is universally admired and adds distinction to all homes. You give decorating freedom, you get buyer acceptance...when you use Oak Floors.

You know you're right when you specify **OAK FLOORS**

National Oak Flooring Manufacturers' Association, 814 Sterick Building, Memphis 3, Tenn.



Oak Parquetry



Random Plank Floor

Strip Oak Floor

Vary your Oak Floors for distinctive homes

Vary the floor style and attract more home buyers. This practical merchandising idea is easy and inexpensive with Oak Floors. It works like this:

Lay economical, popular Strip Oak through most of the house. But in a special "feature" room use one of the patterned Oak Floors shown here.

For the living-dining area of a traditional home, or any den or family room, Random-Width Plank is always appealing. It has the authentic warmth and charm of Colonial times with its boards of varying widths, walnut pegs and beveled edges.

Parquetry, with its smart geometric design, is appropriate in every contemporary home. Available in cut-to-size strips or pre-assembled blocks, it can be laid in mastic over concrete or nailed to a wood subfloor.

With the overwhelming public acceptance for Oak Floors, you can be sure these style variations will get favorable reaction from prospective home buyers . . . and give you an "edge" on your competition.



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

OAK FLOORS

The most popular, most practical of all floors

Dress up "Naked" Homes
for Faster,
Easier Sales!

Put the warmth of "woman appeal" into every room with decorative lighting styles by MOE Light—and watch your home sales rise! Decorative lighting is your easiest way to flatter a new home—your most effective way to add allure to modernized or remodeled homes. For the latest fashions in lighting—and full-color photos showing you how to use them in every room, get your free copy of the revolutionary new MOE Light decorative lighting guide and catalog. Just off the press, it's packed with lighting ideas to help you make sales!



Left, above

Pull-downs flanking sofa add decorative charm, reading comfort. See "idea rooms" such as these in the new Moe Light catalog.

Right, above

Recessed ceiling lights dramatize fireplace; pole and reel pull-downs provide adjustable reading light.

Send for FREE Lighting
"Idea Book" Today

- 66 full-color pages!
- hundreds of decorator fixtures!
- room-by-room lighting ideas!



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Executive Offices: 207 E. Broadway,
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THOMAS INDUSTRIES INC.

Lighting Fixture Division

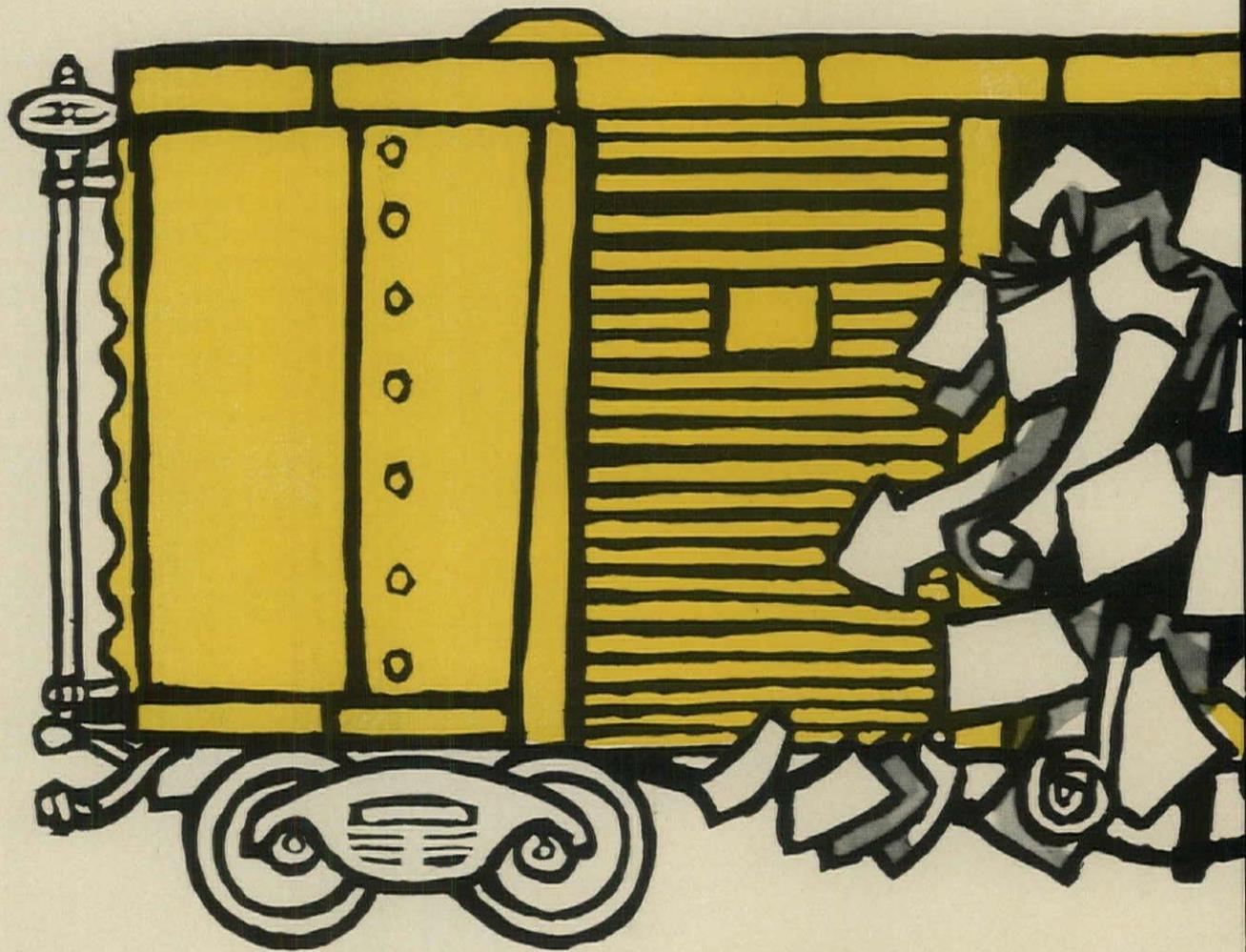
207 E. Broadway, Louisville 2, Ky., Dept. HH-7

Send new 66-page MOE Light Decorative Lighting Guide and Fixture Catalog—packed with lighting ideas to sell homes.

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CITY _____ ZONE _____ STATE _____
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The World's Largest Single Source of Lighting for Home, Commerce and Industry

The Golden Value Line of the 60's...



GENERAL ELECTRIC'S PPP THROUGH A COMPLETE

"Profit" is PPP's middle name—and the name belongs to General Electric

PPP stands for Planned Profit Package—A program you get only from General Electric Major Appliances (The Golden Value Line of the 60's).

The package is made up of profit-adding extras, such as Planning and Styling Help, Savings on Labor and Installation, General Electric Product Availability and Service, and more.

One of PPP's most important parts is a Complete Merchandising Program built around the Golden Value Home Promotion. It offers:

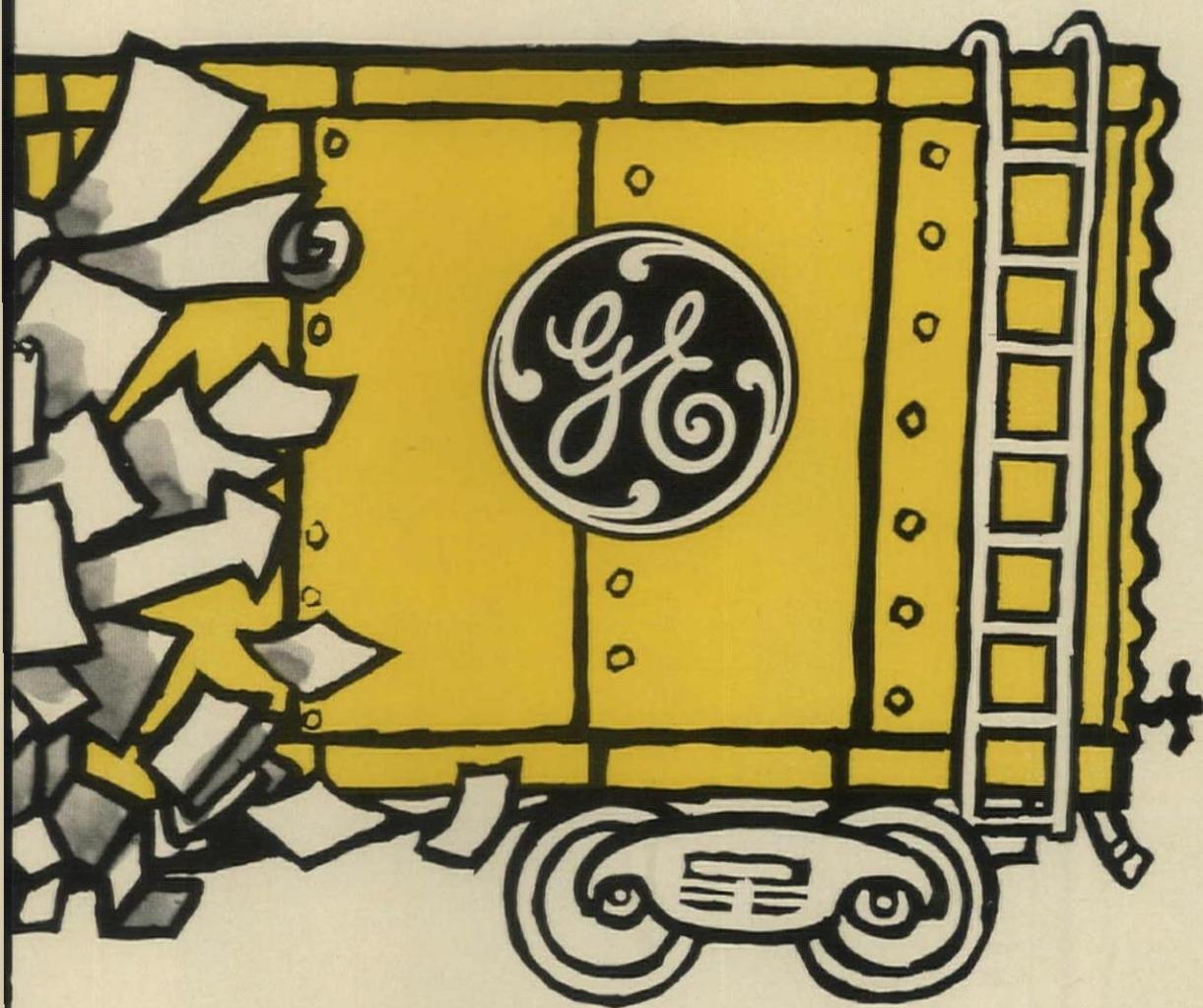
- Suggested ads and press releases for newspapers and radio
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- Outdoor poster advertising help
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- Salesmen's cue booklets
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With General Electric's extensive home promotion program working for you, it all adds up to more sales and more profit!

Save money through General Electric. Send for the "PLANNED PROFIT PACKAGE" kit. Just clip the coupon and mail it today.

The Golden Value Line of the 60's



SPELLS MORE PROFIT MERCHANDISING PROGRAM



As an authorized builder of MEDALLION HOMES, you get prestige and many promotional advantages. Ask your General Electric Distributor about this program.

For information, mail coupon to:
General Electric Co., Home Bureau,
Appliance Park, Louisville 1, Ky.

Have local General Electric builder sales representative contact me.

NAME _____

ADDRESS _____

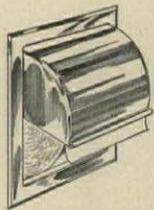
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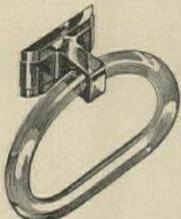
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Progress Is Our Most Important Product

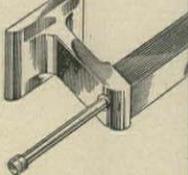
GENERAL  ELECTRIC



Concealed Toilet Paper Holder—revolving hood protects, covers paper.



Handsome lucite and chrome Towel Ring.



Coronado Extendo-bar for drying nylons, lingerie.



Shower Recess Unit—handy, safe spot for shampoo bottles, etc.



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HALL-MACK COMPANY
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A lady never tells her age—and neither do Hall-Mack Bathroom Accessories. Styled for a lifetime of gleaming beauty, these quality accessories provide practical convenience and comfort—plus blending harmoniously with either modern design or period architecture to enrich the beauty of any bath. Pioneered by Hall-Mack, these quality accessories are tailored to meet the needs of every budget. Building, buying, or remodeling—always specify and install Hall-Mack Bathroom Accessories for the *touch that means so much*.

Sold by leading plumbing, tile and hardware dealers everywhere

Versatile CreZon[®] Overlaid Plywood

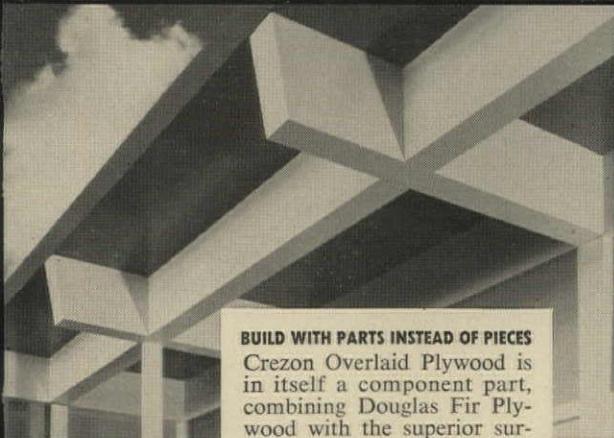
SAVES YOU MONEY ALL AROUND THE HOUSE!

You'll save money every time you discover a new way to use Crezon Overlaid Plywood. Reduce construction and finishing costs on everything from accent panels to box beams. Crezon Overlaid Plywood installs quickly, easily, cuts cleanly. Two coats of paint do the job of three. Checking and grain rise are eliminated. Weathering characteristics are unsurpassed.



THE HOUSE THAT CREZON BUILT

This handsome home features Crezon Overlaid Plywood in all siding, soffits, entrance door, box beams, garage door, fence, cut-out.



BUILD WITH PARTS INSTEAD OF PIECES

Crezon Overlaid Plywood is in itself a component part, combining Douglas Fir Plywood with the superior surfacing qualities of a medium density resin overlay. By combining Crezon Overlaid Plywood with other construction techniques, builders can now cut costs by using parts instead of pieces!

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THE PLYWOOD WITH A PLUS!

Partitions-Walls	Counter Tops
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These leading plywood manufacturers produce the highest quality overlaid plywood by bonding Crezon to DFPA exterior grade plywood:

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Diamond Lumber Corp.	United States Plywood Company
Evans Products Company	Washington Plywood Company, Inc.
Georgia Pacific Corp.	Canadian Western Lumber Co.
International Paper Company (Long-Bell Division)	MacMillan & Bloedel, Ltd.
Roseburg Lumber Company	Western Plywood Co., Ltd.
Simpson Logging Company	



CROWN ZELLERBACH

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**LENNOX SELLS
QUALITY TO MAKE
YOUR CUSTOMERS
QUALITY CONSCIOUS**

Your prospects see Lennox ads like this, in 4 colors, all year 'round in Post, Reader's Digest, Life and Good Housekeeping.

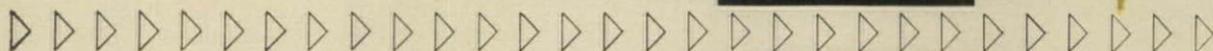
This series lets the home buyer know he can afford quality heating and air conditioning—marks you as a quality builder when you feature Lennox in your model homes.

Lennox also helps you with the finest model home promotion ever created—*personalized* to your individual needs. It contains brochures, display cards, suggested advertising and publicity, plus TV and radio scripts.

Your local Lennox *Comfort Craftsman*, listed in the Yellow Pages, or a special Lennox representative, will be happy to tell you about this program and the many other advantages of dealing with Lennox, the leader in air conditioning and heating.

65,000,000 people
will see this ad in **4** colors

June 11, 1960
30,000,000 readers



June, 1960
35,000,000 readers



LENNOX[®]

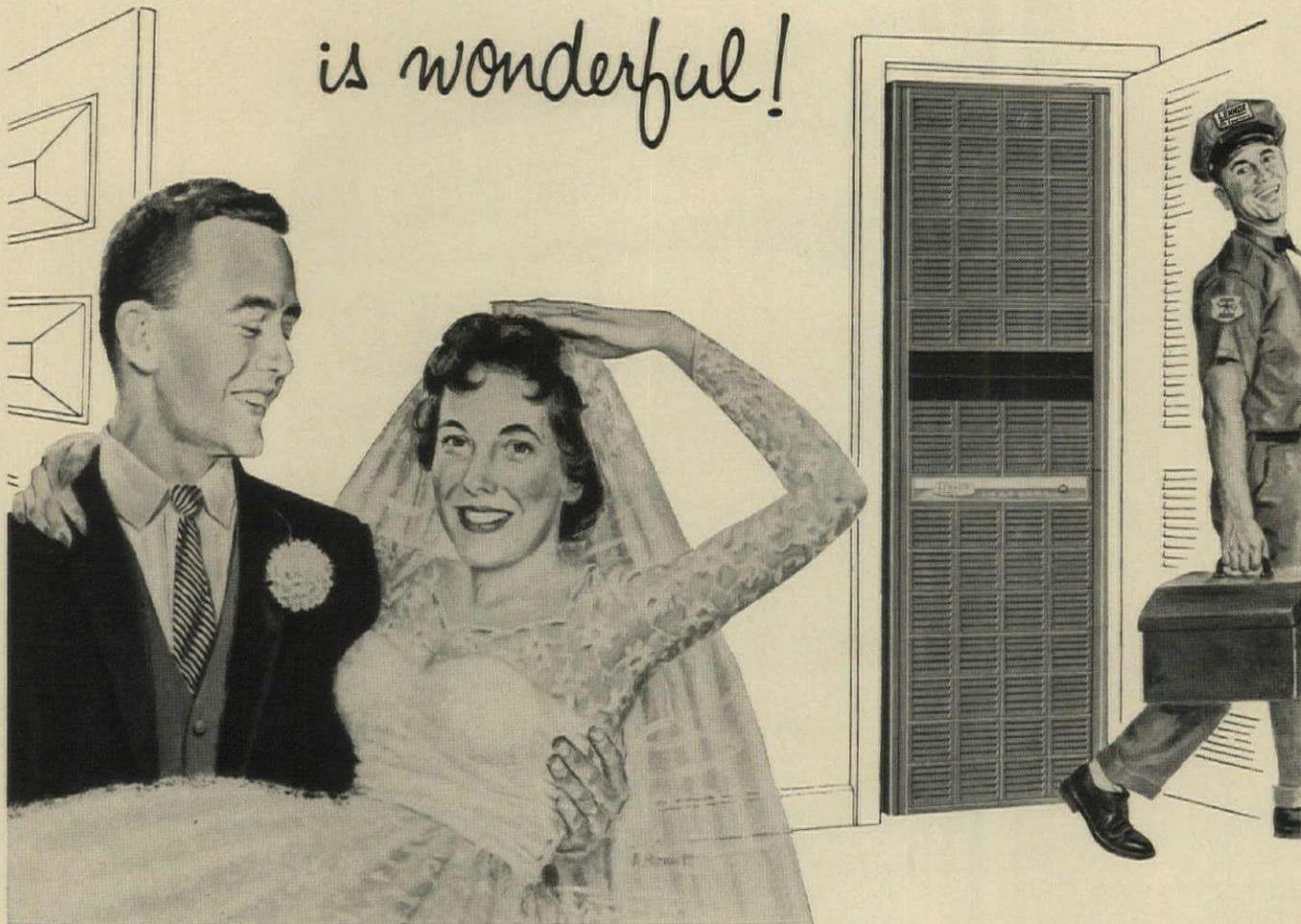
WORLD LEADER IN INDOOR COMFORT
FOR HOMES, BUSINESS, SCHOOLS

is wonderful!

LENNOX

®

is wonderful!



Their marriage day is a *Golden* wedding day . . . because their new home welcomes them with the treasure of Lennox air conditioning and heating.

As their family grows, the "rare as a day in June" indoor comfort will prevail through blizzards and heat waves—through the years—because Lennox is engineered to last. Many couples now celebrating their Golden Anniversary enjoyed Lennox quality equipment in their "honeymoon" homes, for Lennox has been a "golden" name in comfort since '95.

Call your factory-trained Lennox *Comfort Craftsman* for a free survey and learn how little it costs for Lennox year-round air conditioning—especially if you now have forced air heating. Your local *Comfort Craftsman* is listed in the Yellow Pages.

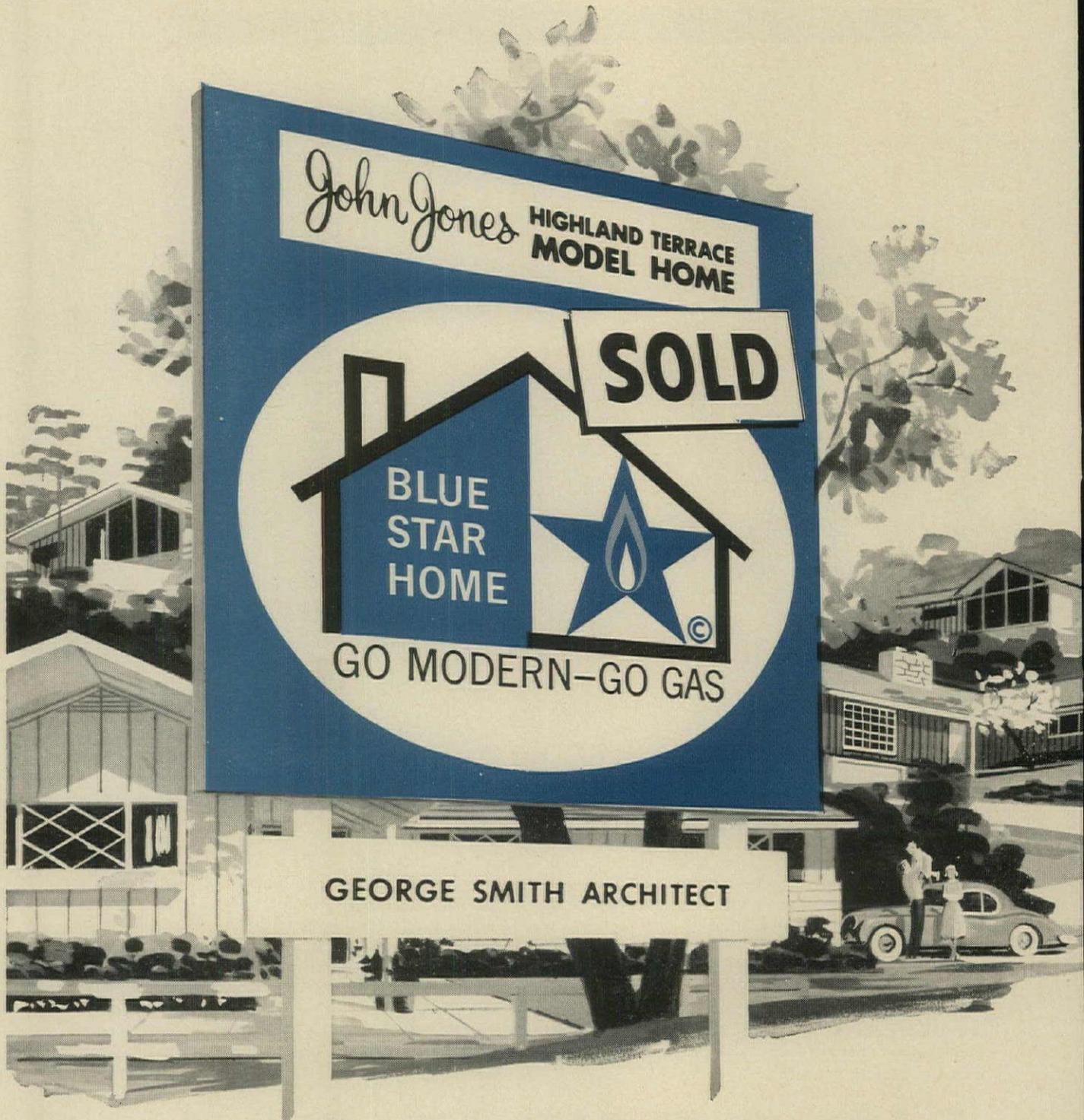
Lennox, world leader in indoor comfort for homes, business, schools.

FREE booklet on *Air Conditioning and Heating*. Write Lennox Industries Inc., 344 South 12th Ave., Marshalltown, Ia.

AIR CONDITIONING AND HEATING

© 1960 Lennox Industries Inc. founded 1895; Marshalltown and Des Moines, Ia.; Syracuse, N.Y.; Columbus, O.; Decatur, Ga.; Ft. Worth; Los Angeles; Salt Lake City. In Canada: Toronto, Montreal, Calgary, Vancouver, Winnipeg.

New nation-wide program helps



GEORGE SMITH ARCHITECT

Today, your prospects know:

ONLY GAS  **does so**

*A.G.A. Mark © Am. Gas Assoc., Inc.

builders Build Better...Sell Sooner!

There's Big Money for YOU in the Big "BLUE STAR HOME" Promotion

You make your own selling easier when you get in on the nation-wide "Blue Star" home-building program. The "Blue Star" is the American Gas Association's award to quality new homes that feature the advantages of modern Gas. The coast-to-coast "Blue Star" promotion helps you put over a real sales campaign in your community.

The A.G.A. "Blue Star" home program includes: hard-hitting ads to put in your local papers; scripts for local radio and TV broadcasts or spots; plus all the "extras" to make your promotion successful! Everything from signs and banners, truck & bus cards, balloons, pennants, aprons and matches to bracelets, key rings, lighters and money-clips—all designed especially for "Blue Star" home-builders, to tie your program to the national one, so the national program pays off for you.

So build your sales by building with Gas. Let us help you sell your "Blue Star" homes with "Blue Star" advertising, publicity and promotion.

In the home building trade, this is the year of the "Blue Star"—This is the year you've been waiting for. Get all the facts at your Gas company, right away.

AMERICAN GAS ASSOCIATION

YEAR-ROUND AIR-CONDITIONING

Today, 8 out of 10 new homes use dependable Gas heat! One unit heats and cools the entire house—comfortably, economically. Or air-conditioning can be added easily, economically, to a modern Gas heating system—for year-round comfort, a cleaner house, a healthier family!



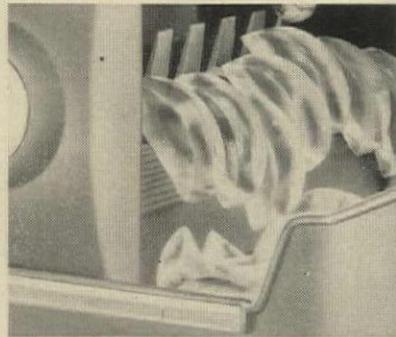
IMPULSE BUYING SALES MAKERS



Check these
"Blue Star" features
and build in
all you can!

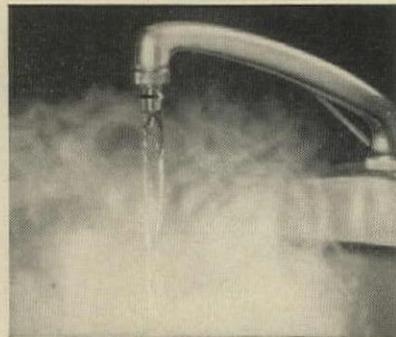
BURNER-WITH-A-BRAIN

When the lady-to-be of the house sees the amazing Gas Burner-with-a-Brain* turn itself up and down *automatically*, she'll never settle for less. Clinch it by telling her the truth—9 out of 10 restaurants use Gas for cooking, and wouldn't use anything else!



ICE CUBE MAKER

All home-buyers are thrilled by the magic ice-maker, featured in this modern Gas refrigerator. No trays to fill or spill—it's completely automatic. And it can really help *you* make the sale.



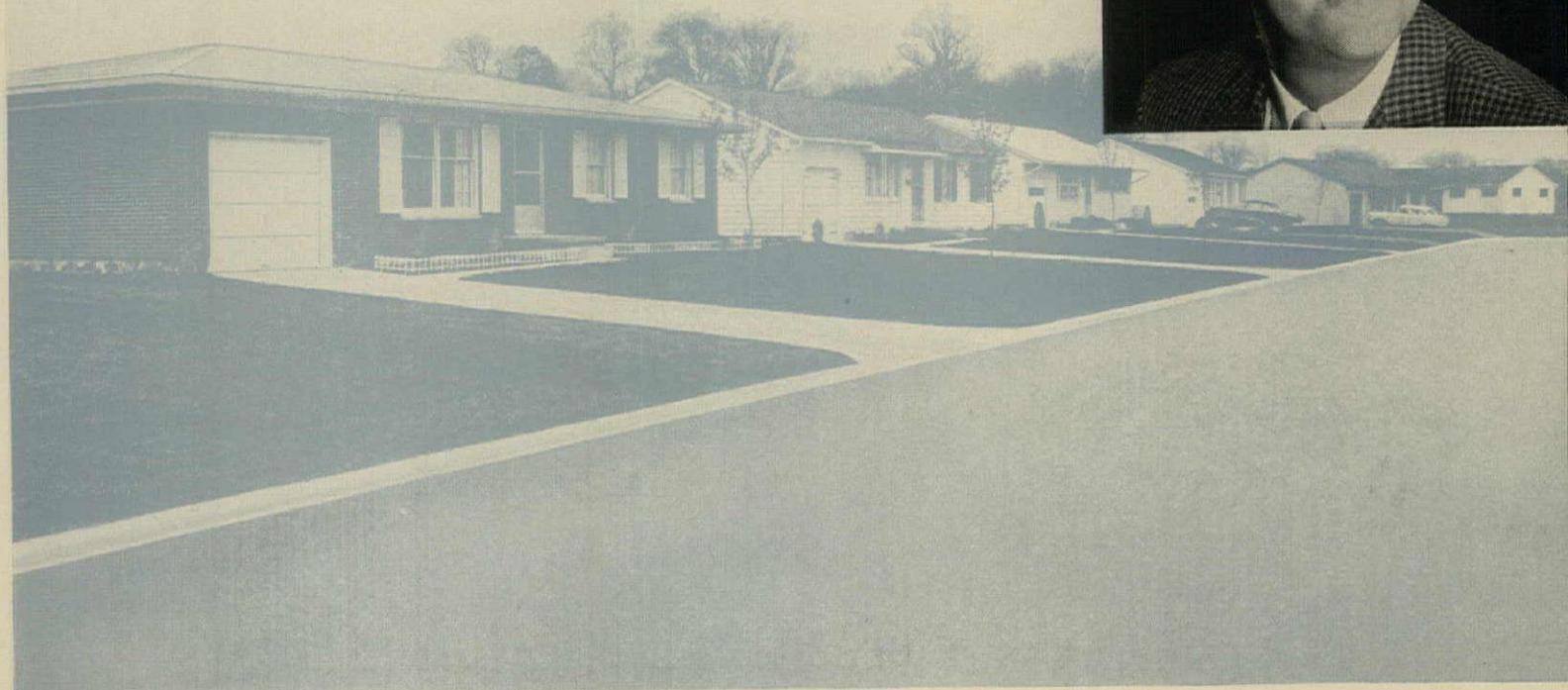
FASTER, MORE ECONOMICAL, MORE ABUNDANT HOT WATER

She'll appreciate the constant, quick hot water supply... He'll be pleased by the money that's saved when you heat water with fast, economical Gas.

much more...for so much less!

“Pease Homes
build my
reputation
today...
and sales
tomorrow!”

RALPH STOPP
Wilmington, Ohio



The qualified home buyer of 1960, goal of every builder, investigates not only the homes you are selling, but also those you have built in the past. An excellent builder reputation often closes sales faster than all the "extras" you can offer.

RALPH STOPP of Wilmington, Ohio, is one of the successful builders who have discovered the way to assure sales today ... *and tomorrow.*

"A fine reputation is essential to continued home sales in my area," Stopp emphasizes. "Although I have built many homes in my new subdivision, land remains for my production for several years. With every home, I am building my reputation today ... and sales tomorrow."

"That is why I chose Pease Homes. Their excellence in materials and workmanship first brings me sound, solid families ... then maintains satisfaction year after year. I'm staking my reputation and future on Pease quality."

Act now to assure your own success for many years to come. Discover the many advantages of the complete Pease program for converting F.H.A. approved land to profits with quality homes.



Write or phone William Stricker, General Sales Manager, and arrange for a sales representative to call. Pease Woodwork Company, 906 Forest Avenue, Hamilton, Ohio

PEASE HOMES

and Building Materials

When she

can see herself in your kitchen
she can see herself in your home.



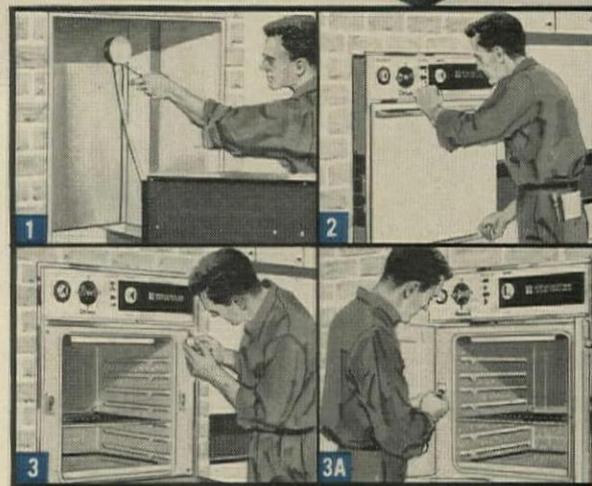
New Frigidaire Wall Ovens

let your kitchen help sell her with Pull 'N Clean Ovens, Drop-Leaf or French Doors, colors, automatic cooking!

Build-in a Frigidaire "Holiday from Apron Strings" and you have the woman house-hunter on your team! Build-in the promise of more time for family and other household duties. Point out that Frigidaire Wall Ovens in *Sheer Look* styled double or single oven models, cook whole meals *automatically*! With either Drop-Leaf or French Doors—and with new-for-'60 Pull 'N Clean Lower Ovens—cleaning is quick, standing up, with no tiresome stretching! Use Frigidaire quality features and workmanship to point up other quality features built into your home. Get product data from your Frigidaire representative or write Frigidaire Division, Dayton 1, Ohio.

Wall Ovens, Cooking Tops and Under-counter Dishwashers available in Mayfair Pink, Sunny Yellow, Turquoise, Charcoal Gray, Aztec Copper and Satin Chrome.

She'll feel like a Queen!

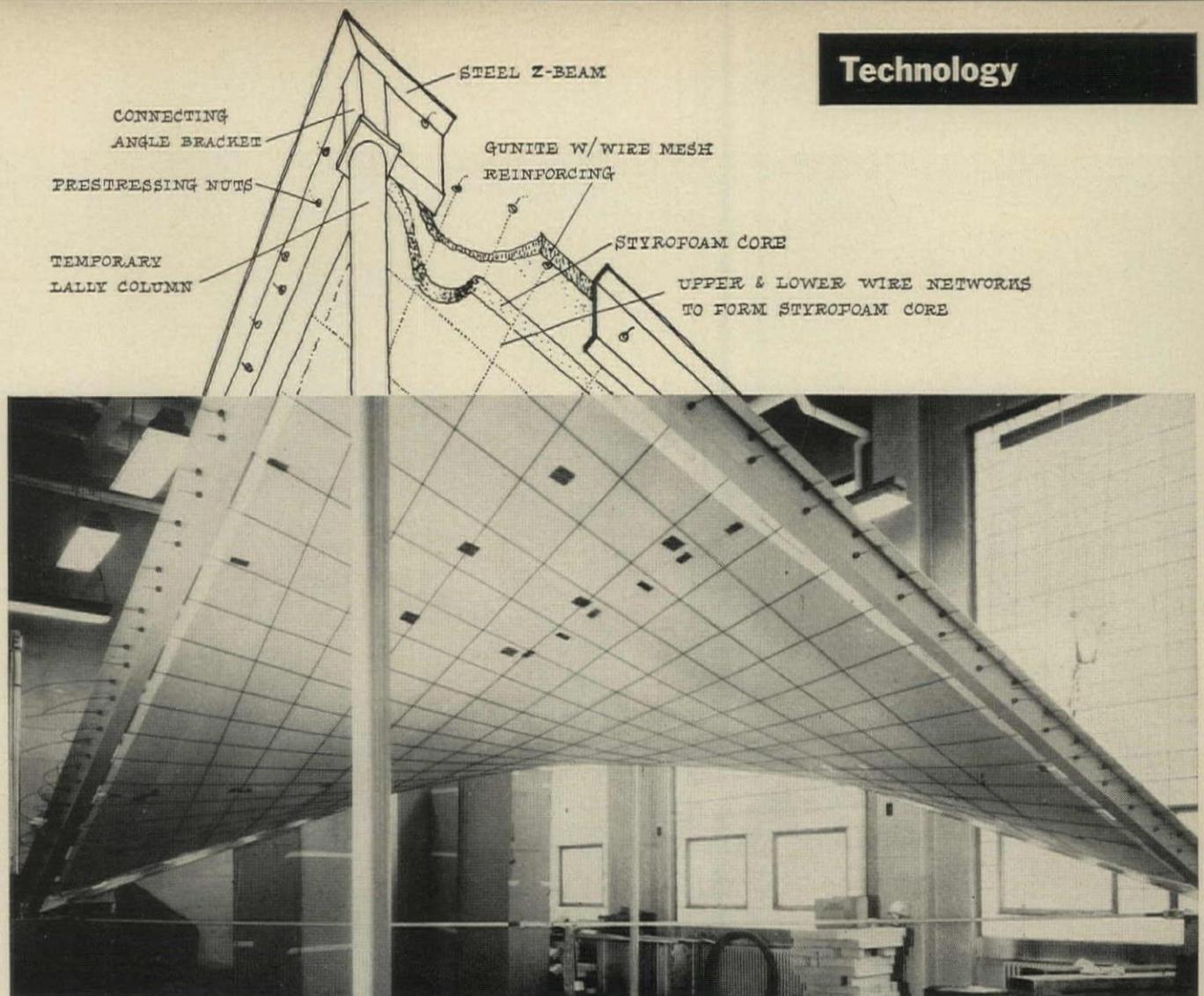


Install any model in minutes! Drop-Leaf Door or French Door models, all are designed for fast installation in standard 24" width cabinets or wall sections. With carpentry a rough wiring completed, simply: (1) Connect junction box and BX cable supplied. (2) Slide in unit (leveling screw included, if needed). (3) Mount with concealed screws. (3) French Door models, tighten only two clamps (no screw



FRIGIDAIRE
PRODUCT OF GENERAL MOTORS

Advanced Appliances designed with you in mind



SADDLE-SHAPED ROOF PANEL is formed by wire network that, when tightened, forces foamed-plastic core boards into double curvature.

Here is a faster, cheaper way to build an h-p roof

The roof system shown above may halve the cost of hyperbolic paraboids and other concrete thin shells.

Reason: It needs no formwork or falsework. Instead, a network of wires shapes the surface of Styrofoam boards. The Styrofoam becomes a permanent part of the structure as insulation and vapor barrier.

(Ordinary h-p roofs—the kind used on gas stations, for example—require lots of lumber and carpentry for forms, plus the application of insulation after the forms are stripped.)

Result: With practice, skilled mechanics should be able to build an h-p roof in a third of the normal time—three to four days instead of nine to 12.

Here is how an h-p roof is built with the new system:

1. Four z-shaped steel edge members are set up. Their high ends rest on two temporary lally columns. Their low ends rest on two foundation piers—the only final roof support.

2. A network of wires is strung between the beams—not parallel to the beams, but slightly askew—so the wires lie in a parabolic curve.

3. Styrofoam is laid on the wire network.

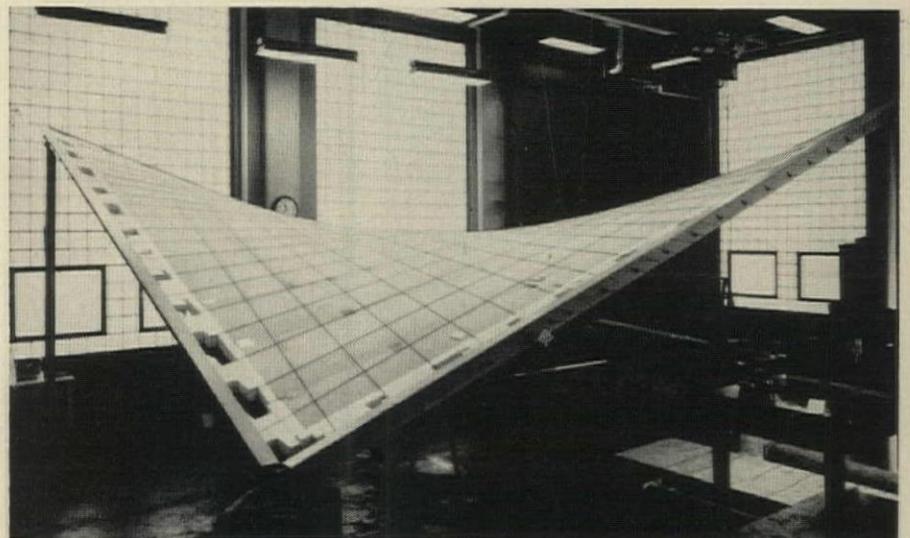
4. A second wire network—skewed in the other direction—is strung on top of the Styrofoam.

5. Both sets of wires are stretched taut with a tensioning wrench to force the Styrofoam boards into their double curvature. To keep edge beams from

bending when wires are tightened, Styrofoam wedges are placed between the beams and the Styrofoam boards.

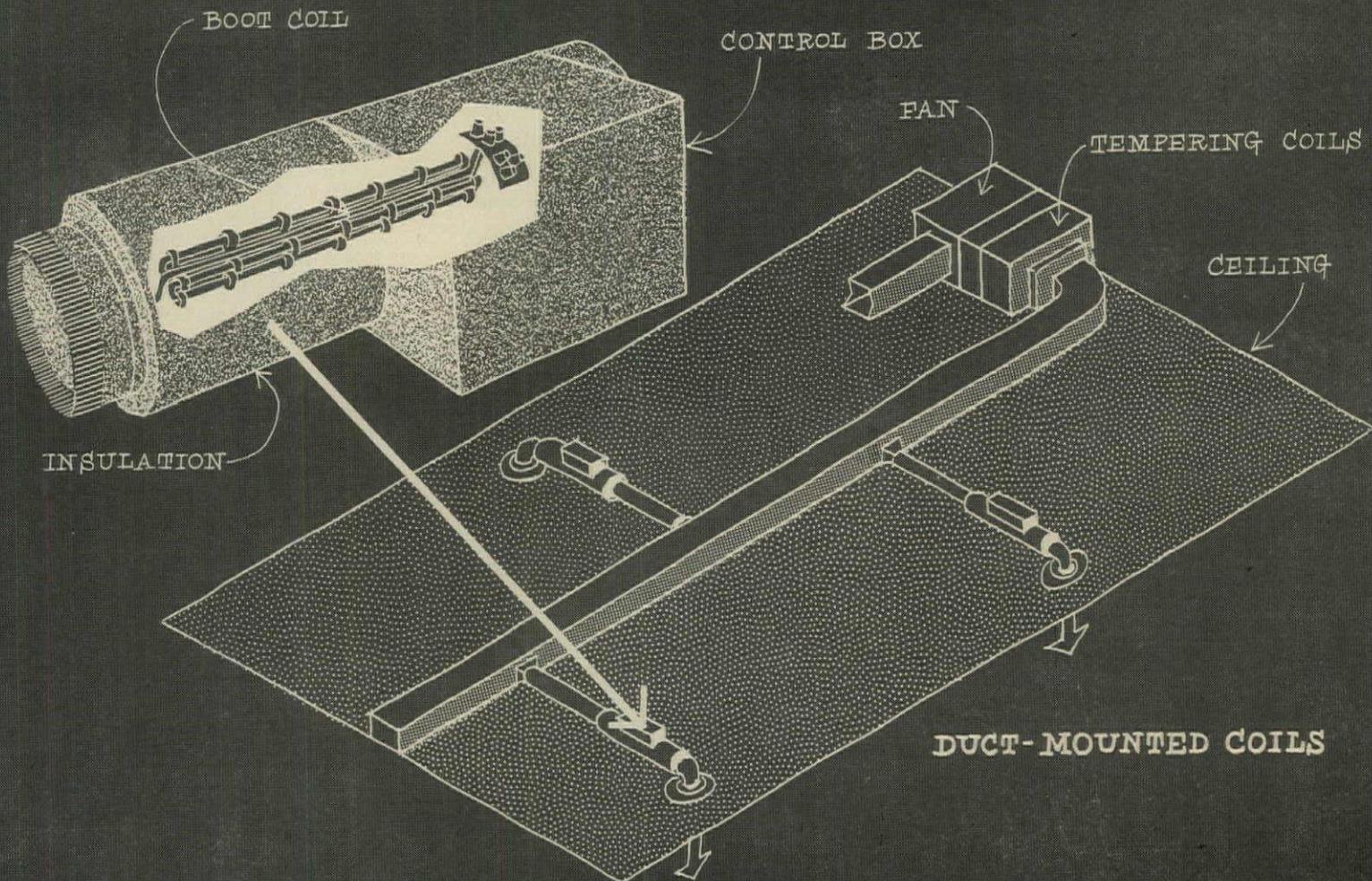
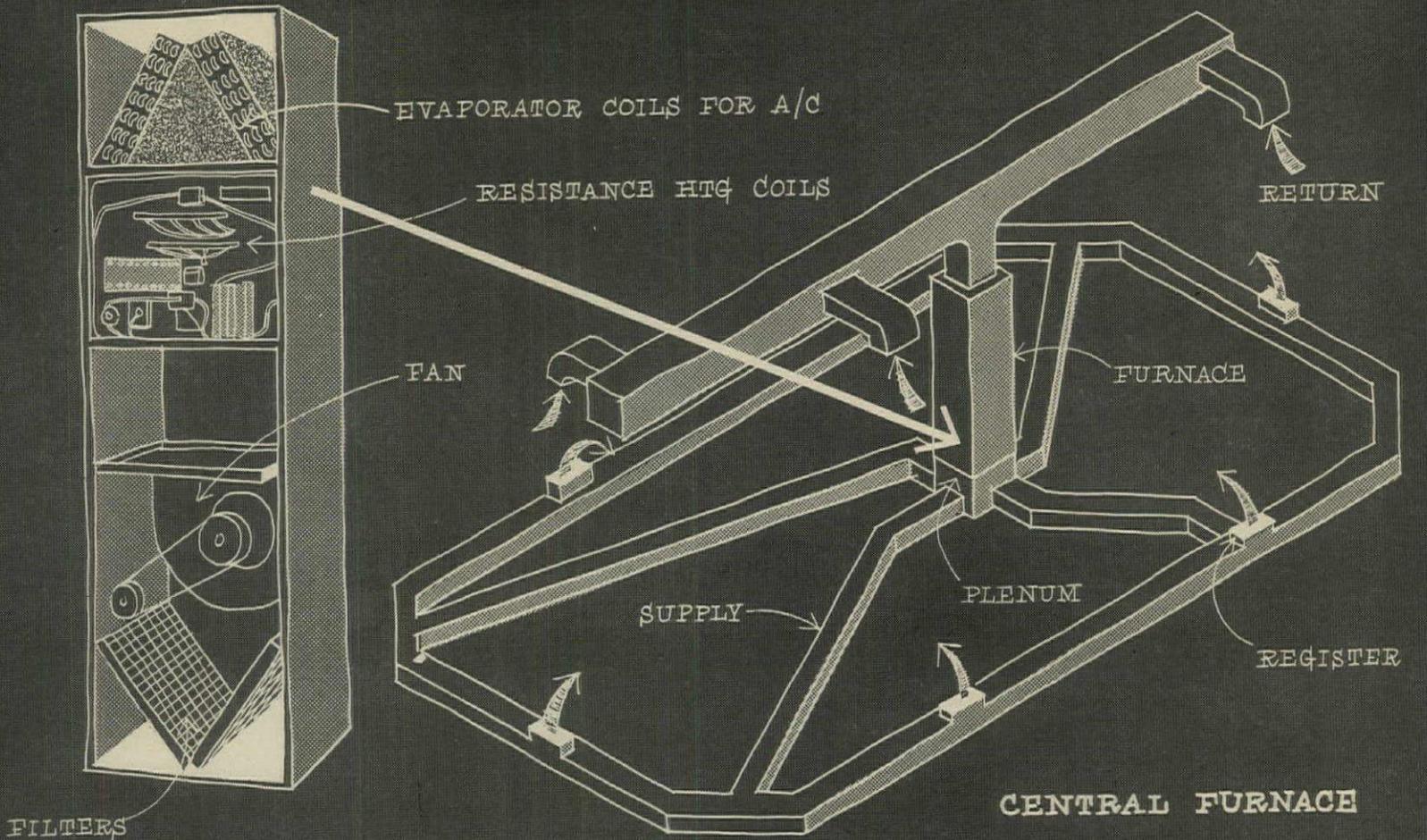
6. The top surface is finished with 2" of Gunite on reinforcing mesh (6x6, 10-10), the bottom with plaster.

The new h-p system was developed by structural engineers at Purdue University under a research grant from the Dow Chemical Co.



FOAMED-PLASTIC WEDGES inserted between edge beams and styrene foam boards keep the beams from bending when the wire network is tightened with tensioning wrench.

Technology continued on p 184



TWO BASIC SYSTEMS for electric warm-air heat—central furnace or room heaters in ducts—can be used with ducts either in slab (or crawl space) or overhead.

Now ducted electric heat is making a strong new bid in the residential market

A year ago there were only three manufacturers of electric warm-air heating systems. Today there are 13 (box below).

Why the sudden increase? Because the makers of warm-air furnaces want a share of the healthy electric-heat market—dominated until recently by radiant heating systems. Though still small, the market is growing fast because of the convenience of electricity and the sales appeal of the all-electric house. Right now, there are two basic ducted electric systems (diagram, left)—one with a central furnace, one with heaters in the ducts.

Spelled out below are the answers to six key questions about warm-air electric heat.

1. How does it compare with radiant electric heat?

Pretty much the way other ducted systems compare with other radiant systems.

Ducted heat's advantages: better balancing of temperatures throughout the house; easier addition of air conditioning, humidification, dehumidification, and air cleaning.

Says W. E. Blake, sales manager of Stewart-Warner's heating division: "With a ducted system, temperatures can be controlled for heating, cooling, and in-between periods when only air circulation is needed. Humidity can be controlled in both summer and winter, and pollen and household dust can be removed easily with electrostatic filters."

Says Kenneth Behr, Lennox Industries' chief application engineer: "The big control advantage is balanced temperature throughout the house. You can take air from a sun-warmed south room, pull it back to the central blower, clean it, treat it, mix it, and send it back to each room at an even temperature."

Radiant heat's advantages: less drafts, less infiltration of outside air, easier zone control. But ducted systems with coils in the register boot (see diagram) have the same zone-control advantages as radiant systems.

Says L. C. Cotts, vice president of Gerwin Industries: "Because we have two or three units per room our system costs half again as much as a system with one big central coil. But our complete zone control may reduce fuel consumption 20% to 30%."

2. What does it cost to install and operate?

Installed costs of an electric furnace are the same as those of a gas furnace (but less than an oil-fired unit). Installed costs of ducts—for either a central unit or a boot-coil system—are the same as duct costs for any warm-air system. Says Don Winegardner, Majestic Co vice president: "A good electric warm-air system in a 1,200 sq ft house can cost as little as \$600."

"Operating costs for electric warm-air run about the same as for electric baseboard," says Gurdon Munger, products supervisor for Owens-Corning Fiberglas, "and are higher than for gas- or oil-fired systems unless the electrical rate is under 1¢ per kwhr and the house is very well insulated."

3. How should a house be designed for it?

The same as for radiant electric heat. You need good insulation (U factors of .05 in ceilings, .07 in walls), double glazing, weatherstripping, and minimum window areas on the north walls (see design manual for electrically heated houses, H&H, April).

4. In what areas can it be used?

In sections of the country where degree days are less than 6,500 and electrical rates are less than 1¾¢ per kwhr. Generally speaking, electric warm-air systems should be used only in areas where other forms of electric heat are economically feasible. Electric heat is usually ruled out by a combination of cold climate and high electrical rates.

5. What is its biggest potential market?

"Our furnaces are installed mostly in \$18,000 to \$30,000 houses," says Majestic's Don Winegardner. "People love electricity as a prestige fuel. If they can afford a quality job, they like to go all the way and put in a year-round heating and cooling system."

"Electricity is a glamorous fuel to Mrs Homeowner," says Stewart-Warner's Blake. "She wants it if she can afford it. At TVA and REA rates, electric warm-air heating makes as much sense as anything else—even in low-cost housing."

6. Who sells and installs it?

Usually a warm-air heating contractor who also handles the manufacturer's gas and oil furnaces. But some electrical contractors are showing interest in handling ducted electric heat along with the electric baseboard and ceiling-cable systems they now install.

Says Winegardner: "Unless the warm-air contractors now in business wake up to the advantages of electric heat, they are going to find themselves in competition with a bunch of new heating contractors who prefer electricity."

13 COMPANIES MAKE ELECTRIC DUCTED UNITS:

American Standard Air Conditioning Div New York City.	Rybolt Heating Co Ashland, Ohio.
Electric Heating Products Co Phoenix.	Saffell Air Cond Co Phoenix.
Heating Assurance Inc Spokane.	Stewart-Warner Corp Heating & Air Cond Div Lebanon, Ind.
Lennox Industries Marshalltown, Iowa.	Thermo-base Div Gerwin Industries Michigan City, Ind.
Majestic Co Huntington, Ind.	The Williamson Co Cincinnati.
Mueller Climatrol Milwaukee.	York Corp York, Pa.
Muncie Gear Works Cordele, Ga.	



Jim Ryan stands before three of the 150 homes in Edward M. Ryan's "Highland Terrace," Mt. Lebanon, Pa.

"ALCOA SIDING adds brand-name quality at no extra cost"

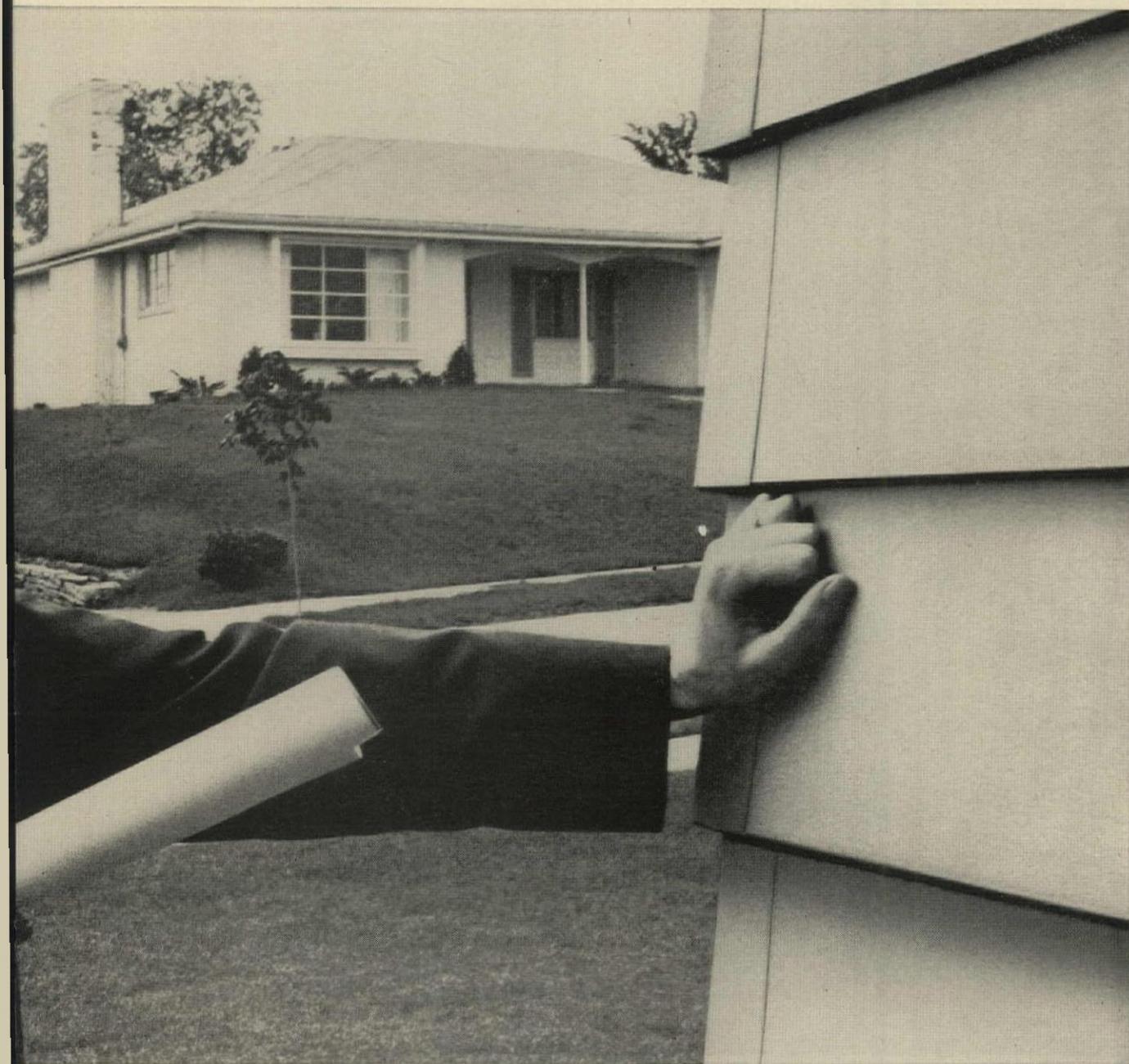
—says Jim Ryan, Sales Manager, E. M. Ryan, Inc.



The VALLEYVIEW is an efficient, three-bedroom ranch-style home designed to provide maximum living area at minimum cost (\$15,500 to \$16,500 range).



The CHARLOTTE, a four-bedroom, two-story colonial-type home, offers the larger family luxury features. (Priced from \$26,000 to \$29,000.)



"More prospects become customers . . . and our investment comes back to us faster . . . when we offer a home with Alcoa Aluminum Siding!" says Jim Ryan, sales manager for the well-known Pittsburgh building firm, Edward M. Ryan, Inc. "Because they know they get 'more for the money' with Alcoa Siding, prospects quickly become buyers."

Ryan-built homes, both custom and tract, range from \$15,000 to \$40,000. Popular in the Greater Pittsburgh area, 537 such homes were sold in 1959 and an estimated 700 will be sold and erected in 1960, Mr. Ryan predicts.

"Homeowners have learned repainting is eliminated—for as long as 10 or 15 years—with aluminum siding," according to Mr. Ryan. "The same properties, like long-lasting corrosion resistance, that make other Alcoa Aluminum products so popular have created a built-in customer acceptance of this fine new Alcoa product."

Ryan homes reflect a distinct pattern of customer-requested features . . . a brand awareness

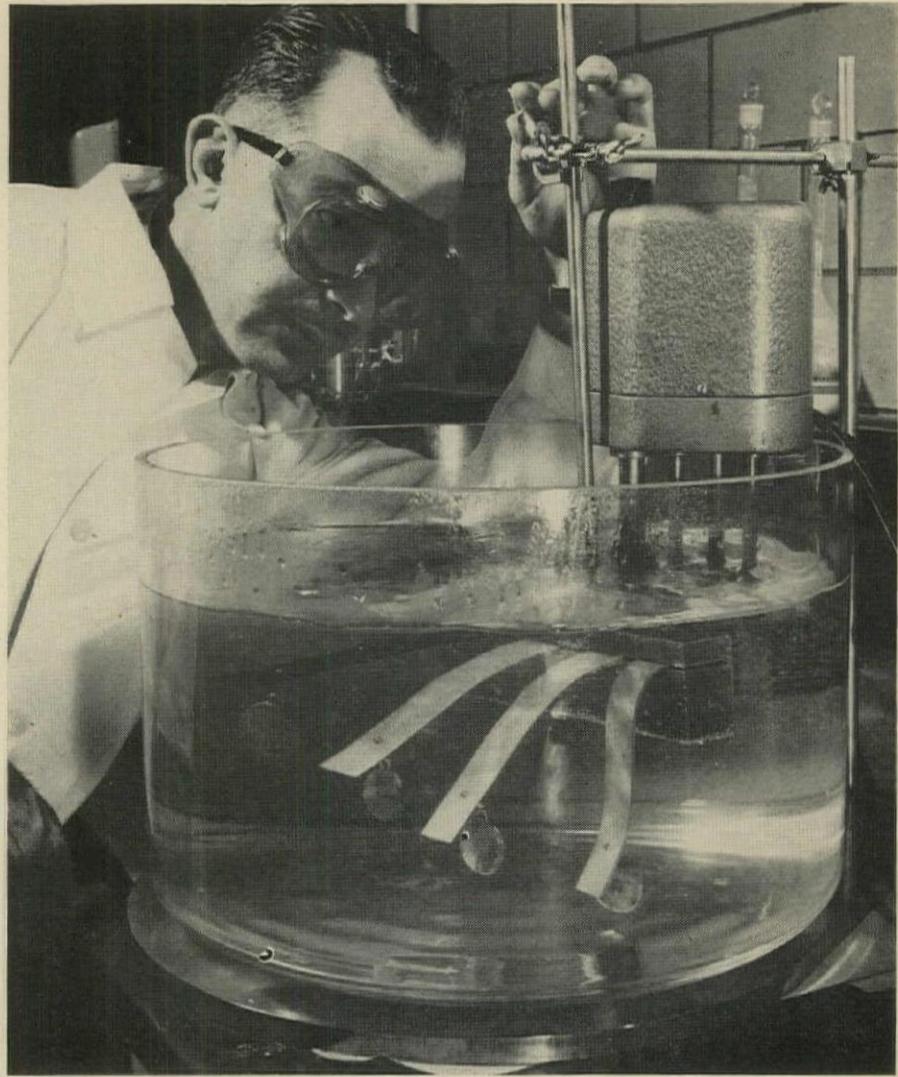
that's sweeping the country, especially in the residential building market. Alcoa® Gutters, Downspouts, Aluminum Soffits, Siding—"all the aluminum they want! And we can give it to them *at no extra cost!*" Mr. Ryan points out.

Easily installed, easily sold, aluminum siding *made by Alcoa* notably enhances property values. Aluminum siding enables builders to reduce monthly house expense . . . enables buyers to carry larger mortgages (on bigger homes) because maintenance bills are lower! **Write for more information on Alcoa Siding today: Aluminum Company of America, 2194-G Alcoa Building, Pittsburgh 19, Pa.**



MADE BY ALCOA

Tests like this show new vinyl can work for hot-water piping



In the photo at right, weighted samples of B. F. Goodrich Chemical Co's new Hi-temp Geon and three competitive plastics are suspended in a 180F water bath. The three older materials (light colored) have sagged, the Geon remains rigid.

The new material (a modified polyvinyl dichloride) seems to remove the chief block to plastic plumbing—its low strength at high temperatures. Hi-temp Geon will stand temperatures as

high as 200F—60° higher than previous rigid vinyls. At 185F, it will handle pressures up to 125 psi (household pressures rarely run over 60 psi) in schedule 60 pipe.

In addition, it will take rough handling in transit or installation, needs no more support in long runs than other water piping materials. ASTM standards rate it as self-extinguishing.

Geon is light weight (one-sixth the weight of copper) and easy to fabri-

cate: It can be extruded, molded, and formed with conventional equipment and techniques; pipe made from it can be cut with a handsaw, joined with a solvent weld, and bent by applying heat. It has low thermal conductivity: little heat will be lost from hot water supplies; cold water pipes will not sweat in humid weather. When the plastic is in full production, materials handling and installation costs could be less than those of competing materials.



HEAT TRANSFER through metal, left, melts test alloy, which stays solid on Geon, right.



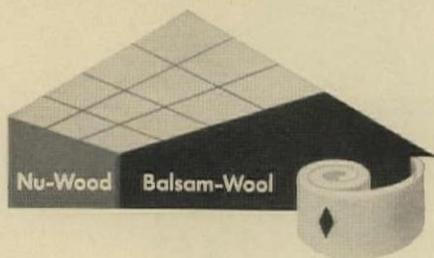
PIPE ASSEMBLY is simple: brush on solvent, slip pipe into fitting, let joint set.



LIGHTWEIGHT WALL of NAHB research house has two-story Geon plumbing rig.

Technology continued on p 192

SELL THESE BASICS AND YOU SELL MORE HOMES!



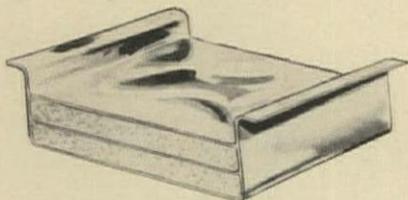
People want comfort—winter and summer. They want low heating and air-conditioning costs. They want barriers against air infiltration and chilling drafts. You can supply all these features—in full measure—with Balsam-Wool sealed blanket insulations. Today there's a type of Balsam-Wool for every climate...every heating and insulation need. And remember, Balsam-Wool combines *all* these advantages: positive vapor barrier...completely sealed insulation mat...double-bonded liner...special spacer flanges for easy application and to provide needed air spaces!

Basic to quality

Balsam-Wool® Sealed Insulation

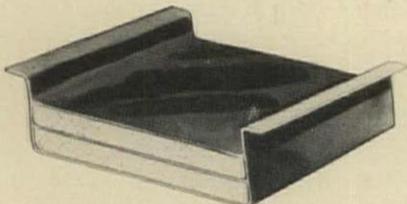
Reflective Balsam-Wool

Aluminum reflective liners. Standard (1" thick): 16", 20" and 24" widths. Double-thick (2"): 16" and 24" widths.



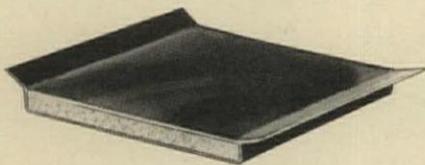
Regular Balsam-Wool

Asphalt-impregnated liners. Standard (1" thick) and Double-thick (2"): 12", 16", 20" and 24" widths.



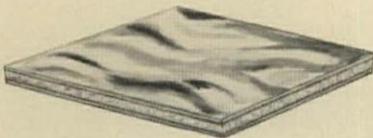
Type E Balsam-Wool

For masonry construction— $\frac{5}{8}$ " thick. Available in 12" and 16" widths.



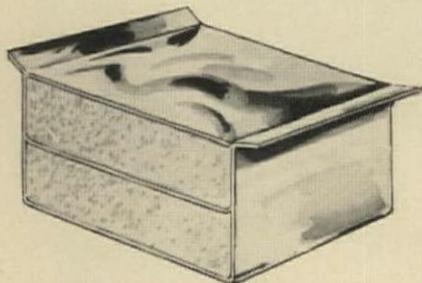
Balsam-Wool Panel Insulation

$\frac{3}{8}$ " thickness; reflective liner-vapor barrier. Cut to size: 49" x 8", and rolls 8' x 41'8"—for use in component or modular construction.

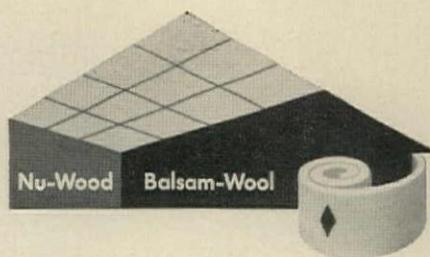


Balsam-Wool for Electric Heat

Full-thick ($3\frac{5}{8}$ " and Super-thick (5") in 16" and 24" widths, in reflective liners.



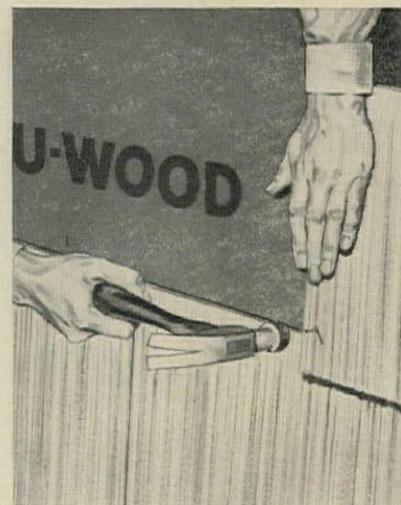
*a basic
for structural
strength*



Nu-Wood® Sheathing

NEW—NU-WOOD NAIL-BOND INSULATING SHEATHING

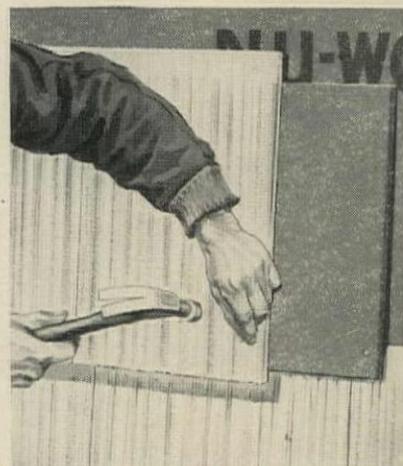
eliminates the need for nailing strips...permits direct application of wood or asbestos siding shingles...meets F.H.A. requirements— asphalt-coated on all sides and edges for moisture-resistance. Available in big 4' x 8' and 4' x 9' panels.



A COMPLETE SHEATHING LINE

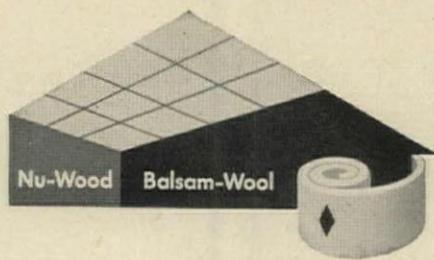
Nu-Wood sheathing costs less to apply because it comes in big sections that cover up to 36 sq. ft. in one operation. Here are additional plus features of the Nu-Wood sheathing line:

- Variety of sizes—2' x 8', 4' x 8' or 4' x 9' panels.
- Big-sheet time-and-material-saving advantages—
 - Rugged strength eliminates costly corner bracing
 - Little waste or messy cleanup with larger panels
 - Marked sheets speed nailing application
 - Cuts easily and cleanly
- Extra insulation—for greater comfort, lower heating and air conditioning costs over ordinary sheathing.
- Sheds water...weather-resistant—danger from moisture damage during construction minimized. Requires no building paper (except with stucco finish).



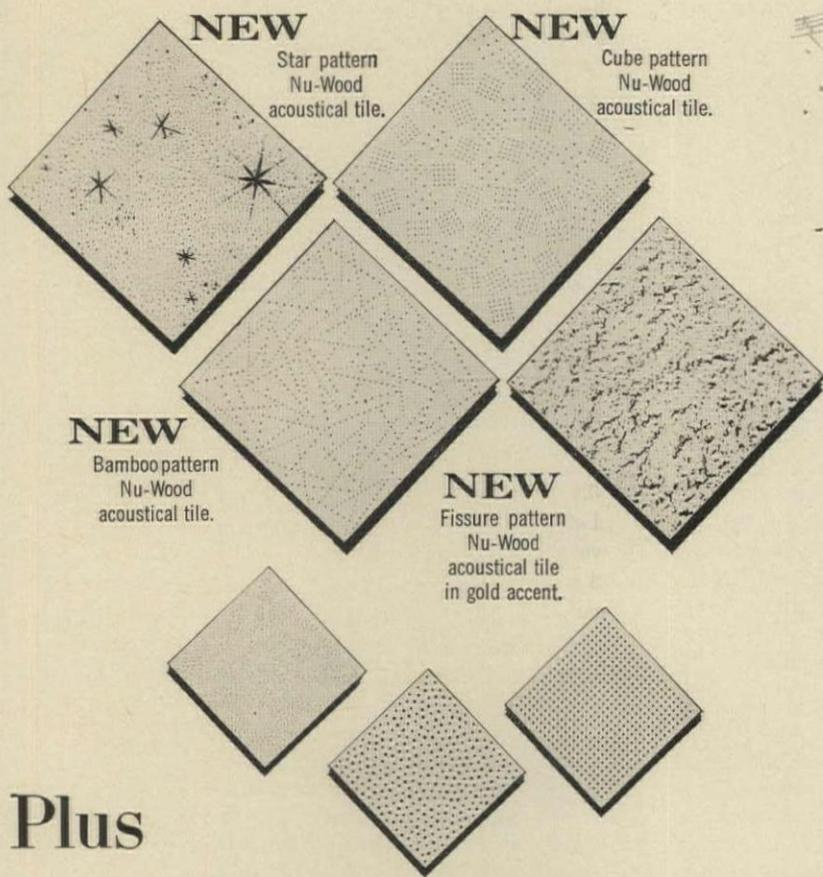
Now with 4' lengths of Nu-Wood shingle backer, three stud spaces can be covered at once to provide desired deep shadow lines of siding or shingles. Easy to apply. Saves money, adds extra insulation.

*basic
to quality*



The Quiet of Nu-Wood® Tile

With the complete Nu-Wood acoustical tile line, you can add the powerful basic quality appeal of *quiet* while you provide new style interest for every room. High in noise-quieting efficiency, Nu-Wood acoustical tile now comes in a wide range of beautiful decorator-designed patterns with light-reflective, flame-resistant and cleanable finishes. Tiny acoustical perforations do not mar beauty, yet control sound.



NEW

Star pattern
Nu-Wood
acoustical tile.

NEW

Cube pattern
Nu-Wood
acoustical tile.

NEW

Bamboo pattern
Nu-Wood
acoustical tile.

NEW

Fissure pattern
Nu-Wood
acoustical tile
in gold accent.

Plus

Nu-Wood Constellation®
acoustical tile—exclu-
sive Micro-Perf® per-
forations.

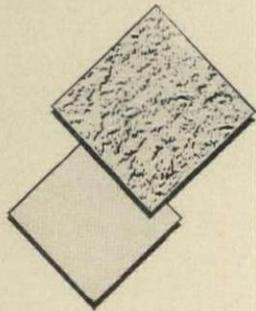
Random drilled
Nu-Wood acoustical tile.

Regular pattern
Nu-Wood acoustical tile.

Nu-Wood Pre-Decorated Tile

Nu-Wood Decorator tile imparts a high-fashion look for ceilings...has a simulated fissure design in gray, beige or gold tones.

Nu-Wood Sta-Lite® plain surface tile has a non-glare white surface.



Balsam-Wool / Nu-Wood

Wood Conversion Company,
First National Bank Bldg., St. Paul 1, Minn.

Will there be a breakthrough by plastic building products in the early '60s?

"Yes—conditionally," says MIT's Albert G. H. Dietz.

"The increased cost of steel and the increased cost of the labor to make things out of steel . . . contrast with a steadily decreasing cost of plastics and the labor to make an item out of plastic," says Appliance man R. W. Finholt of GE.

"There will soon be a change in the standard operating procedures of the building industry so great as to lead to a different situation *in kind* from that with which we have been dealing," says City Planner Burnham Kelly.

This tentative encouragement was given the plastics makers at two meetings in May: a meeting of the Society for the Plastics Industry in Miami and a meeting of the Chemical Market Research Assn in New York City.

Speaking for the housing industry, these experts, and others quoted below, told the chemical industry what it must do to share in the building market.

The experts first pointed out six conditions new building products must meet:

1. They must have satisfactory endurance. Said Al Dietz: "The acrylics and phenolics have exposure histories of more than 20 years; some vinyl chloride compositions have been exposed almost that long; reinforced polyesters go back ten or more years . . . but they are the exceptions. . . . If the building industry is to be convinced that plastics materials are durable and reliable over the life of buildings, the plastics industry must find ways of demonstrating it."

Asked Leonard Haeger, chairman of BRI's research committee: "Do we think in terms of the life of the occupant, the life of the mortgage, or the physical life of the structure? . . . An answer to the question of durability is the great need."

2. They must hold to an accepted set of standards. Said Dietz: "FHA is under continual pressure to approve plastics products but for most uses cannot find industry-wide standards upon which to base an intelligent decision."

Said Willard Worth, research vice president of National Homes: "Most of the plastics industry's problems can be easily solved compared to the problem of establishing realistic performance standards."

3. They must comply with established regulations. Prof Dietz summed it up: "If it can be shown that plastics do not

constitute a hazard in construction, the building code problem will be largely solved . . . Most code authorities are not averse to approving new materials and products if it can be proven that they are safe and reliable."

4. They must allow adequate design freedom. Or as Len Haeger put it, they must lick "the problems of fabricating the material and of making the material into a structural element; of packaging; of size limitations in transport; of storing at the site; of erection, of fastening, of mass production."

And here C. Theodore Larson of the University of Michigan saw big opportunities for plastics: "One easily applied synthetic can take the place of a dozen traditional items and make the component more versatile . . . There is emerging a new architecture based on the use of new materials, new concepts of environmental control, and new production techniques—a delightful architecture, gay, colorful, flexible, strong, light, always changing in appearance, and offering performance capabilities never before dreamed possible."

5. They must be available when the builder wants them. Said Dietz: "Considering the vast and diffuse nature of the building industry, thousands of outlets throughout the country must be supplied and distribution channels kept filled . . . Contact must be maintained

with the architects, engineers, builders who determined whether the product will be specified."

Said William H. Scheick of Teco: "There is a new pattern of direct supply from manufacturer to large builders or fabricators. But the local dealer remains the outlet to smaller builders and homeowners."

Said Builder William Levitt, Jr: "Levitt & Sons—the first big builders—almost single-handedly caused a revolution in the building supply in the late '40s. We started the swing toward the producer, allotting the supplier his proper place, but no more, in the distribution pattern."

6. They must be priced to meet the market. In Len Haeger's words: "To succeed a new structural element must 1) perform like traditional materials at a lower cost; 2) perform better at no greater cost; or 3) offer new performance at greater cost."

Said GE's Finholt: "In the past plastics have made their way, not because of lower cost, but because of their properties and because they could be formed easily and with lower-cost tools. At the present rate, it may be more economical to use plastic than steel in only eight years . . . All the mechanical parts of a house—water pipes, electrical conduits, air channels—could be made better and at a lower cost with plastics."

. . . and then they offered a glimpse of the blue sky ahead

Said Bill Scheick: "Many facets of building should fire the imagination of any industry not restricted by traditional concepts. Take the idea of a house that serves a useful life of 25 years, then can be dismantled and sold for second-hand use."

Suggested Ted Larson: "We might have a single plastic sheet that could be unrolled like a rug to cover the entire roof deck."

Added Willard Worth: "A considerable market for the chemical industry might develop in the reclamation of marginal land . . . The absorption quality of soil might be chemically altered to improve and control drainage . . . Land unable to support foundations may be stabilized. Chemical flocculation of sewage may be worthy of investigation . . . The single-family home may have to be freed from its

umbilical cord of services by the chemical generation of power, conservation of water, and disposal of sewage."

Concluded Burnham Kelly: "Our attitude toward the potentials of technology should not be the old Madison Ave phrase, 'Let's follow it down the street and see what it eats,' but a new responsible realization that we can lead it up the street and show it the best places to start eating." /END



For above door, specify Float-Away Flush Panel, 8'-0" height, primed, any width required.

Dept. H-72

YES! I am interested in making \$14.97
extra profit on every closet I build.
Rush me all your facts and figures on the
Float-Away closet door profit story at once!

Name _____

Address _____ City _____ Zone _____ State _____



FLOAT-AWAY DOOR COMPANY

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Float-Away metal closet doors are made to fit all standard modular openings—available in Flush Panel, Louver, Colonial, prime coated—also prefinished Luan and Birch. Five-year guarantee.

New "BUILT-IN BEAUTY"

without the cost!

New Roper "Style-Line Design" eliminates costly installation ... pleases every prospect

Beautiful! — and so easy to install! Slides neatly into pre-planned alcove between built-in cabinets to create a fresh, unbroken line of kitchen symmetry. Occupies only 30 inches of space!

Profitable! — Gives the "built-in look" without the expense. No costly cut-out work. Minimum crew time. One simple gas connection. Plan for bigger profits — plan around the smart new Roper Style-Line "30" and be first with the newest!

Sleek, streamlined styling in fashionable coppertone finish

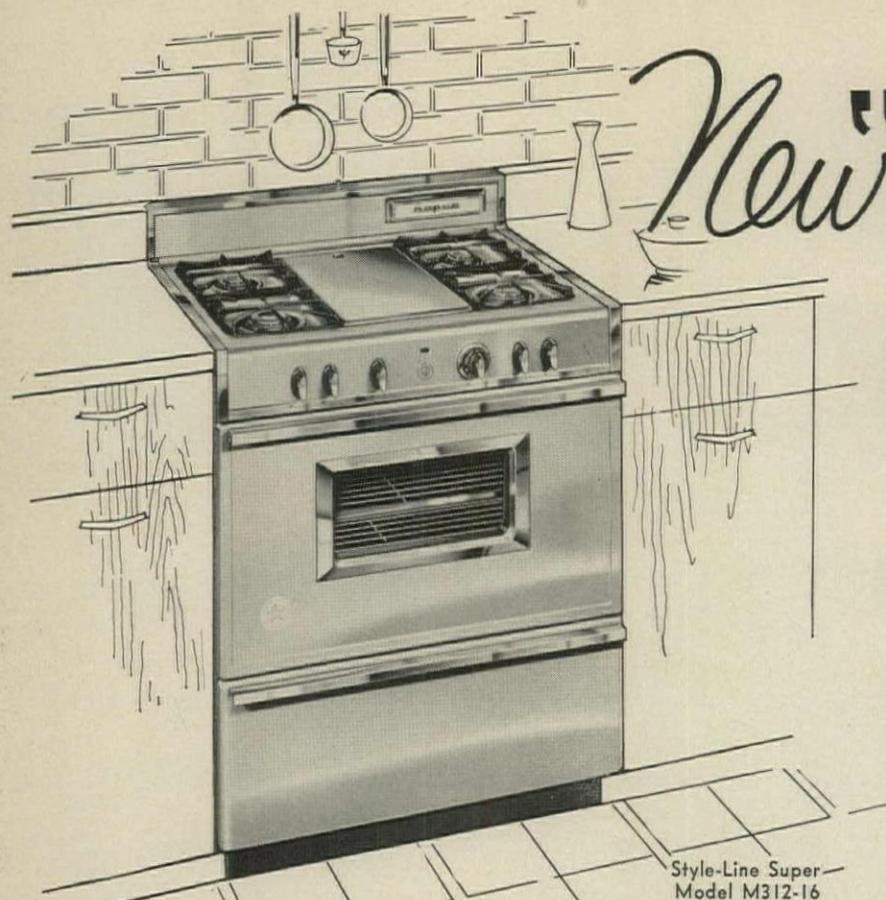
Here's sales magic for your showroom display ... stunningly beautiful in rich coppertone finish that harmonizes with any decor. Here's kitchen-planning flexibility that lets you create strikingly original kitchens at low cost. Here's the name all America knows and identifies with the finest in gas cooking. Big 25-inch Bake-Master oven, 4 Simmer-Speed top burners, automatic oven heat control, oven light and window. Famous Roper *lifetime* construction. Send for details today!

Write Dept. HH for full details

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A Subsidiary of Geo. D. Roper Corporation

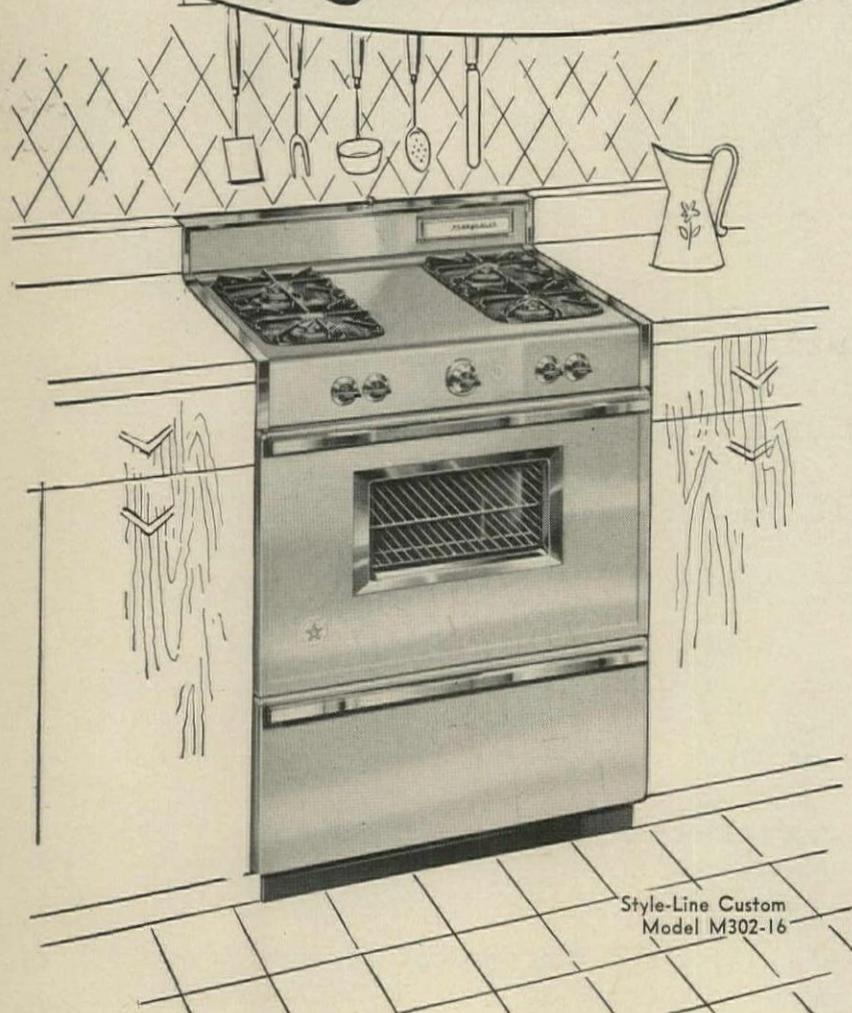
KANKAKEE, ILLINOIS



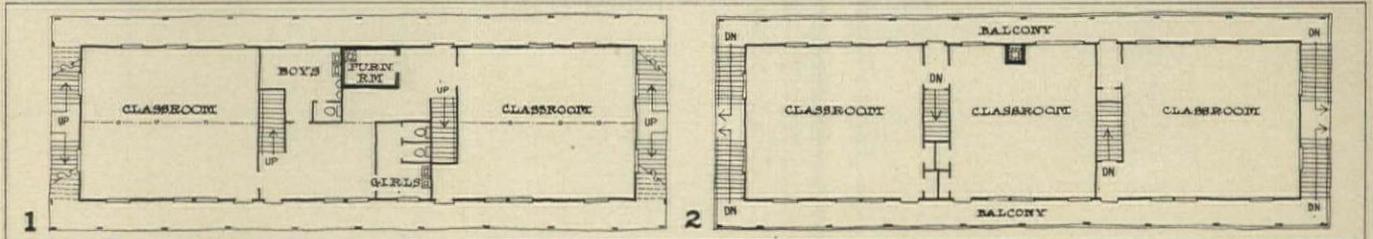
Style-Line Super
Model M312-16

ROPER

Style-Line "30"

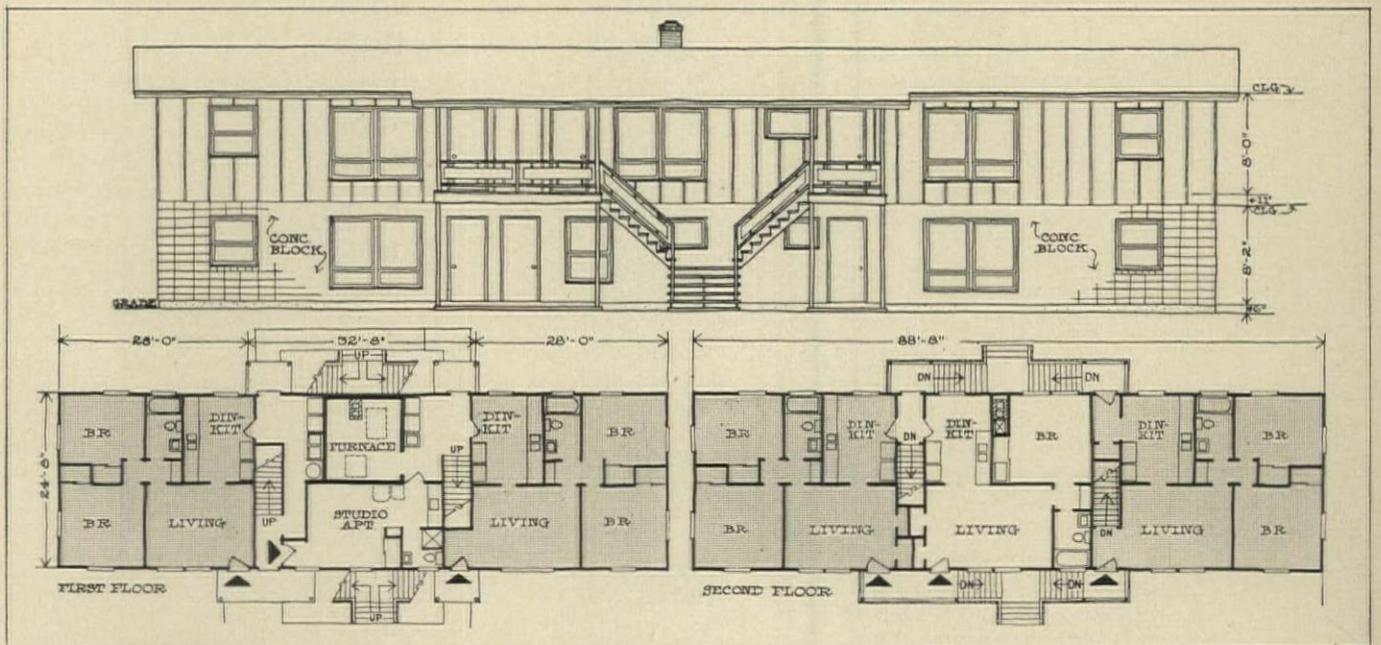


Style-Line Custom
Model M302-16



TEMPORARY SCHOOL was built in one month to fill need for classrooms when homes outpaced schools in New Richmond, Wis.

It was built to meet a shortage of school rooms . . .



APARTMENT HOUSE was converted from school, has six rental units. Only exterior changes were new stairways to second floor.

Now it is meeting a shortage of rental housing

What the leaders are doing

- How Houston's Home Parade drew 190,000 visitors in 15 days* p 196
- How big crane saves \$50 a house for component builder* p 200
- Why builder uses prototype model to market-test his houses* p 202

This school-turned-apartment is one builder's solution to the classroom-shortage faced by fast growing communities.

Designed by Builder Sam Slaughter Jr, the temporary school was built for \$38,000 and later converted into an apartment house for an additional \$12,000.

To meet an emergency need for more classrooms in New Richmond, Wis. Slaughter built the five-room school in one month and leased it to the school board. He held down costs and speeded the job by using concrete-block walls on the first floor, Lu-Re-Co

panels on the second, and roof trusses.

After permanent schools were completed, Slaughter turned the building into a six-unit apartment for new teachers. He added bathrooms, kitchens and kitchen equipment, partitions, new outside stairways to the second floor, and two communal laundry rooms. He rents the apartment units for \$50 to \$95 a month.

Slaughter, who ships 3,000 to 5,000 Lu-Re-Co homes a year in the Midwest (and is first vice chairman of Lumber Dealers Research Council), expects to build more schools like this in several states this year.



CROWDS LIKE THIS flocked to Houston's 11th annual Parade of Homes in early May. Parade, tied in with home show, displayed 31 models.

Houston Parade of Homes draws 190,000 in 15 days

And they paid 50¢ a head to get in.

"I've never seen any Parade anywhere that matched this one," said NAHB President Martin Bartling.

"We've had more calls about houses than at any time since I've been in business," said Parade Chairman Paul McConnell.

"In the next six weeks, we'll probably sell 25 houses averaging \$37,000," said Builder E. R. Cantrell.

Were Houston's builders just lucky? Far from it.

Here are Houston's ten rules for making a Parade a smash hit:

1. Start planning 12 months ahead. Even before one Houston Parade is finished, the Houston Homebuilders Assn starts on the next one. For an April or May Parade, the location is chosen the previous June, lots are sold to builders soon after, and houses are designed by December.

2. Build in one area and in a narrow price range. Houston builders claim they create more excitement and get bigger crowds by having one big Parade of 30 houses instead of scattering their shots with three or four small Parades. (Major consideration: the Houston new products "home show" is combined with the Parade.)

3. Get other businesses to work for you. One secret of Houston's success has been the help given by three newspapers, local TV and radio stations, three utility companies, a dozen department and furniture stores, and, this year, by *American Home* magazine. The builders have convinced local

groups that the city's economic growth is tied to homebuilding.

4. Keep tight control over everyone. Many Parades have only middling success because the Parade committee lets each builder go his own way. Houston's Parade committee insists on approving house designs and prices, signs and landscaping. Builders are required to meet deadlines on starting, finishing, and furnishing their models. Houses must be cleaned daily and opened on schedule. The committee also spells out regulations for products exhibitors, the subdivider, and other Parade participants.

5. Spend freely on ads and promotions. Houston's Parade was promoted by about \$500,000 worth of paid and free newspaper space and radio and TV time, estimates Gordon Neilson, HBA executive vice president. And 136 billboards carried Parade ads.

The bulk of the advertising was by individual builders, utilities, stores, and the subdivider. The parade committee spent \$25,000.

6. Build a big parking area. Houston builders have learned that people will not turn out for a Parade if they cannot park easily. So this year they built three lots to hold 8,000 cars. Surrounding streets were paved and curbed; ground was leveled, compacted, drained, and filled. In addition, \$4,000 was spent to hire traffic and security policemen.

7. Give the crowds a show to talk about. A Parade can fail the first Sunday if word gets around that it is not

worth seeing. People drove 15 miles (from downtown) to see the Houston show and many came back a second or third time. Women enjoyed the house furnishings (see p 144) as much as they did the houses. Thousands came on Ladies' Day to see cooking demonstrations by the two local gas companies.

8. Make your visitors comfortable. Houston's builders provided soft drink stands, a refreshment tent where people could sit at tables, well planned toilet facilities. Planned for next year's Parade: street-side benches in front of houses.

9. Combine your Parade with a home show. Most builders associations have a spring home show and a fall Parade. Houston builders combined the two, rented 70 exhibit spaces at \$350 each. (A tax-paying subsidiary, the Home Builders Research Corp, runs the Parade, spends most of its profits for research.) Parade visitors entered and left through a 360' exhibit tent.

10. Be your own toughest critic. While this year's Parade, Houston's 11th, was still going on, Executive Vice President Neilson began writing a detailed and tough critique. He pinpointed faults and weaknesses, suggested ways to improve such things as parking, security, landscaping, lighting, signs and traffic control. Says Neilson: "If you keep harping on details, you keep doing better from year to year." Sums up NAHB President Bartling: "I'll hold this Parade up as a goal for other associations to follow."

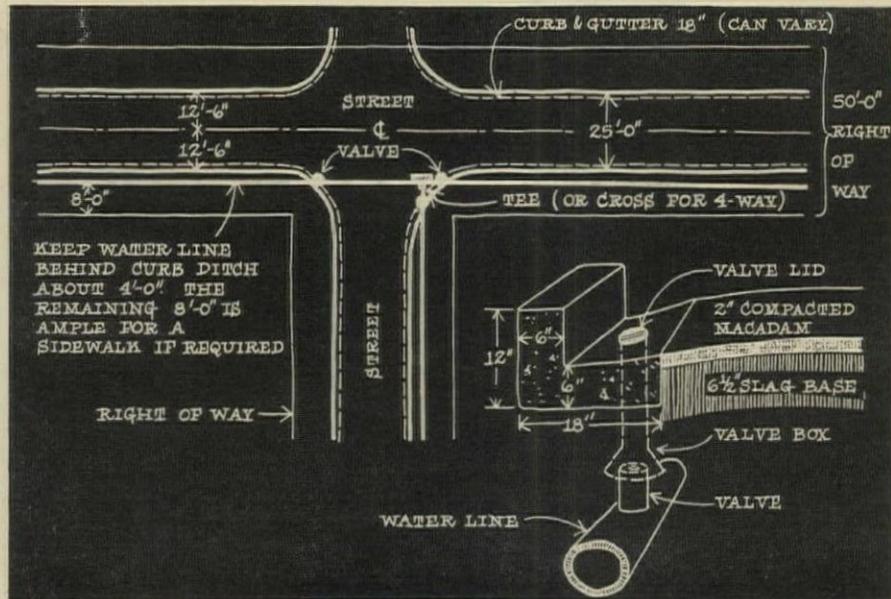
6,000 all-electric houses planned in New Jersey

By far the biggest all-electric housing tract in the US has been announced for fall opening in northern New Jersey, 35 miles south of New York City.

Six thousand houses priced at \$12,990 to \$24,990 are planned by Builder Walter J. Happle Jr on a 2,500-acre site near Spotswood, N.J. The houses and 5,000 rental units will all measure up to the electric industry's Gold Medallion standard (H&H, April). They will have electric heat, hot water, ranges, ovens, and dishwashers, plus adequate wiring and lighting—all equipment supplied by General Electric.

Happle, 34, has built a number of large and small developments in northern New Jersey in the past ten years. He hopes to complete his new community—called Electric City, USA—within five years. With shopping centers, an industrial park, and other facilities, construction costs will come to about \$190 million.

Jersey Central Power & Light Co will offer a residential electricity rate of 1.8¢ per kw-hr at the outset, but may be able to reduce the rate after volume increases. The utility's officials also say the electric load may make it practical to put wiring underground after the first 300 houses have been completed at Electric City.



Put your water valves in the curb—not in the street

So says Youngstown Builder Nils Johnson who has devised the method diagrammed above for the latest tract developed by Cook & Johnson.

Explains Johnson: "When we put our main water valves in the street intersections, trucks would often break them before the streets were black-topped. So we spent a lot of money on repairs. And when we placed the valves back of the curb in the tree lawn, they were

covered with topsoil. So the water company often had to dig up lawns to find them. Now we form the valve well right in the 18" wide curb-and-gutter. So the valves are both protected and easy to find."

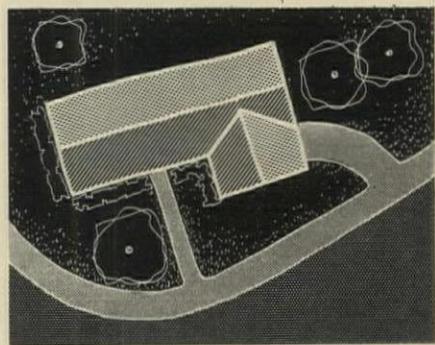
Cook & Johnson's new method puts one restriction on street layout. Curbs must have a radius no less than 25'. Otherwise the valves would have to be set too close to the "T" or cross.



This corner-lot plan plays down the garage and drive

In the L-shaped Sacramento house at left, Western Enterprises put the garage and driveway in the unusual position shown at right for two reasons:

1. To give the house a more attractive setting by freeing the front yard for grass and shrubs.
2. To keep an open garage door from spoiling the looks of the facade.



If you plan a community center, build it before you start to build houses

That is what Builder Matt Jetton did when he spent \$9,900 to build the open-air community center and bath-

house (left in photo) at one of his riverside developments in Tampa. Says Jetton: "By building these facilities

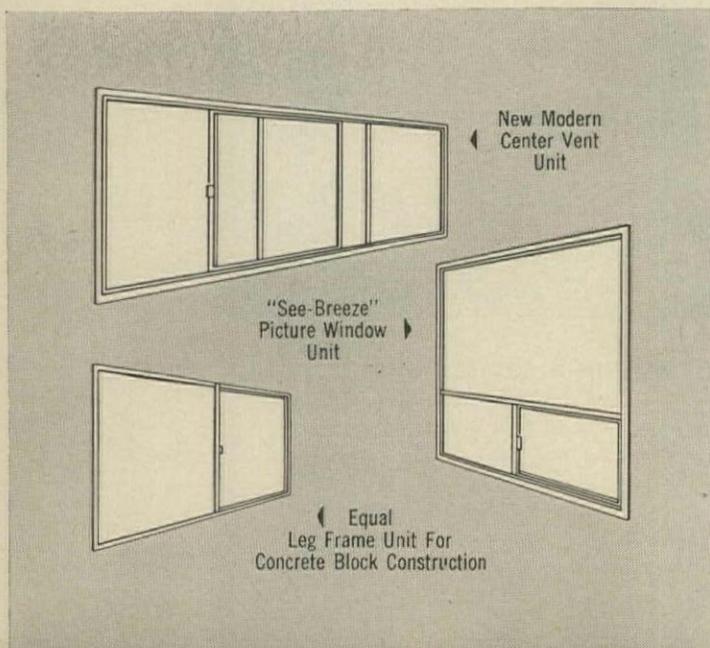
first, we gained twice their cost in publicity. As a result, we were able to sell our houses a lot faster."

Leaders continued on p 200



TRUSCON'S New Full Line of Aluminum HORIZONTAL SLIDING WINDOWS SERIES 700

... in types to meet every consumer demand



SINGLE SLIDE—one ventilator operates
 FIXED PICTURE WINDOWS
 SEE-BREEZE—slide ventilating picture windows
 CENTER VENT PICTURE SLIDE WINDOW
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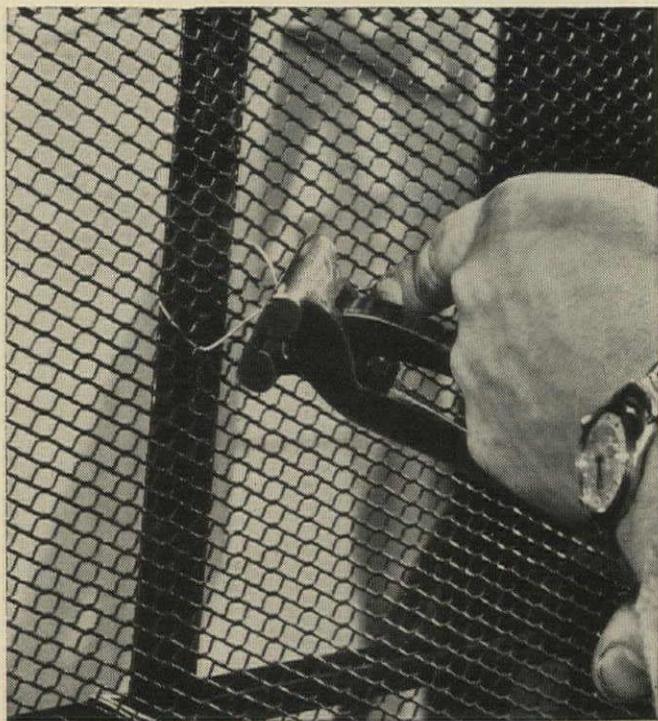
No other manufacturer supplies all these types to meet every consumer demand. Available in standard types and "Pacific Coast" types. Majority of types and sizes are stocked, completely glazed, for prompt shipment from warehouse.

Manufactured to meet FHA and VA requirements. Full perimeter weatherstripped. Stainless steel vent slide channel assures smooth, easy operation. Interlock at meeting rail assures weathertightness, easy operation.

Call your Truscon representative and get the facts direct. Or, send coupon.



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TRUSCON TRU-DIAMOND METAL LATH trimmed square . . . no flare! It's a pleasure to work with this precision-made, distortion free metal lath. Sheets are perfectly square and true—selvage edges are neatly finished. These Truscon Tru-Diamond features insure a good fit on the toughest job. Full line of Truscon Tru-Mesh Metal Lath Accessories. Contact your Truscon Dealer and get the complete story, or send coupon below.

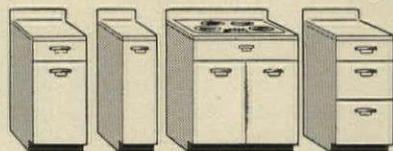


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Standard Units of Republic Steel Kitchens are available in a wide range of sizes in base and wall cabinets, sinks, drop-ins, and accessories to meet every kitchen need and size. Easy to install.



NEW TRADITIONAL FINISH—grain texture, vinyl on steel. *Traditional* is the homebuilder's answer to any kitchen preference. A vinyl of beautiful, natural grain inseparably bonded to Republic Steel Kitchen door and drawer fronts. In apartment or multiple home developments, you can vary the kitchen plan without altering the floor area. Every kitchen is a custom kitchen with a choice of *Traditional Finish*, or crisp, clean, popular colors. Republic Steel Kitchens are easy to install, dimensionally accurate. Call your Republic Steel Kitchens distributor, or send coupon for information and color sample.

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Firm _____

Address _____

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EXPERIMENTAL MODEL, build in 1959, has shallow bedroom windows, seven porch posts, half-height standard brick wall along the front.



FOR-SALE MODEL has deeper bedroom windows, full-height board-and-batten front siding, used brick at end of house, six porch posts.

Market test your models before you introduce them

That is the advice of Indianapolis Builder Tom Perine, who never introduces a new model without first building and market testing a prototype.

Perine furnishes the experimental model and holds special showings for selected people—former buyers, lenders, subcontractors, suppliers, and others. This brings out a wide variety of likes, dislikes, and specific suggestions for major and minor improvements. Then Perine's product development committee (key men from each department in his organization) goes over the

new ideas and decides which to include in the model to be built for sale.

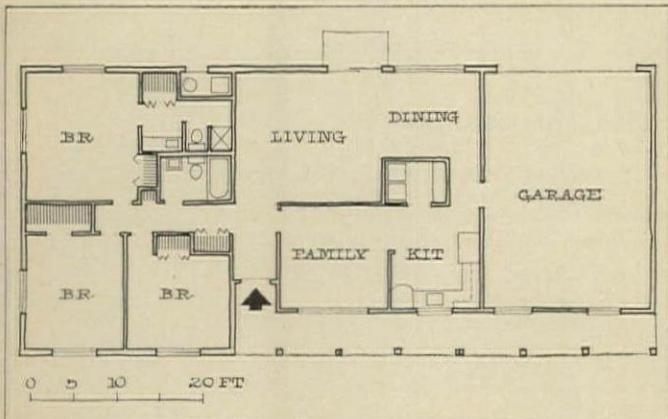
Perine's market-testing method pays off in four ways:

1. It pinpoints sales appeals. Says Perine: "Most important of all, we find out what buyers like and dislike and can set realistic prices."
2. It cuts costs. "Subs often show how we can trim wiring or plumbing costs. A construction man may show how to save time or materials."

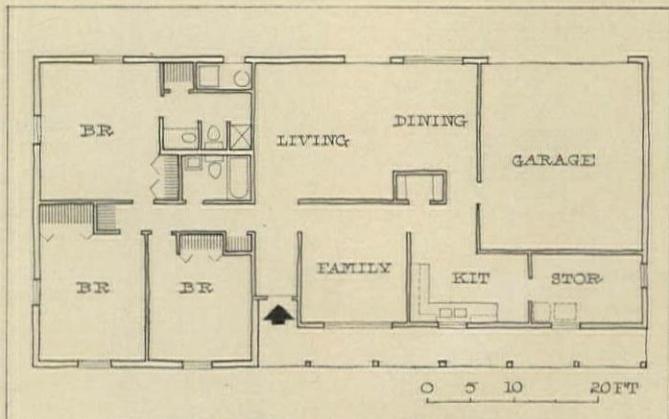
3. It makes financing easier. "We get better loans and appraisals because lenders can understand much more about values when they see the model than when they just look at plans."

4. It speeds construction. "With the bugs worked out in advance, we can build the final model much faster, with less worry about opening dates."

"And," adds Perine, "if we don't change the exterior too much, we can use photos of the experimental model to advertise the final model before it is even built."



EXPERIMENTAL PLAN was 33'x71', had 12'x11'4" family room, large laundry between kitchen and dining room, and oversized garage.



REVISED PLAN is 1' deeper so that family room and other areas are much larger. Relocation of laundry provides more dining space.

Leaders continued on p 202

PUT CONVENIENCE and QUALITY
IN YOUR KITCHENS WITH

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KITCHEN ACCESSORIES

CLIP THIS COUPON...

and mail in for a FREE copy of Catalog 300-L

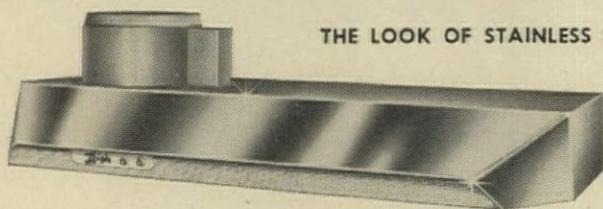
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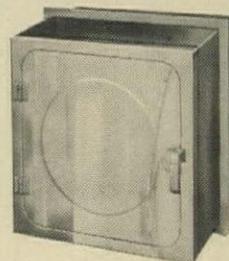
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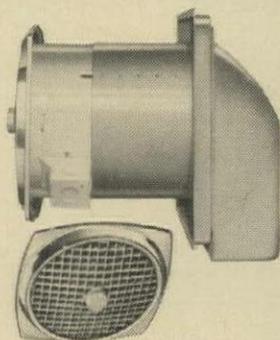
THE LOOK OF STAINLESS STEEL AT A FRACTION OF THE COST

This exciting new "Brushed Chrome-tone" finish is available exclusively on Leigh 5400 series "Economy" Range Hoods. Lowest cost quality hoods on the market. 4 popular sizes. Also in luxurious coppertone finish.



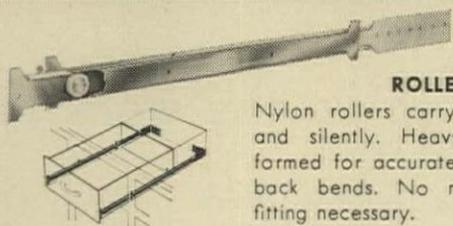
MILK AND PACKAGE RECEIVERS

Deliveries received inside safely. Insulated doors, heavy-duty hardware, painted aluminum prime-coat finish. Models available for frame or brick construction.



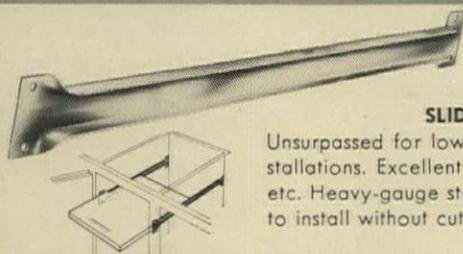
TWO NEW LOW COST VENTILATING FANS

Wall and ceiling types. Both at a remarkably low cost, but with all the beauty, installation and construction features of the most expensive units—plus Leigh's exclusive High Impact Polystyrene Grille... with an 80% free area. A gleaming, chrome-like finish.



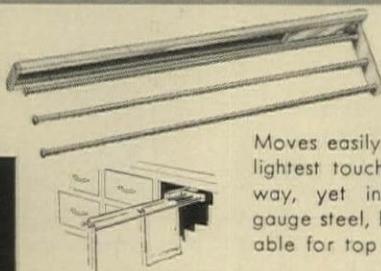
ROLLER DRAWER GUIDES

Nylon rollers carry the load smoothly and silently. Heavy-gauge steel, die-formed for accurate fit. Extra length on back bends. No notching, cutting or fitting necessary.



SLIDING SHELF GUIDES

Unsurpassed for low-cost sliding shelf installations. Excellent for kitchen cabinets, etc. Heavy-gauge steel construction. Easy to install without cutting or fitting.



SLIDING TOWEL RACK

Moves easily on 4 nylon guides, with the lightest touch. Keeps towels out of the way, yet instantly accessible. Heavy-gauge steel, brightly chrome-plated. Suitable for top or side mounting.



HIDE-AWAY GARBAGE CONTAINER

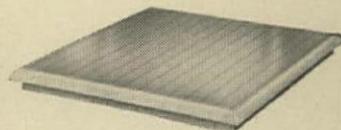
Easily installed inside cabinet door. White, baked enamel finish. Heavy galvanized steel pail with convenient handle. Easy to empty. Right or left-hand models.

LOOK
TO
Leigh
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CHOP-N-TOP BUILT-IN WOOD CHOPPING BLOCK

Protects new or existing counter tops from knife marks, burns, blisters. Made of dense, heavy, close-grained Rock Maple strips, laminated for greater strength. Prevents warping.



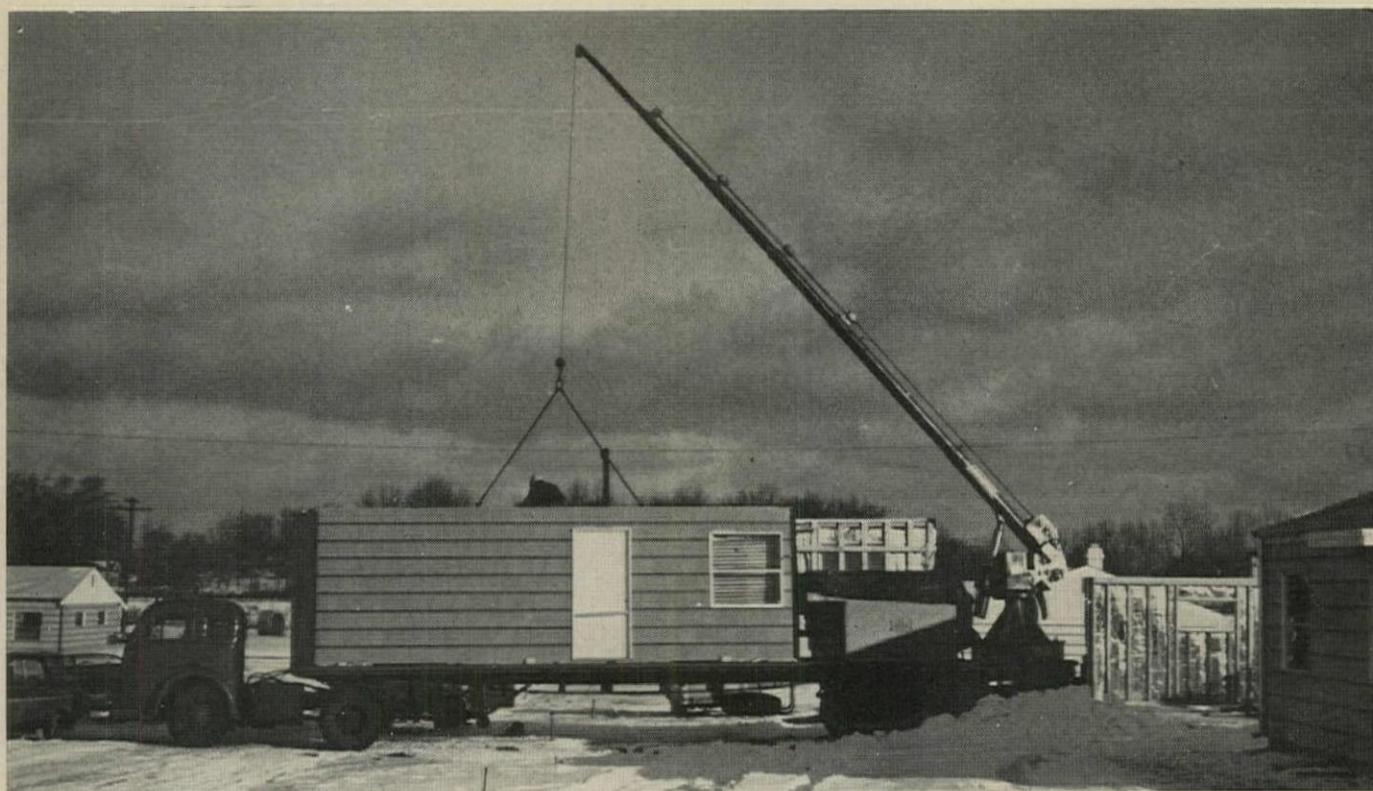
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ACCESS DOORS... provide easy access to piping, electrical connections, storage space, etc. Sizes from 8" x 8" to 22" x 24"

CLOTHES CHUTE DOORS... easy to install. Bright chrome or white baked enamel finish.

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West Coast Warehouse: Leigh Industries (California), Inc., 649 South Anderson, Los Angeles, California. Made in Canada by: Leigh Metal Products Ltd., 72 York Street, London, Ontario. Prairie Provinces Affiliate: Leigh-Tornel Distributors Ltd., 549 Archibald Street, St. Boniface, Manitoba—Copyright 1960 LBP-ACP, Inc.



TELESCOPING BOOM, 85' long, is mounted on 42' trailer loaded with all materials for a house. Wall panels form trailer sides.

With this crane, four men can do the work of seven

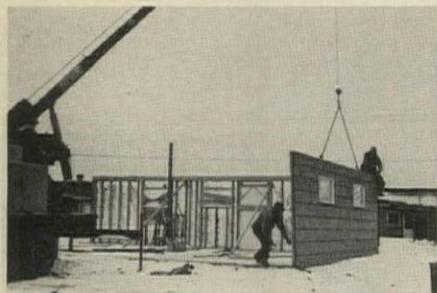
Builder Bob Schleicher of Gary, Ind. says the trailer-mounted crane saves him the cost of three men on the day he puts a new house under cover.

Schleicher uses the crane to load and unload factory-built components, erect walls and roof framing, and place smaller materials at the point of use. Three men and a crane operator (the trailer-truck driver) unload and erect

big wall panels, trusses, and other components in 2½ hours, close in a 1,200 sq ft house in one day. Without the crane, says Schleicher, six men and a driver would be needed.

Schleicher, who builds about 200 houses a year, figures the crane saves him about \$50 a house after he allows for its initial cost (\$5,000), maintenance, and operation.

Schleicher's 42' trailer carries the crane and all materials for a house measuring up to 42'x42'. Items: panels, trusses, gable ends, roof sheathing, plumbing tree, furnace, interior materials—everything except paint and wiring. The crane can lift 42' long wall panels and 2,500-lb packages of wall-board and set them down 25' from the trailer.



WALL-LENGTH PANELS, with insulation and siding, are lifted from trailer to slab.



U-SHAPED LIFT designed by Schleicher hoists materials over erected wall panels.



PALLETIZED LOAD of sheet materials is deposited exactly where needed inside walls.



SIX TRUSSES ARE SPACED along angle-bar attachment notched at 2' intervals.



TRUSSES ARE LIFTED on angle bar, set on wall panels, and nailed in place.



ROOF SHEATHING, last cargo unloaded from trailer, is swung onto trusses. /END



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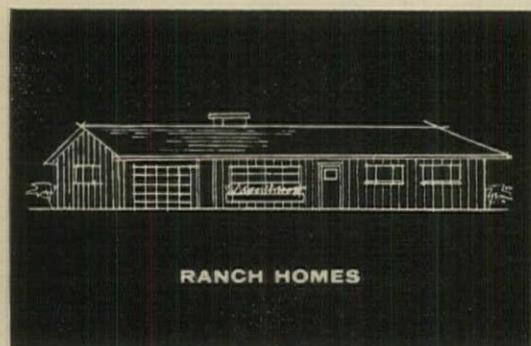
Here's a way to sell your new homes fully air conditioned at little more than the price of a heating system alone. It's the exclusive Carrier Thermo-Center—a unique method of combining a forced warm air heating unit with a self-contained summer air conditioner to provide low-cost, twelve-month central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

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

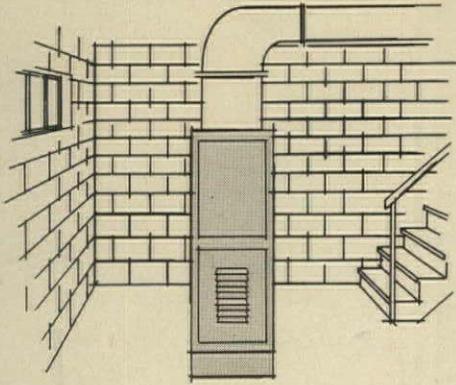
transition assembly which provides a simple, through-the-wall mounting for the air conditioner and controls the airflow between the heating and cooling units. The result is a cost-cutting installation technique for you and superior air conditioning your prospects want and can afford.

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

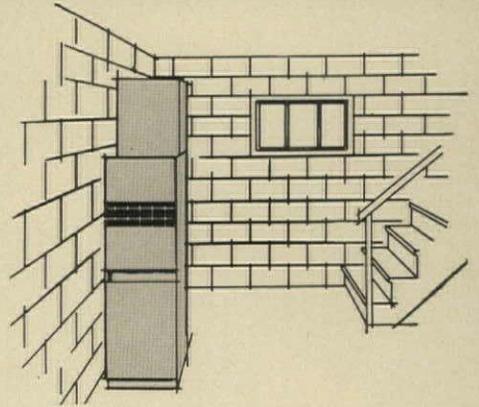
Any type of home can be a Carrier Thermo-Center home



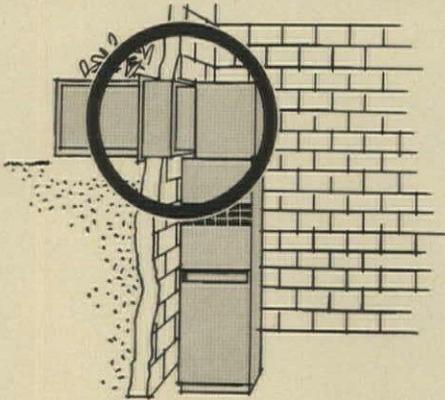
The ABC's of the Carrier Thermo-Center Concept



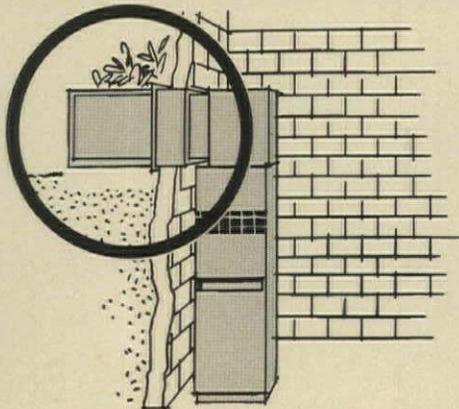
1 The first step is to put aside outdated notions of where a heating unit can be located. Planting the furnace in the middle of the basement was good enough years ago when people were satisfied simply with heating their homes.



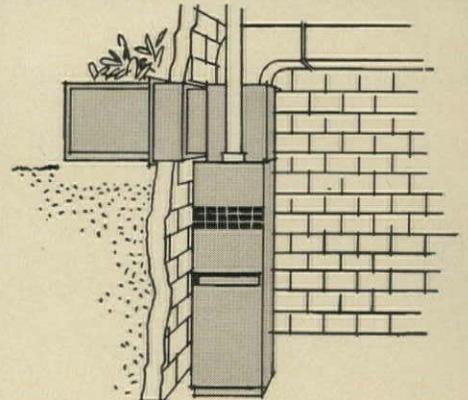
2 In the Thermo-Center, the unit is moved to an outside wall. There's no change in the amount of ductwork required, nor is the system operation affected in any way. Heating units can be upflow, downflow or horizontal; gas or oil.



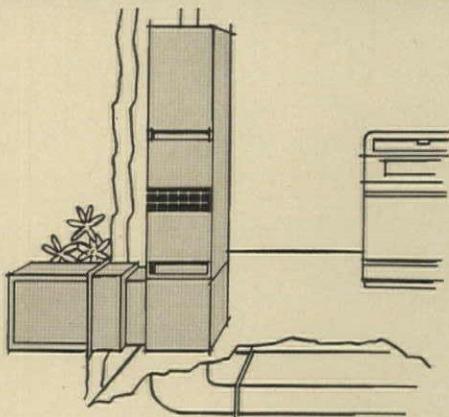
3 Next, the prefabricated sleeve and transition assembly is built into the wall and joined to the furnace plenum and ductwork. The sleeve and transition assembly can be applied to any type of wall construction—frame, brick or concrete.



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



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



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

You save hundreds of dollars per home

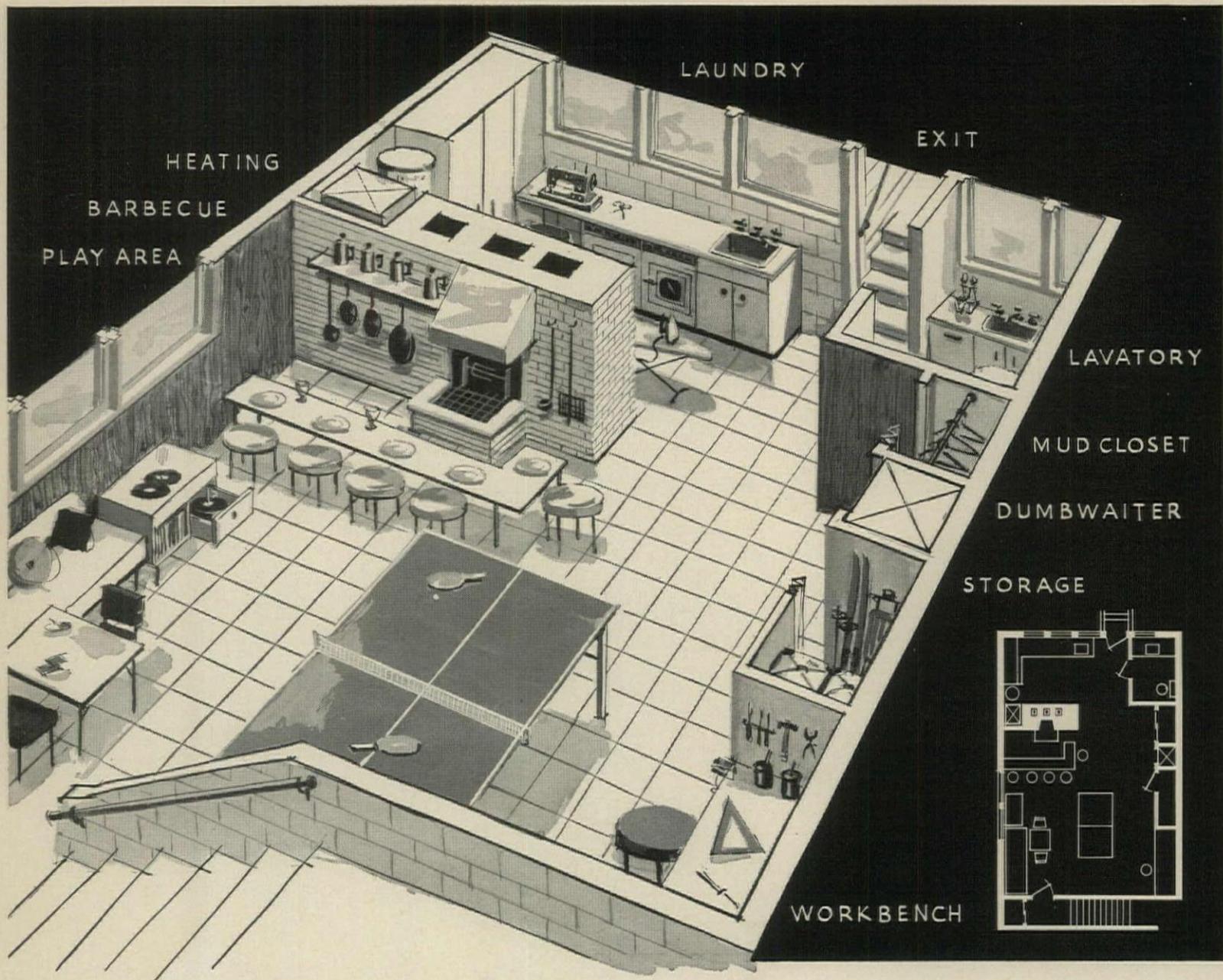
- 1** No water supply or drain piping is required
- 2** No refrigerant lines are needed
- 3** Ductwork and wiring are simplified
- 4** No specialized on-the-job construction is necessary
- 5** Installation time and labor are greatly reduced
- 6** Less than 5 square feet of floor area is required

MORE PROOF OF

BETTER AIR CONDITIONING FOR EVERYBODY



EVERYWHERE



How to heat up profits from the basement

There's a big profit potential down under most homes. Basement remodeling! You can build playrooms, laundries, install new heating systems—and more. All can be financed on the Universal C.I.T. Property Improvement Plan. In fact, you can use this plan to upgrade the sale, sell a more extensive job.

Make the C.I.T. Plan a part of your remodeling package. All you need do is *estimate the job*, and *close the sale* by quoting low monthly payments. There's no down payment—customers can take as

long as 60 months to repay. In addition, your customers are protected by Credit Life Insurance on the unpaid balance.

C.I.T.—the nation's *largest* independent finance company—backs you with fifty years of experience serving more than seventeen million families. 400 offices, coast-to-coast, assure you of fast, reliable service. See how the C.I.T. Property Improvement Plan can help you build profits. Call your local Universal C.I.T. representative, today. Or write: Universal C.I.T. Credit Corporation, 650 Madison Avenue, New York 22, N. Y.



Property Improvement Plan

FINISHED PANELS are used to face structural walls or as integral, non-bearing partitions. Cherry graining gives the look of wood without the need for any job-site finishing.



New panels promise quick-and-easy interior finish

Latest component from Simpson Logging is this coordinated partition and panel system. The 2'x8' Easy Wall panels have prefinished woodgrain hardboard faces, insulation board cores. Partitions are 1 3/4" thick, offer good sound and heat insulation. Panels are 5/8" thick, have hardwood face laminated to 1/2" insulation board.

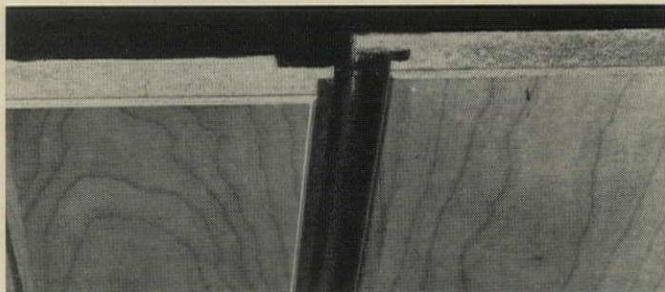
Partitions slide in place over 1/2"x1 3/4" plates, are joined by 1/2"x1 3/4"x8' splines. (Plates and splines are included in

package). Panels are stapled to furring strips applied across the studs; staples are concealed by joint flange. Both paneling and partitions are finished off at floor and ceiling with prefinished molding.

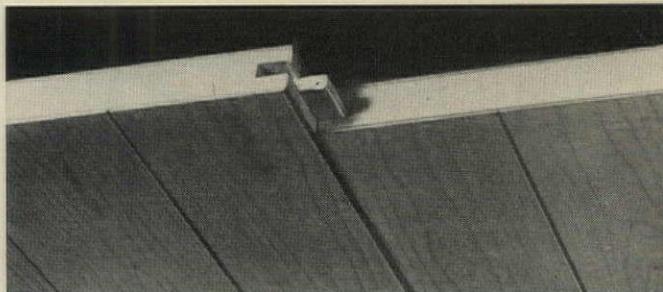
Expected costs to builders: 95¢ a sq ft for partitions; 35¢ for paneling.

Simpson Logging Co, Seattle.

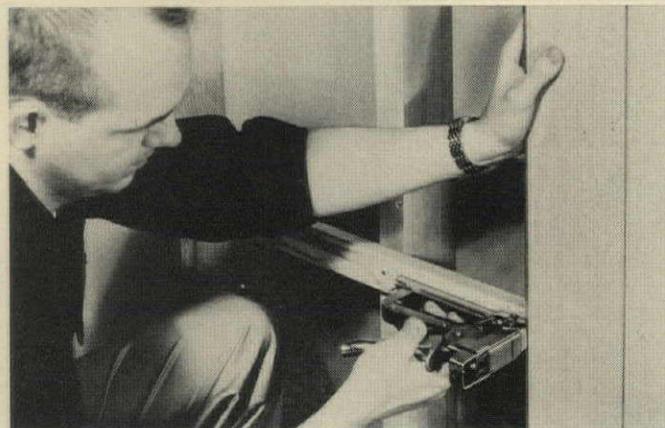
For details, check No. 1 on coupon, p 244



EASY WALL PANELS have an insulating-board tacking strip at each interlocking joint. V-grooves conceal joint where panels match.



EASY WALL PARTITIONS go together with a plywood spline. Faces of partitions can be matched to paneling to give solid wood wall effect.



PANEL UNITS go up fast, can be quickly stapled to furring strips nailed to the studs. Fiberboard backing adds to wall's insulation.



PARTITIONS slide in place over floor plate 1/2" thick. Splines and plates tie panels into a wall more rigid than conventional partition.

New Products continued on p 210

NOW!

MAXIMUM HOUSEPOWER FOR ALL-ELECTRIC HOMES



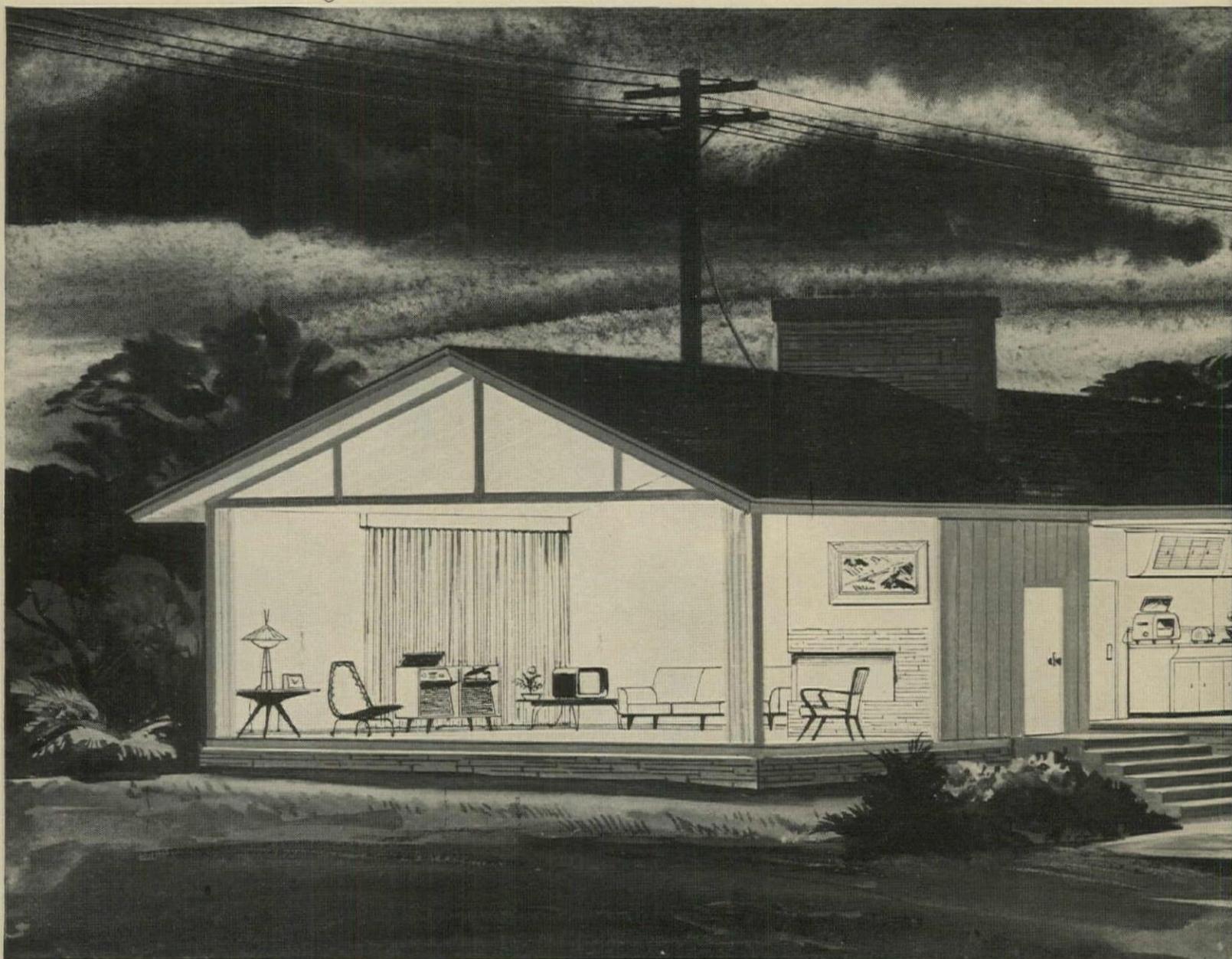
*with Bulldog's 200-Amp
distribution service center*

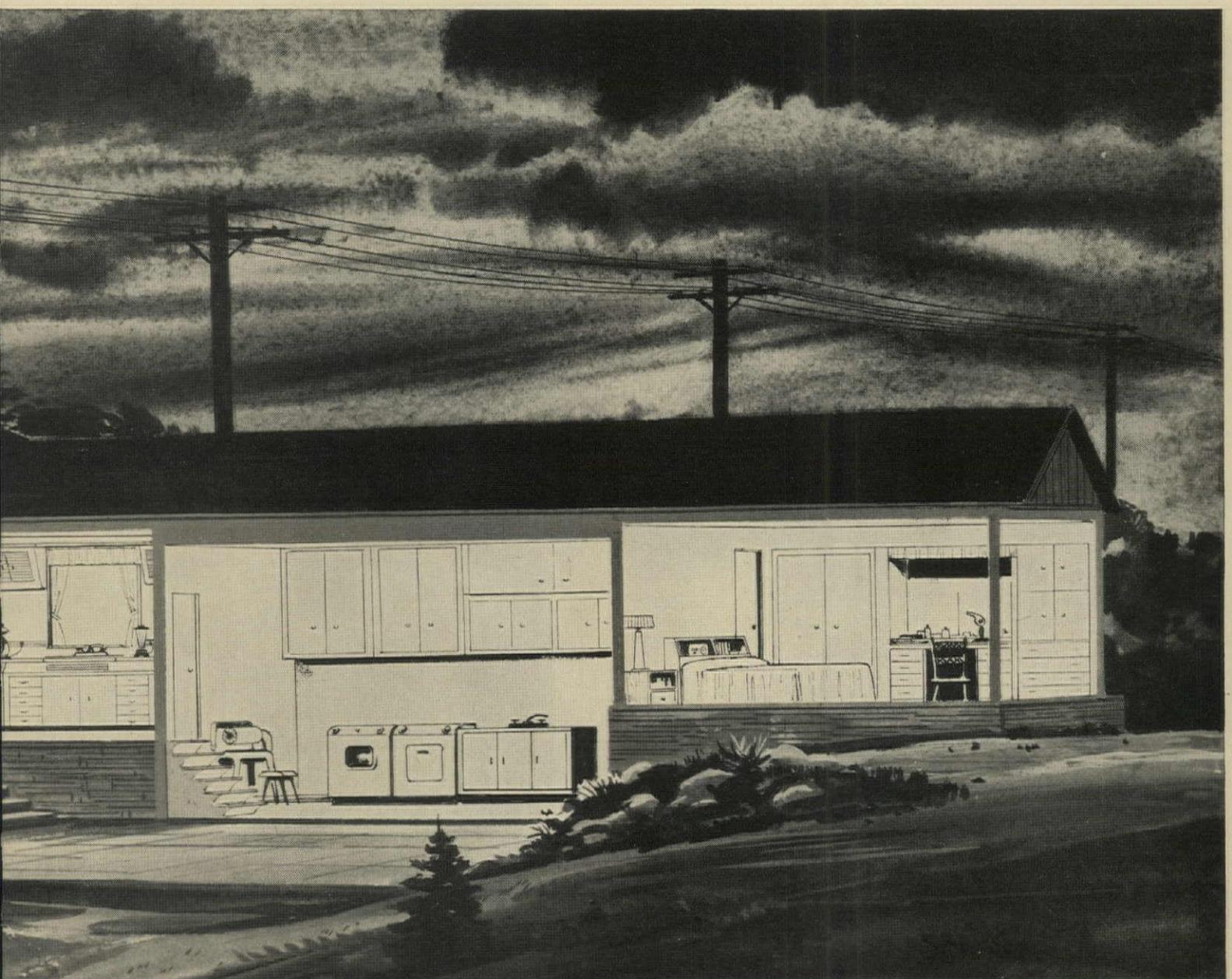
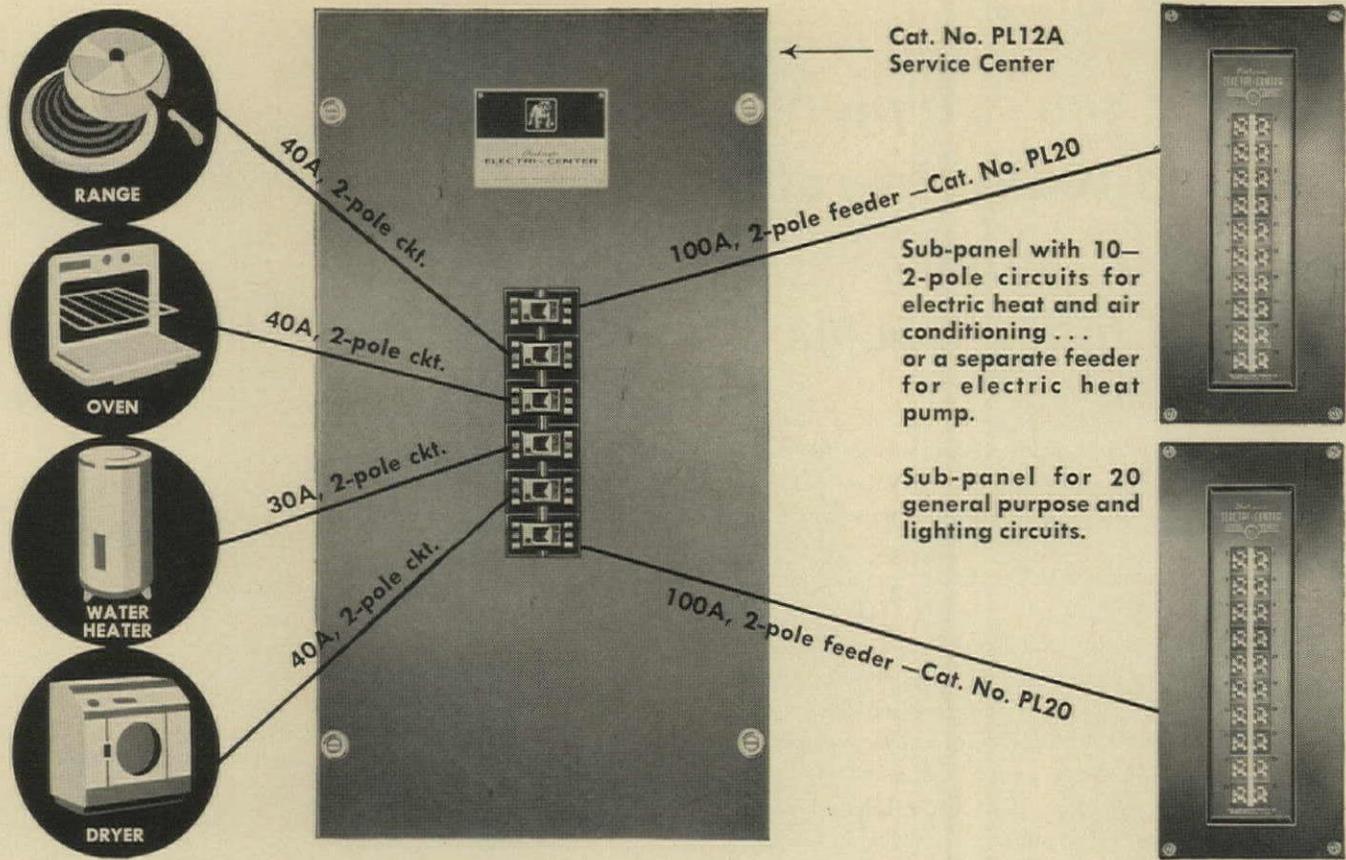
Provide better electrical living with Bulldog's PL12A Pushmatic Electri-Center®! This residential distribution service system supplies 34 circuits to feed electric heating, air conditioning, range, oven, water heater, dryer, plus lighting and general purpose circuits . . . all from a single compact 200-Amp 12-circuit panel! (See diagram at right.) For further information contact:

Bulldog Electric Products Division, I-T-E Circuit Breaker Company, Box 177, Detroit, Michigan.
In Canada: 80 Clayson Rd., Toronto, Ont. Export Division: 13 East 40th St., New York 16, N.Y.



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





NEW...

low cost sewage plant furnished ready-to-run, on a "single responsibility" basis

Here at last—"Suburbia," a sewage treatment plant installed in your new sub-division and ready-to-run within 120 days! What's more, you deal with just *one* company from start to completion—*one* source of responsibility for furnishing and installation.

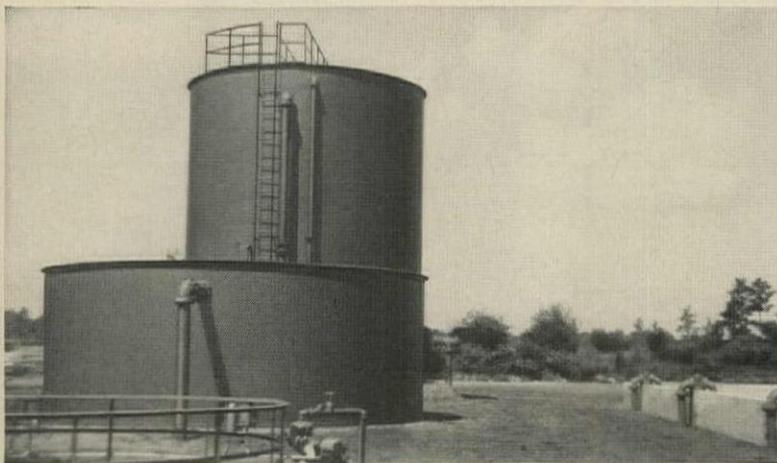
Individually planned and installed under the direction of your consulting engineer, "Suburbia" serves communities of 200 to more than 10,000 homes. Units conform to requirements of your State Department of Health; can be used permanently or as an interim measure (and then be re-erected elsewhere).

"Suburbia" is so simple that unskilled help can operate it; yet, with minimum maintenance, units produce no objectionable odor or bacteria-laden foam. Best of all, "Suburbia" involves less initial and operating capital than any other type of sewage treatment plant.

Let us show you how to buy community sewage treatment at sensible cost—and have it installed quickly, efficiently, without adding the confusion of multiple contracts. "Suburbia" is furnished and installed on a turnkey basis only, by . . .

MUNICIPAL SERVICE COMPANY

Your sewage service—our full responsibility
4623 Roanoke Parkway • Kansas City 12, Missouri



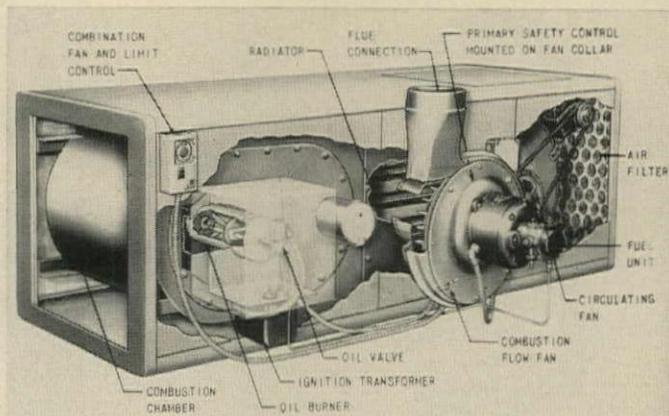
TYPICAL SOUTHERN-STATES INSTALLATION can go above-ground. Costs drop when tanks need not be buried, true of most of the South. This installation serves 300 homes (105,000 gallons per day) in the Corrine Terrace Development, Orange County, Florida.

TYPICAL NORTHERN INSTALLATION goes below-grade to take advantage of residual ground-warmth during colder winters. This one serves 700 homes (245,000 gallons per day) in the Gracemor Subdivision, Kansas City North, Missouri. Other installations range as far north as Michigan.



New products

start on p 207



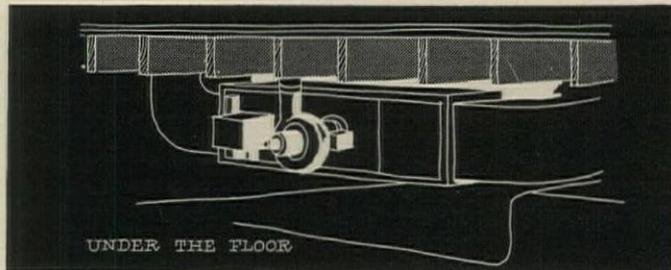
HOW IT WORKS: combustion flow fan on flue side insures complete fuel and air mixture, cools exhaust as it blows it out.

New furnace goes anywhere

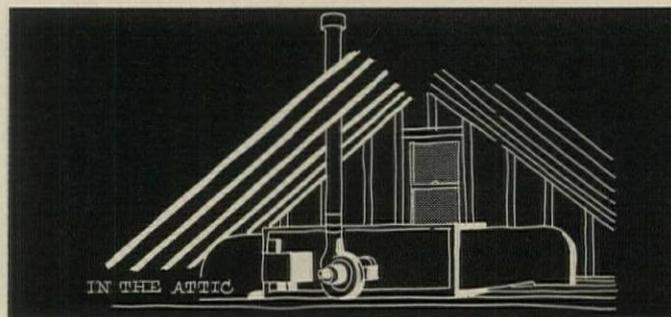
Draft inducer in Iron Fireman's new horizontal oil furnace gives new flexibility in installation. Air aspirated by the draft fan cools flue gases to the point where a vent can replace the usual chimney. Efficiency of new "volumetric combustion system" is claimed to give 30% savings in fuel and greatly reduce maintenance. Furnace comes in six sizes with outputs of 84,000 to 250,000 Btuh. When cooling units are added, bigger blower motor and pulley are optional.

Iron Fireman, Cleveland.

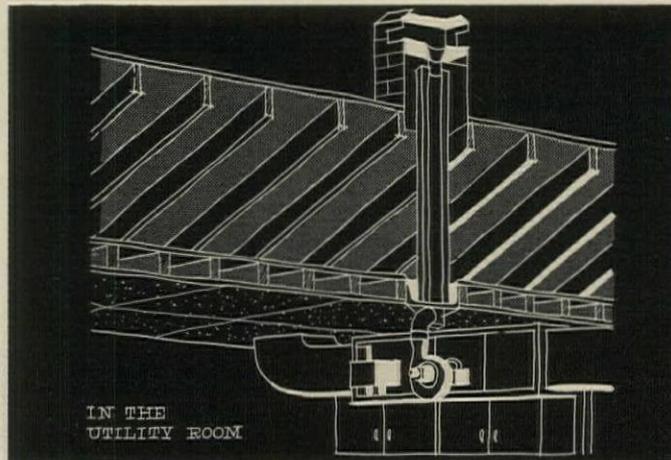
For details, check No. 2 on coupon, p 244



UNDERFLOOR UNIT can be vented through basement wall.



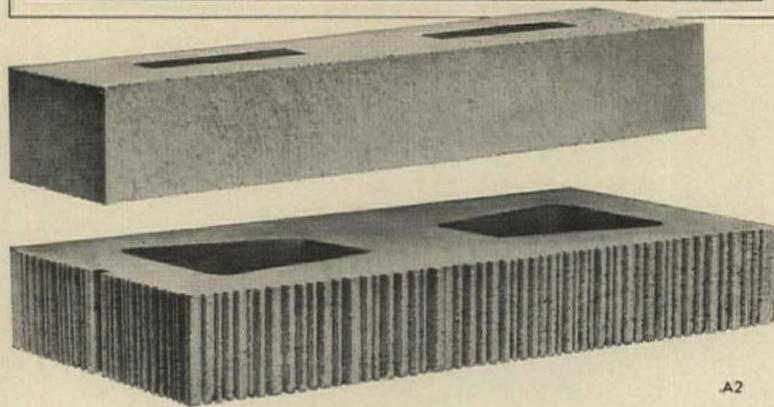
ATTIC UNIT needs only a stub flue through the roof.



UTILITY ROOM UNIT above cabinets vents through prefab chimney.

New Products continued on p 214

AMEROK



A2

NEW HORIZONS IN MASONRY

If you're not in the mood for monotony, build of Amerok—the supreme achievement in masonry.

For Amerok is refreshingly different. There's newness in its striated texture . . . tomorrow's touch in the wide color range . . . thought of contemporary styling in its clean-lined symmetry.

And it's easy to build with Amerok. It is strictly in modular conformation. Precisely dimensioned. Generous voids to entrain air and lighten the load on footings and foundations. Ample structural strength. Two lengths — 16" and 12"; two thicknesses — 8" and 4". Two heights — 2 $\frac{1}{4}$ " and 3 $\frac{5}{8}$ ". Half units for each size. Striated or plain face.

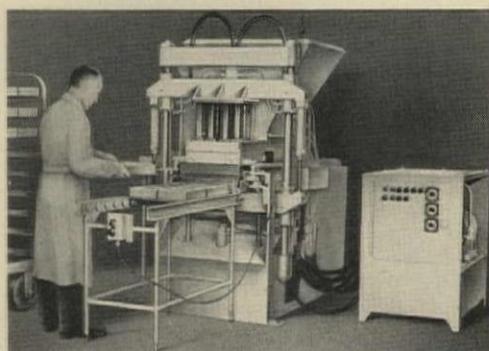
Price? Beauty considered, 8-inch-thick Amerok is easily the lowest cost masonry available. Material for material, usually costs less than lumber. And there's the 4-inch-thick for cavity walls, or veneer over frame.

Write for brochure "New Horizons in Masonry" and name of nearest manufacturer.

OPPORTUNITIES ARE OPEN FOR LOCAL MANUFACTURING

Amerok is relatively low in price because it is produced in local plants, from local aggregates, for local or regional consumption, practically eliminating the terrific costs of freight and distribution, and permitting a generous mark-up on basic costs. For these reasons, the manufacture of Amerok can be a very profitable operation, either for your own building projects or for sale to others in the area.

The Amerok machine is compact, self-contained and fully automatic. Plants operate under franchise, with exclusive rights in protected territories. Equipment investment is nominal with extended payments to responsible parties. Write for "The Story of Amerok."



Brikerete Associates, Inc.
416 W. 25th, Holland, Mich.

"We chose **Ductless Hood**"

New York Life Insurance Company
HOUSING DEPARTMENT
51 MADISON AVENUE, NEW YORK 10, N. Y.
TELEPHONE: MURRAY HILL 5-5000
May 23, 1960

The Ductless Hood Co., Inc.
601 Plandome Road
Manhasset, L. I., N. Y.

Gentlemen:
In our modernization program of some 2,000 kitchens in our Fresh Meadows development on Long Island, we faced a difficult problem of kitchen ventilation. Traditional duct work would be prohibitive in cost, yet our program of modernization made some form of range hood a "must."

After much consideration we chose Ductless Hood because of its comparative ease and low cost of installation and because it seemed to do a good job of kitchen air purification. Service has been at a minimum and general performance has been quite satisfactory.

Sincerely yours,
G. Harmon Gurney
G. Harmon Gurney
Chief Architect for Housing

*Standard Model 571

New ... BUILDERS' SPECIAL
LOW-PRICED BD-10 **Ductless Hood**



EVERY kitchen can now include a Ductless Hood and all the benefits that magic name implies: Fresh kitchen air — odors, smoke and grease banished! Ductless Hood purifies air by the time-proved method of recirculation through Activated Charcoal. No costly ducts or outside vents needed.

Model BD-10 Ductless Hood is designed to meet builders' demands for a low-priced unit. You have the prestige of the Ductless Hood brand name as a selling tool for your homes. At the same time, Model BD-10 does a satisfying job of air purification for the home buyer.

Ductless Hood

U. S. Patent No. 2,886,124

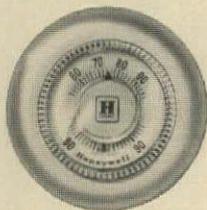
Write for information:
DUCTLESS HOOD CO., INC.
601 Plandome Road
Manhasset 2, N. Y.

Dramatize quality air



WATCH HOMEBUYERS GO FOR THESE OTHER NEW THERMOSTATS, TOO

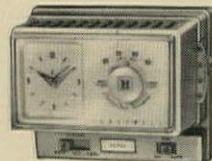
New Honeywell Round Thermostat—with picture-window dial, eye-saving numerals, comfort-zone indicator, diamond-lustre finish.



New Heating-Cooling Thermostat—controls both heating and cooling. Changes from one system to the other—automatically.



New Electric Clock Thermostat—automatically turns heating or cooling up or down at the desired time daily for extra comfort, economy.



conditioning with this new Master Control Panel

Honeywell Weather Station
puts visual evidence of year
'round air conditioning at your
prospect's fingertips

Now you can point to and demonstrate dramatic evidence of quality air conditioning in the living area of your homes. And, you can offer your prospects complete, fingertip control over their indoor comfort.

Simply point out how the Honeywell Weather Station lets them check indoor humidity and both indoor *and* outdoor temperatures at a glance. Show them how they can pre-set day and nighttime temperatures to change whenever they wish. Mention the barometer that helps them forecast weather changes well in advance. And explain that there are special lights to warn them of a clogged filter and similar minor disorders they can correct themselves.

See how this dramatic Weather Station Control Panel can help you sell homes. Plan to install them in the homes you build. And get free promotional materials from your local Honeywell office to help you attract prospects. For additional information, call your nearby Honeywell office; or write: Minneapolis-Honeywell, Department HH-7-136, Minneapolis 8, Minnesota.

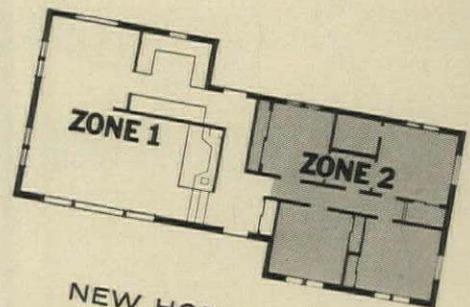
Honeywell



First in Control
SINCE 1885

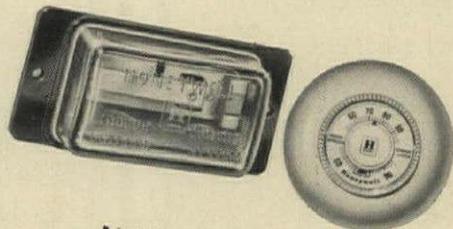
75th
PIONEERING THE FUTURE
YEAR

JULY 1960



NEW HONEYWELL COMFORT-ZONING

Impress quality-home buyers with comfort that's zoned to match their way of living. Show them how zone control divides their home into comfort zones. Point out the thermostat in each zone that provides heating or cooling to that zone according to its own individual comfort needs. And explain that it can be comfortably warm in the living area and pleasantly cool in the sleeping area both at the same time. Only zone control assures *maximum comfort* per square foot.

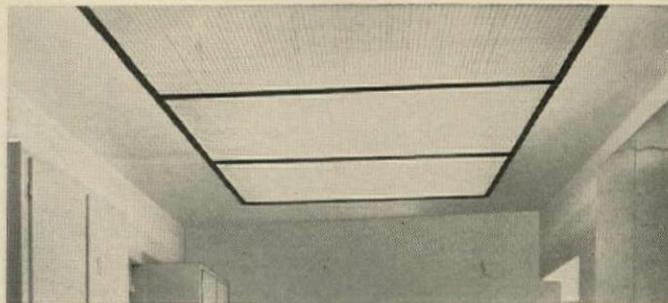


NEW INDOOR- OUTDOOR SYSTEM

House-hunters will be fascinated with the way this low-cost control system actually anticipates their comfort needs. Here's how it does it! An outdoor thermostat senses a change in wind, sun and temperature . . . and signals this information to an indoor thermostat. The indoor thermostat then lowers or raises room temperature accordingly. Your home buyers won't notice changes in the weather because the system compensates for it.

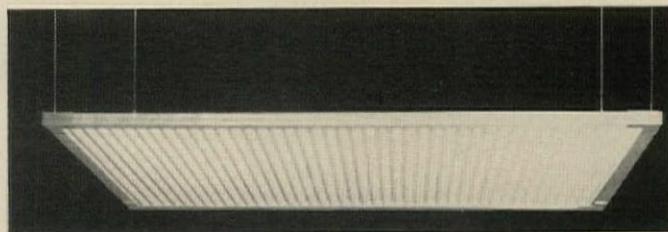
With this new Indoor-Outdoor System, you have your choice of many of Honeywell's complete line of thermostats—including the new Diamond Jubilee model of the famous Honeywell Round.

Three ways to light a ceiling



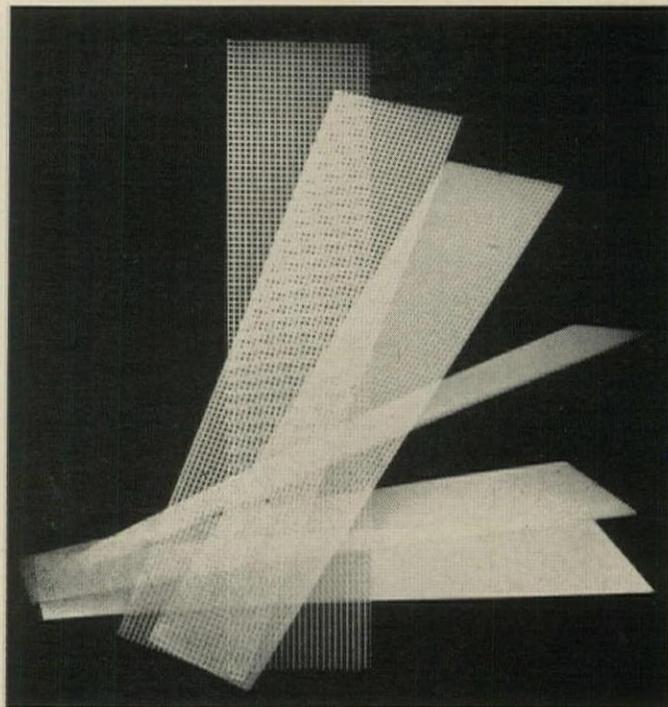
Sta-Brite's Modernlite is an economical modular ceiling unit made in 4'x4' and 4'x6' grilles. Each unit includes the translucent plastic grille in a natural or gold anodized aluminum frame. Grille is lightweight, easy to remove. Dust does not accumulate. Translucent plastic evens out light.

Sta-Brite Fluorescent Mfg Co, Miami.
For details, check No. 3 on coupon, p 244



Island of light is supplied by suspended plastic grille of Diffusa-Lite's unit luminous ceilings. Vinylux plastic panels have concave and convex surfaces that eliminate glare and contrasts. Diffusa-Lite panels come in eight sizes: from 3'x4 to 6'x9'. Vinylux plastic comes in 18", 24", and 36" wide rolls. Two-light fluorescent fixtures are available to match diffusers.

Diffusa-Lite Co, Conshohocken, Pa.
For details, check No. 4 on coupon, p 244

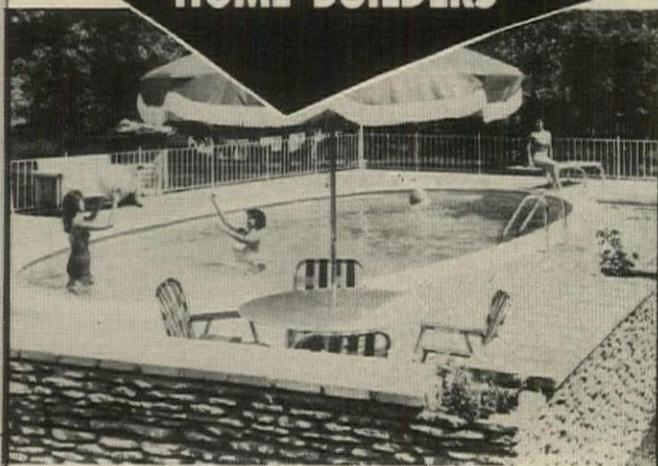


Plastic louvers give a high-intensity but well diffused light from overall ceiling fixtures. Mystic Gratelite comes in two panel sizes: 11"x48", 16"x48". Cubes are 3/8" on a side, but polystyrene is translucent so panel looks solid. Gratelite hides tubes but allows free interchange of air. It can be easily cleaned and destaticized by a dip in detergent.

Edwin F. Guth Co, St Louis.
For details, check No. 5 on coupon, p 244

New Products continued on p 218

LANCER Pools
announce
A LUSH, NEW PROFIT AREA
for **PRE-FAB & TRACK HOME BUILDERS**



NEW MODEL HOUSE—NO INVESTMENT PLAN GUARANTEES BUILDERS SIZEABLE PROFIT ON EVERY MODEL HOME PLUS TREMENDOUS EXTRA INCOME ON EVERY INSTALLED POOL WITHOUT MINIMUM GUARANTEES OR FRANCHISE FEE!

The matchless strength of **LANCER'S Structural®** Fiberglass is now blended with functional beauty and luxurious design in America's most masterful line of swimming pools—by **LANCER**, the Leader!

Entire families will enjoy added health and happiness **YEAR ROUND** . . . swimming, sunning and funning in the warm weather—ice skating through the colder months.



- 10 Year Guarantee on Workmanship & Materials
- Installed in 3-6 Days
- Minimum Maintenance—No Cracks, No Leaks—100% Laminated Structural Fiberglass
- Over 600 Dealers & Distributors Strategically Located Throughout the United States & Canada
- Easy Financing Available

LANCER POOLS CORP.

Executive Offices 22 Jericho Turnpike, Mineola, New York Pioneer 7-8255 III-7-60

Please have your representative call to explain LANCER's New Model House—No Investment Plan

Name.....

Address.....

City.....State.....Phone.....

LANCER POOLS CORP.
a division of LANCER INDUSTRIES, INC



*add quality...cut costs
choose Rimco "Slide"*

RIMCO®

WOOD WINDOW UNITS

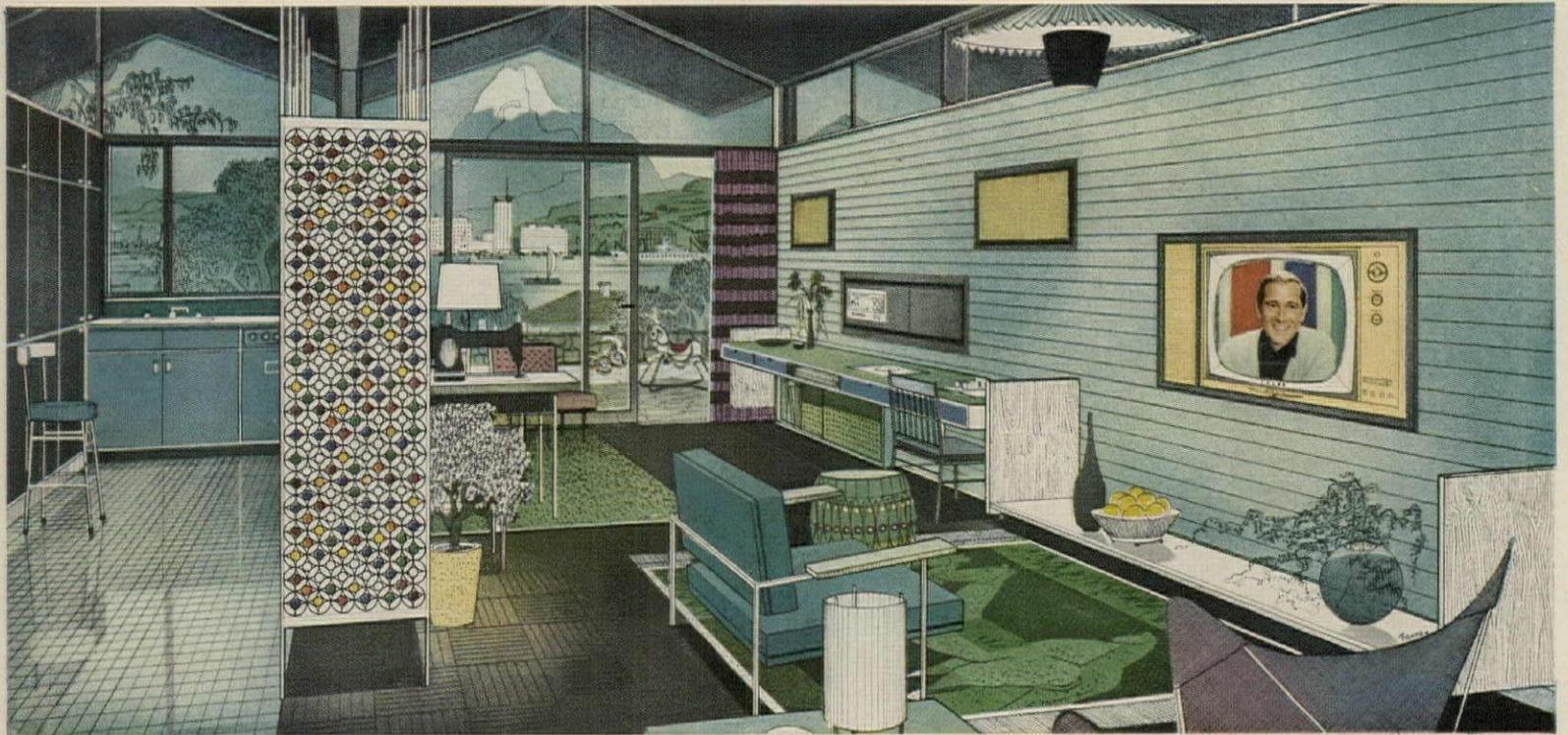
That's right! Rimco Slide Wood Window Units give more quality, yet, help cut your building costs. Reduced installation time: all parts are pre-assembled . . . fitted with beautiful hardware . . . ready to install. That's why we go further than saying just "window" . . . we say "window unit." Look at 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."

RIMCO®

ROCK ISLAND MILLWORK COMPANY
FACTORY DIVISION
Rock Island, Illinois



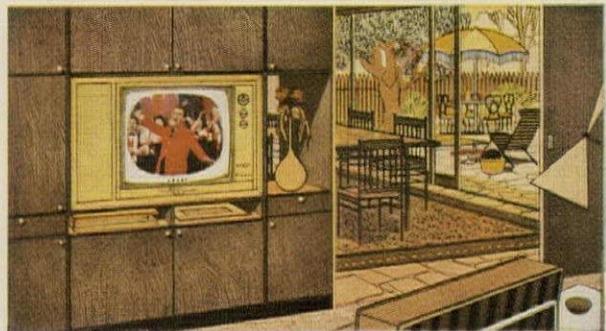
COMPLETE HOME ENTERTAINMENT... "In the wall, off the floor, out of the way!" Here the magic of Color TV is combined with the finest pushbutton Radio-Victrola® High Fidelity Stereo. 4-speed record changer slides out

for easy loading... plays all records. Stereo AM-FM Tuner, visual Stereo Balance Control, 2-in-1 supercharged chassis with 58 watts of power. Shown is Model BK-2 with DK-109 Panoramic Sound 3-speaker units.

(©RCA Trade Mark for Record Players)



B & W "MURAL TV"... Front-ventilated Model DK-103. The custom TV look plus the convenience of "Wireless Wizard" remote control. Superb performance—25% brighter picture... 3-speaker Panoramic Sound. Rear-ventilated model available.



"MURAL TV"... Like 2 sets in one, build in the magic of Color TV and get superb B & W reception too. Simplified color-quick tuning (new wireless remote control available), mirror-sharp picture, 3-speaker Panoramic Sound, adaptable for stereo. Above: The DK-107 Frame for rear ventilation. Front-ventilation design also available.

Year's best new idea for selling homes...

"MURAL TV" and STEREO BUILT-INS BY RCA VICTOR CONVERT LOOKERS INTO BUYERS

Many successful tract developers are now selling from model homes with RCA Victor "Mural TV" and Stereo Built-ins. The same is true with smaller builders of custom homes.

It is significant that most of these builders are installing *Color TV*, alone or in combination with stereo. Why? Most home buyers feel that Color TV

is the coming thing, yet many hesitate to buy right now. But when you show it built into a home they can afford, the bars are down and they "have to have it." It's the *extra value* that wins over competition.

RCA Victor Built-in units are engineered for the top performance and dependability that the public expects

from RCA Victor. They are available in a complete line of fashion-leading styles... expressly designed for simple installation into walls, permanent room dividers, or in cabinets and closets.

Experienced RCA Victor sales engineers are ready to discuss plans, models and costs with you. Send coupon today!



The Most Trusted Name
in Electronics

RADIO CORPORATION OF AMERICA

RCA Sales Corporation
Box 1226—A15
Philadelphia 5, Pa.



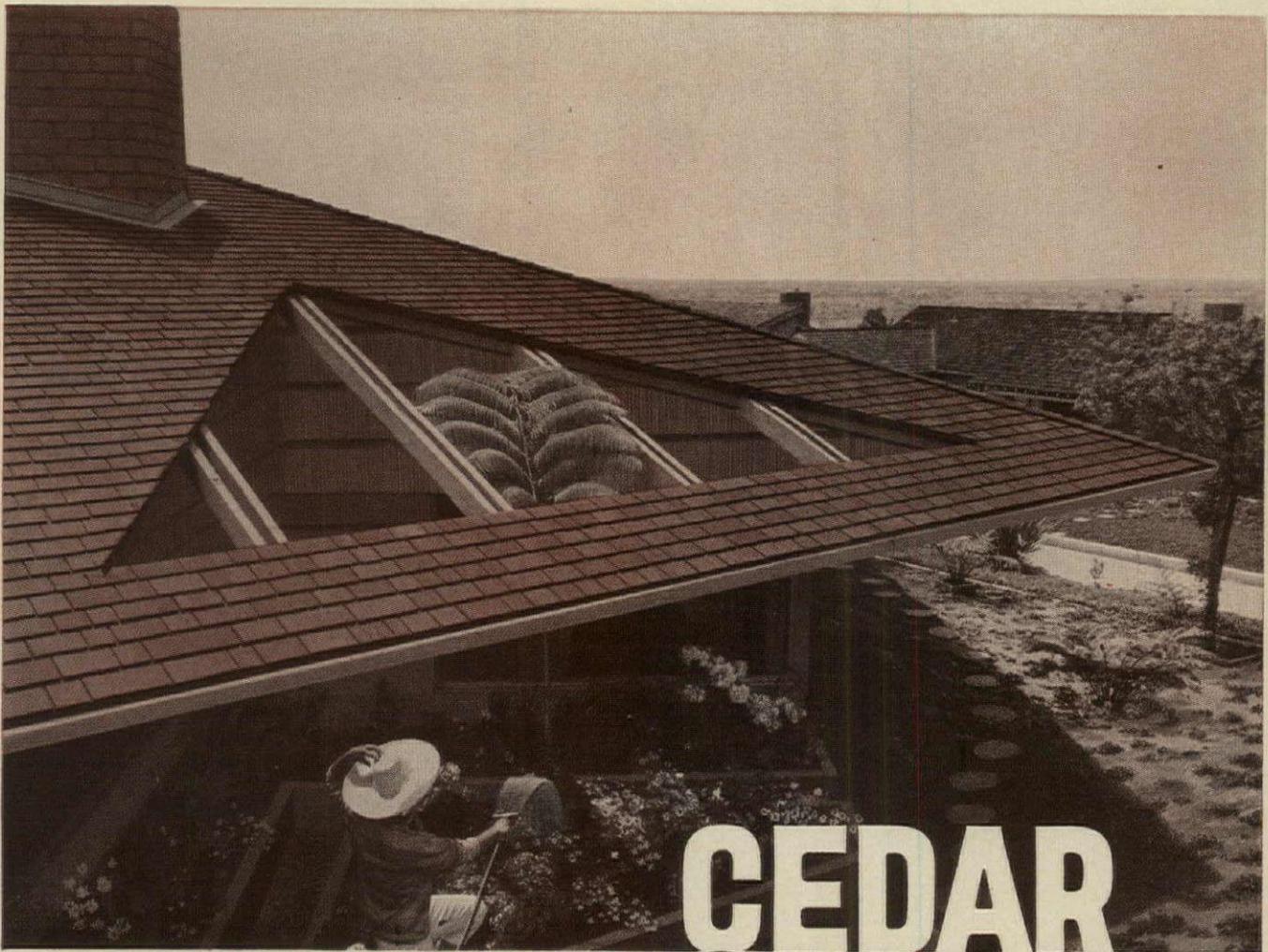
Please send full information on RCA Victor
Built-in "Mural TV" and Stereo.

Name _____ Title _____

Company _____

Street _____

City & State _____



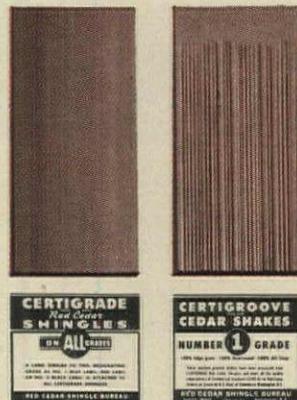
CEDAR CEDAR

Cedar makes a roof important. It lets you **the RIGHT roof** combine prominent textures with protec- **for today's** tive overhangs... broad expanses with dramatic **big roof** pitches... natural good looks with genuine durability. Cedar says quality. Top off your next design with three thick layers of genuine red cedar shingles. And watch how quickly it sells!

For complete application details, see your Sweet's File, or write...

RED CEDAR SHINGLE BUREAU

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





NOW...the finest aluminum siding designed for new home building!

**NU-HOME
ALUMINUM SIDING**

■ Here, for the first time, a siding developed specifically to help you build better new homes for less money. You save on both materials and labor, with no lost time due to weather. Nu-Home Aluminum Siding goes on quickly, even with unskilled workers, and completely eliminates painting time. And, you'll sell homes faster, too, when you offer Nu-Home beauty with its many years of freedom from maintenance and painting costs. Mail the coupon below and get the complete story on how Nu-Home can help you build better homes for less. There's no cost, no obligation, so mail the coupon today.

- Panels bonderized and vinyl-coated front and back.
- 10-year factory warranty on finish.
- Meets FHA Standards.
- Easy, fast lock-up installation.
- Sold only to builders through building supply firms.



HASTINGS
ALUMINUM PRODUCTS, INC.
Hastings, Michigan

Complete details for the cost of a stamp! Get the whole Nu-Home product and profit story. Mail this coupon today and we'll rush complete information to you.

Hastings Aluminum Products, Inc., Dept. 9G, Hastings, Michigan
Please rush me additional information on Nu-Home Aluminum Siding

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

New products

start on p 207



Contemporary look in new line of appliances

New single Compact oven fits a standard 24" cabinet. Oven is 17" wide, has speed broiler, lift-off door, glass control panel. Three models — 310, 318, 320 vary in trim and degree of automaticity.

For details, check No. 6 on p



Wall-hung Contempo range is the top of O'Keefe & Merritt's 1960 line, introduced in consumer advertising late May. Complete cooking center has hide-away burnertop, two glass-enclosed ovens, one 21½"x11½"x15½". Contempo has automatic controls, is available optionally with cabinet.

O'Keefe & Merritt, Angeles.

For details, check No. 7 on p



Whirlpool shows two new kitchen appliances

This new automatic ice maker from Whirlpool is only 13½" wide, is designed for compact kitchens. Unit will produce up to 35 lb of ice a day. Cubes are frozen in solid sheet from running water, then cut in ¼" cubes by radiant wires. Storage holds 16 lb. Free-standing or built-in models carry full year guarantee.

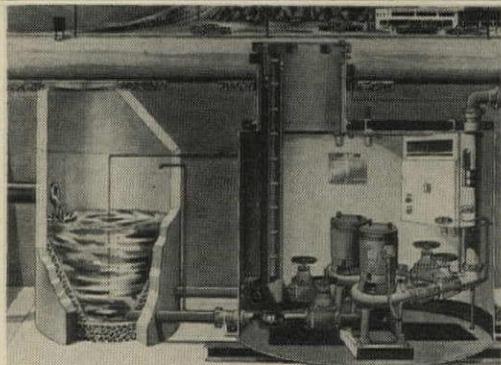
For details, check No. 8 on p



Also new from Whirlpool is a 13½ cu ft frost-free refrigerator-freezer. New insulation makes these models smaller overall than last year's 11 cu ft models. Luxe model, GA-1400, has automatic ice maker, frost-free freezer, jet cold chill shelf. Gas absorption system will work for less than a month even in high humidity areas like Chicago. See Whirlpool's refrigeration system is guaranteed for ten years. Price \$570 to \$700.

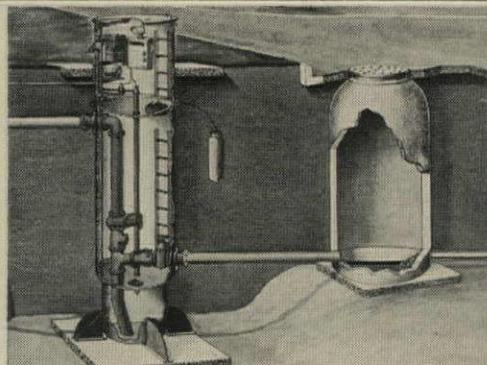
Whirlpool, St Joseph, Mo.
For details, check No. 9 on p

Specify Smith & Loveless Factory-Built Quality and Dependability in Your Sewage Projects...and Save!



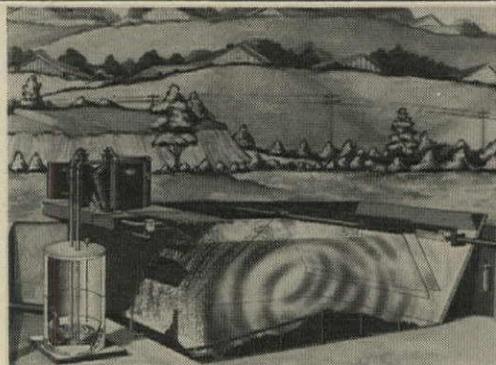
PUMP STATIONS

Smith & Loveless pump stations are available in standard sizes for capacities from 100 GPM to 4500 GPM per pump with two or three pumps per station. Even larger capacity stations may be built to order. Proved in municipal and suburban sewer systems in more than 1200 installations all over the United States, including Alaska and Canada.



PNEUMATIC EJECTORS

Smith & Loveless' complete line of factory-built pneumatic ejectors, like the "Mon-O-Ject", offers a universal selection of lift stations to meet your requirements for lower capacities. Available in sizes ranging from small, single-dwelling sewage ejectors for the home to large duplex "Du-O-Ject" units for stand-by dependability and extra capacity to handle peak loads.



TREATMENT PLANTS

Smith & Loveless factory-built "Oxi-gest" sewage treatment plants provide low-cost, dependable treatment facilities for motels, factories, schools or subdivisions. Available in single units to serve 10 to 100 homes—or may be installed in parallel, as needed, to serve a growing subdivision. Requires only minimum annual maintenance.

WRITE TODAY FOR OUR FREE ENGINEERING DATA MANUAL ON SEWAGE LIFT STATIONS AND SEWAGE TREATMENT PLANTS
ADDRESS: DEPARTMENT 70

(2443)



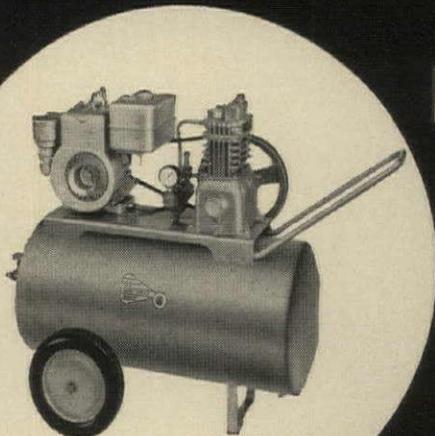
Smith & Loveless

DIVISION-UNION TANK CAR COMPANY
P. O. BOX 8884
KANSAS CITY 15, MISSOURI
Plant: Lenexa, Kansas

NEW RUGGED Campbell-Hausfeld

HIGH PRESSURE TANK UNITS

... ideal for paint and building contractors, rental, maintenance, or other hi-volume air power requirements!



- Rugged twin cylinder air compressor (2 1/4" bore x 2" stroke) ... delivers 5.4 CFM at 45 psi.
- Up to 100 psi continuous, 150 psi intermittent.
- 1 HP electric motor with automatic pressure switch, or 3 HP gasoline motor with constant speed unloader.
- 20 gallon tank. Stationary, or mobile with 10" rubber tired wheels.

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 ...

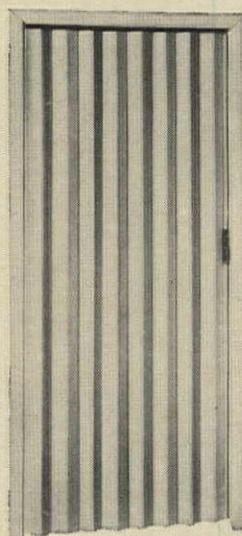
Campbell-Hausfeld has the unit for you."

The Campbell-Hausfeld Co., 305-S Railroad Ave., Harrison, Ohio



CAMPBELL-HAUSFELD

INSTALLED IN SECONDS!



NO Hanging!
NO Painting!
NO Hardware!

New, unique patented design enables the builder to use construction short-cuts, labor-saving installation procedures never before enjoyed. Available in heights to 8', widths to 4'. Can be installed in pairs. 16 lovely, washable, fire-resistant vinyl colors available.

THE
Columbia-matic

FABRIC DOOR

Slashes Builders Costs

For complete details write

THE COLUMBIA MILLS, INC.

368 S. WARREN STREET

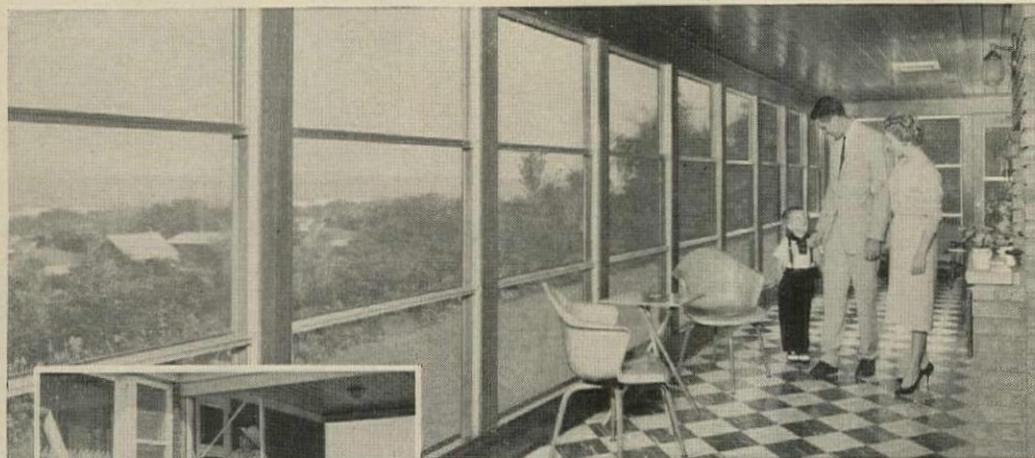
SYRACUSE 1, NEW YORK



"In 1960 American families will spend an estimated \$4.6 billion on home remodeling. According to market analysts, the biggest share of these dollars will be used to add family rooms."

Building Family Rooms with DeVAC GlassWalls

... a unique opportunity to make extra profits on the home remodeling boom using DeVAC modular units.



MODULAR UNITS permit fast, economical construction. Two men can easily enclose a porch or breezeway in one working day. Result: less cost.



BONUS SALES are an added plus for the building supply dealer. Lumber, conduit, hardware, and sometimes floor covering and roofing, are included in sales of DeVAC GlassWalls.

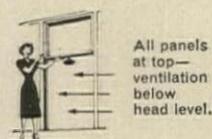


BEFORE: Summer porch, wide open to cold, wind, rain and snow. Porch furniture must be moved in and out according to the weather. The porch is useable only a few days a year. The rest of the time it's just so much wasted space.



AFTER: A year-'round room—but the family can still enjoy porch pleasure when the weather's warm. DeVAC GlassWalls have three sliding glass panels which can be opened to create an open porch effect.

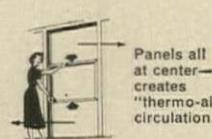
A complete year-'round room created through the use of DeVAC GlassWalls. Whether you enclose a porch or breezeway or build from the ground up, you can add a room with DeVAC GlassWalls at lower cost per square foot than by any other method.



All panels at top—ventilation below head level.



All panels at bottom—draft is off your feet.



Panels all at center—creates "thermo-air" circulation.



DeVAC does extensive national consumer advertising—creating prospects for porch enclosures and has a complete program of sales aids, including literature, ad mats, and displays.

SEND COUPON TODAY: 

DeVAC, inc. Dept. HH-7
5900 Wayzata Boulevard • Minneapolis 16, Minnesota

Please send me complete information on DeVAC GlassWalls.

NAME _____

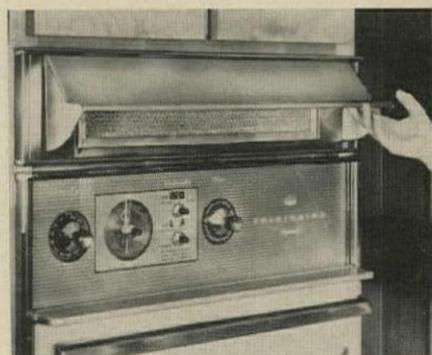
COMPANY _____

ADDRESS _____

CITY _____ STATE _____

New products

start on p 207



Fold-away hood projects to catch cooking odors when oven is on, forms flush front when no cooking is being done. Opening and closing hood turns fan on and off. Hood is made in stainless steel and copper enamel to match built-in gas or electric ovens in 24", 27", and 32" widths. Price of hood, \$17.45; of power unit, \$34.50.

Nutone, Cincinnati.

For details, check No. 10 on coupon, p 244



Flat-back sink is a new shape in Jensen's Contour self-rimmed stainless line. New sink was designed as answer to the complaint that ledge back of countertop sinks collects dirt and is hard to keep clean. Curved lines avoid institutional look. Single-bowl and double-bowl types are \$29 and \$43.60.

Jensen-Thorsen, Addison, Ill.

For details, check No. 11 on coupon, p 244



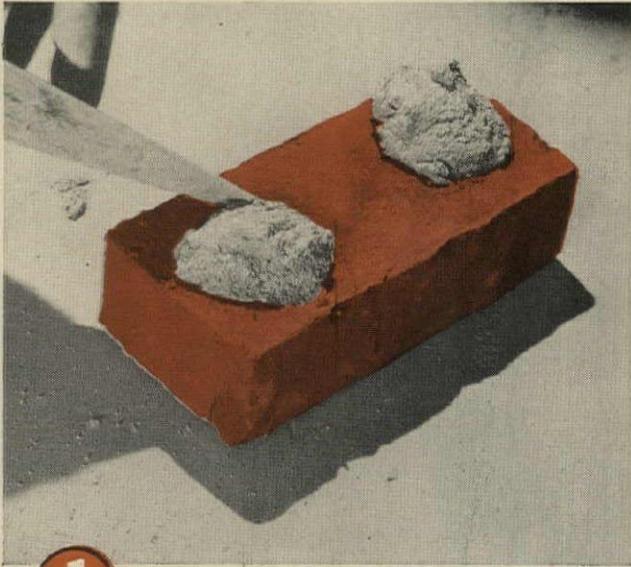
Cluster drop-in from Roper has top-mounted controls protected by a raised bezel. Top controls permit simple, one-cutout installation. New unit comes with four high-speed burners or three high-speed burners and an automatically controlled burner. It is available in chrome or colors to match Roper's built-in ovens.

Geo. D. Roper Sales, Kankakee, Ill.

For details, check No. 12 on coupon, p 244

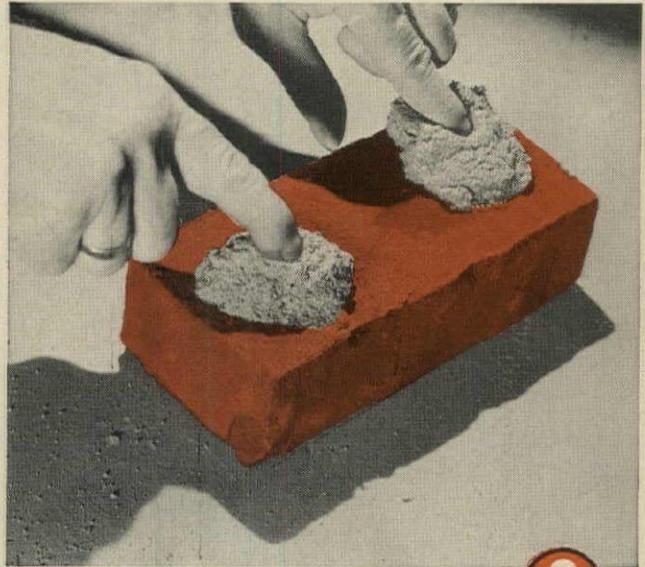
continued on p 222

HOUSE & HOME



1

Place a dab of Brixment mortar and a dab of 50-50 cement-and-lime mortar on a brick or concrete block. Wait a minute, then feel each mortar.



2

The mortar that stays plastic longer will be the one having the highest water retention. Notice the greater plasticity of the Brixment mortar!

BRIXMENT mortar has better WATER-RETENTION!

Water retention is the ability of a mortar to retain its moisture longer, and hence its plasticity, when spread out on porous brick or block.

Because of its inherent physical characteristics, plus the air-entraining agent intermixed into Brixment during manufacture, Brixment mortar has very high water-retaining capacity. It resists the sucking action of the brick. It gives the bricklayer more time to bed the brick properly before the mortar stiffens, thus helping to secure a good bond.

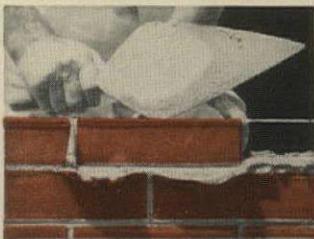
But greater water retention is only *one* of the

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.*

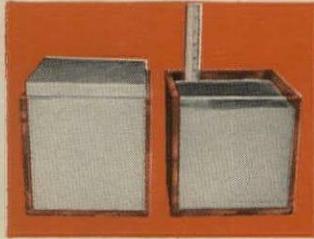
It is this combination of advantages that makes Brixment superior to any mixture of portland cement and lime—and which also accounts for the fact that Brixment has been the leading masonry cement for over 40 years.

Louisville Cement Company, Louisville 2, Ky.

BRIXMENT MORTAR ALSO COMBINES THESE 8 OTHER ESSENTIAL CHARACTERISTICS



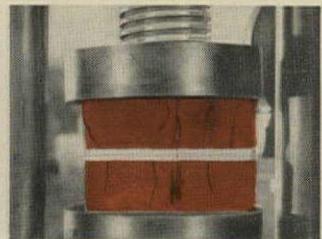
PLASTICITY



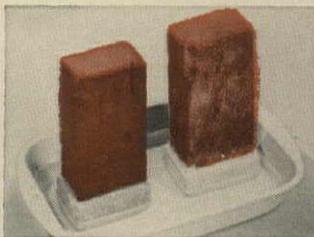
YIELD



BOND



STRENGTH



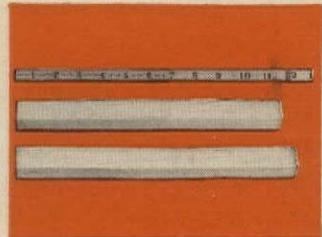
LOW EFFLORESCENCE



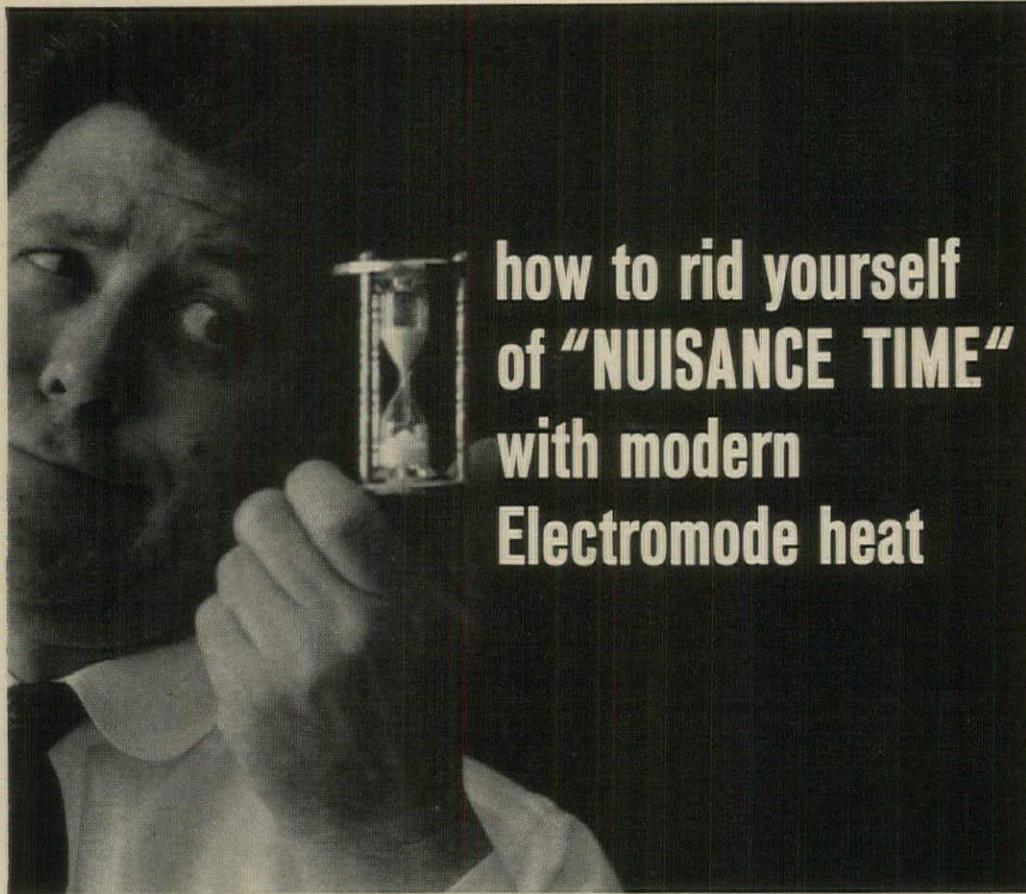
IMPERMEABILITY



DURABILITY



SOUNDNESS



how to rid yourself of "NUISANCE TIME" with modern Electromode heat

When you recommend Electromode electric heat for a building modernization job, you can forget it once it's installed. There will be no "nuisance time" to revamp, revise or redo your work.

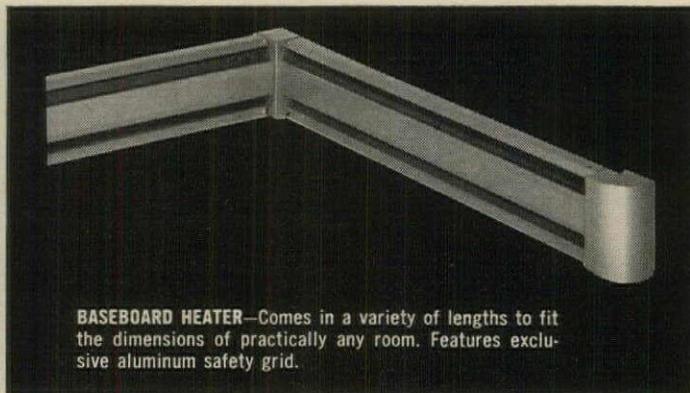
- Installation is quicker and offers you more flexibility in floor planning than a fuel-fed system.
- Maintenance problems and break-downs are non-existent because of

the very few moving parts and the elimination of a central unit with pipes and ducts.

- Costs—both initial and operating—are comparable to other types of heating.
- Customer satisfaction is assured because Electromode is the cleanest type of heat . . . safest, too. Gives more comfort with thermostats in every room.



BATHROOM HEATER—Installs easily in wall—even behind a door—to provide instant heat. Thermal safety switch. Thermostatic or manual control.



BASEBOARD HEATER—Comes in a variety of lengths to fit the dimensions of practically any room. Features exclusive aluminum safety grid.

Electromode

Dept. HH-70, Division of Commercial Controls Corp., Rochester 3, N. Y.

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- Bathroom Heater Baseboard Heater
 All of your many residential and commercial heaters

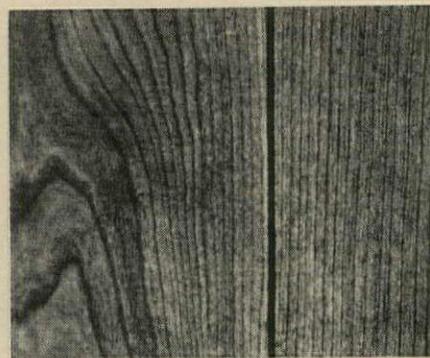
NAME COMPANY

STREET

CITY STATE

New products

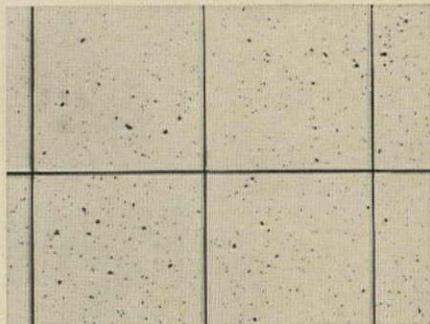
start on p 207



Cherry paneling has been added to US Plywood's new Charter series of pre-finished, V-plank wall panels. Charter series uses veneers with more burls, birds' eyes, knots, and other grain markings to get a more distinctive panel at a cost somewhat lower than clear boards. Other Charter panels: oak, walnut, birch.

US Plywood, New York City.

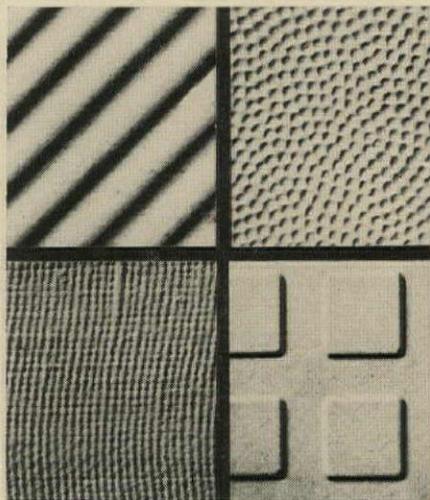
For details, check No. 13 on coupon, p 244



Gold-flecked tileboard is a new plastic-finished hardboard from Panelboard. The new panel is designed to complement the many new metallic-flecked countertop and floor materials. Sheets come 4'x4' and 4'x8' with a 4 1/4"x4 1/4" tile-like scoring or 4'x8' smooth surfaced. Base board is 1/8" tempered hardboard; finish is baked melamine. White and colors.

Panelboard Mfg Co, Newark.

For details, check No. 14 on coupon, p 244



Ceramic floor tile in new patterns, textures, and colors is now being imported from Sweden by Scandinavian Marketing Assoc. Ifo tiles are made by Sweden's biggest tilemaker, come in a wide range of solid colors, textures, and sizes suitable for indoor or outdoor use.

Scandinavian Marketing, New York City.

For details, check No. 15 on coupon, p 244

continued on p 224

HOUSE & HOME

SPECIFY

WARE

ALUMINUM WINDOWS

PROVEN PERFORMANCE • Millions of Ware Aluminum Windows, in installations all over America—residential, institutional, industrial—have been demonstrating their quality for more than a decade.

NEW DESIGNS • Forward looking management will introduce a number of new designs in the next few months that will add to the attractiveness of this great window line. Write now for details.



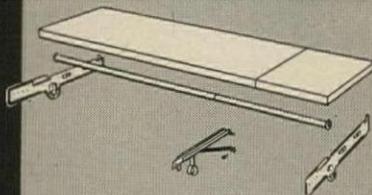
*Main Factory at Miami
Distribution Centers at Atlanta, Houston, Chicago,
Newark, N. J. and Connellsville, Pa.*

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storage
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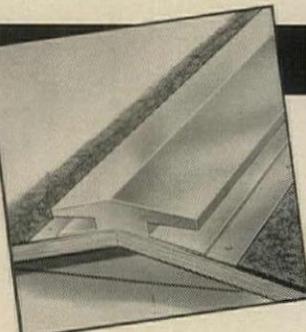
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A new prefabricated aluminum ridge vent that is economical, attractive and efficient. FHA accepted.



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High-style vinyl asbestos catches the look of Italian marble at a moderate cost in a practical, long-lasting material. Mastic Tile's Antiqua series combines swirls of gold and white with base colors—gray, yellow, onyx, green, pink, beige. Antiqua series is made in standard gauge in 9"x9" tiles.

Mastic Tile Co, Vails Gate, N.Y.

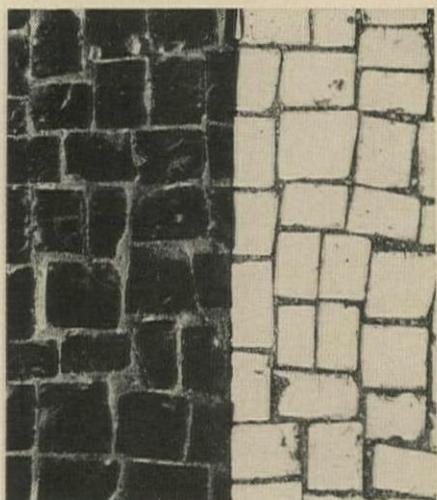
For details, check No. 16 on coupon, p 244



Solid vinyl tile in a variety of patterns has been added to Johns-Manville's flooring line. Patterns in the new line are Phoenician (a translucent), Marbleized, and Terrazzo. Wide range of colors is available in all types, Marbleized also comes with gold striations.

Johns-Manville, New York City.

For details, check No. 17 on coupon, p 244



Textura vinyl is the latest flooring style from Amtico. Patterns and colors are derived from Spanish mosaics. Material is available in sheet form. Also new from Amtico: Moiré, a vinyl flooring with the look of watered silk. Both new patterns have been cited by the American Institute of Decorators.

American Biltrite Rubber, Trenton.

For details, check No. 18 on coupon, p 244

continued on p 226

5 points to remember



This five-pointed star of specialties is only part of PFI's profit story for wholesalers, dealers and builders.

From one integrated source you get: (1) 100% kiln-dried quality lumber, (2) seven species to choose from, (3) selected quality Idaho White Pine from the world's largest source of this fine species, (4) and everything PFI supplies is available in mixed carload lots.

5 profit building items

1. **LAMINATED BEAMS**—A quality specialty from PFI in sizes ranging up to 20 feet.
2. **LOCK-DECK**—Laminated tongue-and-groove roof decking developed and patented, by PFI. Saves up to 50% installation time.
3. **CUSTOM-MADE LUMBER**—Precision Edge-and-End-Glued lumber in made-to-measure lengths and widths.
4. **LOCK-WALL**—Plywood paneling has patented, factory-attached backing strips, which speed installation.
5. **PATTY-O-PANEL FENCING**—Pre-cut basketweave fencing is packaged and ready for assembly, with nailing only at posts.

POTLATCH FORESTS, INC.

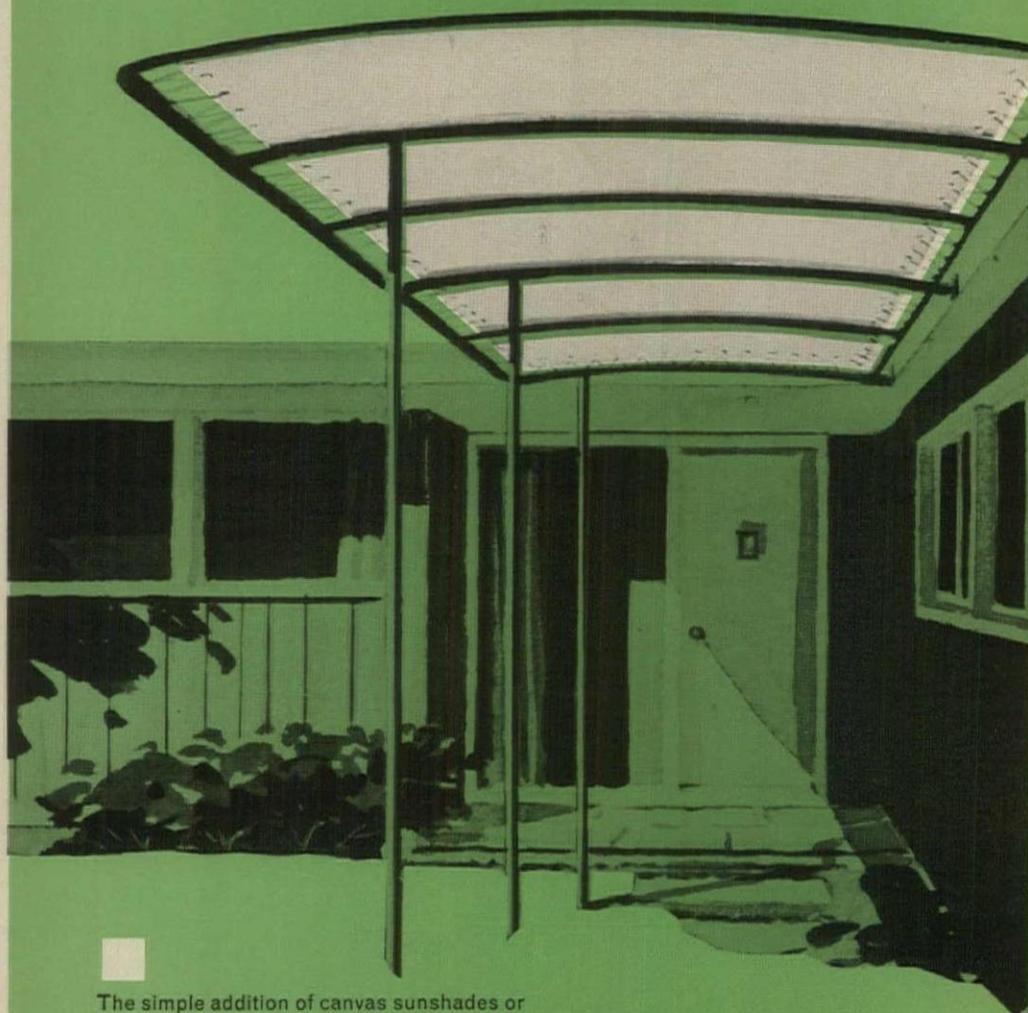
LUMBER DIVISION GENERAL OFFICES, LEWISTON, IDAHO



...better because it's **Potlatch**
symbol of quality since 1906

Sales Offices — Kansas City, Mo.; Pittsburgh, Pa.; Chicago, Ill.; Elizabeth, N.J.; Deer Park, Wash.; Warren, Ark.

A dramatic entrance
for your model home:
A smartly-styled
CANVAS CANOPY



The simple addition of canvas sunshades or canopies can work wonders in giving look-alike houses a look of luxury. Yet here's a product that soon pays for itself in the comfort and savings it provides.

Used as a protective covering for walkways or entrances, canvas costs substantially less than other building materials. As a shading device to keep hot sun rays off window glass, canvas makes homes easier to cool without air conditioning, cheaper to cool with air conditioning.

What's more, with the remarkable new finishes for this sturdy fabric, you can expect years and years of rugged service and rich, colorful beauty. Ask your local canvas products manufacturer about the acrylic paints, vinyl-plastic coatings, and improved dyes that now make canvas sunshades and canopies a better-than-ever feature to attract prospective home-buyers.

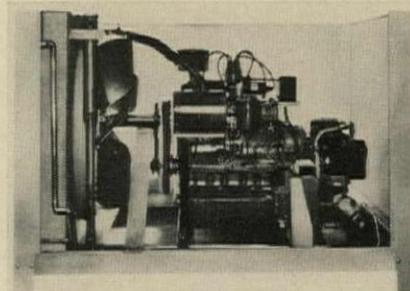
CANVAS AWNING INSTITUTE, INC. and NATIONAL COTTON COUNCIL • P. O. Box 9907 • Memphis 12, Tenn.

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.



New products

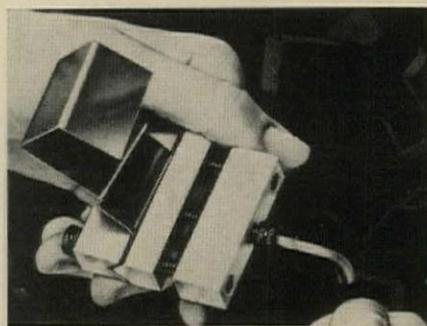
start on p 207



Air cooling by gas uses natural or Lp fuel to power a Continental engine. In this system by Gas-cool, models of 5-ton and 7½-ton capacities are claimed to operate up to 60% cheaper than all-electric models. Fuel consumption is only 20 cu ft of 1,000 Btu natural gas per ton-hour. Five-ton model rates at 60,000 Btuh, bigger model at 90,000 Btuh.

Vector Engr Contractors, Dallas.

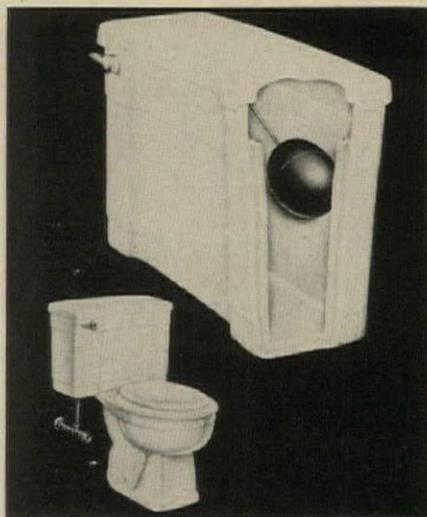
For details, check No. 19 on coupon, p 244



Portable bender is a handy tool for forming light metals on the job. Round and V anvils will shape cold-rolled steel up to ¼" thick, 1¼" wide to form straps or hangers. Tool is made of heat-treated steel, case hardened to take pressures up to 2,000 psi, zinc plated to last a lifetime. Price: \$4.95.

The Hahn Co, Los Angeles.

For details, check No. 20 on coupon, p 244



Non-sweat tank is now optional on most Universal-Rundle Uni-Closets. The tank is insulated with a foamed polystyrene liner to keep the water from chilling the shell, causing condensation. Tank comes in white and all U-R colors, needs no special fittings for installation. Ever-Dry was field-tested for five years.

Universal-Rundle, New Castle, Pa.

For details, check No. 21 on coupon, p 244

continued on p 229

HOUSE & HOME

**BEST BUILT
AIR CONDITIONING
for the Money!**

We believe "You Only Get What You Pay For" — and that "cheap" air conditioning is never a bargain. That's why all BAR-BROOK units are engineered for a job and not for a price. You will find more expensive units than BAR-BROOK — but none better. There are no senseless, eye-catching and costly gadgets. No "juke-box" trim. Just clean, modern, functional engineering, with nothing overlooked that will make a BAR-BROOK more efficient, more reliable, and more



Illustrated above is the Bar-Brook Vertical Heating-Cooling Unit, in 3-ton and 5-ton models with balanced heaters.

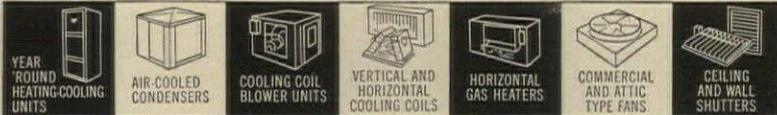


At the right is the compact BAR-BROOK Horizontal Gas Heater, in 4 sizes.

economical to install, to buy and operate. That's why we think you should investigate BAR-BROOK Heating-Cooling Equipment — NOW! A call, card or letter brings you a catalog and all details.

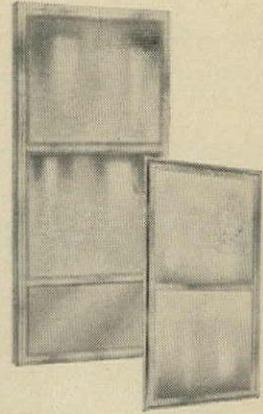
BAR-BROOK

BAR-BROOK MFG. CO., INC.
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Shreveport, Louisiana



**ALL
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Keystone**

**ONLY
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Keystone**



**Solid Quality
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SERVICE — The big market is Keystone's back yard. Keystone has its own fleet of trucks to give you fast delivery!

Keystone Alloys co. home fashions in Aluminum
DERRY, PENNSYLVANIA

Send me complete information on KEYSTONE Aluminum:

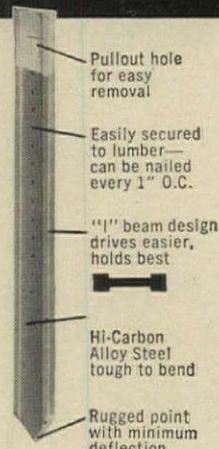
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Company.....
Address.....

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**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.



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. _____

Symons CLAMP & MFG. CO.

4277 Diversey Avenue Dept. G-O Chicago 39, Ill.

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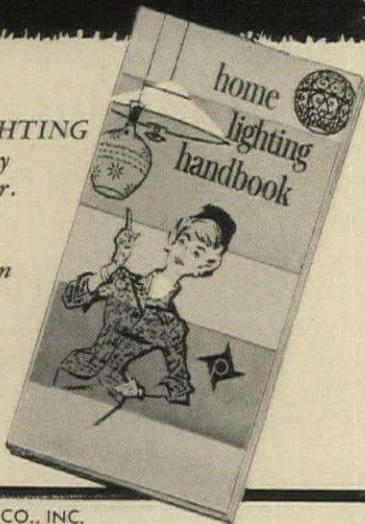
Quantity	Size	Price Each	Total Price	Quantity	Size	Price Each	Total Price
	12"	\$1.00			30"	\$1.30	
	18"	1.10			36"	1.45	
	24"	1.20			42"	1.60	

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HOME LIGHTING IDEAS



Home lighting, today, is an art—an art that Progress' HOME LIGHTING HANDBOOK helps any homeowner to master. The 36 colorfully illustrated pages fire the reader's imagination... Scores of inspired and novel lighting treatments—for every room, every corner of a home, indoors and outdoors.

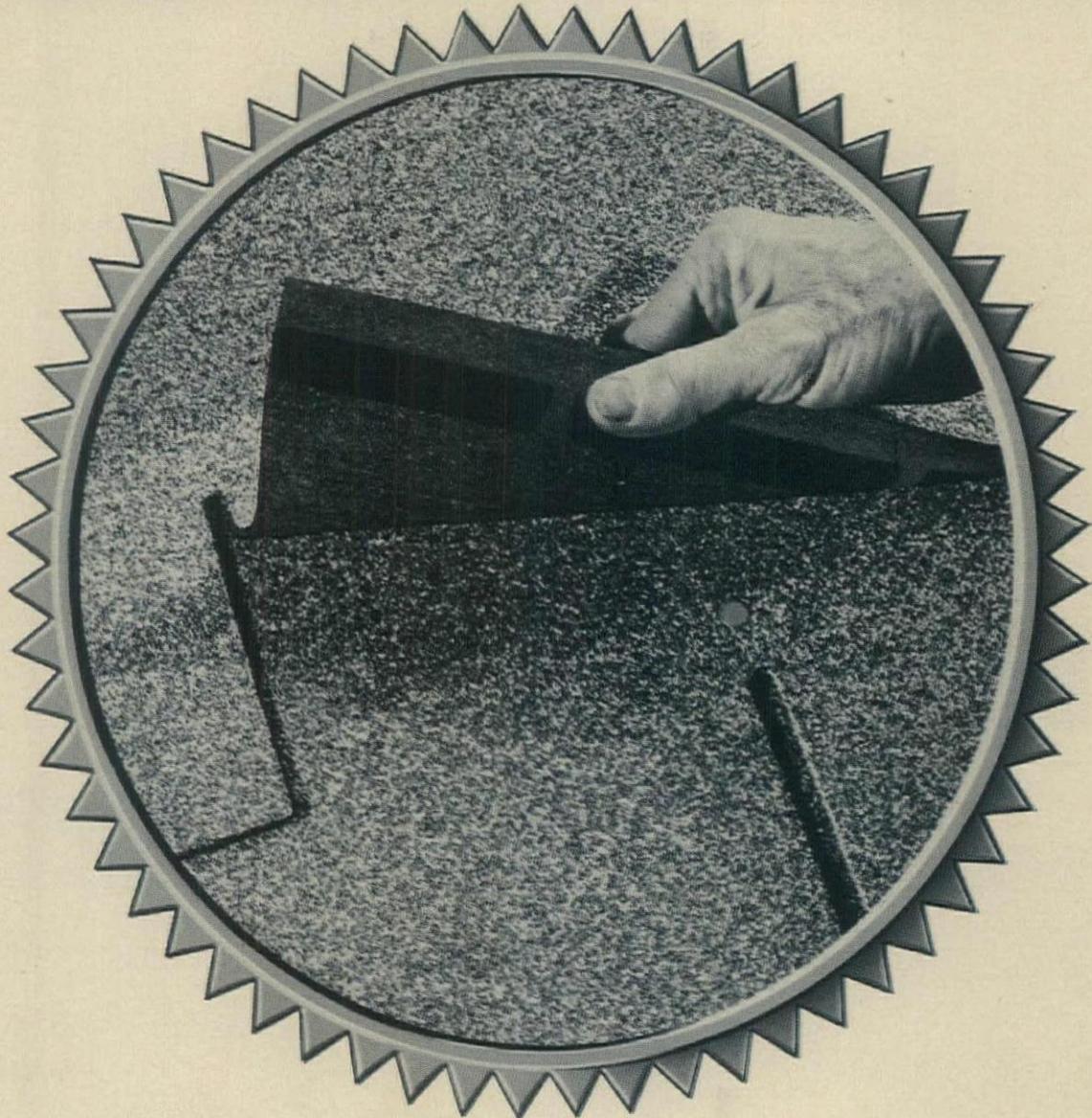


PROGRESS MANUFACTURING CO., INC.
Dept. H&H-7, Philadelphia 34, Pa.

Please send me a FREE copy of your new HOME LIGHTING HANDBOOK.

Company.....
Address.....
City..... Zone..... State.....
My Name..... 13

Certain-teed's Seal of assurance



... gives Sealdon Shingles added protection

You're certain of customer satisfaction with Certain-teed Sealdon Shingles. They offer the attractiveness and ruggedness of Certain-teed Tuftab shingles plus a factory-applied sealing compound on the underside.

When heated by the sun, this adhesive bonds each tab to the roof and, once sealed, Sealdons stay down. Hurricane winds or driving rain can't pry them loose. They seal weather out, seal protection in. Yet wind-blown

moisture can escape through small spaces left in the sealing strip.

Designed in the popular square-butt pattern in a wide choice of colors, Sealdons are being featured in Certain-teed's "Our Wonderful World of Color and Comfort" builder program. This includes three exclusive, sales-producing features designed to help you sell more homes. Get full details from your Certain-teed representative.



Certain-teed[®]... *Superior Products through Creative Research*

CERTAIN-TEED PRODUCTS CORPORATION
Ardmore, Pennsylvania
Plants and offices throughout the United States

New products

start on p 207



"Frame locators" eliminate guesswork in nailing Celotex's Celo-Rok or Fi-Rok gypsum wallboard. Each sheet is printed with small letters spaced 1" apart in lines 16" oc. When drywall is nailed vertically, the lines locate studs; horizontally, letters are the key. Lettering fades when exposed to natural light.

Celotex Corp, Chicago.

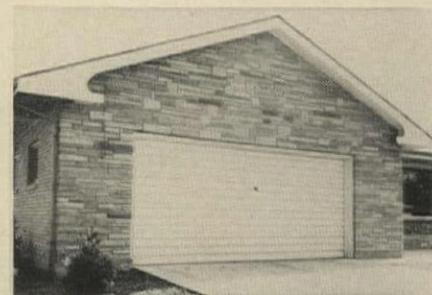
For details, check No. 22 on coupon, p 244



Prefabbed awnings in two styles and in sizes from 10'x10' to 10'x40' are now being made by Jensen-Lewis. Each package includes galvanized steel framing, removable painted-canvas cover, detailed instructions. List prices start at \$74.95.

Jensen-Lewis Co, New York City.

For details, check No. 23 on coupon, p 244



Lightweight door—the Raylon—combines aluminum frame with translucent fiberglass-reinforced panels. Door is claimed to be immune to corrosion, warping, shrinking, splintering. It comes in green, tan, and white, in standard sizes, 8'x6'6" to 16'x7'. Normal headroom is 12", reducible to 3" with Raynor Converti-Kit. One-year guarantee.

Raynor Manufacturing, Dixon Ill.

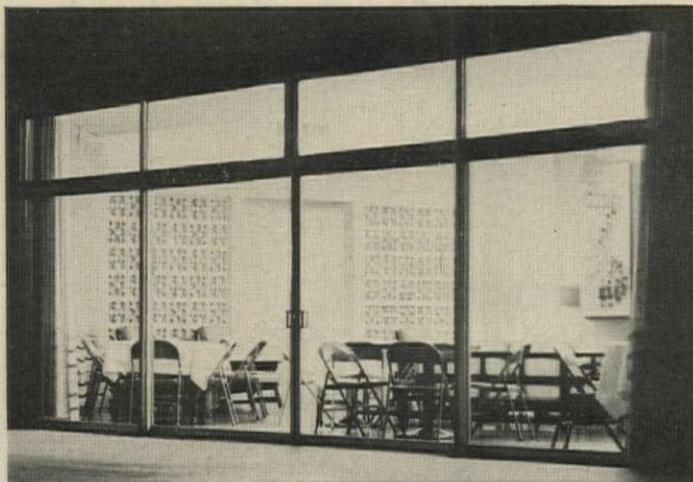
For details, check No. 24 on coupon, p 244

continued on p 232

ONLY Slide-View GIVES YOU

a complete choice of sliding glass doors

Slide-View's complete line of steel and aluminum sliding glass doors means there is always a right Slide-View door for each job.



The Slide-View Model AL-1a deluxe aluminum door is shown in this country club installation, which includes transoms with vertical muntins above sliding doors. This model is often used in motels, schools, churches, showrooms, apartments and quality homes. It is available as multi-slide doors with 2, 3 or more tracks and also with a "recessed" track for interior use—all for either single glazing or insulating glass.

The Slide-View Model 300 economy aluminum door (as shown here in a project home) gives positive weather protection at a new, low price. Completely Alumilited for lifetime wear in attractive satin finish. Step-down track and "outside slide" feature keeps water and air out, while the quiet, nylon rollers with stainless steel bearings allows easy sliding. Inside screen stays cleaner, longer, will not rattle in the wind. Can be glazed with $\frac{3}{8}$ ", $\frac{1}{2}$ " or $\frac{1}{4}$ " glass. Model T-300 is glazed with $\frac{5}{8}$ " insulating glass.



One of the original products of the sliding door industry, Slide-View steel doors have been specified and installed in all types of construction for many years. Strong and sturdy, they can be fabricated up to 50 feet wide and 12 feet high. Completely double weatherstripped with stainless steel track and rust resistant chemical prime coat, Slide-View steel doors are superior in use and construction. Available for every kind of glazing in 19 types from the regular 2 panel door to multi-panel, pocket types and outside sliders.

Our 12th Year fabricating sliding glass doors exclusively.

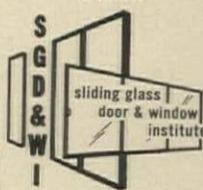


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DOOR AND WINDOW CO.
P.O. Box 409, El Monte, California

"BRINGS THE OUTSIDE INSIDE"

Member



NEW! EXCLUSIVE!

BARRETT

BAR-FIRE[†]

ASPHALT SHINGLES



The only 300# asphalt shingle with

Here's the quality shingle you've been waiting for. The new Barrett Bar-Fire[†]. The finest ever made—worthy in every way of the quality structures you build. Here's why:

- 300# shingle carrying Underwriters' "Class A" label. Top fire protection through fire-barrier layer of granules and *vermiculite*; long asbestos fibers stop flame spreading.
- Giant mineral granules produce an appearance that's genuinely distinctive. Rich, massive, lustrous.
- 18" tabs, instead of the conventional 12", give "Bar-Fire" roofed homes that long, low appearance—fewer vertical lines!
- Multi-layer construction, plus extra weight, spell super weather-worthiness, long-life, extra fire protection!
- Handsome and popular colors: Snow White, Pastel Green, Pastel Gray, Slate Tone!
- The prestige of the new "Bar-Fire" shingles is backed by the prestige of the Barrett name—the greatest in roofing with an unequalled reputation for quality. For samples and full information, call your Barrett representative or contact us direct.

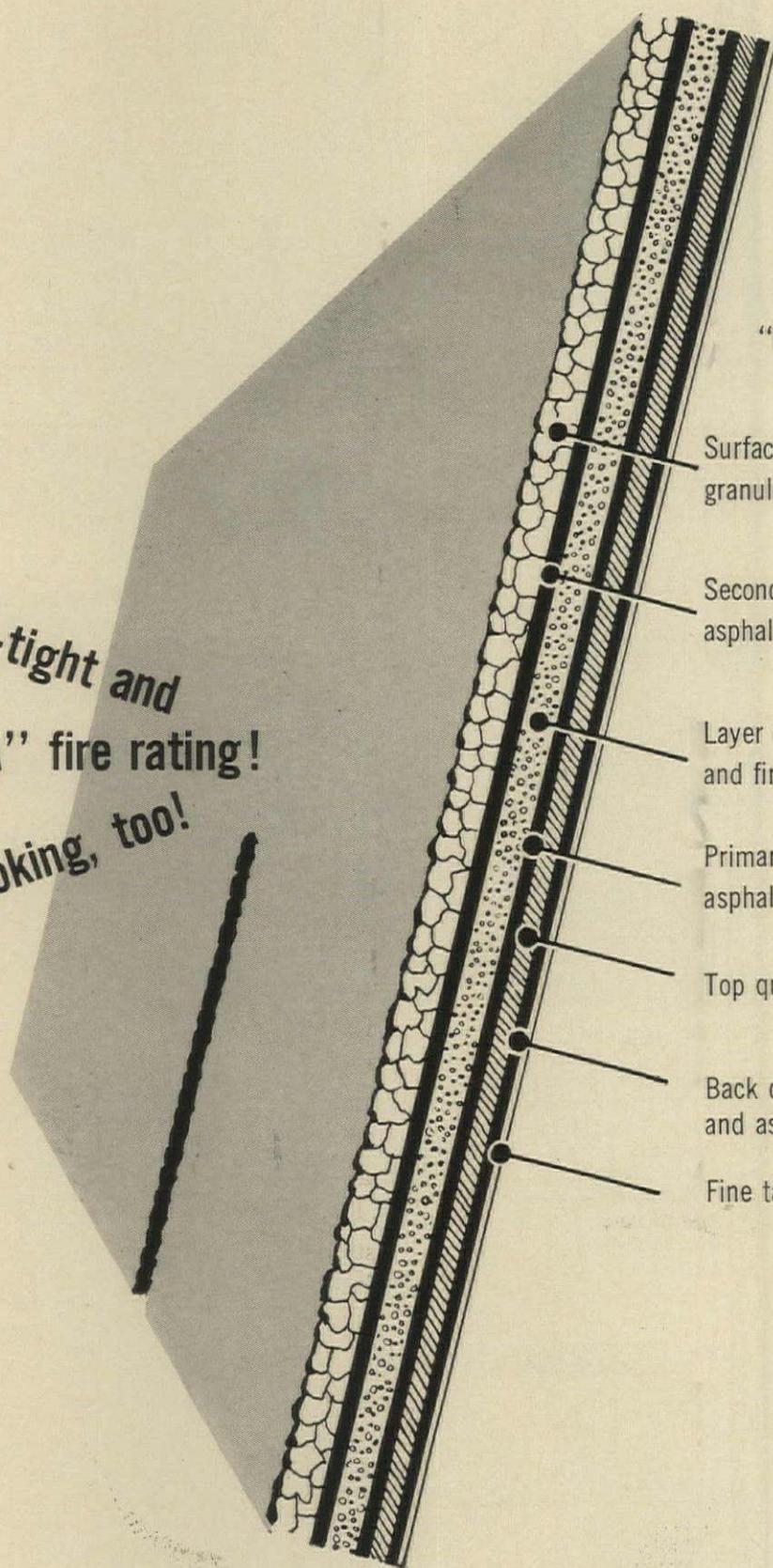
BARRETT IS OUT TO HELP YOU! Whatever your building material needs, Barrett can fill them with a full line of dependable, quality products—all manufactured to the highest standards.

• STORM-KING[®] SELF-SEALING AND OTHER ASPHALT SHINGLES • PITCH & ASPHALT BUILT-UP ROOFING • ROLL ROOFINGS • FIBERBOARD AND GYPSUM PRODUCTS
 • INSULATION • PROTECTIVE COATINGS AND CEMENTS.

[†]Trade Mark Allied Chemical Corporation



**Weather-tight and
"Class A" fire rating!
good looking, too!**



**CROSS-SECTION OF
"BAR-FIRE" SHINGLE**

Surface layer of giant mineral granules, three times usual size.

Secondary coating of asphalt and asbestos fibre.

Layer of granules and fire-blocking vermiculite.

Primary coating of asphalt and asbestos fibre.

Top quality asphalt-saturated felt.

Back coating of asphalt and asbestos fibre.

Fine talc surfacing.

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40 Rector Street, New York 6, N. Y.

**Allied
Chemical**

Cut Chimney & Fireplace Costs —

in Housing Developments and Custom Homes Alike



Majestic

Prefabricated, all-metal

FIREPLACE & CHIMNEY

★ATTRACTIVE CHIMNEY TOPS

Simulated brick-patterned tops in a choice of sizes. Red, tan or off-white.

★NO MASONRY OR MORTAR NEEDED!

All-metal construction from hearth to chimney top. Made of corrosion-resistant alloys and stainless steel.

★EASY TO INSTALL

Cuts builder's time and cost. One workman can erect several chimneys or fireplaces a day.

Perfectly safe, even butted against wood. Use any style mantel. 30" or 36" opening width. Floor-level or raised hearth. Unit is complete with built-in, sliding, firescreen.



★DESIGNED FOR MAXIMUM DRAFT and complete with handy cleanout and anti-condensation feature

★MODELS FOR ALL HOUSE STYLES — one, one-and-half and two full stories

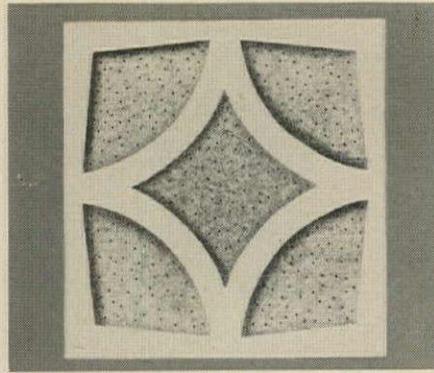
★CLASS A CHIMNEYS for oil furnaces, incinerators, other appliances. Class B Vents available for gas furnaces, other gas appliances.

Build attractive, quality fireplaces and chimneys at less cost. Write for full details.

The **Majestic** Co., Inc.
416 Erie Street, Huntington, Ind.

New products

start on p 207



Decorative tile for acoustical ceilings has a sculptured, three-dimensional surface in a design derived from the US Pavilion at Brussels. Tiles are 9/16" thick, 12"x12", t&g, finished in a high-reflectance white and a wheat tone. Sound absorption is aided by needle perforations in sculptured areas.

National Gypsum, Buffalo.

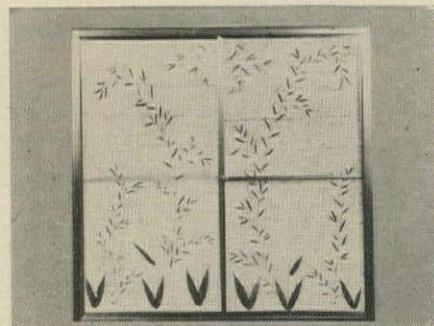
For details, check No. 25 on coupon, p 244



Plastic filigree in openwork panels 36"x12", 1/4" thick, can be clamped to decorator poles to form screens and room dividers. Panels are white with black or gold trim. They are ready to install but can be easily worked with woodworking tools for custom use. Poles are brass-plated or black enamel. Prices for two panels, two poles start at \$12.98.

Bernard Edward Co, Chicago.

For details, check No. 26 on coupon, p 244



Plastic panels for tub and shower enclosures are framed in extruded anodized aluminum in gold or silver. Reinforced, shatterproof Panelon sheets are .150 gauge, come in a wide variety of fabric or foliage imbedments created by Beatrice West.

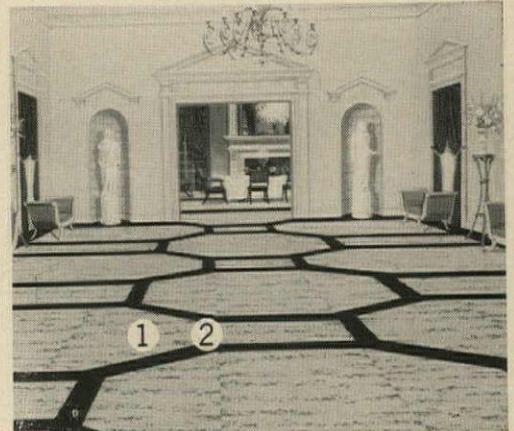
Panelmode Corp, Edison, N.J.

For details, check No. 27 on coupon, p 244

Publications start on p 236

This fabulous Amtico Vinyl Floor wins prospect interest

as illustrated on the facing page



The Flooring:

New Amtico Travertine Vinyl

The Colors:

1. VA-1 Beige
2. VP-22 Black

Travertine* Flooring Data:

Amtico Travertine Vinyl 1/8" . . . all-vinyl, color throughout thickness • Standard tile sizes . . . 9" x 9", 12" x 12" • Special tile sizes . . . 36" x 36", 36" x 24", 36" x 18", 36" x 12", 36" x 9", 24" x 24", 24" x 18", 24" x 12", 24" x 9", 18" x 18", 18" x 12", 18" x 9", 12" x 6" • Other sizes available by special order.

Amtico Flooring Facts:

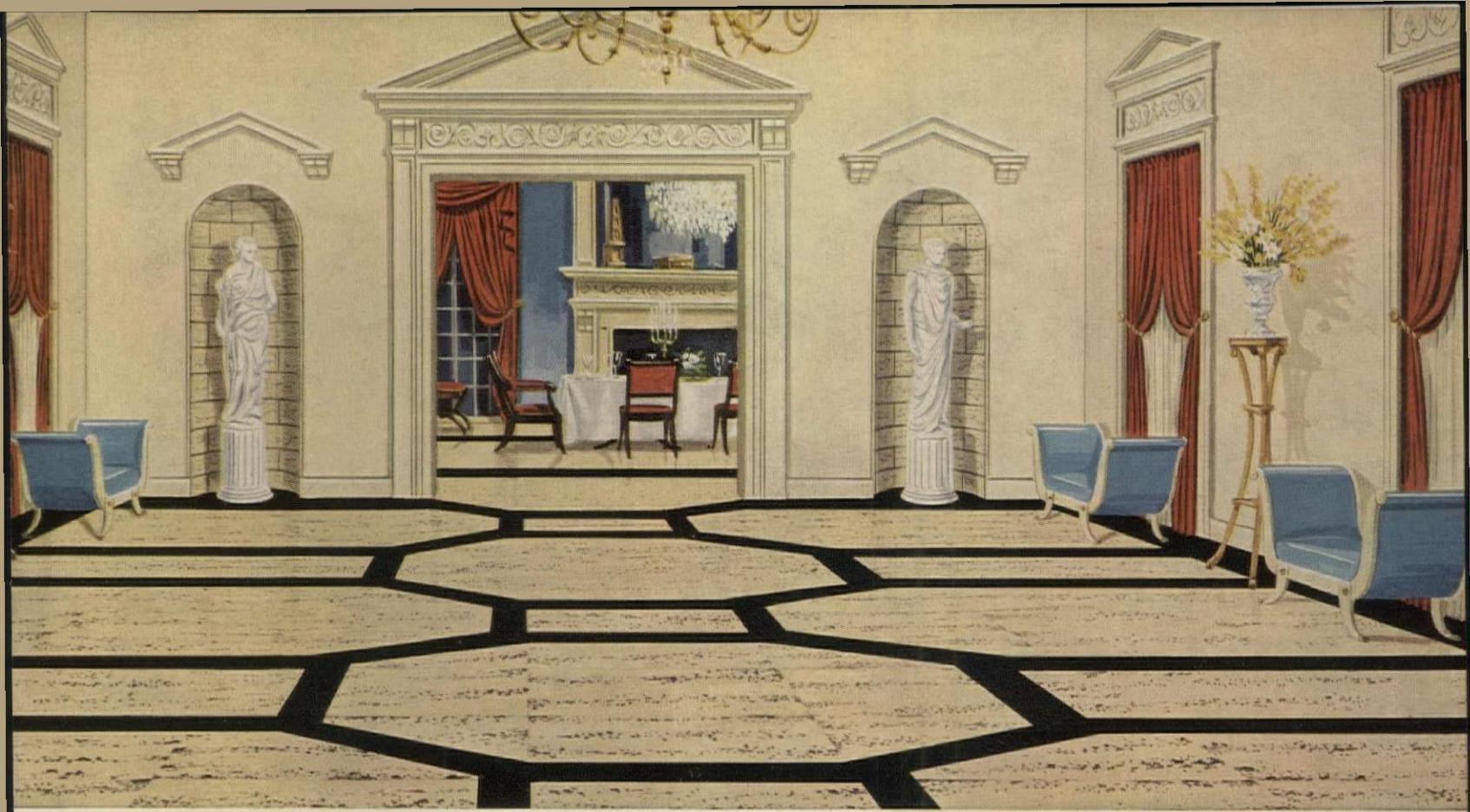
Builders who think of flooring in terms of attracting prospects usually turn to Amtico Vinyl . . . for many good reasons. Beauty is one. The beauty, for example, of Amtico Travertine Vinyl, capturing the full glory of natural travertine. The translucent loveliness of Amtico Renaissance® and Amtico Celestial®. The smart freshness of budget-priced Amtico Care-Free® and Amtico Vinyl Plastex. The versatile beauty of Amtico's complete line.

Home buyers think of the years ahead, so you can sell them on Amtico's quality that stands up to hardest wear. They'll like the underfoot comfort Amtico's resilience assures. There's big appeal in maintenance that's almost effortless, even with lightest colors.

Install an Amtico Vinyl Floor easily anywhere . . . over wood subfloors, concrete under floors, suspended concrete, on-grade concrete, below-grade concrete.

*Produced by an exclusive process. Pat. Pend.





Regal as the splendor of imperial Rome...

Amtico
TRAVERTINE
Vinyl

Classic as a Roman column . . . yet new as the decade it will grace so distinctively. Amtico Travertine* Vinyl captures the full drama of travertine marble, its stately look, muted tone, its very texture. In a room of any period, Amtico Travertine Vinyl adds magnificent significance with subtle sophistication . . . on floors, walls, stairs, decorative devices, furniture surfaces.

Amtico Travertine Vinyl performs patrician magic so

practically . . . with infinitely more economy, more resilience underfoot than natural travertine. Much lighter in weight, yet wears far longer. Amtico Travertine is so much easier to install and so effortless to maintain . . . should never be waxed.

Delight in the plans *you* can devise with Amtico Travertine Vinyl Flooring . . . and Amtico's complete line of fine floorings including renowned Renaissance®.

*Produced by an exclusive process. Pat. Pend.

Amtico VINYL flooring

AMERICAN BILTRITE RUBBER COMPANY • TRENTON 2, NEW JERSEY

AMERICAN BILTRITE RUBBER COMPANY
 Dept. HH-10, Trenton 2, N.J.

Please send full color idea brochure and FREE complete set of Amtico Vinyl and Rubber Flooring samples to:

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CITY _____ ZONE _____ STATE _____

(Please attach coupon to your business card or letterhead.)



PREWAY

Gives Your Kitchens *individuality*

As a builder, or contractor, Preway Built-Ins set you apart from the crowd . . . give you special identity . . . help your kitchen gain the "Look of Luxury" with Preway's customized styling in both gas and electric appliances.

And when it comes to installation, you'll find that Preway also gives you the lowest in-place cost. In fact it takes only 60 seconds to "lock-in" a Preway oven, gas or electric; and a screw driver  is the only tool required.

Preway is *the pioneer* full line manufacturer of built-ins; offers you the most complete selection in the country. Bring women your way with Preway — as hundreds already do. Call or write for *the facts*, in full color; and *the figures*, in black and white.



The Look of Luxury



2715 Second St., North, Wisconsin Rapids, Wis.

SINCE 1917 — Pioneer manufacturer of built-in appliances . . . refrigerator-freezer combinations, gas and electric ovens and surface units, ventilating range hoods, dishwasher. Member of Brand Names Foundation.

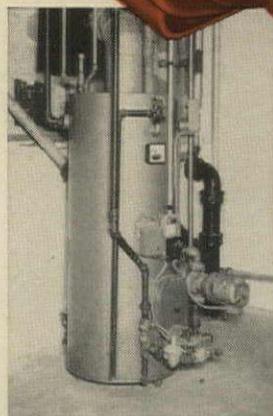
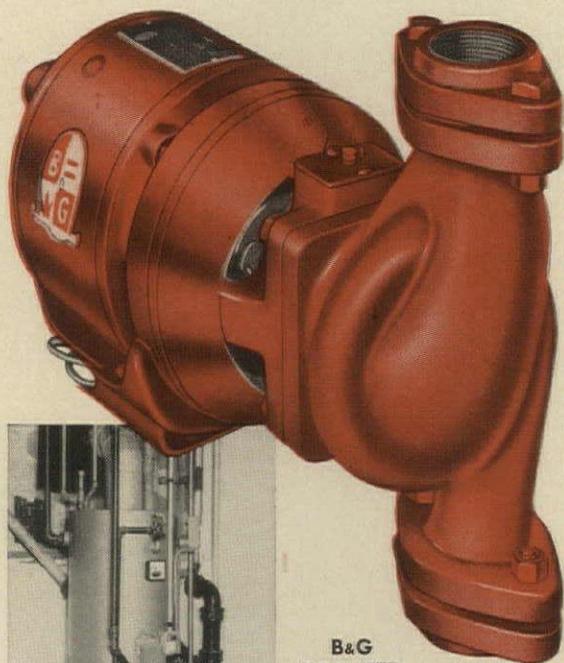
to custom-built
or mass produced
homes, **B&G**
Hydro-Flo[®]
HEATING
ADDS EXTRA VALUE



Designed and owned by Mr. Harry Weese, Chicago architect, this home was selected for "Record Houses of 1960".



300 Hydro-Flo heated homes in this development were sold over one week-end.



**B&G
BOOSTER**

The key unit of a B&G Hydro-Flo System—a quiet automatically controlled electric pump which circulates hot water through the heating system. Hydro-Flo equipment can be installed on any hot water heating boiler.

To homes built without regard to cost, B&G Hydro-Flo Forced Hot Water Heating brings comfort which matches the highest standards of design and construction. Where homes are built to sell competitively, B&G Hydro-Flo Heating adds distinction which gives them a strong selling edge over less adequately heated homes.

A builder who is installing B&G Hydro-Flo Heating in thousands of homes says this—

"In deciding on this type of heating, we were guided by the need in this highly competitive market for a feature of outstanding sales power. Radiant heating, with its sun-like warmth can't be equalled for genuine comfort and cleaner, quieter operation. Its warm, draftless floors guard against usual winter ills."

"Hydronic Homes" Sales Promotion for Builders

Every builder should see this presentation! There's no obligation in getting the facts on this comprehensive program of ideas and sales helps for utilizing the outstanding and exclusive advantages of *hydronic** heating. Write, phone or wire today.



**Modern hot water heating.*

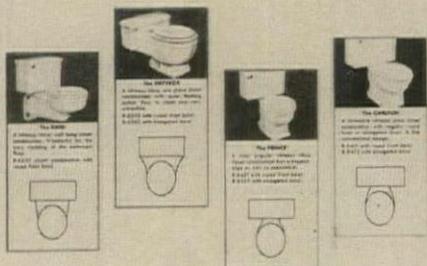
BELL & GOSSETT
C O M P A N Y

Dept. GG-10, Morton Grove, Illinois

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



Model sanitary fixture, backed by more 70 years of experience in the St. Regis Paper plant, produce high-quality ceramic toilet water closets of unsurpassed beauty and dependability. Show in the European, the ultimate in contemporary design and efficiency. The one-piece vitreous is more about in design, and you will enjoy its quiet, whisper and operation.



How to design a bathroom

This new booklet contains 36 pages of bathroom ideas and planning helps. One 16-page section shows all colors and styles of Briggs fixtures in four-color photographs of room settings. Other pages (like those above) show all versions of each fixture type. Others

show how extra baths may be fitted into a house plan in remodeling or new construction. Color wheel incorporated in the back cover gives various schemes to match Briggs's fixture colors.

Briggs Mfg Co, Warren, Mich.
For copy, check No. 34 on coupon, p 244

NATIONWIDE NETWORK of Lighting Sales Engineers
Always at Your Service.

Manufactured by the world's most advanced lighting fixture manufacturer, Moe Light, the new recessed lighting fixture is designed for maximum efficiency, safety, and economy. It is the only fixture of its kind that is completely self-contained, and it is the only one that is completely self-contained.

MOE LIGHT'S 3-POINT SUPERIORITY

1. TRIM WITHIN A FRAME
2. FULL ADJUSTMENT
3. PROTECTION

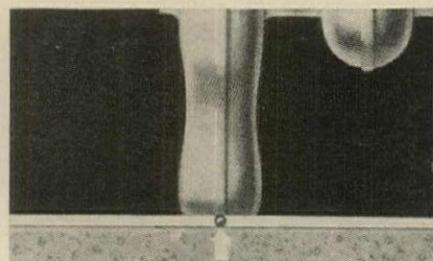
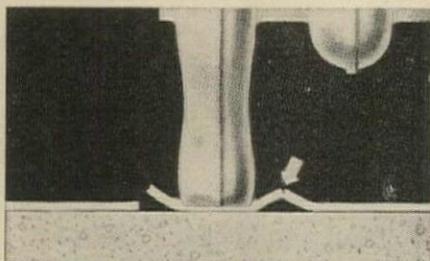
New from MOE Light... a completely new creatively engineered RECESSED LINE MOE LIGHT

Here are 36 pages of recessed-lighting ideas

Moe Light's latest catalog covers a whole new line of fixtures for recessed installations. Featured is the frame-within-a-frame design shown above which can be used vertically or horizontally, eliminates light leaks, smudge marks, paint cracks. New catalog offers

installation instructions, light curves, coefficient table, detailed drawings of all units. Fixture types include square, rectangular, round, adjustable beam, opal glass, shower, and aisle lights.

Thomas Industries, Louisville.
For copy, check No. 35 on coupon, p 244



How to choose and use resilient flooring

Know how to keep concentrated loads from breaking asphalt or vinyl asbestos tile? Imbed a ball bearing in the tile under the leg of the heavy furnishing (above). This is only one of the many installation details included in Kentile's new manual. The 48-page

booklet also details where and how to use each flooring type, how to layout any installation (including basketball and shuffleboard courts), how to specify, how to install, and how to maintain.

Kentile, Brooklyn.
For copy, check No. 36 on coupon, p 244

How to apply plastic laminates

Panelyte division of St Regis Paper has a new technical manual on high-pressure decorative laminates. The 24-page brochure is in two sections: 1) Designing with Panelyte; 2) Specifications. Full product information—grades, colors, patterns, finishes, sizes, costs, etc—is in part one, as are details of applications for countertops, walls, baths.

St Regis Paper, New York City.
For copy, check No. 28 on coupon, p 244

New lighting control booklet

A new 24-page four-color brochure tells how to use Luxtrol controls for perimeter, area, task, and accent lighting. Applications cover ceiling and wall fixtures, portable lamps, cornices, valances, coves, luminous ceilings, downlights, spotlights, soffits. Full product information is included.

Superior Electric, Bristol, Conn.
For copy, check No. 29 on coupon, p 244

New uses for aluminum

Aluminium Ltd, has a new 36-page booklet of home ideas in aluminum, many of which might be adopted by builders. Among the areas covered: vacation homes, carports, greenhouses, roofs, walls, screen porches, fences, trellises, etc.

Aluminium Ltd, New York City.
For copy, check No. 30 on coupon, p 244

Decorate with glass

New 20-page booklet of ideas for using patterned glass in quality homes has just been issued by Mississippi Glass. The uses photographed in actual house installations include roof lights, structural walls, indoor and outdoor screens, entryways, garden rooms, bath enclosures. Back cover shows nine of the many different textures offered.

Mississippi Glass Co, St Louis.
For copy, check No. 31 on coupon, p 244

New patterns in mosaic tile

New catalog of Vico tile, a ceramic imported by Amsterdam Corp, shows patterns unlike those of any US maker. New styles include pebble forms, crazes, miniatures, polka dots, interlocking rings, etc. Also shown: variety of buckshot, random, and spiral patterns.

Amsterdam Corp, New York City.
For copy, check No. 32 on coupon, p 244

Painting color guide

DuPont has a new 48-page booklet on home painting. About 30 pages show interior and exterior color schemes in color photographs and renderings. Other pages show the palette for various types of DuPont paint. Eight pages tell how to prepare and paint almost every type of surface. Price: 10¢.

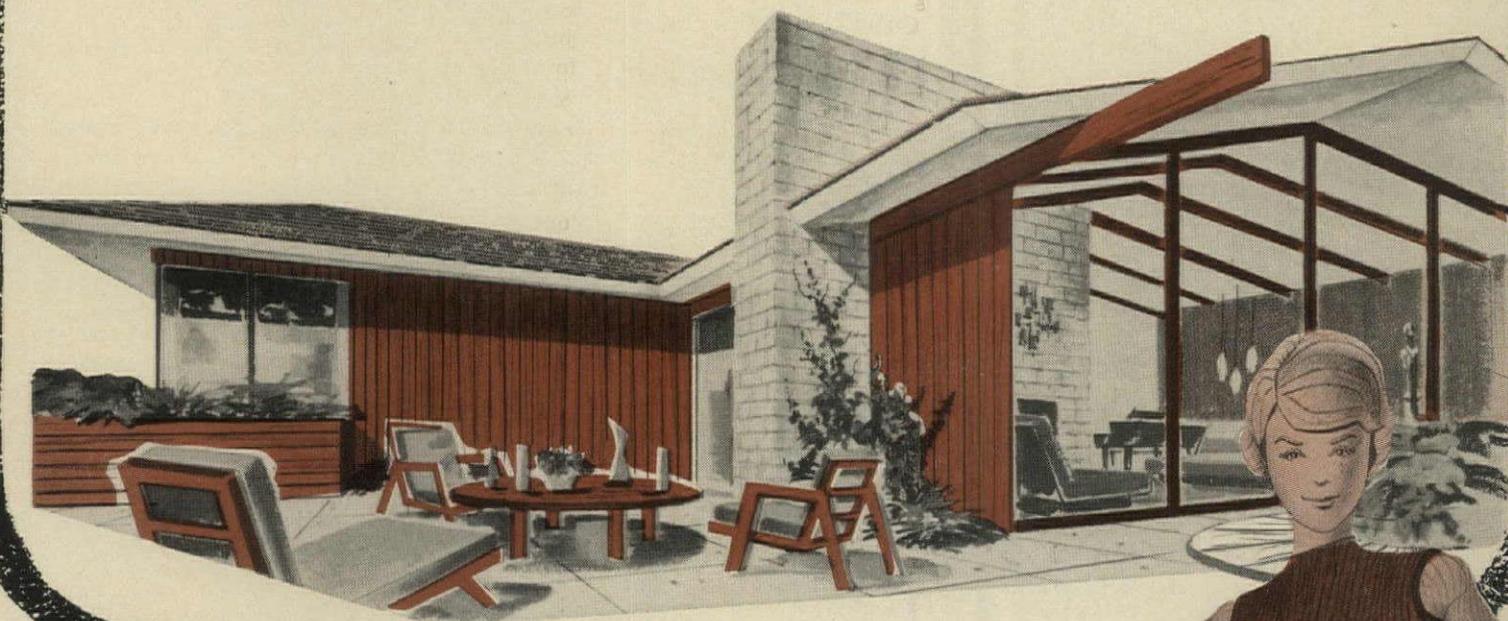
E. I. du Pont de Nemours & Co, Wilmington, Del.
For copy, write direct to manufacturer

Rez

COLOR PIGMENTED* SEALER-FINISHES FOR EXTERIOR AND INTERIOR WOOD

Homes finished in Color-Toned REZ have a distinctive richness and warmth. REZ hard-wearing sealer-finishes enhance with color the intricate patterns of natural wood siding. The wood is sealed and protected from the effects of sunlight and weather. There's no crack, chip, peel or blister because REZ Color-Toned sealer-finishes penetrate below the surface of the wood, carrying the color pigments deep into the pores... your assurance of long lasting customer satisfaction.

For smart, harmonizing interiors, use REZ Color-Tones on wall paneling, doors, cabinets and room dividers.



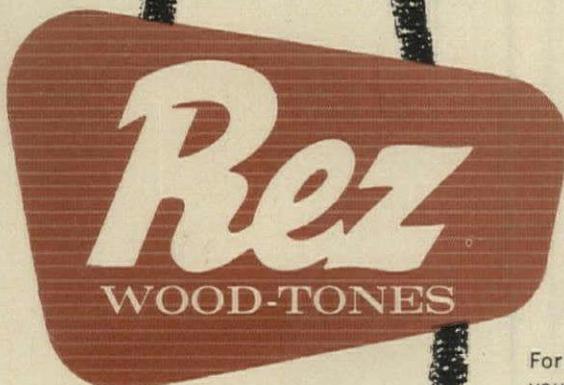
* REZ COLOR-TONED SEALER-FINISHES ARE AVAILABLE IN 13 DISTINCTIVE COLORS

They range from soft, muted greens and greys, through warm, natural tones to rich, deep Redwood and Mahogany. Easy to apply... No primer coat is required for exterior use because REZ Color-Tones seal as they finish.

SEND FOR FREE 32-PAGE BOOKLET...



Here you'll find comprehensive information about the many uses of REZ Wood-Tone finishes. Also includes 13 color swatches of REZ Color-Tones.



For name of
your nearest
dealer, consult
the YELLOW
PAGES.



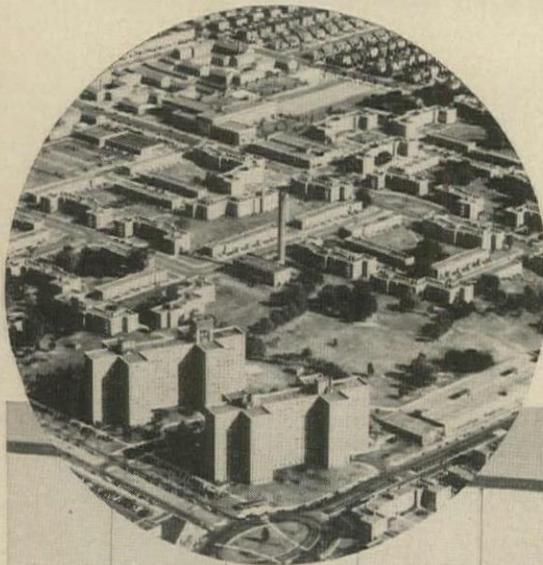
REZ WOOD-TONES, INC.

Dept. 66, P. O. Box 142, Springdale, Pa.

SELECTED FOR QUALITY

3000

GENEVA KITCHENS



FRESH MEADOWS

...the family community of 3000 apartments in Queens, Long Island, owned and operated by New York Life Insurance Co.



GREATER DURABILITY, EASE OF INSTALLATION, WIDER CABINET SELECTION . . . these are the reasons GENEVA cabinets were selected to provide the ultimate in practical and gracious kitchen living in Fresh Meadows. In a two year modernization program for two and three story buildings, 3000 GENEVA KITCHENS will be installed in this famed project.

From architect to installation crew, to tenant, GENEVA steel cabinets are found easier to work with, more fully satisfying, permanently more charming.

ask about all-new

Impasto®

GENEVA'S exclusive textured cabinet finish of etch-line patterned steel. It has the strength of Gibraltar . . . new warmth in appearance . . . superior stain and mar resistance.

find us fast in the Yellow Pages



Look in the yellow pages for the GENEVA "Kitchen Distributor" nearest you.

GENEVA MODERN KITCHENS

Division of Acme Steel Company Dept. HH-7-60 Geneva, Illinois

Send Complete Information on the Geneva cabinet line.

Architect Builder _____ other

Name _____

Address _____

City _____ County _____ Zone _____ State _____

Publications

start on p 236

"Perfect fireplace at less cost"

Bennett-Ireland has a new manual showing how a mason can save up to a ton of laid masonry on an average fireplace. The booklet gives specifications, diagrams, and photographs of the Benefire form; tells how to guarantee smoke-free installation, extra heat, draft-free floors without affecting the looks of the fireplace.

Bennett-Ireland Inc, Norwich, N.Y. For copy, check No. 37 on coupon, p 244

Technical data on Sheet-Board

Basic information on glue-bonded lumber panels is the subject of Western Pine Assn's latest technical publication. Data covers strength, weatherability, economy, workability, and quality of product for roof, wall, and floor sheathing.

Western Pine Assn, Portland, Ore. For copy, check No. 38 on coupon, p 244

Decorative plastics catalog

Wasco has a new four-color brochure covering Acrylite panels. These panels have smooth or textured surfaces and a wide range of natural, fabric, and metallic embedments. The catalog shows patterns in color, shows typical installations in color and in black and white.

Wasco Products, Cambridge, Mass. For copy, check No. 39 on coupon, p 244

Facts on plastic sewer mains

Evanite Plastics has just issued a four-page brochure stating the case for plastic sewer piping. Among the virtues claimed: no exfiltration, no infiltration, no root problems; lightweight, easy to handle in long lengths; rapid joining; high impact and crushing strength; good flow characteristics with no joint turbulence.

Evanite Plastic, Ulrichsville, Ohio. For copy, check No. 40 on coupon, p 244

Adhesives for construction

A 12-page account of how adhesives can be used in light construction is 3M's latest brochure. Contents cover products for adhering ceramic tile, insulation, wallboard, floor tile, carpets, sheet materials, as well as primers and sealers for construction use. Twenty products in all are charted.

Minnesota Mining & Mfg, St Paul. For copy, check No. 41 on coupon, p 244

Door and window manufacturers

Schlegel Mfg Co has just published two lists of manufacturers using its product.

Bulletin D covers foreign and domestic makers of sliding glass doors, storefront and entrance doors, monumental and commercial doors, storm doors, jalousie doors, and all types of screen doors. Bulletin also includes application data for woven pile weatherstripping.

For copy, check No. 42 on coupon, p 244

Bulletin W covers window and screen manufacturers, both foreign and domestic, of residential, commercial, and monumental prime and storm windows and curtain wall units.

Schlegel Mfg Co, Rochester, N.Y. For copy, check No. 43 on coupon, p 244

continued on p 243

At least twice a day,

Berry's easy-open features

protect your reputation as a quality builder

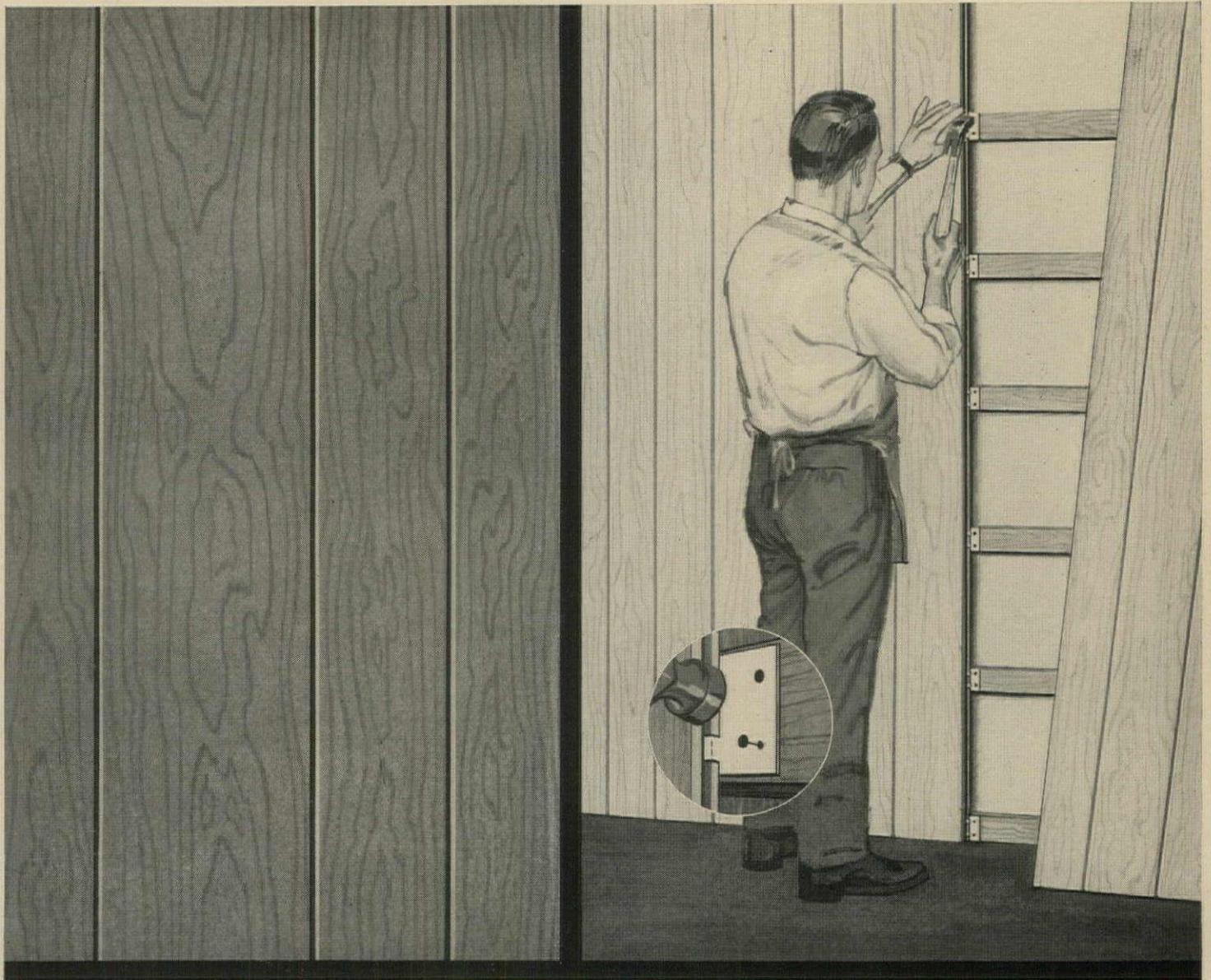


No wonder Berry has the easiest going doors a garage can boast! They have floating nylon rollers . . . factory-lubricated bearings and hinges . . . oil-tempered steel wire springs . . . Paintlok-steel that won't swell or shrink . . . tapered track and full width unlatching mechanism on sectional models . . . factory-furnished steel stops.

Additional features such as complete climate-proof weatherseal and rigidized face panels mean maximum customer satisfaction. Berry's full five-year guarantee protects you from costly call-backs. The price is right, installation is quick and economical. New Sundrift primer needs only one coat of paint—even white! One-piece or sectional, single or double, standard or special sizes. See your distributor or write: Berry Door Corporation, 2400 E. Lincoln, Birmingham, Mich. In Canada: Berry Door Co., Limited, Wingham, Ont.



wood-grained panels...what an



Easy on the eyes...

Factory-finished on genuine Masonite hardboard, these exciting new Royalcote cherry panels look like authentic wood grains. The three cherry tones easily maintain their rich beauty for years with just a coat of clear sealer, lacquer or wax.

Easy to apply...

You will marvel at the ease with which these handy 16"-wide by 8'-long panels install. An entirely new clip-on system makes paneling so simple that you are bound to save application time—and time saved is money in your pocketbook!

easy way to dress up homes!



Easy on the imagination . . .

Versatility is the keynote to these beautiful Masonite wood grains: as an accent wall in any room; above fireplaces, behind basement bars, alongside bookshelves—wherever you use them, these walls bring a new dimension of warmth and beauty.

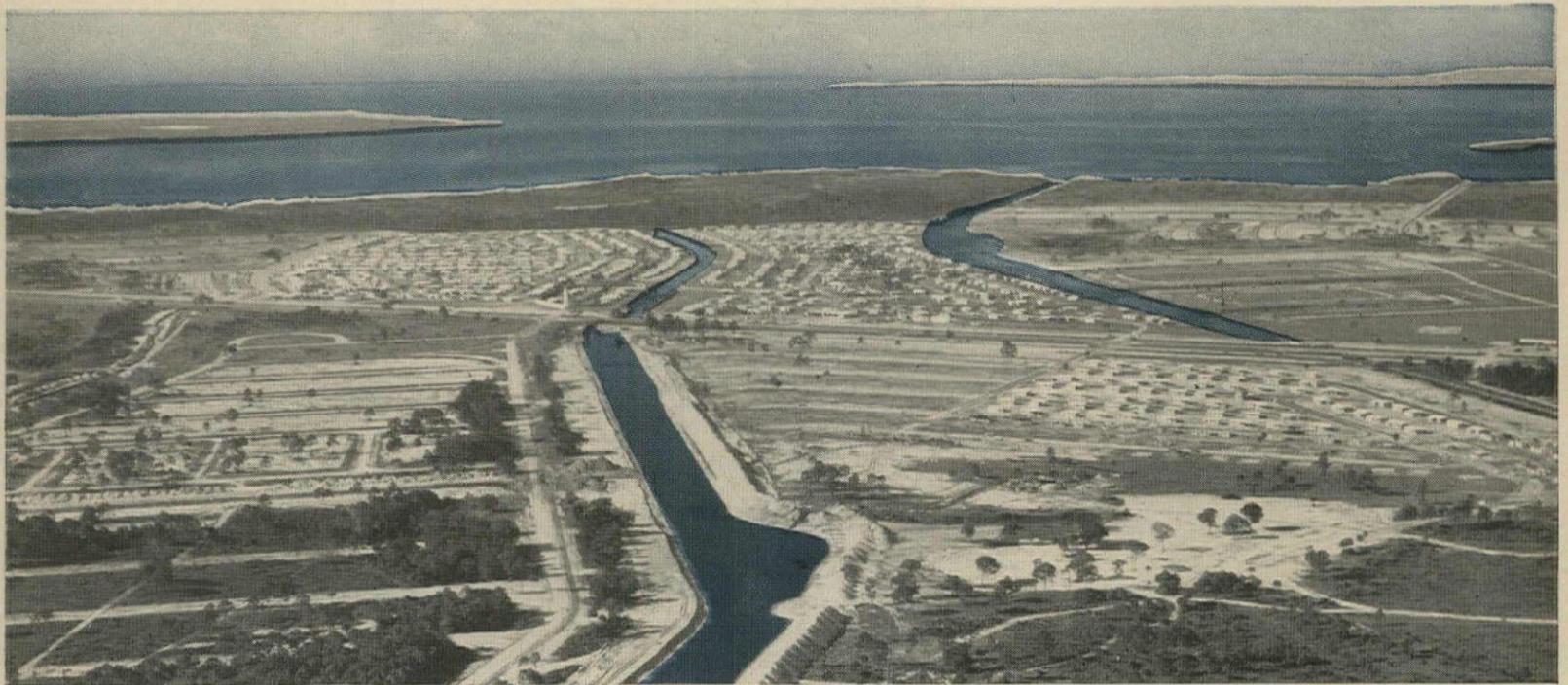
and so easy to sell

You're in for a real surprise when you see how Masonite Royalcote wood grains please prospects and create extra sales appeal in your homes. And your biggest surprise will come when you discover the refreshing low cost!

See your building materials dealer or write Masonite Corporation,
Dept. HH-7, Box 777, Chicago 90, Ill.

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CORPORATION

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Port Charlotte, 94,000 acre homesite community on Florida's south-west coast, is under construction by The Mackle Company for General Development Corporation, which handles everything from the land title to the financing, and offers home owners outstanding

values in a seacoast community. L-M Permaline Bituminous Fibre Pipe was selected for the house-to-street sewers because of its economy, long life, and resistance to corrosion. Using L-M Permaline Pipe, three men installed eight sewers a day.

Mackle Company Chooses L-M Permaline Pipe For Homes in Huge Florida Community



Ray Webb

L-M Permaline house-to-street sewers at this Mackle Company Development were installed by Ray's Plumbing, Incorporated, with L-M Permaline Pipe supplied by Morehouse Supply Company, Miami. Raymond A. Webb, President of the contracting firm, says that a three-man team dug trenches, installed the L-M Permaline sewer pipe, and backfilled more than 8 sewers a day. According to Mr. Webb, this couldn't have been done with any other type of pipe.

No Corrosion, Leaks, or Root Trouble

At Port Charlotte, south-west Florida seaside community, Mackle Company engineers again selected L-M Permaline Fibre Pipe for house-to-street sewers. This outstanding product eliminates all problems of corrosion; it more than meets the problems of low installed cost; and provides lifetime root-proof and leak-proof service.

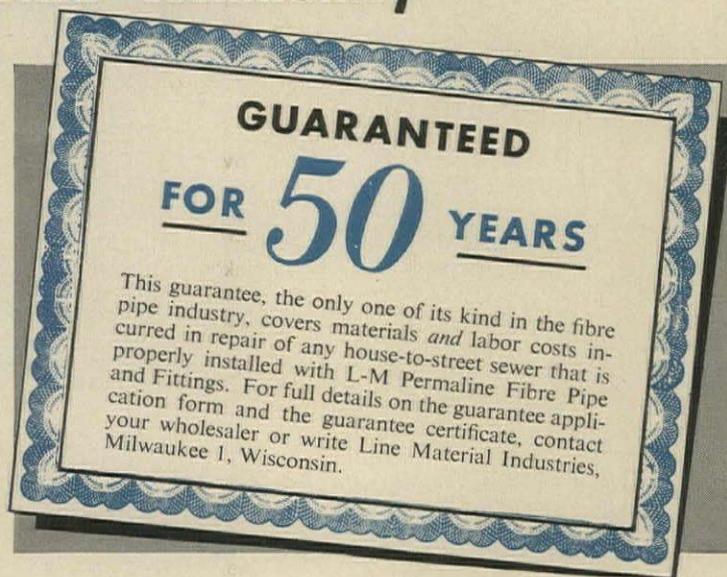
Get Information on Permaline Pipe

Ask your wholesaler or the nearest L-M office; or mail the coupon.

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FOR 50 YEARS**

This guarantee, the only one of its kind in the fibre pipe industry, covers materials and labor costs incurred in repair of any house-to-street sewer that is properly installed with L-M Permaline Fibre Pipe and Fittings. For full details on the guarantee application form and the guarantee certificate, contact your wholesaler or write Line Material Industries, Milwaukee 1, Wisconsin.

Permaline Pipe is light, strong, tough, and easy to handle. Joints are made in two minutes with tapered, easy-drive couplings that assure a leak-proof, root-proof joint. The pipe is unaffected by all conditions normally encountered, including detergents, hot water, ground-heaving, and settling.

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LINE MATERIAL Industries, Milwaukee 1, Wisconsin: HH-70

451

- Send me details on L-M Guaranteed Permaline Fibre Pipe and name of nearest L-M Permaline Wholesaler.
 Ask Mackle Company to send me literature on homes in Port Charlotte.

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Title _____

Company _____

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City _____ State _____

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BEST FOR PRODUCTION WORK!

Right now in Levittown, as well as in developments all over the nation, one mechanic is installing tile in four bathrooms in just one day. Certainly it takes a special material to do the job. That's Miracle Ceramic Tile Adhesive. Truly the mechanic's mastic. Made by Miracle Adhesives Corporation, who introduced the '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 its Ceramic Tile Adhesive in accordance with the mechanic's own specifications. All over the country tile mechanics have told us what they wanted. In economy, in coverage, in long open time and in real waterproofness. All are combined in Miracle's Ceramic Tile Adhesive, finest and most economical tile adhesive in Miracle's entire 20 year history. Really long lasting, too! Try it. You'll be delighted with the way it speeds installations to achieve important savings.

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MIRACLE ADHESIVES CORPORATION

250 Pettit Avenue, Bellmore, L. I., N. Y.

Publications

start on p 236

Full-line flush door catalog

Simpson's most recent publication shows the company's five-ply and seven-ply hollow-core doors, Seven-Eleven ceiling height doors, and bifold doors. Manufacturing details, color photographs of face veneers, and cutaway drawings of door structures are included.

Simpson Logging Co, Seattle.
For copy, check No. 44 on coupon, p 244

How to build a fallout shelter

With the endorsement of the office of Civil and Defense Mobilization, the Structural Clay Products Institute has produced a 16-page treatise on clay masonry shelters. Five plans—including two basement shelters, an underground shelter, and two above-ground shelters—are shown in full detail. Tables chart radiation protection factors, equivalent thicknesses of various materials, relation of overpressures to blast distances, descriptions of shelter categories.

Structural Clay Prod, Washington, D.C.
For copy, check No. 45 on coupon, p 244

How to preserve wood

Architectural Woodwork Institute's new technical pamphlet classifies various softwoods as to decay resistance, charts the preservative treatments available. Complete specification detail for woodwork and preservative treatments are included. Booklet was prepared by the AWI Technical Advisory Committee with the help of Forest Products Laboratory.

Architectural Woodwork Inst, Chicago.
For copy, check No. 46 on coupon, p 244

How to build safe chimneys

Standard recommendations for safe fire-place and chimney construction, complete with drawings and ASTM specifications, make up the latest bulletin from the Clay Flue Lining Institute. Besides the technical information, the booklet presents the sales story for clay linings.

Clay Flue Lining Institute, Akron.
For copy, check No. 47 on coupon, p 244

How to develop a sales manual

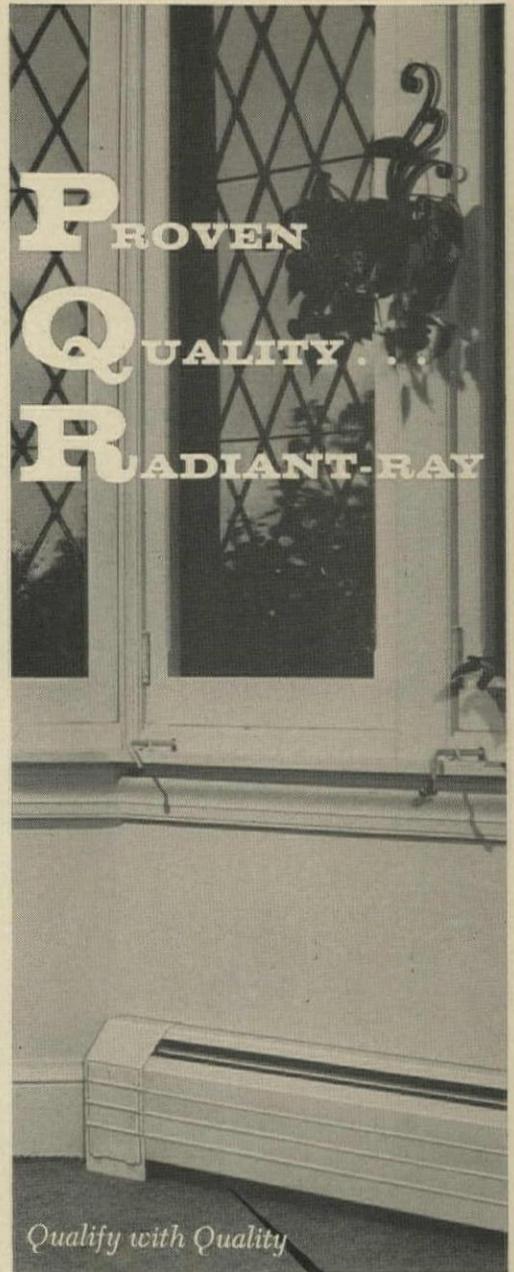
This 12-page booklet tells how to collect information, what to include, how to develop subjects, how to divide work, how to insure full use of manual. The booklet is not aimed at any one business; suggested copy for index tabs covers 13 main titles, and 90 subtitles.

Heinn Co, Milwaukee.
For copy, check No. 48 on coupon, p 244

Welding steel fittings

Nibco's new line of Husky welding steel fittings are presented in a new 10-page catalog. The opening pages show the virtues claimed for the new fittings; the last spread gives technical data and tables of performance, materials, and properties. Catalog pages list nominal sizes, thicknesses, and weights for each type: reducers, elbows, tees.

Nibco Inc, Elkhart, Ind.
For copy, check No. 49 on coupon, p 244



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For modernization of present structures or installation in new building, specify and insist on Radiant-Ray baseboard radiation. Get all the cost-saving advantages of hydronic heating plus the proven quality of Radiant-Ray, the most complete baseboard line in the industry... IBR approved ratings. Buy from this one source and fulfill every heating requirement in home, apartment building or institution.



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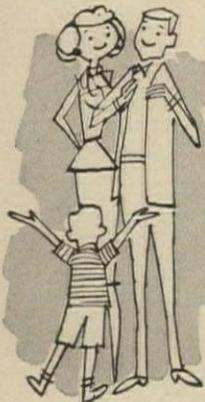
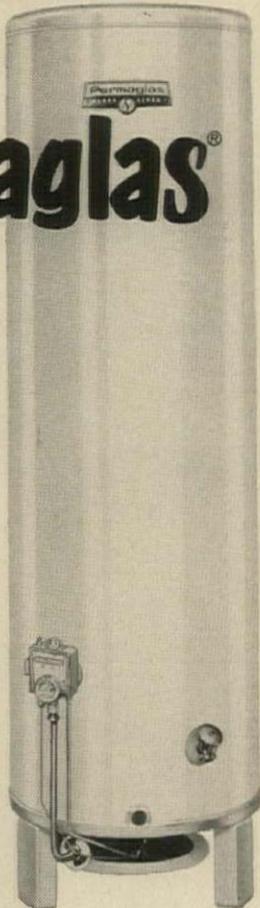
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Building product catalog

Ruberoid has just brought out a full-line catalog of its current products including the products of the Mastic Tile Corp acquired last year. Separate sections cover the various types of asphalt shingles, asbestos-cement siding, asbestos building board, roll roofing, insulation, built-up roofing, gypsum wallboard, roof coatings, plastic cements, asphalt and vinyl asbestos tile.

Ruberoid Co, New York City.

For copy, check No. 50 on coupon below

New load-center equipment

Walker's Speedfax devices are shown in a new 40-page catalog in four categories: fusible load centers, small fusible devices, circuit-breaker load centers, special application devices. Sizes, loads, wiring diagrams, and prices of all devices are given.

I-T-E Circuit Breaker, Philadelphia.

For copy, check No. 51 on coupon below

All about swimming pools

Paddock Pools has a new 22-page brochure covering all aspects of pool financing, construction, outfitting and maintenance. Booklet discusses what the customer should look for before he builds, what kind of pool to build, and where to put it. It covers engineering detail in a good pool system, surface finishing, filtering, heating. A four-page foldout back cover shows typical pool accessories.

Paddock of Calif., Los Angeles.

For copy, check No. 52 on coupon below

Architects' own homes

Four-color 16-page booklet from California Redwood Assn features the houses of more than 20 leading architects—all of which use redwood prominently. Houses are drawn from all over the US. Uses cover all indoor and outdoor areas.

Calif. Redwood Assn, San Francisco.

For copy, check No. 53 on coupon below

Want more information?

The numbers below are keyed to the items described on the New Products and Publications pages. Check the ones that interest you and mail the coupon to:

House & Home Room 1960, Time & Life Building
Rockefeller Center, New York 20, N.Y.

NEW PRODUCTS • July

1. Simpson Easy Wall panels
2. Iron Fireman horizontal furnace
3. Sta-Brite ceiling
4. Diffusa-Lite ceiling
5. Guth ceiling louvers
6. O'Keefe & Merritt oven
7. O'Keefe & Merritt range
8. Whirlpool ice maker
9. Whirlpool gas refrigerators
10. Nutone oven hood
11. Jensen Contour sinks
12. Roper drop-in range top
13. US Plywood Charter Cherry
14. Panelboard tileboard
15. Ifo ceramic tile
16. Mastic Tile Antiqua
17. Johns-Manville vinyl tiles
18. Amtico Textura vinyl
19. Vector Gas-cool conditioner
20. Hahn portable bender
21. Universal-Rundle non-sweat tank
22. Celotex frame locator drywall
23. Jensen-Lewis prefab awnings
24. Raynor Fiberglass door
25. National Gypsum acoustic tile
26. Bernard Edward plastic panels
27. Panelmode enclosure panels

PUBLICATIONS

28. St Regis Panelyte manual
29. Luxtrol design brochure
30. Aluminum Ltd booklet
31. Mississippi Glass booklet
32. Vico tile catalog
34. Briggs bathroom planner
35. Moe Light's recessed lighting
36. Kentile flooring manual
37. Bennett-Ireland fireplace guide
38. Sheet-Board data
39. Wasco decorative plastics
40. Evanite plastic sewers
41. 3M construction adhesives
42. Schlegel door mfrs list
43. Schlegel window mfrs list
44. Simpson door catalog
45. SCPI fallout shelters
46. AWI wood preservation
47. Clay Flue Lining booklet
48. Heinn Co sales aids
49. Nibco steel fittings catalog
50. Ruberoid product catalog
51. I-T-E load-center equipment
52. Paddock pool guide
53. Redwood uses in architect's homes

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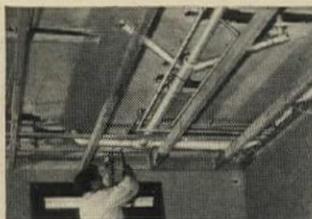
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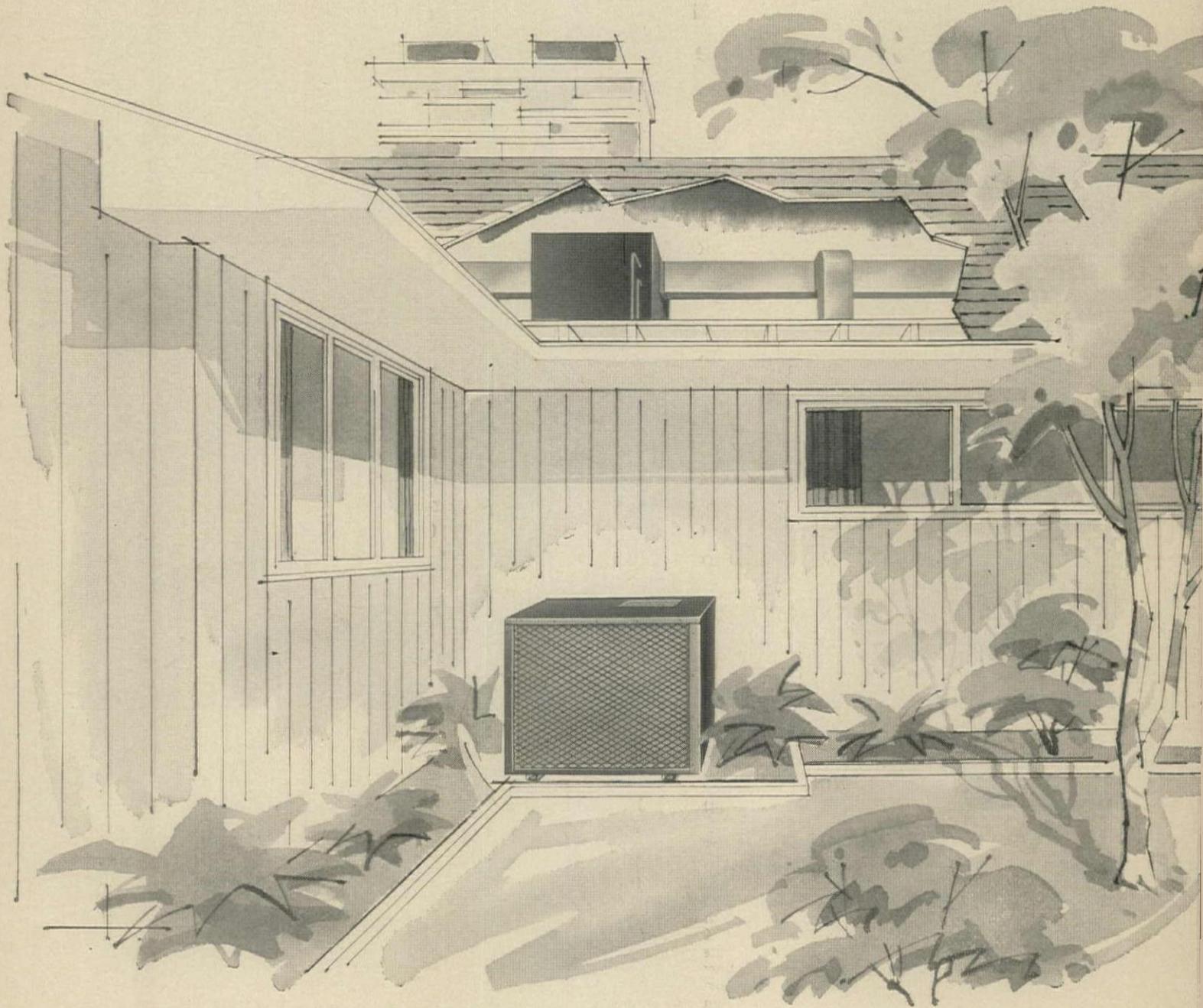
Lightweight—easier installation



Compact connections—save space



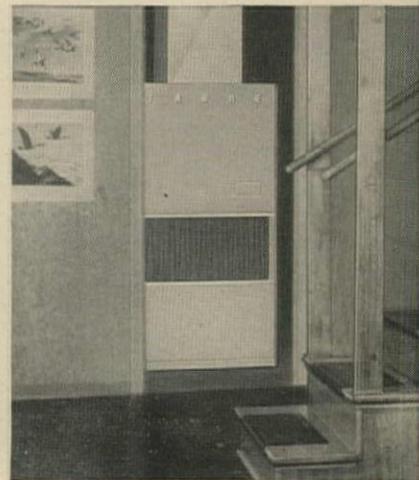
Now!...Trane brings complete air conditioning



1. Heat, cool entire home with a new TRANE air-to-air Heat Pump! Here's big building quality air conditioning, engineered to meet residential needs. This new TRANE Heat Pump operates *electrically*; uses no water, requires no fuel, provides heating in winter, cooling in summer. On cooling cycle, it operates as a conventional air conditioner, extracting heat from the home. On heating cycle, the action is reversed: heat from outside air is picked up by the refrigeration system. This, plus heat from the compressor is delivered into the residence. For colder climates, electric auxiliary heating units are available.

An outside unit is usually located on the ground, with the indoor unit in the attic, crawl space or basement. No chimney or flue is needed. A ductwork system delivers both cool and warm air throughout the dwelling. The new TRANE air-to-air Heat Pump is available in 2, 3, 5 and 7½ hp capacities to heat and cool any size or type of home.

2. Year-around air conditioning for homes, stores, offices with this TRANE water-to-air Heat Pump. Easy to install, completely factory-wired, the TRANE water-to-air Heat Pump provides year-around comfort for homes, stores, offices. The modern, compact cabinet takes little floor space, may be installed within or outside of the conditioned area. Quiet, efficient, vibration-free, this unit meets every requirement in areas where water supply and disposal is adequate. It's available in 5 sizes: 3, 5, 7½, 10 and 15 tons.



you 4 ways to provide —at competitive prices

A new, compact Heat Pump—plus heating-cooling systems for any home, in any climate—add salability to your homes, while holding building costs down!

HERE ARE FOUR practical ways you can offer complete, year-around air conditioning in the homes you build—and still keep your prices competitive. New TRANE Climate Changer units give you an almost unlimited choice of system for heating, cooling—or *both*. And this is *quality* air conditioning—manufactured by a leader in big building systems. It's *matched* equipment, produced in a new, modern factory designed exclusively for the manufacture of "package" heating, cooling units that are *built together to work together*.

Latest addition to the TRANE residential Climate Changers is the industry's newest line of heat pumps, air-to-air or water types. Compact, efficient, they're easy to install . . . provide

year-around comfort. Best of all, these new TRANE Heat Pumps (air-to-air type) tuck away in attic, crawl space, basement or garage; take no usable floor space. Outside unit is neat, inconspicuous, with upward air discharge for quiet operation, location flexibility.

The name TRANE on your heating-cooling system means full capacity, trouble-free operation. Each system is carefully installed by a selected air conditioning contractor. A TRANE system marks yours as a quality home! For complete facts on the TRANE Climate Changer line, just call your nearby TRANE Sales Office . . . it's listed under "Air Conditioning" in the Yellow Pages. Or write TRANE, La Crosse, Wisconsin.

For any air condition, turn to

TRANE

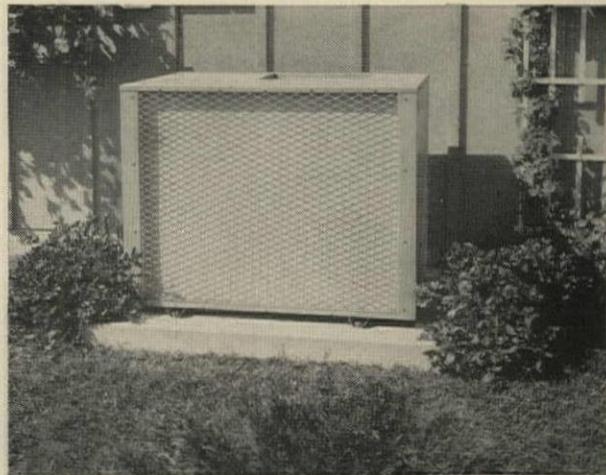
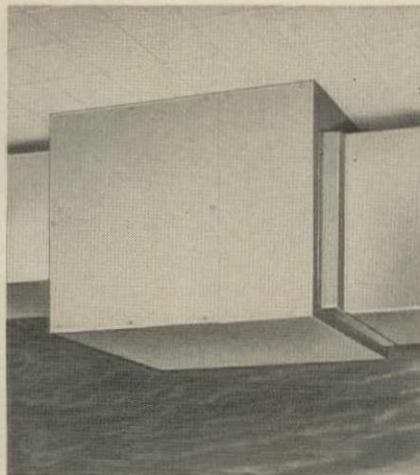
MANUFACTURING ENGINEERS OF AIR CONDITIONING,
HEATING, VENTILATING AND HEAT TRANSFER EQUIPMENT

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3. Combination furnace and air conditioner heats and cools any type of home! This TRANE Climate Changer may be oil or gas-fired warm air type (upflow or downflow). Matched cooling unit fits on the furnace, may be installed with the furnace or added later—so you may offer *optional* cooling! Heating, cooling use same duct-work, cutting installation costs.

4. Independent cooling, for use with hot water heat or where there is no central heating, is provided by this TRANE Climate Changer Fan-coil unit. Fits into just 5 square feet in attic, basement, utility room or garage. Ideal for use with TRANE Baseboard and other wet heat systems in homes or small commercial buildings. Comes in 2, 3, 5 and 7½-ton models.

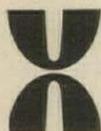
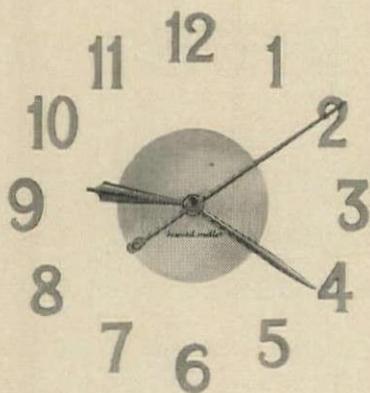
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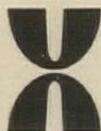
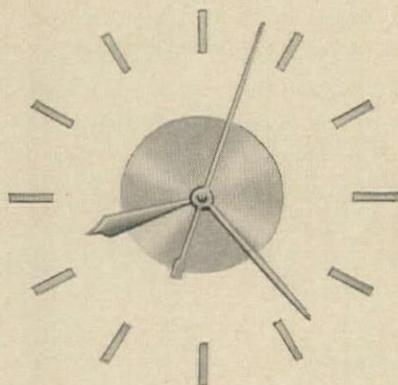
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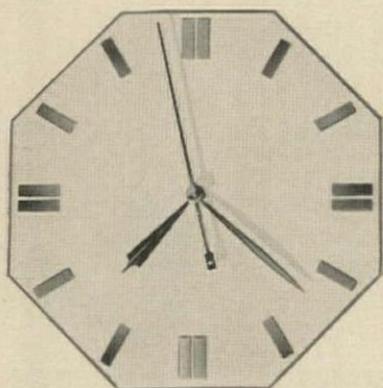
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Page:

- | | |
|----------------|---|
| 158, 159 | Alliance Ware, Inc. |
| 230, 231 | Allied Chemical & Dye Corp. (<i>The Barrett Div.</i>) |
| 186, 187 | Aluminum Company of America |
| 232, 233 | American Biltrite Rubber Co. |
| 245 | American Brass Co. |
| 176, 177 | American Gas Association |
| 58 | American Motor Corp. (<i>Kelvinator Div.</i>) |
| 24, 25 | American Steel & Wire Div. (<i>U. S. Steel Corp.</i>) |
| 35 | American Telephone & Telegraph Co. |
| 227 | Bar-Brook Mfg. Co., Inc. |
| 230, 231 | Barrett Div. (<i>Allied Chemical & Dye Corp.</i>) |
| 235 | Bell & Gossett Co. |
| 239 | Berry Door Corp. |
| 70 | Bird & Son, Inc. |
| 211 | Brikcrete Associates, Inc. |
| 76 | Bruce Co., E. L. |
| 72 | Bryant Manufacturing Co. (<i>Div. of Carrier Corp.</i>) |
| 208, 209 | Bulldog Electric Products Co. |
| 16, 17 | California Redwood Assn. |
| 251 | Caloric Appliance Corp. |
| 219 | Campbell-Hausfeld Co. |
| 226 | Canvas Awning Institute, Inc. |
| 92 | CARADCO, Inc. |
| 204, 205 | Carrier Corp. |
| 228 | Certain-Teed Products Corp. |
| 52 | Colorado Fuel & Iron Corp. |
| 219 | Columbia Mills, Inc. The |
| 181, 182 | Consolidated General Products, Inc. |
| 30, 31 | Crane Co. |
| 173 | Crown Zellerbach Corp. |
| 166, W2, 3 | Day & Night Mfg. Co. |
| 166, W1 | De Marco Cabinet Mfg. Co. |
| 220 | De Vac, Inc. |
| 81-89 | Douglas Fir Plywood Assn. |
| 211 | Ductless Hood Co., Inc. |
| 60 | DuPont de Nemours & Co., Inc., E. I. |
| 222 | Electromode Division |
| 46 | Eljer Division (<i>Murray Corp. of America</i>) |
| 63, 65, 67, 69 | Emerson Electric Mfg. Co. |
| 156 | Farley & Loetscher Manufacturing Co. |
| 10, 11 | Fasco Industries, Inc. |
| 48 | Fedders Corp. |
| 193 | Float Away Door Co. |
| 166A | Flintkote Co., The (<i>Orangeburg Div.</i>) |
| 7 | Flintkote Co., The (<i>Van Packer Div.</i>) |
| 180 | Frigidaire Division (<i>General Motors Corp.</i>) |
| 27, 170, 171 | General Electric Co. |
| 90, 91 | General Electric Co. (<i>Hotpoint Co.</i>) |
| 180 | General Motors Corp. (<i>Frigidaire Div.</i>) |
| 238 | Geneva Modern Kitchens, Inc. |
| 19-22 | Georgia-Pacific Corp. |
| 166, W5 | Gladding, McBean & Co. (<i>Hermosa Tile Div.</i>) |
| 68 | Graham Door Co. |
| 26 | C. Hager & Sons Hinge Mfg. Co. |
| 172 | Hall Mack Co. |
| 57 | Harris Manufacturing Co. |
| 218 | Hastings Aluminum Products |
| 166, W5 | Hermosa Tile Div. (<i>Gladding, McBean & Co.</i>) |
| 12, 13 | Hines Lumber Co. |
| 6 | Homasote Co. |
| 74, 224 | Home Comfort Mfg. Co. |
| 90, 91 | Hotpoint Co. (<i>Div. of General Electric Co.</i>) |
| 166D | House Beautiful Magazine |
| 166, W4 | HOUSE & HOME |
| 58 | Kelvinator Division (<i>American Motor Corp.</i>) |
| 40 | Kentile, Inc. |
| 227 | Keystone Alloys Co. |
| 162 | Knap & Vogt Manufacturing Co. |
| 55 | Koppers Company, Inc. (<i>Wood Preserving Co.</i>) |
| 5 | Kwikset Locks, Inc. |

Page:

214 Lancer Pools Corp.
 201 Leigh Building Products Division (*Air Control Products, Inc.*)
 174, 175 Lennox Industries Inc.
 242 Line Material Co.
 221 Louisville Cement Co.

232 Majestic Co., Inc., The
 240, 241 Masonite Corp.
 62 Mastic Tile Corp.
 248 Miller Clock Co., Howard
 212, 213 Minneapolis-Honeywell Regulator Co.
 243 Miracle Adhesives Corp.
 169 Moe Light Division (*Thomas Industries Inc.*)
 32, 33 Monsanto Chemical Co. (*Plastics Div.*)
 50 Mortgage Associates, Inc.
 249 Mt Vernon Furnace & Mfg. Co.
 210 Municipal Service Co.
 46 Murray Corp. of America, Inc. (*Eljer Div.*)

4 National Concrete Masonry Assn.
 252 National Homes Corp.
 167, 168 National Oak Flooring Manufacturers Assn.
 64 New Castle Products, Inc.
 2, 2A, 2B Nutone, Inc.

3 Olin Mathieson Chemical Corp.
 (*Western Brass Div.*)
 166, W1 Olympic Stained Products Co.
 166A Orangeburg Manufacturing Co., (*Div. of The Flintkote Co.*)
 14, 15, 166B, 166C Owens Corning Fiberglas Corp.

8, 9 Pacific Lumber Co., The
 178, 179 Pease Woodwork Co.
 166, W6 Pioneer Mfg. Co.
 160, 161 Pittsburgh Plate Glass Co.
 39 Plywall Products Co., Inc.
 225 Pottlatch Forests, Inc.
 227 Progress Mfg. Co., Inc.
 234 Preway, Inc.

243 Radiant Ray Radiation, Inc.
 216 Radio Corp. of America
 217 Red Cedar Shingle Bureau
 166, W4 Red Cedar Handsplit Shake Assn.
 198, 199 Republic Steel Corp.
 77-80 Reynolds Metals Co.
 237 Rez Wood-Tones, Inc.
 215 Rock Island Millwork Co.
 194 Roper Corp., George D.
 23 R. O. W. Sales Inc.
 203 Ruberoid Co., The

34, 250 Schlage Lock Co.
 163-166 Simpson Logging Co.
 229 Slide View Door & Window Co.
 244 Smith Corp., A. O.
 219 Smith & Loveless, Inc.
 18 Spotnails, Inc.
 38 Stanley Works, The
 227 Symons Clamp & Mfg. Co.

169 Thomas Industries, Inc. (*Moe Light Division*)
 54 Trade-Wind Motorfans, Inc.
 246, 247 Trane Co., The

66 United States Plywood Corp.
 24, 25 United States Steel Corp. (*American Steel & Wire Div.*)
 206 Universal C.I.T. Corp.
 28, 29 Upson Co., The

7 Van-Packer Chimneys (*Div. of The Flintkote Co.*)
 36, 37 Virden Co., The John C.

223 Ware-Aluminum Windows Inc.
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NOW YOU CAN OFFER YOUR CUSTOMERS

Giant CAPACITY OVENS

EITHER GAS OR ELECTRIC

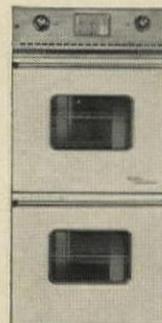
by

Vernois

Removable oven doors
 Full 18" wide inside
 Fits Standard 24" cabinet
 Lift-out racks



GAS Broilmaster Oven

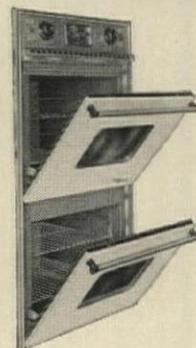


Automatic as a gas oven can be — featuring Robertshaw "FLAME MASTER" oven control with Lo-Temp setting and minimum-flame broiler control. Porcelain or polished chrome interiors.



New 3-burner Shadow-Slim gas surface units with top controls — only 3" deep, installs in 24" cabinet.

ELECTRIC Broilmaster Double Oven



Top oven has automatic clock controls for pre-set oven cooking or broiling. Temperature controlled broiling or baking in bottom oven. Use top or bottom oven simultaneously or independently.

2 Perma-View windows; 2 electric oven lights; electric clock. Available with porcelain or polished chrome interior.



3-burner Shadow-Slim electric surface units have top controls — are only 3" deep, installs in 24" cabinet.

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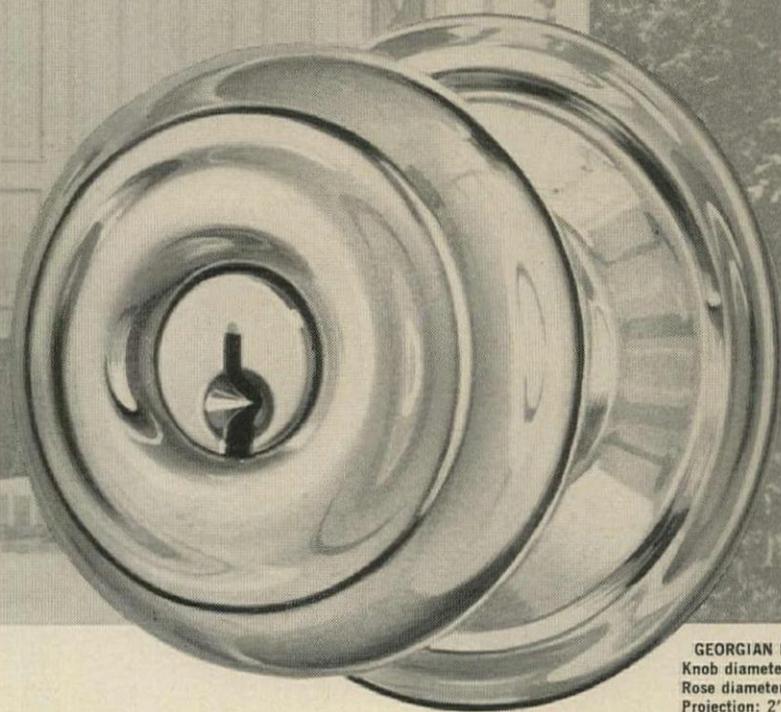
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GEORGIAN DESIGN
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Rose diameter: 2-9/16"
Projection: 2"

Schlage: for locks that match the mode

This new Georgian design complements the traditional mode of architecture. Wrought in brass, bronze, or aluminum, it's *the very thing* for entranceways and for use throughout the home.

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