IUNE 1960 SIX DOLLARS A YEAR-ONE DOLLAR A COPY

ouse

AIA Award-winning Custom Houses

WS BEGINS ON PAGE 43 / NEW WAYS TO BUILD BETTER, PAGE 157 / COMPLETE CONTENTS, PAGE 101





Congoleum-Nairn presents inspired magnificence in fine seamless inlaid vinyl with new sparkling metallic magic

Trade up your homes inexpensively...and make them different. Install Congoleum-Nairn's new luxury vinyl-by-the-yard: Cosmopolitan. Here's a superb sheet of ultra-smooth, *glowing* vinyl...rich yet subtle combinations of precious marbles and sparkling metallics...in a *seamless* vinyl floor of superb smoothness and glow offering the maximum in burnished luster. See all the decorative potentials of Cosmopolitan vinyl—and also learn all about Congoleum-Nairn's new Builders' Selling Aid Program.

ALL PATTERNS ACTUAL SIZE. To the left 6204, upper right 6209, lower right 6200.

SPECIFICATIONS: By the yard, 6 feet wide. May be used on above-grade floors of wood, concrete or ceramic tile, with or without radiant heating.



© Congoleum-Nairn Inc., Kearny, New Jersey, 1960

BUILDER AFTER BUILDER ACCLAIMS THE SELLING POWER OF B&G® Hydronic HEATING



A few of three thousand projected homes in which B&G Hydro-Flo Heating is installed.



Builder is using B&G Hydro-Flo Heating in one hundred homes like this.

The builders of the homes illustrated here have realized that to attract today's critical home buyers takes visible *extra value*... demonstrable *extra quality!*

A "hydronic" B&G Hydro-Flo Heating System does just that ...adds a genuine quality touch...assures the buyer that he is getting more value for his money. It's a matter of record that this forced hot water heating system is proving a sales clincher!

No other equipment can offer so much immediate comfort or so many possibilities for more gracious living in the future. The B&G Hydro-Flo System endows a home with all the essentials of good heating...the right quality of heat... operating economy...and long-lived equipment.

It's cleaner heat—doesn't soil walls and draperies. It's quiet heat—no fan hum. If desired, the same boiler that heats the house can be equipped to furnish year 'round hot faucet water. Summer cooling and snow melting equipment can be included—when building or later. And the B&G Hydro-Flo System can be easily zoned for the ultimate in heat control and fuel economy.



"HYDRONIC HOMES" SALES PROMOTION FOR BUILDERS

A comprehensive program of ideas and sales helps for utilizing the outstanding and exclusive advantages of hydronic heating. There's no obligation in getting all the facts—write today.

Hydro-Flo System Bell & Gossett

C O M P A N Y
Dept. GF-10, Morton Grove, Illinois

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

Madefor Each Ther



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

Monterey

FIAT

shower enclosure

and floor Now you can custom-build a

Now you can custom-build a luxury shower at a cost you never dreamed possible.

The Fiat Monterey Shower Enclosure and floor were designed to help you do just that.

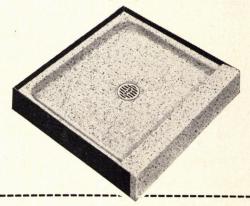
Made for each other. And like the ideal couple who live happily ever after, these perfect companions insure a permanently trouble-free installation.

Construction time is cut to a fraction. The pre-packed, pre-hung, pre-assembled Monterey enclosure saves hours of costly cut-and-try.

32" and 36" models each allow a full 1½" adjustment—¾" on each side of the frame—to compensate for out of plumb openings.

Adjustment is instant—and accurate!

The one-piece PreCast Terrazzo Floor does away with old-fashioned sub-pan, mortar, and tiling construction—slides into place in one simple operation.





100

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

II.	A	1	T
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FIAT METAL MANUFACTURING CO. 9301 Belmont Avenue, Franklin Park, Illinois

Please send me data about the Monterey Shower Enclosure and PreCast Terrazzo Floor.

Name	Title		
Company			
Address			
City	Zone	State	

for 3-way easy sell

build your houses with BIRD'S 3-way protection – top, bottom, and sides

TOP PROTECTION with the mighty self-sealing

BIRD WIND SEAL

SHINGLES

SHINGLES

that even hurricanes don't blow off

SIDE PROTECTION with beautiful new

BIRD-ALCOA ALUMINUM SIDING

that does not rot, rust, or corrode

BIRD TERMITE

That shuts out termites and moisture

THE BIRD "3-WAY-PROTECTION" ANGLE
HAS POWERFUL SALES APPEAL

Advertise it, talk it up, feature it . . . you'll cash in on this unique angle that gives your customers so much lasting protection three ways.

Bird has informative printed matter and strong sales aids on all these products to help you put the story across. Get this material from your Bird salesman or write direct to Bird & Son, inc., East Walpole, Mass.

BIRD & SON, INC.



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READ HOW

WINTER AND YEAR-ROUND AIR CONDITIONING CAN HELP SELL

Notice that we say "electric winter and year-round air conditioning." We're not tolking about ordinary resistance heating. talking about ordinary resistance heating. We're talking about the new American-

Standard Electric Winter and Summer Air Conditioning Systems that can (1) deliver air to every room at exactly the right temperature; (2) deliver humiditycontrolled air in both winter and summer; (3) filter the air to remove pollen, dust and lint; (4) gently circulate the air to freshen it and carry off odors. Only winter and summer air conditioning can deliver these four essentials of comfort!

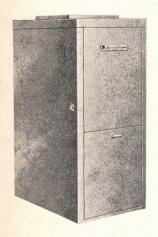
NOW READ ABOUT THE TWO AMERICAN-STANDARD ELECTRIC HEATING & AIR CO SYSTEMS THAT DELIVER THE 4 ESSENTIALS OF COMFORT—AND CAN HELP YOU SELL MORE HOMES! Ordinary radiant electric systems provide heat...but they lack the four essentials to comfort—air circulation ...air filtering ...humidity control ...adaptability to central summer cooling.



American-Standard electric furnace plus add-on summer air conditioner

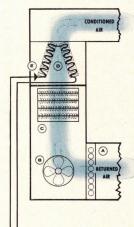
Here is a system for all-electric year-round air conditioning that is practical in <u>any</u> section of the country where electric heating is now being promoted by the local electric utility company. And this

is the <u>only</u> all-electric system that lets you offer your prospects complete winter air conditioned comfort... plus central summer air conditioning as either standard or optional equipment.



IN THE WINTER

This compact American-Standard Electric Furnace takes only 19" by 30" of floor space. It needs no chimney or flue (think of the construction savings right there!), and can be installed almost anywhere in the house—basement, closet, utility room, alcove for both up-flow and down-flow installation. Heating capacity is adjustable to meet exact requirements between 41,000 and 82,000 Btu per hour. Blower capacity will handle up to 5 tons of summer add-on air conditioning—which you can install originally or offer as an option.



When the thermostat calls for heat, air is cleaned as it is drawn through the filter (A) by the blower (B) and is warmed as it travels across the electric resistance heating elements (C). It is then evenly circulated to every room. A measured amount of fresh air is drawn into the system to eliminate odors and control humidity.

IN THE SUMMER

Complete whole-house summer air conditioning is a snap to add to the American-Standard Electric Furnace. All moving parts of the air conditioner are located outside the home in the Condensing Unit. The Condensing Unit is connected to the cooling coils (Evaporator Unit) located in the ductwork, and the furnace blower sends cool, dehumidified, filtered air to every room. There is an Evaporator Unit for every type of duct system, with Condensing Units in 2, 3, 4 and 5 H.P. capacities to cool any size or type home you are building.

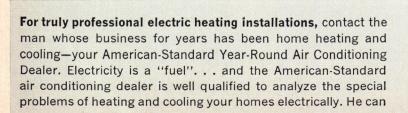






as it is drawn through the filter (A) by the blower (B), then is cooled and dehumidified as it passes through the evaporator coil (D). It is then sent through the ducts to room registers. The heat removed from the air by the refrigerant in the evaporator is carried to the compressor (F). The condensed, hot refrigerant gas moves to the condensing coils (G) where a fan (H) cools the refrigerant and blows the heat away. And this cycle keeps repeating.

The air to be cooled is cleaned



recommend the proper type and size of equipment for your needs. He has both the skills and the tools to do the job right—so you can be sure of long-term satisfaction with little need for call-backs or service. Most important, he's backed by all the technical know-how of the heating industry's leading company—American-Standard Air Conditioning Division.

Two new systems of year-round electric air conditioning

American-Standard year-round electric heat pump

A heat pump is a year-round air conditioning unit that supplies heating or cooling automatically 365 days a year! When cooling is called for, it pumps heat out of the home; when heating is called for, it pumps heat into the home. And with the addition of our

supplemental electric heating unit, the American-Standard Heat Pump is perfect for homes in a surprisingly large part of the United States. Prospects love it—it gives your homes terrific extra sales appeal!

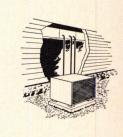


The American-Standard Packaged Heat Pump, consists of an outdoor unit and an indoor unit in just one jacket. It is usually installed through an outside wall of the home so that half the unit is inside the home, half outside—or the entire unit may be put outside and connected through the wall with ductwork. The unit provides the most compact and inexpensive type of year-round air conditioning possible.



The American-Standard Split System Heat Pump consists of two units—an indoor unit with a heating and cooling coil plus an air distribution blower, and an outdoor unit consisting of the refrigerant compressor, fan and a second heating-cooling coil. The indoor unit is located at any convenient place in the ductwork. It is connected by refrigerant tubing to the outside unit, located any convenient place outdoors.







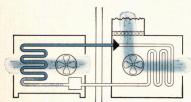




ENTRAL HALLWAY

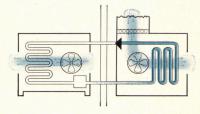


BASEMENT



IN THE SUMMER

In the summer the American-Standard Heat Pump operates in exactly the same manner as the conventional air conditioning equipment described on the opposite page.



IN THE WINTER

In the winter the Heat Pump reverses itself to gather heat automatically from outdoors. Outside winter air, no matter how cold, is warm in comparison with the cold refrigerant coils. So the "warm" outside winter air gives up heat to the coils, warming the refrigerant, which then carries this heat into the home.

Utilities support electrically heated homes with powerful "Gold Medallion Home" Promotions. Here are some examples of the help many electric power companies are giving builders: technical help in making electric heating installations . . . model home displays . . . directional site signs . . . outdoor night illumination for models . . . ads in newspapers and on radio . . . model

home brochures . . . demonstrators in the model . . . an allowance toward the cost of electrical installation work.

Now's the time to get maximum benefit from these incentives. They combine perfectly with the American-Standard Air Conditioning Division Builder Promotion. Contact your American-Standard air conditioning dealer today!

What's new from American-Standard!

NEW ECONOMY DISPOSER

adds that extra touch that delights women. Extra-quiet, continuous feed, and self-cleaning, unit has a durable grinding chamber and stainless steel cutting teeth that can be reversed to double its life.

NEW LOW WATER HEATER

the Arcolow, is just 54½" low to the top of the draft hood in the 30 gallon size . . . can be installed in low-overhead areas where many other heaters cannot. Gas-fired, it has a magnesium anode to prevent corrosion, 100% safety controls, Fiberglas insulation. Glass-lined or galvanized in 30 and 40 gallon sizes. Other gas and electric models in full size and price range. Plumbing & Heating Division, 40 West 40th St., N. Y. 18, N. Y.



WEATHER STATION

Top-quality comfort control your prospects can see! The new American-Standard Weather Station gives your prospects dramatic visible proof of the year-round comfort built into your homes! It reports continuously on indoor temperature, humidity, outdoor temperature and barometric pressure. Push buttons set the system for heating, cooling, or air circulation and filtration only. The automatic clock-thermostat gives 24-hour temperature control. An automatic set-back cuts night-time temperature by five degrees—a strong fuel-economy story for your salesmen to point out. There is even a warning light that indicates when the filter needs changing! Air Conditioning Division, 40 West 40th St., N. Y. 18, N. Y.



CHURCH SNAP-OFF SEAT

and cover make it easier to clean. Both seat and cover are easily removed without detaching hinge posts from bowl. The No. 300, a smart, modern design with streamlined cover, is high-impact plastic. White and colors.

C. F. Church Division, Box 471, Holyoke, Mass.



YOUNGSTOWN KITCHENS new 24-inch Diana Oven-Range

- . . . the only built-in that installs like a base cabinet!
- Cut-out counter top for drop-in surface unit. No sealers to install
 or separate controls to mount.
- 2. Drop-in surface unit. Can be replaced anywhere in counter top.
- 3. Slide-in complete oven base unit under counter. Then make a single electrical connection for both oven and surface units through the front panel. Surface unit can also be installed anywhere along a continuous counter top.
- ... gives a kitchen that "custom-built" look!
- Flush-front fits perfectly with Youngstown Kitchen base cabinets.
- Chrome-lined oven has easy-to-clean removable racks, smokeless broiler pan.
- 4-burner electric surface unit has finger-tip controls on top ...
 easy-to-reach for the housewife, yet safely out of reach of small
 children.

Youngstown Kitchens Division, University St., N. E., Warren, Ohio.

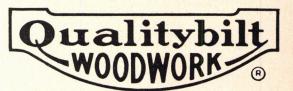




AMERICAN RADIATOR & STANDARD SANITARY CORPORATION



The outlook is always the <u>best</u> with Qualitybilt Wood Windows



Here's a window line so complete that it's bound to suit your requirements. The Qualitybilt Wood Window line ranges from precision-crafted, slimline Casements to the versatile, economical 4-Ways...includes the novel Gliders, Double-Hung, and Picture Units. If it's quality you want...at a reasonable price.. then investigate this full line! There's a Qualitybilt Distributor near you with complete details. See him TODAY, or, write us for full information.

See our catalog in Sweets Architectural and Light Construction Files!

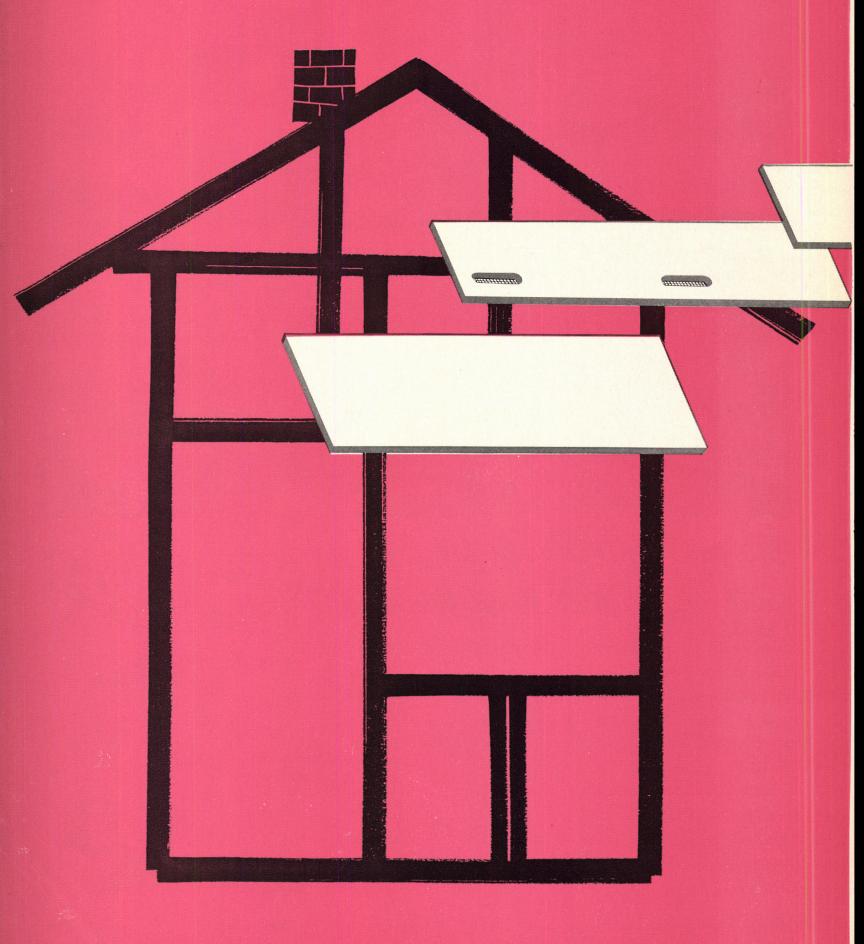


FARLEY & LOETSCHER MFG. CO.

DUBUQUE, IOWA

Entrances / Doors / Frames / Sash / Blinds / Casements / Glider Windows / Sliding Doors / Screens / Combination Doors / Storm Sash / Garage Doors Mouldings / Interior Trim / Sash Units / Louvers / Kitchen Cabinet Units / Cabinet Work / Stairwork / Disappearing Stairs / "Farlite" Laminated Plastics

What size of



READY-TO-APPLY soffits do you need?

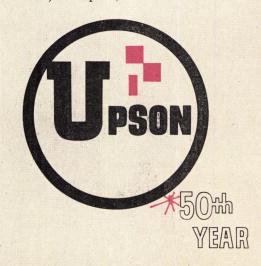
Save hours of on-site cutting and fitting

announa

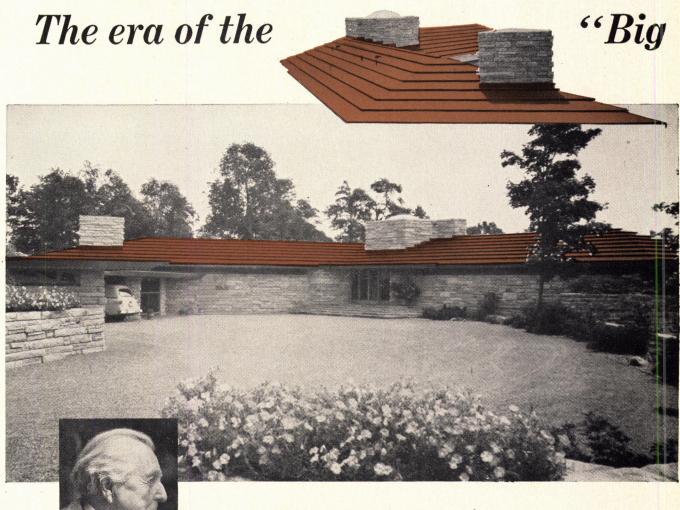
Primed, Vented, Screened • Immediate delivery of Standard Sizes from Stock • 12" -16" -24" -32" 36"-48" widths • 8' and 12' lengths

Savings on hundreds of projects are running 25%. Upson soffits won't crack, split or check. Delivered to your job cut to size, with or without screened vents. Waterproofed, white prime coat finish. Clean, straight edges. Aluminum "H" moulding supplied for strong attractive joint treatment. Excellent painting qualities.

Our technical staff will gladly consult with you on your requirements. Phone, wire or write. The Upson Company, Upson Point, Lockport, New York.



THE UPSON COMPANY • UPSON POINT • LOCKPORT, NEW YORK
PRIMED SIDING • DUBL-BILT • TRIM-BILT • SOFFITS • ALL WEATHER • STRONG-BILT



Frank Lloyd Wright employed

REVERE COPPER

in a dramatic and utilitarian manner on the roof of the I. N. HAGAN residence, Uniontown, Pa.

In residential building today architects are using the roof to do more than keep out the weather. They are designing the roof big... with 3' and 4' overhangs. This makes houses look bigger, gives them more sweeping lines, keeps down heat and cooling loads, reduces maintenance and affords better protection of window and door areas from rain and snow.

To aid the architect in producing the "big roof" effect.

To aid the architect in producing the "big roof" effect there is no material quite like copper. Its ease of workability and fabrication, its flexibility in design, make it the ideal tool in the hands of the master designer. And its qualities of endurance have been unmatched for

A most striking example of what can be done with copper is illustrated by Frank Lloyd Wright's dramatic

use of copper on the roof of the HAGAN residence. The bold scale of the unique stepped design stretches this house out to huge proportions, making it hug the terrain as though it were part of the countryside.

Construction details and application techniques used the property of the country of the country

Construction details and application techniques used to apply the roof were discussed jointly with owner, architect, sheet metal contractor and Revere. In fact, Revere's Research Department and Technical Advisory Service made up models of the recommended details in order to make sure their recommendations were practical. These details were then discussed and accepted by the owner, architect and contractor, and working drawings prepared.

drawings prepared.

Why not call on Revere's Technical Advisory Service to assist in your specifications and planning?



REVERE COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

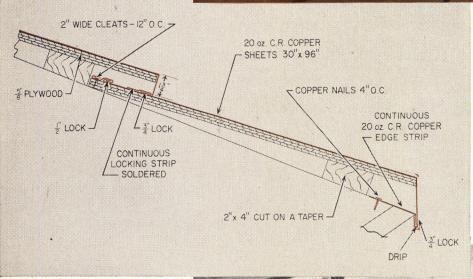
230 Park Avenue, New York 17, N. Y.

Mills: Rome, N. Y.; Baltimore, Md.; Chicago, Clinton and Joliet, Ill.; Detroit, Mich.; Los Angeles and Riverside, Calif.; New Bedford, Mass.; Brooklyn, N. Y.; Newport, Ark.; Ft. Calboun, Neb. Sales Offices in Principal Cities, Distributors Everywhere.

Roof" points to a new era for the ALL-COPPER ROOF

9,000 LBS, OF 20 OZ. REVERE COLD ROLLED COPPER used on the roof were supplied to the Sheet Metal Contractor, HENRY J. COOPER COMPANY, Uniontown, Pa., by the Revere Distributor, WILLIAMS AND COMPANY, INC., Pittsburgh, Pa.





DETAIL SHOWING stepped design and how continuous edge strip was applied. Distance between seams was 23" to the weather using Revere 20 oz. 30" x 96" copper sheets.

CLOSE-UP SHOWING full support between horizontal battens, as suggested by Revere's Technical Advisory Service after careful study. Expansion joints were made 24' apart. General Contractor was HERMAN H. KEYS, "Master Builder," Uniontown, Pa.



Only Hotpoint gives you so



Model RJ76-A right-hand control panel

Model RJ77-A left-hand control panel

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

NEW hood-fan automatically removes cooking odors during broiling and barbecuing.

NEW control panel comes mounted on side that fits your kitchen plan best.

NEW ventilation system circulates more even heat over every inch of each shelf for better baking.

NEW mirrored window gives a clear view inside when oven lights are on, but with them off the window acts as a mirror, hiding the oven interior.

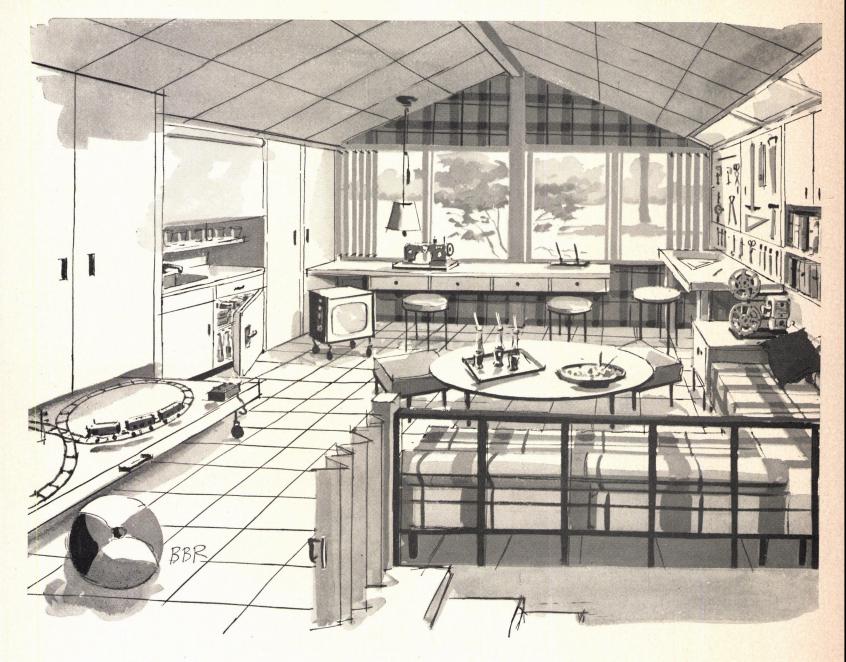
NEW full-width door lifts off; new chrome floor liner, oven units and broiler spatter guards remove for faster, easier oven cleaning.

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



New Hotpoint CREST Surface Section with Cook Book Controls and Calrod® Recipe Heat Units

Now you can offer your prospects an end to cooking guess-work and an aid to recipe-perfect meals every time. One glance at Hotpoint's simple Cook Book instructions on the control panel shows how to enjoy the easiest cooking ever. One touch of a button lets your customers cook with Recipe Heat... heat as accurately measured as the ingredients of any recipe. And with the temperature-controlled Supermatic unit any pot becomes an automatic cooking utensil.



How to boost profits by raising roofs

Most growing families need more living space. You can give it to them with C.I.T.'s Property Improvement Plan. You can push out a dormer in the attic or build a complete second story; add a new wing or completely remodel a home.

The C.I.T. Plan rounds out your remodeling package. It helps you close in two fast steps: (1) estimate the job, and (2) close the sale by quoting low monthly payments. Use this plan to upgrade the sale, sell a more extensive job. There's no down payment—up to 60 months to repay, and

Credit Life Insurance on the unpaid balance.

More than seventeen million families have used financing by C.I.T.—the nation's *largest* independent finance company. 400 offices, coast-to-coast, assure you of quick approvals and dependable service. Find out how you can increase your property improvement business with the Universal C.I.T. Property Improvement Plan. Call your local Universal C.I.T. representative, today. Or write: Universal C.I.T. Credit Corporation, 650 Madison Avenue, New York 22, New York.



Property Improvement Plan



A scant 1% inches thin, a sleek 4½ inches low—Arvin Invisa-Line low wattage baseboard brings you an exciting new dimension in electric heating. Here is a unit that hugs the wall and disappears from conscious view once installed, and it's yours exclusively from Arvin, world leader in portable electric heat and pioneer in electric heating for more than a quarter of a century.

Electric heating is here and rapidly growing in acceptance. Team up with Arvin, foremost in styling, safety and merchandising know-how to assure yourself the biggest possible share of business from the expanding electric heating market. Compare Arvin electric baseboard with any other unit. See the difference in size. Check the safety difference in wattage. And note the tremendous selling advantages Arvin offers you with its established and accepted brand name that's nationally advertised . . . plus a hard-hitting merchandising program designed to help make your Arvin electric heated homes the easiest of all to sell!

HERE'S HOW INVISA-LINE HELPS YOU SELL HOMES

BRAND ACCEPTANCE—Millions of families enjoy Arvin products, advertised nationally in leading magazines. The Arvin brand name is presold and is recognized as the *leading name* in portable electric heat. These factors combined help assure ready-made acceptance for Arvin *baseboard* heat!

RESEARCH—Serving the Arvin family of finer products, manufactured in 15 Arvin plants, are the extensive Arvin research and development facilities, where Arvin electric baseboard heat was designed using 27 years of experience. The result—the most advanced heating systems available to builders.

PRODUCT EXCELLENCE—The exclusive design and construction of Arvin baseboard heat adds extra selling power to every advantage of electric heating.

GREATEST EYE-PLEASING DESIGN AND SAFETY—
Arvin baseboard heat's unmatched trimness blends easiest into any decor, and its low wattage assures safest possible performance.

THE QUIETEST, CLEANEST, FASTEST HEAT—Arvin's heating element is mounted on floating holders to eliminate all

THE QUIETEST, CLEANEST, FASTEST HEAT—Arvin's heating element is mounted on floating holders to eliminate all expansion and contraction noises. The natural convection of the heater provides uniform air circulation as the high-capacity heating

element produces heat faster and more efficiently

MOST ACCURATE HEAT CONTROL—Individual thermostats provide individual room-comfort control . . . plus the unparalleled economy that results from this flexible heat control. And for absolute safety in controlling heat output, exclusive Arvin "heat-limit" safety thermostats, build into each baseboard section, prevent overheating.

LOWEST INSTALLATION COST—Arvin baseboard heat eliminates the need for expensive central heating plant installation, saves approximately 15 square feet of floor space at \$10 to \$15 per foot, plus a chimney at \$80-\$100, and all ductwork. What's more, Arvin baseboard heat sections are *pre-wired* for connection at either end, saving you the time and labor costs of wiring-in."

GREATER HOME VALUE—A home electrically heated with Arvin baseboard units is a better-built home, because it is equipped with the most advanced and efficient of all electric baseboard systems and represents greater loan potential. Remember, too, a warm air furnace requires replacement or major repair every 10 years, whereas electric heat units, with no moving parts, have a life expectancy of 40 to 50 years!

ARVIN ELECTRIC RADIANT CABLE HEAT

The finest in completely concealed heat. New! No braid or loom required; cold leads have heavy, UF-type insulation. Easily installed with new-design staples. Nickel-chrome elements.



ARVIN WALL THERMOSTATS

Single and double pole models. Fast reaction, dependable operation. Element reacts to both room air temperature and radiant heat. Flushmounting; wires from front.

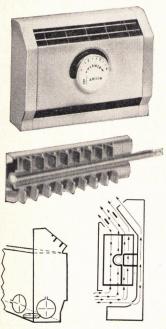




TAKES THE LEAD IN ELECTRIC HEATING

Setting the pace in <u>size</u> <u>safety</u>, <u>sales</u> <u>appeal</u>

ARVIN INVISA-LINE ELECTRIC BASEBOARD HEAT



ARVIN THERMOSTATS—For economical installation of Arvin electric heat—small, compact, convenient thermostat baseboard sections are available. Each perfectly matches other sections to provide a neat, inconspicuous installation. Arvin baseboard thermostat sections save the cost of "wiring in" a wall thermostat. Arvin wall thermostats can be used if desired. In addition to baseboard thermostat sections, one or more Arvin "heathimit" safety thermostats are pre-wired into each regular section, depending on length. This safety feature, pioneered by Arvin, makes the safest heat even safer!

ARVIN HEAVY-DUTY FINS—Faster, more efficient heat transfer—from heating element to fins to room—is assured by advanced Arvin engineering. The extra-heavy continuous fins are an integral part of the thick metal section that is welded to the entire length of heating element. To assure long, trouble-free life, heating element temperature is held to one-third of rated capacity. Heavy-duty heating element is fully guaranteed for five years, can be expected to last indefinitely!

ARVIN DESIGNS FOR BEST AIR FLOW—The efficient air flow through Arvin baseboard units is indicated by arrows. Cool air enters bottom of unit, passes over radiating fins where it is warmed and is then radiated outward and convected upward. Secondary air passage in rear of unit keeps back cooler and aids air circulation. New chrome baffle attaches to front of fin section, reflecting heat into air passage to further increase warm air circulation efficiency.

Three Knockouts in Both Ends Simplify Wiring



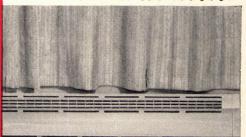
High Wattage Baseboard—2" wide, 6" high. Approximately 300 watts per linear foot. 2150 to 7270 BTU output, and 2867 to 9693 BTU output.

ARVIN BUILT-IN WALL HEATERS

A complete line—six fan-forced and radiant models, from 3413 to 13,652 BTU capacities. Instant-heating elements. Each model features Arvin's new-design rough-in box and quick-fastening clamps that greatly reduce installation time and costs.



all you notice is the warmth



WITH ARVIN'S INVISA-LINE UNIT!

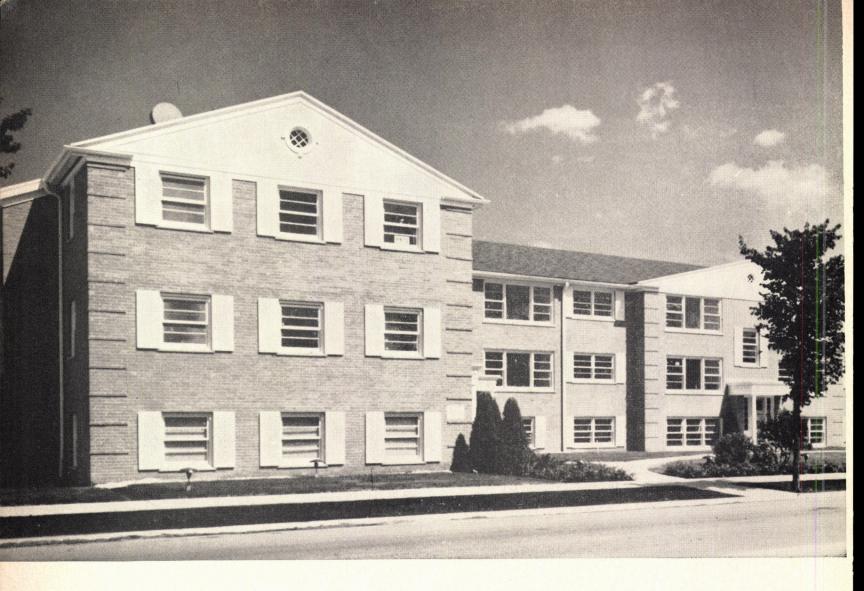
Attractively finished in the finest beige enamel, Arvin Invisa-Line baseboard heat units blend beautifully into any room in any style home. The low, slim design hugs the wall in such an inconspicuous manner, Arvin baseboard disappears from conscious view once it is installed.

Each section can be painted to match walls or baseboard, if desired. Note the handsome chrome top grill that prevents objects from falling into unit and aids in directing the warm air flow outward and upward into the room.

No other baseboard heat offers the over-all trimness of Arvin Invisa-Line, plus true low wattage for maximum safety!



ARVIN INDUSTRIES, INC.
COLUMBUS, INDIANA



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

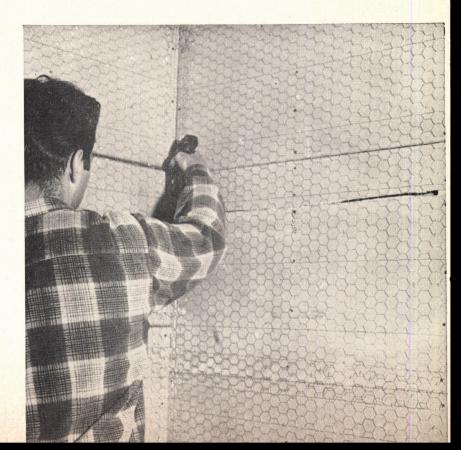
KEYMESH - KEYCORNER -

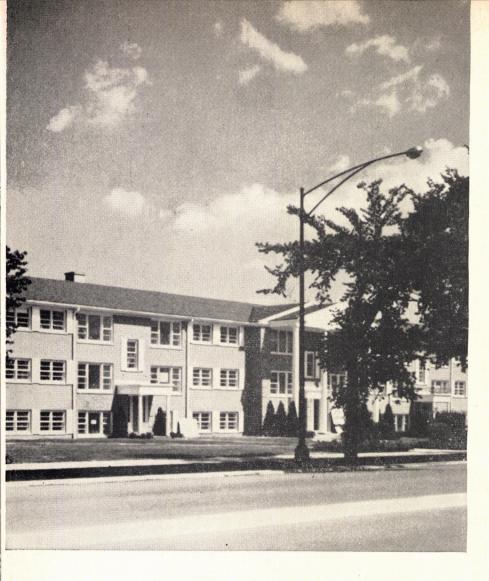
Lasting beauty and low maintenance are built into the new Williamsburg Apartments located in Chicago, Illinois. That's because greater plaster-crack resistance is assured by reinforcing the lath and plaster walls.

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

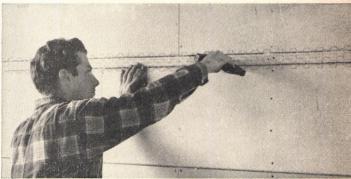
Tiled bathrooms in the Chicago project have lasting beauty with KEYMESH reinforcement. The portland cement plaster reinforced with Keymesh provides a strong, maintenance-free base for the tile. You'll find Keymesh makes any gypsum lath and plaster wall stronger and more crack resistant.

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





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



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



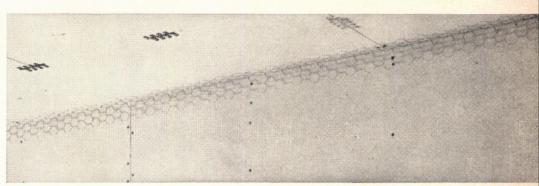
three keys to stronger plaster

KEYSTRIP GALVANIZED REINFORCING LATH

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

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

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





KEYSTONE STEEL & WIRE COMPANY

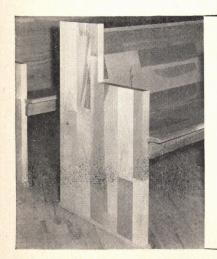
Peoria 7, Illinois

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

JUNE 1960 29



MOST VERSATILE NEW WOOD



DEALER MAKES PEWS

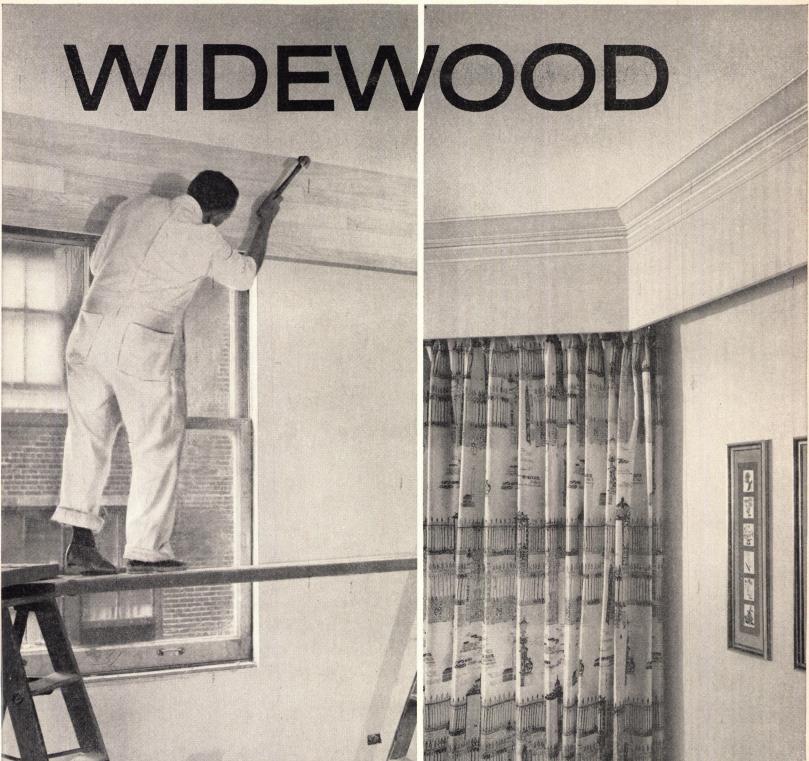
OF WIDEWOOD

Here's another use of Hines Widewood, typical of its versatility. The H. L. Taylor Lumber Company of Wadley, Alabama, not only secured the lumber order for the New Hope Christian Church, but also made the pews of Widewood quickly and economically in the yard's own shop.

THINK OF ALL THE WAYS YOU CAN USE WIDEWOOD

Superintendent Larry Dawson and Head Carpenter Einar Bergstrom of Chicago's world-famous Drake Hotel have discovered that Hines Widewood fills certain material needs better than any other wood product. They chose Widewood for ceiling box beams in the Drake's American Room because of its long length, sufficient width and clear surface, which took walnut stain handsomely. Widewood was also used for valances in remodeled rooms because of its convenient length and resistance to twisting, warping or splitting. Solid wood edges were another advantage.

Hines Widewood is made from selected pieces of top quality kiln-dried Ponderosa Pine, precision joined



ROOM REMODELING PROJECT AT DRAKE DEPENDS ON WIDEWOOD FOR VALANCES

PRODUCT SINCE PLYWOOD!

and electronically bonded with waterproof glue. The resulting bond is stronger than the wood itself. Widewood can be made on special order up to 50" wide, 4" thick and 24' long. Available in choice of standard sizes in three grades—common, select, and 100% clear.

Ideal for fascia, counter and table tops, cabinets, soffits, closet wall units, open or enclosed shelving—anywhere that extra wide or extra long material is desirable. It's easy to work, too!

Unlike plywood, Widewood has edges that hold nails and screws, need no special finishing. It comes in wider widths than lumber, with less tendency to warp. Accurately milled and machine sanded by Hines. Prove its advantages to yourself by actual use. Send for free samples today!

Just call or write the man from HINES

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

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Please send me free so	imples and information abo	out Hines Widewood.
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Title		
Company		
Address		
City	Zone	State



There will be 390 attractive homes like these in the first section of Steeple Chase—1200 in the whole community. All will have the same basic floor plan and General Electric *Thinline* air conditioning.

"Home buyers want luxury," says St. Louis builder . . .

\$11,800-\$13,800 homes sell fast; air conditioned by General Electric Built-Ins with the decorator baffle



In the living room of a model home, the baffle of the Built-In *Thinline* Air Conditioner is painted to match the walls.

A contrasting color adds a modern touch to a bedroom. Baffles also can be papered, panelled, or hidden by a picture.



Two Built-In *Thinline* Air Conditioners cool and dehumidify an entire house in Steeple Chase, the new community we're building," says Robert Edwards, president of Robert Edwards, Inc. "House-hunters like the luxury of air conditioning. They're buying our houses faster than we can build them.

"People also are impressed by the interior baffle on General Electric Built-In units. They like an air conditioner that can be decorated to disappear!"

All homes in Steeple Chase have 1,051 square feet of floor space. A Built-In *Thinline* of 9,500 BTU* capacity in the living room and another Built-In unit of 5,300 BTU's in the master bedroom take care of all five rooms. *Thinline* cases are installed as part of the wall during construction and the unit is slid into place when the house is completed.

General Electric's Golden Value Line of the 60's includes 18 room air conditioner models ranging from 5,300 to 16,000 BTU's. There's a *Thinline* for every air conditioning need . . . to fit almost every wiring and installation problem.

See your General Electric representative and get all of the facts. General Electric Company, Room Air Conditioner Department, Appliance Park, Louisville 1, Kentucky.

*Cooling capacities are tested and rated in accordance with NEMA Standard CN 1-1958 and are stated in terms of British Thermal Units,

Progress Is Our Most Important Product

GENERAL ELECTRIC

Harold Berry and associate, Donald Speck, reached new heights in concrete drama in the \$6.5 million Home Furnishings Mart at Dallas, Texas. And they used only standard Vibrapac block,



look how beautiful walls can be ... with Standard Vibrapac Block

Yes, it's true! Nothing but standard Vibrapac block was used in these walls. Yet look how dramatic they are. The secret, of course, lies in the creative imagination of contemporary architects who see in concrete masonry a new idiom for creative expression.

Consider the boundless patterns available with standard block, then review its proven features: permanence — high acoustical and insulating values - low maintenance cost - and, above all, its priceless fire safety and storm safety. Small wonder this trusted old friend, Vibrapac Block, is sparking architects and sparkling walls everywhere. Keep it in mind for forthcoming projects.





Put Pella's creativity
to work for you!



Casements like these can be the best-selling feature in your next house

Here's a four-way sales assist in one up-to-the-minute window design. From the quality shops of Pella: casements with removable muntins!

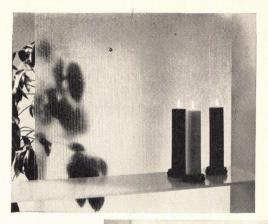
This creative development means you can offer the elegance of small-pane glazing without incurring its higher cost. The snap-out, snap-in feature comes as a happy surprise to prospects worried about window cleaning and painting drudgery. And, best of all—you can offer buyers a voice in both the exterior and interior styling of their house by letting them

choose from the three removable muntin patterns available in each size.

Then there's the glass! You'll be calling close attention to these sales-worthy casement windows — and nothing will spoil your demonstration. Because Pella glazes with the finest!

As a supplier of glass to practically all pre-glazed sash makers, American-Saint Gobain salutes Pella and its worthy colleagues for their high standards of quality and creativity.





BATHROOM TREAT-MENT. No self-conscious hole-in-the-wall window for this bath. Panels of totally obscuring Blue Ridge Huewhite® fill it with softly diffused light, add elegance and excitement. (The shower enclosure is linex®.)

Get more merchandising mileage per dollar with these creative ideas in glass!

A glamorous accent or a dramatic vista -here's the way to achieve either at least expense: through the magic of Blue Ridge patterned glass by American-Saint Gobain. No other material is so bright, so smart, so versatile. An ASG pattern — as part of your house design or its interior decor - adds value far exceeding its cost. In fact, functional glass can replace costlier installations. A patterned glass wall, for instance, eliminates lathing, plastering, decorating on both sides . . . requires far less labor. Here's another plus: You can give your prospect his own choice of a dozen or more ASG patterns . . . or individualize each of your houses by varying the patterns yourself.

At right are a few of hundreds of possible hard-selling extras you can offer with Blue Ridge patterned glass by American-Saint Gobain. Contact your local glass jobber, or our district office nearest you.



SKYLIGHTING. Aftic space is transformed into a smart, unusual studio, with lights of wired glass in the Luminex® pattern with Satinol® finish. This installation adds exterior interest to the house as well.



SCREENING. Glistening
Doublex® makes a dramatic
carport screen or garage
wall... or screens off an
undesirable view. A dozen
other ASG patterns will
accomplish the same purpose —
each with a distinctive flair
of its own.



ENTRANCE TREATMENT.

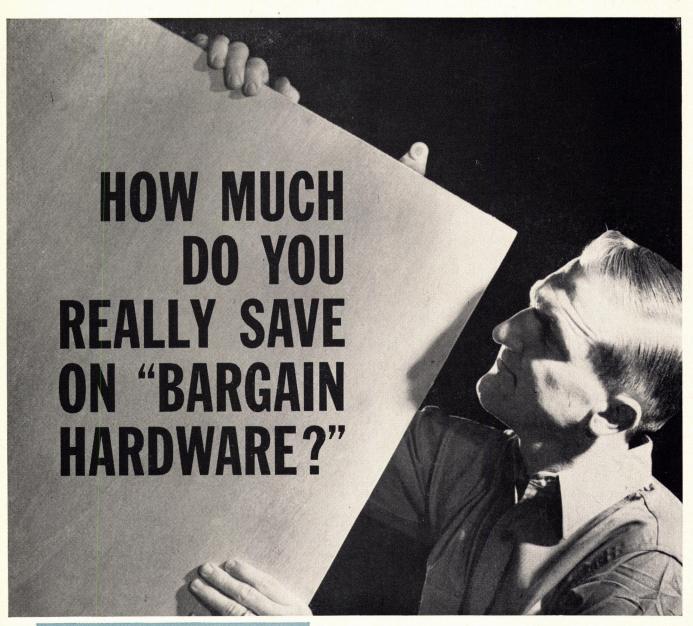
A door flanked by panels of patterned glass by ASG adds both light and beauty... extends a warm, cordial welcome without sacrificing privacy. The glass in the picture is Blue Ridge Flutex[®].

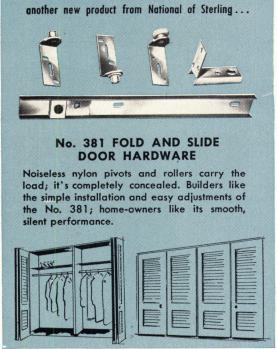


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hardware prevents costly call backs... builds customer satisfaction

Temporary profits don't build a solid business. You may be able to save a few pennies by cutting hardware costs, for instance, but in the long run it's products like National of Sterling hardware that pay off. You stop costly call backs...cut installation time and build customer satisfaction that lasts for years. These are some of the reasons so many prominent builders *insist* on hardware by National of Sterling.

NATIONAL MANUFACTURING CO.

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Now! At last! Specifying insulation to fit the job is as easy as

Air-conditioning experts, electric heating experts, utility experts, insulation experts...all agree on

THE NEW ALL-WEATHER COMFORT STANDARD



How to specify the insulation performance you want:

For superior comfort and economy, for electric heating or for air-conditioning—specify the new All-Weather Comfort Standard:

ALL-WEATHER COMFORT STANDARD

BUILDING SECTION	REQUIRED INSTALLED RESISTANCE	RECOMMENDED FIBERGLAS† INSULATION
Ceilings	R*=19	R = 19 (Super thick) R = 19S (Full thick, Foil-enclosed, ceilings, summer)
Walls	R=11	$R=11 \; (Full \; thick)$ $R=11S \; (Medium, \; Foil\text{-}faced)$
Floors (over vented crawl space)	R=13	R=13 (Full thick) R=13S (Medium, Foil-faced)



R is a new way of stating the installed performance of insulation regardless of the direction of heat flow. The higher the R the lower the heating and cooling costs; the greater the comfort.

R indicates the required installed resistance by number, making it easy to get the proper product performance for the job.

R is a simplified guide to enable you to specify the right insulation.



How to be sure you get the performance you specify:



Here's how the R on the package above helps you be sure. For ceilings, the installed resistance recommended in the new All-Weather Comfort Standard calls for an R=19. The

label on Fiberglas Building Insulation packages prominently displays the installed performance of the product by its R value.

More than ever, it makes sense to specify Owens-Corning Fiberglas Insulation

When you buy Fiberglas Insulation you know what you're getting. Now packages are marked with the R number that indicates the installed resistance of their contents. Along with its certified thermal performance, Fiberglas Insulation is light

in weight, easy to handle, requires little storage space and installs quickly. And Owens-Corning Fiberglas is the name your customers know and prefer on insulation . . . a name people associate with the best new homes.

THE OWENS-CORNING FIBERGLAS INSULATION LINE			
Building section	Installed resistance and appropriate Fiberglas Product		
For ceilings	††R=19 (Super thick) ††R=19S (Full thick, Foil-enclosed, ceilings, summer R=13 (Full thick) R=13S (Medium, Foil-faced, ceilings, summer) R=9 (Medium)		
For walls	††R=11 (Full thick) ††R=11S (Medium Foil-faced) R=8 (Medium) R=8S (Minimum Foil-faced) R=7 (Minimum)		
For Floors (Over vented crawl space)	††R=13 (Full thick) ††R=13S (Medium, Foil-faced) R=9 (Medium) R=7 (Minimum) ††All Weather Comfort Standard Products		



Still America's No. 1 new home building and merchandising program.

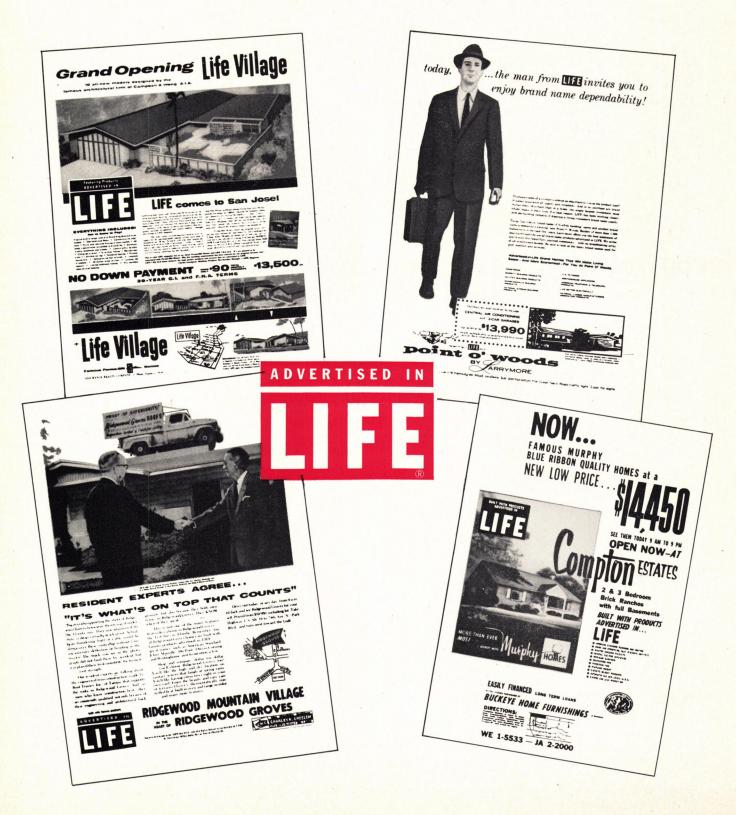
For the complete story on the new standards and on Fiberglas full line of insulation, call your nearest Owens-Corning Fiberglas office, or write: Owens-Corning Fiberglas Corporation, Box 67-F, Toledo 1, Ohio.



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

LIFE in their newspaper ads, because . . . "It helps sell houses."

Simple as that. is a symbol of confidence to 18,950,000 householders — so builders feature it in their own newspaper advertising 3 to 1 over the next two general magazines combined.





COMPLETE HOME ENTERTAINMENT..."In the wall, off the floor, out of the way!" Here the magic of ColorTV 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. Rearventilated model available.



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

Living Color "Mural TV" Built-ins by RCA VICTOR

...sensational salesmen of new homes!

What a drawing card! Builders who are advertising "Living Color" TV Built-ins in their model homes are getting the crowds... and selling their homes. And this new Color TV built-in is simply the leader in the new RCA Victor line... the world's first complete, specially engineered line of built-in home entertainment.

Here is modern design at its best . . . "off the floor, in the wall and out of the way." Here is superb performance in TV, Stereo and Radio . . . what your public expects from RCA Victor. It's the extra value that wins out over competition.

RCA Victor Built-ins are available in a complete line of fashion-leading styles,

with flush-mounted frames in wood finishes to harmonize with any décor. They're 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 financing with you.

Send coupon today.



RCA Sales Corporation Box 1226— A10 Philadelphia 5, Pa.		
Please send full informati "Mural TV" and Stereo	OH OH RECH TROUGH	
Name	Title	
Company		
Street		
City & State		



sections. Your home prospects see this advertising...know that Kentile Floors are top quality, symbolic of fine construction in any home. And, with Kentile, you can have distinctive flooring designs in each of your homes. Talk to your flooring contractor. Remember: "You Get Much More In A Kentile Floor."

Let Kentile's big advertising

help you sell. Get your Free Model Home Display Kit. Write: Kentile, Inc., 58 2nd Avenue, Brooklyn 15, N. Y.





Roundup:

New 'industry' bill would let Fanny May spawn little ones

Another starter in the fast-growing field of housing bills this session is an "industry" bill introduced by Sen John Sparkman and Rep Albert Rains, but cooked up in informal huddles of NAHB, NAREB, and MBA under HHFA chaperonage. Aimed at making Fanny May a more effective central mortgage banking instrument, it would do most of the things to Fanny May that are in Rains' second, omnibus, bill (see p 44) plus 1) put three public members, nominated by the President and confirmed by the Senate, on its board; 2) give it power to charter and supervise a flock of "little Fanny Mays" or federal mortgage investment companies across the nation. With a minimum of \$1 million private capital to start, each could sell debentures to 20 times its capital, use the proceeds to buy FHA or VA mortgages. Though HHFA sparked the talks that produced the bill, it doesn't necessarily approve or disapprove of the results. (For other news on the housing policy front, see next page.)

Every family a home owner in ten years?

The average American family will have an annual income of \$8,500 by 1970, and all families will be able to own a home. This is the forecast of Prof Arthur R. Upgren, head of the bureau of economic studies at Macalester College, St Paul. Upgren bases his prediction on growing productivity and rising wages (he expects national output to reach \$700 billion a year in 1970, says: "I am very conservative, as President Eisenhower has suggested we can reach \$750 billion").

Upgren expects neither inflation nor a drop in interest rates. "The lowered interest rates of the '30s and '40s probably contributed more to the rapid inflation of construction costs than any other price level of equal importance," he contends.

"The low rates were maintained by monetary tinkering. As a matter of fact, only dead economies have no interest rates, and only sick economies have low interest rates. We have shifted to more normal interest rates, and we shall do very well on that basis. Everybody is earning the higher interest charge who has any occasion to pay it. Working men's wages for many years since the end of the war have risen 180% a year. This will pay 1% on an \$18,000 mortgage and give working men all future pay and productivity increases free and clear of a further interest charge."

Still more roadblocks to renewal

Will new federal efforts to get more builders into redevelopment and rehabilitation (News, May) work? Top Washington officials are convinced it is the No. 1 problem to lick if American cities are to rebuild their slums as quickly and economically as possible. But assurances that FHA and URA will smooth their paths as much as they can still don't make renewal look attractive enough to lure many builders. One reason that federal policies can't change much: local public authorities can (and often do) cause as many delays, headaches, as federal agencies. Says Philadelphia Builder Norman Denny: "The [local] government boys' attitude is that if you haven't made \$1 million this year you will next. So whenever you go in to negotiate with them, they act as if you have the guns right out on the table." And builders wonder how much all the talk—both in Washington and the field—of encouraging local redevelopers means when they see Philadelphia's huge Eastwick renewal project, stalemated for nearly a year as rival bidders, each with a different set of political allies, struggle behind-the-scenes to see who will get the \$250 million contract, with its potential \$9 million profit.

WASHINGTON INSIDE: A Democratic senator active in housing was good-naturedly twitted at a recent dinner by a friend who remarked the Democrats have put so many goodies in their housing bills this year, that "the next thing, you'll be letting them include closing costs in FHA mortgages." Deadpan and unaware of the humor, the senator replied: "Well, we may come to that yet." . . . FHA is getting a new assistant commissioner for operations—the fourth man in a year to hold the post. He is Edward J. Dee, who as Ft Worth district director set the whole FHA empire an example by making appraisals "in a goldfish bowl" (H&H, Mar '59). Recently, Dee has been in Washington as a troubleshooter. William Painter, who has been acting assistant commissioner for operations, is shifting to director at Houston-at his own request. . . . Persistent and now-published rumors that FHA Deputy Commissioner Cy Sweet wants to leave the agency aren't true.

The rumors spring from an offhand remark Sweet made when he heard a colleague was headed for a job in the Southwest: "I'd like to find one in the Northwest." . . . The Supreme Court has finally agreed to review blue laws that have crimped Sunday selling in some states. Arguments will be heard in the fall on appeals from Maryland, Massachusetts and Pennsylvania. . . . Election-year jitters won't bother leading housing legislators from the South whose nomination in Democratic primaries are tantamount to election. Among them: Rep Olin Teague (D, Tex.), Rep Albert Rains (D, Ala.) and his old college roommate (at Alabama University) Sen John Sparkman (D, Ala.). Still in doubt is Sen Estes Kefauver (D, Tenn.) whose primary battles (which won't be over until August) have been keeping him so busy he hasn't been able to carry on his threatened investigation of materials prices.

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Election year deadlock?

Nearly everybody wants Washington to tinker with housing—his way. But the conservative coalition will probably keep action to a minimum

Proposals for new legislation to reshape laws controlling housing are popping up in more profusion than usual this spring. One big reason is that, for the first time in years, the Administration has offered no plan of its own for a catchall housing law. So nearly everybody is getting into the act on his own.

The upshot is that Congressional housing subcommittees are considering a clutch of late-starting measures that probably won't become law this year. Some may pass Congress. The Democratic leadership—with one eye on the upcoming Presidential election campaign—is aiming at sending comprehensive legislation to the White House before Congress adjourns next month. But whether it will pass a bill President Eisenhower will sign is another question. The conservative coalition of Republicans and Southern Democrats seems to have enough votes to prevent Congress from overriding vetoes.

Rep Albert M. Rains' so-called "emergency housing bill," is heading on course toward a veto—unless the Senate bottles it up. Last month, it was attacked as a profit-boosting windfall to builders, not a help to the home buying public.

But if little action is in prospect for this year, some of the proposals now getting their first legislative airing may well become some of the most significant housing laws of the Sixties—maybe next year, perhaps later.

Maneuvers to kill the Rains' bill

Rep Albert Rains' "Emergency Home Ownership Act," halfway to the inevitable veto, has been given a crack that might kill it short of the Presidential axe.

The blow fell just after the bill, with its \$1 billion cargo of FNMA special assistance for low-price housing (News, Jan), passed the House 214 to 163 and took its place with a flock of others at hearings by Sen John Sparkman's Senate housing subcommittee. The blow was dealt by Charles Wellman, prominent California Democrat and legislative chairman of the Natl League of Insured Savings Assns. He denounced the last such Fanny May aid (1958's controversial Program 10) as "a windfall to the bulk of the builders using [it]." He said Congress "ought to find out what happened to the \$1 billion spent in '58 and '59 and . . . who is going to benefit from the program in 1960."

His own experience, said Wellman, indicated builders, not buyers, were the chief beneficiaries. "Program 10 didn't lower the cost to the homebuyer in most cases; it merely increased the profit of the builder." And, said Wellman, "I certainly do not believe that the building industry today is in such serious state that a \$1 billion Treasury program is necessary to improve the profit margin of the builder."

With such a blast from a Democrat, the Rains bill's chances in the Senate seemed measurably dimmed. Even while the bill was before the House, it stirred up remarkably little support from industry leaders. Said Rep Charles Widnall (R, N.J.): "I have yet to have a letter from a homebuilder asking for it."

Other denunciations of the par purchase provision came from House Majority Leader Charles Halleck (R, Inc.) who labeled it "political payola . . . \$1 billion worth of baloneyola," and Sen Prescott Bush (R, Conn.), who told MBA's Eastern Mortgage Conference it was:

". . . that billion-dollar backdoor raid on

the Treasury known as the Rains Bill, which goes under the fraudulent title, 'Emergency Home Ownership Act.'" Asked Bush (who is eclipsing Sen Homer Capehart (R, Ind.) as the Administration's chief Senate housing spokesman), "Have you ever stopped to think that the federal government, through FNMA, now holds two-thirds as much in mortgages as it does in surplus farm products, which now total almost \$9 billion?" A good part of Fanny May's \$5.774 billion portfolio is private money, he conceded, but nevertheless, "When the Treasury has slightly over \$2.5 billion invested in mortgages, it is a matter which should be of some concern to the taxpayers."

Only by dint of loud election-year cries that its opponents were "against progress" had House Democrats cracked the coalition of Republicans and conservative Democrats that often kills big spending bills. They passed the bill, but the crack still isn't wide enough to override a veto.

A new 'Christmas tree' housing bill pops up

With the light of his aging emergency housing bill on the wane, Rep Albert Rains has unveiled a Christmas-tree omnibus bill boasting such spectaculars as cabinet status for housing, a new secondary market facility for conventional mortgages, and FHA insurance for land development loans.

Indications are that the bill holds the shape of legislation the leadership will seriously try to push through Congress this session. If so, it is loaded with plums for nearly every segment of the industry. And because it skirts such budget-affecting subjects as public housing and urban renewal, it should be about as hard to denounce as Santa Claus. Main points:

FHA:

Title I home improvement is extended two more years, given another shot of insuring authority.*

Race bias & public housing

Now it's official: racial friction is why so little public housing is being built in northern cities

Testifying before the Senate housing subcommittee, acting PHA Commissioner Lawrence Davern said demand for public housing was "phenomenal" but that, even so, there is no need now for any more than the 37,000 unbuilt units already authorized. Sen Joseph S. Clark (D, Pa.) asked why there is such a gap.

a gap.
"I can answer in one word: integration,"
Davern replied.

"You're candid, anyway," Clark retorted. Then he let the subject drop.

Mortgage insurance also gets another boost in its authorization.*

Down payments are cut even more. The present 3% down on first \$13,500 is eliminated entirely; the 10%-down bracket is extended to \$20,000 and down payments on higher values are cut from 30% to 25%.

Maximum loan limit is increased from \$22,500 to \$25,000.

Maximum loan term is extended from 30 to 35 years.

Insurance premium is cut from ½% to ¼% unless the FHA commissioner makes a formal finding that it would impair FHA's reserves.

Co-operative housing and rental housing programs are amended, with the chief change establishment of a mutual mortgage fund for co-ops to give them "the same financing advantages as those . . . under the regular FHA sales housing program."

FNMA:

Borrowing power: increased from the present 10 times capital & surplus to 15 times.

Advance commitments: authorized for the first time.

Loans: also for the first time, authorized on mortgages pledged by lenders as security.

Special assistance: par purchase made mandatory; fees and charges limited; additional funds provided,* subject to Presidential discretion

Nursing homes: a special fund * established for special assistance to nursing homes built under provisions of the 1959 Housing Act.

Advisory board: 12 members—one from each Federal Reserve district—familiar with problems of the housing industry, would be established to advise FNMA.

A special plum to S&Ls is the provision for a secondary market facility for conventional mortgages. It would be a corporation set up within the Home Loan Bank System, with authority to buy mortgages from members and issue debentures against its portfolio.

VA extension? Congress leans toward voting it

Congress still appears likely to extend VA home loans for World War 2 veterans beyond their June 25 expiration—perhaps to the Jan 31, 1965 cutoff for Korean vets. And despite Administration opposition, proposals to extend benefits to peacetime vets seem also to have a fair chance.

^{*}Dollar amounts are left open, pending completion of hearings on the bill.

Main problem—as every builder knowsis finding mortgage money, with VA's interest rate frozen so far below the market (ostensibly to protect the veteran) that discounts in most parts of the country are impossibly deep. One proposal, by Chairman Olin Teague (D, Tex.) of the House Veterans committee, would let VA issue \$5 billion a year in 41/2 % debentures to finance direct loans.

To give the debentures a flying start, the bill would also authorize the National Service Life Insurance Fund to buy 25% of them. Either plan is a cinch for a Presidential veto.

Hearings on extending VA for World War 2 vets opened briefly last month, then closed again. But they were set to begin again in time to give Congress a chance to consider an extension just before adjourning for the political conventions next month.

Wind on Capitol Hill (housing goals division)

Liveliest verbal sparring so far in debate over 1960 housing legislation is the round between Sen John Sparkman's housing subcommittee and HHFAdministrator Norman Mason over Sparkman's proposal to set an annual national housing goal (NEWS, May).

Mason told the subcommittee that: "statements of national housing policies and objectives are desirable and helpful . . . [but] I do not recommend goals expressed in terms of the number of housing units . . . We must consider the income groups for whom the housing is being provided, the quality of the housing . . the special needs of our people, such as elderly families and minority groups .

Sparkman's proposal to have the President outline how the goal would be achieved is particularly bad, he said, because, "any such assurance would imply some government regulation of the economy if that is necessary to produce the number of units specified."

Sparkman countered by noting that the President himself had just named a Commission on National Goals with Dr Henry Wriston, president emeritus of Brown University as chairman. He also noted FHA Commissioner Julian Zimmerman's remark that cutting FHA downpayment schedules would help reach the 1960 "target" of 1.2 million starts.

SPARKMAN: I do not quite get the distinction between what I have proposed and what you have been doing. You have been setting goals. The only thing I provide for is that this thing be scientifically arrived at.

Mason: I would not claim that I knew everything about the objectives of [The Wriston] committee. [But] the opinion that I formed from talking with them [was] that they were not coming out to say how many houses were needed.

SPARKMAN: Mr. Zimmerman . . . was not timid about setting down the number of units we ought to work toward.

Mason: I am certainly not saying . . . that we do not feel there is a necessity to look ahead to try to estimate what type of housing is needed by the American people . . . so I think we have, in a way, to set desirable levels of attainment. . . .

SPARKMAN: Goals, desirable goals.

Mason: . . . goals in the economy . . . but I think it is quite a different picture when we come by legislation to arrive at exactly what the American public should have because . . . we need we need [then] to specify not just the overall number but the various sectors of the economy that these are going into.

SPARKMAN: I would not advocate legislation that . . . the President would have to designate a certain number and then the country . . . have to see to it that exactly that number is built. That is not the purpose at all. The only purpose of my bill is study and good and careful planning . . .

Mason: . . . we would like to have more funds to scientifically study this market . . .

higher interest rates is the real enemy of

SPARKMAN: I think our committee was unanimous . . . that there ought to be more research and study than you are permitted under the pres-

Sparkman's plan also got lambasted by Sen Prescott Bush (R, Conn). Cried he: "This bill . . . virtually puts the government into the housing business up to its neck.'

Asked Sen Edward Muskie (D, Me.): "Mr. Mason, you are not really opposed to dealing with numbers in this field, are you?"

Mason: I think this is part of the job . . know something about how many houses we think should be started, yes sir.

Muskie: Is there anything in the bill to suggest

that if there is a gap between the number of units that ought to be built, and the number . . . the President expects will be built, the President must submit recommendations designed to close that

gap?

Mason: As I read the bill, there is, yes, sir.

Muskie: Then you read the bill differently. MASON: This probably is a matter of seman-

tics. I think it could be stated so we could agree.

MUSKIE: Are you afraid that if the evaluation . is substantially greater than the number of units which are likely to be produced . . . pressure would increase for more government action?

MASON: What I am afraid of is that we will have to have a completely managed economy.

Sen Joseph Clark (D, Pa.) tried to focus the issue:

CLARK: Mr. Mason, I would like to pinpoint our philosophical differences in a friendly way ... I suggest ... that the difference is that we believe in planning and you do not ... that you think that a free, unregulated and more or less chaotic economy can take care of the housing needs of this nation, and we do not?

Mason: Sen Clark, I think that it is in the

measure of planning . . . Certainly, we do not believe in a 'chaotic' condition.

We believe that there should be a greater de-

pendence upon p ivate economy . . . Our difference . . . is in the degree in which we believe that dependence should be put on the private enterprise system.

Sparkman: I think the difference [is] in the

degree of planning . . .

CLARK: We think the government ought to go

a lot further than you.

Mason: I believe in government leadership. CLARK: Do you not think the government has to know which way it is going to lead?

MASON: I think the government does know . . .

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NEW HOUSING ISSUES—WHERE THE PARTIES STAND

ISSUE

DEMOCRATS

Want mandatory reduction 1/4%, at least for some multi-family rehabilitation and relocation housing.

Reporting fees & discounts

FHA premiums

Would require originating mortgagee to report all charges except normal origination fee on all FHA & VA loans.

Individuals as mort-

Would require FHA approval of individuals as mortgagees.

Extend Sec 220 financing to cities' "grey areas."

Set national housing

Would make areas designated for "conservation" eligible.

Would require President to set specific numerical goal in units for each year, report on how it

should be accomplished.

Experimental houses

Would admonish FHA to consider houses built with advanced techniques for cutting cost without lessening value "sympath-etically" when offered for FHA loan insurance.

REPUBLICANS

Contend FHA reserves, especially for special programs, are not se-cure enough to make this a "responsible" move, but would welcome discretionary authority.

"Unnecessary and undesirable." Current market information adequate; proposed data would be so voluminous it would be too old to be useful by the time it is processed.

Oppose as unnecessary because individuals can now invest in mortgages through approved in-stitutional mortgagees; would be workable only if institutions retained servicing for individuals' account.

Agree wholeheartedly.

Statements of policy and objectives are important, but numerical absolutes imply an obligation to impose controls in other sectors of the economy to assure their accomplishment. Oppose vigorously.

Agree in principle, but feel that insurance under Sec 203 would be "inconsistent with the mutuality provisions" of it and unfair to owners of conventionally-built homes whose insurance is part of the fund. Would accept authorization for a limited, separate insurance program.

AND THE OLD PERENNIAL ISSUES

FHA authorization

Would increase mortgage insuring authority by a specific amount, extend Title I home improvement program, with a similar shot-in-the-arm of authorization.

Public housing

Increase authorized units up to number left from 1949 Housing act.

Renewal grants

Increase available funds by varying amounts depending on the

VA program

Renew World War II program to expire with Korean vets program in 1965; extend benefits to peacetime veterans.

FHA should be able to insure all properties offered for mortgage insurance which meet its standards. Title I should be extended.

No need for further units now.

No need for more funds than already authorized now or for next

Let World War II program die; continue with K-vets, but not extend to peace-time soldiers.



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TUNE IN WESTINGHOUSE-CBS TV-RADIO COVERAGE-PRESIDENTIAL CONVENTIONS, JULY 10-29.

Will second half bring a spurt in starts? Signs of pickup show

Easing availability of mortgage money is brightening the outlook for this year's housing output.

The effect is subtle and, so far, largely psychological. Builders in many cities say sales are picking up. But this trend—a reversal of gloomy reports through the winter's bad weather—hasn't yet shown up in housing statistics. Starts for the first four months of this year are $18\frac{1}{2}\%$ below their 1959 level (see p 75). And every month, the year-to-year gap has been widening. But now, signs grow that the bottom has been reached.

Forecasts by housing leaders are beginning to take on a rosier tone.

"In the last six months of 1960, America will produce more housing units than it did in the same six months of 1959," predicts HHFAdministrator Norman P. Mason. "And it will spend more dollars than it did in the same months of 1959." He adds this caution: "The housing market in the last six months will be pretty evenly balanced between buyers and sellers. It could even be shaded a bit on the side of the buyer. I'm sure sellers in 1960 will not be in a position where there is an automatic instant market for any type of housing they build. Buyers this year are choosy—more selective."

Adds Treasurer Walter Hoadley of Armstrong Cork: "New homebuilding is commonly placed in the weakness category [in the US economy] for 1960 . . . Nevertheless, slightly easier mortgage conditions, lower FHA down-payments, and continuing strong demand for better housing will shift residential construction to the 'plus' side of business by summer or fall."

Most prophets stick to a prediction of 1.2 million starts (counted by present methods) for the year. But James O'Leary, research director for the Life Insurance Assn of America, is more optimistic. "Based on somewhat less of a shortage of residential financing, I think that starts will move to a higher level than most expected early this year," he says. "The total may easily reach 1.25 million if mortgage money is available."

The US—and the world—economy seems to be pointed for a plateau of stable prices, dwindling worry about inflation, and slow (some say very slow) economic growth.

Hoadley, who likes to turn a colorful phrase, calls this prosperous plateau "seething stability." Retail sales are turning up, as are auto sales (the latter often move in step with housing). Indications continue that business will go ahead with planned \$37 billion capital expansion. Intense competition marks both world and domestic markets—as many a building materials' producer knows. Observes Managing Director Per Jacobsson of the International Monetary Fund: "After so many years of rising prices, it will not always be easy for either businessmen or labor leaders, or holders of public office, to adjust their attitudes and practices to the changed situation (ie no inflation). But this adjustment is slowly taking place.

Adds Chairman Raymond Saulnier of the President's Council of Economic Advisors: prospects for economic growth without more inflation "are better now than at any time since the end of World War 2." And, speaking to a meeting of the Natl Assn of Mutual Savings Banks, he added: "I do not speak casually on this subject." One sign; a narrowing of the "considerable" margin between wage increases and productivity. "I believe we are moving toward a national wage pattern that will be consistent with a reasonable stability of prices."

Lower FHA down payments are drawing a "ho-hum" reaction from most builders—which raises the question of what were they shouting so loud about last fall when FHA postponed putting them into effect amid a mortgage pinch.

The new schedule (News, May) is applicable to pending FHA commitments (under Secs 203 (b), 220, 809, and 810) as well as new deals. And it covers existing homes as well as new ones. Typical reaction comes from a Dallas builder: "It's going to make a difference. I don't mean there is going to be a drastic change. It will be slight, but it will still make a difference."

Why people buy

A study of how houses are sold, one of a series by LIFE Magazine's marketing laboratory, has shed some new light on upper-bracket buyers.

- The study was made last fall by interviewing 1,052 home owners in Atlanta, Chicago, Los Angeles, Hartford, Queens, N. Y. and Westchester, N. Y. More than half were owners of \$20,000-and-over homes. But 31% owned homes they valued at \$15,000 to \$19,999. Only 9% valued their homes under \$15,000. Some 82% had bought ready-built houses. Findings:
- House hunting is so extensive that people are more likely to find the home they buy by trial and error than via marketing channels. 42% just saw their home by chance, and another 18% heard of it by word of mouth. 18% were attracted by newspaper ads and 12% were steered by realty men.
- After the price, the amount of space in a house is the most important thing influencing decisions to buy at a given time. One-third of the panel mentioned it. Runner-up reason was good price, financial ability: 16%. Only 12% mentioned they were tired of renting.
- People who build rather than buy from a builder often do so because they want 1) a bigger lot and 2) more facilities for outdoor living. Sewer systems are very important, the panel said, but built-in appliances, FHA approval, and public transit are not.
- Consumers feel today's house values are poor, so price and location are the top two reasons for buying a house at all. Among other things, they attribute this to high land prices and poor workmanship. "I don't think you can get a home that is worth the money anywhere in the Chicago area now," said one interviewee. Complained another: "Labor is getting more money and is extremely careless."
- Buyers have generally favorable impressions of their builders, after living in their homes for a while. 40% called their builder excellent, another 37% good.

Family rooms on the wane?

Family rooms are on the way out in Southern California tract homes.

So says Architect William Krisel, AIA, partner in the Los Angeles firm of Palmer & Krisel, designers of thousands of tract homes.

"People have lived with the family room for a few years now," says Krisel, "and they've decided it just isn't what it was cracked up to be. They would rather have a dining room or a separate den. They especially don't like the family room open to the kitchen. This makes it part of the kitchen. They can't watch TV there—they can't hear it when the water is running. With the limited space in a tract home, families today want a separate room that can be a dining room or a den but closed off from the kitchen. They want more privacy."

Another reason: FHA will not give room credit for a family room open to the kitchen, so Krisel now encloses "family rooms" in 213 sales tracts to boost the room count.

This trend is so new it is not evident yet in most of tract homes on the market, Krisel notes.

*NEWS continued on p 51

Vacancies soar in some cities but the boom rolls right on

Rental starts set a postwar record last year but HHFA predicts this year will be even bigger

The apartment building binge of the past four years has left many US cities with a hangover.

Rental vacancies reached 7.2% nationally in the first quarter of this year, according to the Census Bureau. This is an 18% increase from the year-ago figure of 6.1% vacancies and a 26% increase from 1958's 5.7% rate.

In many areas, the rental outlook is much worse than the national figures indicate. Los Angeles, Sacramento, San Diego, Phoenix, Seattle, and Columbus, Ohio have vacancies substantially higher than the national average. In some suburban areas it is well over 20%, sometimes as high as 40%. Even in traditionally strong rental areas like New York, Washington, Chicago, where the vacancy rate hovers at a tight 2%, there are signs that the market is getting softer.

Some symptoms of the apartment surplus have not been seen since the depression. Samples: concessions to tenants of up to two months free rent, sub rosa price cutting (a \$90 apartment for \$80 and "don't tell your neighbor"), paying tenants' moving expenses. To fill empty apartments, many landlords willingly redecorate, look on children with a kindlier eye.

The problem is simply too much, too soon. The rental market has been heating up slowly since 1956 when, under the impact of the FHA windfall scandals, it struck a postwar low. But rental investors too often build by the seat of their pants, do only scanty market research. Last year, a postwar record of 214,900 three-or-more-family units were built. Populations of many cities did not grow to meet the supply of new units. Then, too, the

House Home exclusive expected return to the city of young marrieds and older couples whose children have grown has not materialized to any appreciable extent. Builders are running into problems that make it harder and harder to build for the market

of couples with young children who want a cheap three-bedroom apartment. Such couples often find it cheaper and easier to buy an inexpensive home with a low down payment than to find a suitable apartment.

Investors are now prone to scan proposed apartment projects more carefully, demand proof that it will pay its way. FHA has cut off commitments in some cities. Even in cities like Cleveland, Houston, and Denver, where apartment building is just getting up a head of steam and vacancy rates are low, lenders are beginning to wonder if overbuilding isn't looming.

The surfeit of apartments has not caused rental experts to reach for the panic button. The market so far has provided its own cure: a lull in apartment building that lets demand catch up with supply. But the lull is not in sight yet. "The proportion of rental housing built this year will be greater than ever," predicts HHFAdministrator Norman Mason. Last year, 20% of the nation's new housing was in multi-unit structures, compared to only 10% five years ago.

Apartment men feel that there is still a substantial market for the **right kind** of apartments. Bachelors, career girls, and newlyweds will want efficiencies and one-bedroom apartments close to the heart of the city in high-rise buildings. The soaring cost of land

is boosting builders' interest in high-rise construction. Larger units with three bedrooms will appeal to couples with young children if cheap enough land is at hand to keep the rent low. The genuine luxury market has not been tapped to its full potential. And, add apartment men, a well designed, well located building with rents keyed to the market will have no problem staying full in any city.

Today's situation in some leading apartment areas:

Seattle: Vacancies in the metropolitan area are now around 8%, may go to 10% when 2,000 units now being built go on the market. In 3,872 FHA units, the rate was 13.1% in March (compared to only 3.1% a year earlier). Cutbacks at Boeing Aircraft, the area's largest employer, are blamed.

Newer apartments with higher rents are hardest hit by vacancies and, say realtors, two-bedroom units are going unrented. Biggest demand is for one-bedroom units. Some apartment operators will pay tenants' moving expenses within a 50-mile radius and waive the first month's rent.

Leading apartment cities

A special Census survey shows how the top metropolitan areas ranked last year in number of permits for apartments (three-or-more units) and a comparison with 1958:

	1959			
Area	PERMITS	RANK	1958	RANK
New York-North	-			
eastern N.J.	.47,640	1	36,674	2
Los Angeles	. 36,650	2	38,321	1
Washington, DC	.11,505	3	9,740	3
Chicago	.11,388	4	8,838	4
San Francisco-				
Oakland	.10,326	5	8,602	5
San Diego	5,265	6	5,580	7
Seattle	. 4,188	7	2,989	10
Philadelphia	. 3,712	8	2,278	13
Phoenix	. 3,703	9	3,101	9
Atlanta	. 3,664	10	2,152	14
Miami	. 3,608	11	6,369	6
Minneapolis-				
St. Paul	. 3,502	12	3,385	8
Cincinnati	. 3,058	13	1,342	19
Denver	. 2,098	14	2,717	11
Milwaukee	. 2,048	15	1,861	17

In 1959, rental units accounted for 47% of the area's housing permits. In the first four months of this year, rental units were only 28%. FHA Director C. W. Broom says that unless employment picks up, the surplus will probably continue for another year, perhaps two.

San Diego: An FHA survey last fall showed 8.5% vacancies in the county. And besides the 4,226 vacant units, another 3,350 were under construction. Some coastal resort sections had 40% vacancies. A survey of smaller landlords showed a rate of 4.8% in the city, 23.5% in the fringe areas. Greatest vacancy rate (12½%) was in two-bedroom units. Says FHA Director Faye Hartman, who thinks the situation is getting worse, not better: "We warned builders two years ago they were overbuilding. They wouldn't listen. This is the result." FHA stopped all apartment financing in 1958. But some exclusive apartments are still 100% occupied.

In 1959, multi-family permits accounted for a whopping 26% of the area's new housing. In the first four months of this year, they fell to 21%.

Older apartments, generally better located and offering more for less rent, have fewer vacancies than new construction. Past President Stewart Wicklin of the Apartment & Rental Owners Assn, blames speculative building and cycles of mortgage drought-and-flood for an "alarming" situation. He predicts that it may take six months to a year before the vacancy problem is solved.

Columbus: At mid-March, vacancies in FHA apartments stood at 10.45% and realty men say that the general average may be even higher. Cries President Gerald W. McDonald of the Columbus Building Owners & Managers Assn: "The apartment rental business is shot to hell at the moment."

Free rent and price cutting are not uncommon (one desperate landlord is reported taking whatever rent he can get). Hardest hit: two- and three-bedroom units renting for \$90 to \$110. Least affected: semi-deluxe two-and three-bedroom units at about \$150 and deluxe units up to \$300 a month.

Few operators expect the surplus to be absorbed for a year or more. So no big projects are being planned now. Lenders are chary. Says Willard M. Ewing, mortgage official for Equitable Life Assurance: "We have to examine projects in the light of the area and the class they will serve and have it proven to us that there is actually a market."

Portland, Ore: A boom in apartment building not seen since the FHA 608 splurge worries Oregon Apartment House Assn. The association is making an economic survey, hoping for data to persuade lenders and FHA not to make more apartment construction loans.

Sacramento: Apartments being built faster than they can be peopled add up to a vacancy rate of 12% in the city, 21% in suburbs, a survey by the Apartment House & Property Owners Assn found. This compares with 4% vacancy in 1958. And in the next month or so, 1,000 more units will open.

In 1959, apartment-unit permits were 25% of the total. The rate tapered off to 16% in the first four months of this year. If the down trend continues, says President Ray Greer of the Sacramento Apartment House & Property Owners Assn, population growth may catch up with available units within a year.

Most affected by vacancies are new units and higher-priced ones (except deluxe). The first high-rise apartments here in a long time —three 15-story towers—are planned by New Yorker James H. Scheuer in a four-block former slum in midcity, but he is first building a 92-unit garden apartment on the cleared site. Expectations are that most construction will continue to be garden type in the suburbs. Renters generally seem to be willing to spend \$10 a month more for places farther out where swimming pools, patios, and more parking space are available.

Vacancies have not yet produced rent slashing, but more space (over 600 sq ft instead of the previous 450 to 500) can be rented for the same price. Says Builder Hunter Bungay: "If you offer less than three rooms, they woi.'t even talk to you." He looks for an upswing in co-ops and deluxe units close to freeways. FHA officials say the brightest market here will be newlyweds and couples with young children.

Phoenix: An FHA survey early this year—at the peak of the winter resort season-turned up a vacancy rate of 7.7%. One suburban area showed over 23%. And vacancies are increasing. Much of the explosive growth in apartment building in the past two years (comprising 19% of the total residential permits in Maricopa County in 1958, 23.4% in 1959) has been suburban. Now, realty men say the market for apartments in the \$110-a-month-and-up class is saturated but the top and bottom rental brackets have been neglected. The trouble, says Rental Expert Rex Gordon, is that many builders start out to put up units that will rent for \$90 to \$100 a month, then decide to add some frills and a swimming pool and go for higher rents. Several such projects are in financial trouble.

Builders are looking back toward downtown where they might put up high-rise units for single people and working couples.

Los Angeles: High land costs are forcing more and more rental building into luxury brackets, or one- and two-bedroom units that bring more return to investors than three-bedroom units. Says General Manager Fern Cheeseboro of the Apartment Assn: "The demand for three-bedroom units here is terrific and everyone admits it. But land costs too much."

The same high-yield logic leads speculative rental builders to avoid parking space and recreational areas. They cost more than they add to profits.

After three record apartment-building years, the vacancy rate in the county's unfurnished apartments is close to 10%. Upset apartment operators fight rezonings which would open more land to rental housing. Lenders are alert to the vacancies, and so are tightening up on new rental loans. Suburban rental construction is rising faster than it is in the central core area.

New York is having the biggest splurge of rental building in years, even though it is still stuck with rent control, which accounts for its overall 1.3% vacancy rate.

The boom takes three forms. In midtown Manhattan, so many luxury apartments have sprung up in the last three years (\$60 to \$100 a room) that canny shoppers now can wangle a month's free rent at move-in. In outlying boroughs like Queens, Brooklyn and nearby Riverdale, thousands of FHA 207 units are going up at \$40 to \$50 a room. In outlying suburbs, garden-apartments bring \$45 to \$50 a room (zoning bars high-rise structures). Builders in Nassau County (Long Island) found in a survey that apartments were yielding localities \$1,000 more per child in taxes than schools cost. They are using the data to try to lower suburban opposition to apartments.

Polluted water jolts Twin City suburbs

Builders are struggling to offset the sharp blow dealt the suburban housing market by discovery of pollution in underground water supplies in 14 of the 28 Minneapolis-St. Paul suburbs.

Sales, after a normal January, slumped in February and are running about 15% under a year ago. Unsold carryover is up about 4% from a year earlier.

FHA and VA have refused to approve loans in new developments without central deep-well water supply or for existing homes where state health department tests show contamination.

Local builders staged a daylong conference on the problem in St Paul last month, promised to cooperate with municipalities in setting up central water systems even though it will cost them money. They found FHA and VA officials have no intention of easing the bans. And the state health department stood firm on its claim that if any detergents are detectable in a well, or if the amount of nitrates exceeds one part in a million, the minimum health standards have not been met

Builders were up in arms, not only because most are finding it hard to get financing for community sewer and water systems in new areas, but also because they feel the public has been left with the impression that all suburban areas are contaminated.

FHA's ruling does not affect Minneapolis, which gets its water supply from the Mississippi River. Nor does it affect a number of suburbs which already have their own water systems or tie into metropolitan systems. But it does affect some 300,000 persons (in a metropolitan area of 1,500,000) who depend on individual wells for water and individual septic tanks for sewage disposal.

FHA has been prodding suburbs for four years but has been getting only the cold shoulder and promises, it says. The Minneapolis move is part of a national policy of insisting on safe community water supplies.

Larry Nelson, executive vice president of the Minneapolis HBA, says the water edict is not affecting the half-dozen big project builders who regularly install community water systems in their developments. "But it does affect the other 90% of the builders who build on scattered lots or in small subdivisions that are not connected to central systems."

At the conference's end, there appeared to be general agreement that the only longrange solution is a metropolitan sewage system, but that this could not even begin to serve more suburbs for at least four years.

Memphis: FHA is urging builders to slow down. Warns Director James E. Kerwin: "There are 4,000 homes in Memphis, Shelby County, and West Memphis, Ark. completed or under construction. This is more than half of last year's total housing production (7,028 units)." Kerwin calls realty markets "soggy everywhere in Tennessee except Nashville, which is humming" because of a big increase in new industrial jobs.

Builders may be over-buying developed lots, too, Kerwin fears.

Miami: Landlords are struggling with a glut of housing for Negro occupancy. Tipoff is unprecedented full-page ads in Sunday papers offering "690 housing units for colored residents" for rent—and listing them (rents: \$9 to \$40 a week). Luther Brooks, head of Bonded Collection Agency, the city's No. 1

Negro landlord, blames his problem on delays in expressway construction which was expected to displace 1,744 Negro families. He claims he has vacancies in \$3 million worth of new housing.

San Francisco: Residential construction in the nine-county Bay area is expected to drop 15% below last year's record level.

The Pacific Gas & Electric Co expects this picture:

New U	NITS CO	NNECTED	
	1959	1960	% change
One-family	39,744	33,550	-15.6
Multi-family	13,184	11,660	-11.6
	59,928	45,210	-14.6

As in 1959, almost 50% of the new homes will be in Santa Clara County, PG&E expects.

But the astonishing thing is that rental construction (which should account for 26% of the region's starts this year vs 8% in 1955) is also concentrated in the suburbs. Specifically, predicts the utility company, it will go mainly in Santa Clara, San Mateo, and suburban parts of Alameda Counties.

The 1960 drop in dollar value of new housing will be much less than the drop in unit-starts, the Bay Area Real Estate Research Committee foresees, because of higher construction costs and a trend to better quality homes.

The market for luxury homes is still strong, as it has been for a year. Sales in the \$20,000 to \$25,000 bracket are also brisk in town and in the suburbs. Troubling the cheaper mass-market homes are deep discounts and rising land production costs. Plans are afoot to turn 3,000-acre Brewers Island in the marshy south end of the bay into a \$350-million community of luxury homes and apartments for 45,000 people, business, and industry. Developers are Richard Grant, Peninsula contractor, and T. Jack Foster, Honolulu builder. The homes would range from \$25,000 to \$150,000.

Philadelphia: Sales and starts were down sharply in the first three months, but builders, encouraged by a good turnout of lookers with the coming of better weather and a resultant upswing in sales, 10w anticipate a fairly good year.

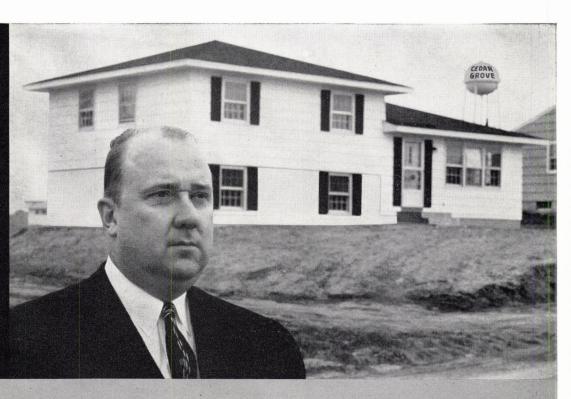
There is little unsold overhang because builders have been selling from samples, building only after sales. Builders say some sales have been lost because owners of older homes who want to move up to bigger new houses balk at paying mortgage discounts for potential buyers of their present houses. Most popular design is still the split-level, followed by colonial and ranch-style.

Salt Lake City: Most builders think as many—and perhaps more—new homes will go up here this year as last (8,272 in entire state). Sales were off to a slow start in first few months of 1960, but Manager Gordon Dick of the Utah HBA calls the situation "no better and certainly no worse than in other years."

Alaska: A 457-acre development of homes, shopping center, and a resort hotel will be built in Juneau by Stone & Schulte, San Jose (Calif.) builders. They say it will be the biggest yet in Alaska. Plans call for two- and three-bedroom homes, \$18,000 to \$25,000.

NEWS continued on p 53

Midwestern Builders like this depend on M O R T G A G E A S S O C I A T E S for complete Finance Services



COMMITMENT \$4,000,000 • Mortgage Associates' Residential Mortgage Division is financing the first section of Cedar Grove, a projected 2000-home community by Emil J. Jandric on the south side of both Twin Cities. FHA and VA minimum down 30-year financing is offered on a wide variety of colonials, splits and ramblers in the \$13,500-\$18,500 range.

COMMUNITY BUILDER JANDRIC drew heavily on Mortgage Associates' complete mortgage finance services for the assistance and counsel he wanted in launching his concept of the modern, carefully-planned, complete residential community.

Cedar Grove features its own central water and sewage disposal systems, street lights, blacktop drives, asphalt-paved streets and curbs, natural gas. When completed, it will be a \$30,000,000 community on 1000 acres . . . including two shopping centers occupying about 20 acres, some 10 acres of playgrounds, marina and water-front park.

To merchant builders within ready reach of our branch offices, and with concrete proposals to discuss, Mortgage Associates offers a wide range of mortgage finance services. Such as: advance group commitments (FHA and VA) · construction financing · model home financing · conventional loans up to 75% of value in approved areas · subdivision qualifying and expediting.

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A Service of Character, Managed by Men of Imagination

Price trend is uneven but signs point to boost in supply of funds

The mortgage market is moving uncertainly, sideways.

Overall, signs of more available money are increasing. But mutual savings banks, which normally do 6% of the nation's lending on new homes, have been hard hit by deposit losses again. Mutuals are major buyers of FHA and VA paper in the deep discount areas of the southwest and west. So their troubles strike the mortgage market much harder in places like California than in the Midwest where S&Ls dominate mortgage lending. S&Ls, in contrast, are having a good deposit year (5% above 1959), but most of their money goes into conventional mortgages.

Discounts on FHA and VA loans show a mixed pattern of movement in House & Home's monthly survey of 16 cities.

Prices of FHA minimum-down immediates, after a two-month pickup, stayed where they were in the May survey. But FHA minimum down futures moved up in Houston from 94-95 to 95-96. FHA 10% down immediates dropped a half point in Los Angeles (from 97 to 96½-97) but futures went up half point (from 96-96½ to 96½). The 10% down immediates, on the other hand, rose half point in Cleveland (from 96½-97 to 96½-97½). FHA existings went up a point in both Boston (par-101 from par) and Detroit (from 95 to 96).

In a generally dead VA market, no-down

immediates fell half point in Los Angeles (to 91-91½ from 91½). In San Francisco, they went up half point (from 91-91½ to a flat 91½).

Conventional loan rates have remained relatively unchanged, but here, too, are some zigs and zags. In Los Angeles, commercial banks and insurance companies moved from 6-61/4% to 6-61/2% and S&Ls from 6.6-7% to 6.6-7.2%. In Oklahoma City, S&Ls went from 6-61/2% to 61/4-61/2% and in St. Louis, rates edged up from 53/4-61/2% to 6-61/2%. But in Detroit, there was a drop, from 6-61/4% to 53/4-6.

FNMA President J. Stanley Baughman predicts the climate for financing homes will improve for the rest of the year. Adds HHFAdministrator Norman Mason: "My studies show that the availability of money—not its price, its availability—regulates the volume of the nation's building . . . And there is a thaw . . . Money is easier, definitely easier."

Savings banks may trim their mortgage purchases by 25%, perhaps more, this year.

President Edmund F. Wagner of the Seamen's Bank for Saving told the eastern conference of the Mortgage Bankers Assn in New York that mutual banks might buy only about \$1.35 billion in mortgages in 1960, compared to



1959's volume of \$1.8 billion. Two troubles plague mutual banks: 1) the volatile deposit situation and 2) stiff competition from higher-dividend-paying S&Ls. At the annual convention of the National Assn of Mutual Savings Banks in Washington, long-range plans to pump new life into the system were disclosed: 1) legislation will be sought to grant federal charters to MSBs, get them out of the bind of state-charters-only which bottles them up in 18 states, and 2) plans

are being considered to set up a central, industry-wide fund to help expand existing banks, create new ones.

The proposed legislation would make savings banks convertible to S&Ls and vice versa. But President Wallace O. DuVall of the US S&L League gave the savings bankers a gentle warning: the S&Ls (without whose backing the legislation would have tough sledding) might think more fondly of the idea if all the MSBs joined the Federal Home Loan Bank System (at present 24 banks now are members). Said DuVall: "The mere idea of being able to convert savings and loan associations to savings banks is not an irresistable idea to many of our people. Many have no desire to be a bank." He said the League will study the MSB proposal.

Mortgages are in a strong position in the current investment picture.

Says Economist Miles Colean: "The year as a whole is certain to see the mortgage market in a favored position vis-a-vis bonds or stocks." An indication of this is the fact that pension funds, traditionally bond minded, are funneling more and more money into the mortgage market.

Indeed, most mortgage bankers report that they have little trouble selling what immediates they get; many say they could increase their volume *if* they could find the mortgages. Because of the slump in house sales and starts, immediates may even be heading toward a shortage.

But most experts do not expect demand to drive the price of mortgages up appreciably. The big reason: mortgages always must compete with bonds for investors' money.

Sums up Colean: "By recent historical standards, money costs will continue to remain high. This is a situation to which builders will have to adjust themselves."

MORTGAGE BRIEFS

FNMA stocks relief vetoed

Mortgage men and builders lost a two-year campaign to get a tax break in their required purchases of FNMA stock.

President Eisenhower vetoed a bill that would have let them count the expense of buying the stock as a cost of doing business instead of a capital loss. Said the President: "I am sympathetic with the objectives of the bill. But it provides for the retroactive application of the proposed amendment in a highly discriminatory manner. This is a defect which is sufficiently serious to require my disapproval."

The President criticized the legislation for permitting refunds only to mortgage men and builders who had claimed the business loss deduction despite a ruling by the Internal Revenue Service that they couldn't. Those who reported it, as they were required to, as a capital loss would be out of luck. Said the President: "I cannot approve such discrimination."

Since passage of the 1954 Housing Act, which set up Fanny May's secondary market program, sellers of FHA and VA mortgages to the agency have been required to buy Fanny May stock equal to 2% of the mortgage. The aim is to make Fanny May privately owned in time. But for builders and lenders who do a big volume of business with Fanny May, this can involve big chunks of cash. So far private housers have bought \$63 million in FNMA stock.

Most housing men resell the stock to avoid depleting their working capital. FNMA sells the stock at par. But on the private market it has always been well below that (last month it was in the 52-53 range). The IRS has refused to let buyers of the stock deduct the difference between its par cost and the market resale figure as a cost of doing business for tax purposes. It must be reported as a capital loss. For mortgage bankers, who buy most of FNMA stock, this is little help: they have few capital gains to offset losses.

Congressmen who sponsored the relief bill are reported ready to try again. This time they are expected to tack the amendment on the first tax bill that comes along but discard the retroactive features that prompted the veto.

More curbs for S&Ls

The Federal Home Loan Bank Board has moved on another front to combat skyrocketing savings & loan dividend rates.

The board is proposing regulations to restrain advertising of rate increases. The new rules would: 1) bar S&Ls from announcing increases more than 30 days before the beginning of the dividend period in which the boost becomes effective, 2) require proof first that the increase will not injure the institution's financial position and 3) prohibit advertising higher rates until 15 days after formally notifying the board of the proposed increase.

The regulations would apply to all 4,007 federally insured associations. They would not empower the board to prevent dividend increases but associations could be subject to discipline for unsound practises. The effective date of the proposed regulation has been held up until the board sifts objections and suggested amendments.

Because of a rash of high dividend rates

NEWS continued on p 55

NAUTILUS NO-DUCT HOOD

CHOSEN FOR NEW





Architects for Indiana's first high-rise FHA approved cooperative apartment—the distinctive 98 unit Cold Springs Manor in Indianapolis—selected the Nautilus No-Duct Hood to insure odor-free air in each of the beautiful all-electric kitchens (see inset). They—like architects and builders everywhere—know that the Nautilus is the modern, efficient and low-cost way to banish cooking odors, smoke and

grease without expensive ducts or vents. With an extra-large Activated Charcoal Filter and Grease Filter, it's the best-selling, most wanted and most efficient hood you'll find.

The Nautilus adds extra sales appeal to homes and apartments . . and, because it goes up in minutes, saves time, money and trouble for you. That's why leading builders and architects all over the country are designing the Nautilus into their newest homes and apartments.

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Name		12	i
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on the West Coast (4½% to 4¾%) and an advertising campaign by these S&Ls in eastern states where lower dividends prevail, there is a growing feeling in the industry that something must be done before the dividend competition gets out of hand. The advertising restraints follow on the heels of the board's action to force S&Ls to amortize fees and charges over a period of about seven years (NEWS, May).

There have been repeated demands for direct federal ceilings on dividends. But, says Kenneth G. Heisler, managing director of the Natl League of Insured Savings Assns: "What we require is less, rather than more, federal control of home financing. Arbitrary artificial controls established by government on interest rates frequently have created more problems than they have solved in the homefinancing field . . . Unhampered by rate controls, savings and loan associations were able to attract the funds necessary to provide a high volume of home financing during the difficult tight-money months of 1959."

Toward the state-chartered S&Ls, unfettered by federal regulations, the industry has become resigned. Says one official: "Nothing can be done about these fly-by-nights. Whatever rate we come out with, they are sure to put theirs a fraction higher."

Plan to rescue Arizona S&L

A proposal to save the floundering Arizona S&L has been approved by the state superintendent of banks. The association was left with a multimillion dollar hole in its books when freespending Builder Don Elbel went bankrupt (News, Aug '59).

The plan to reorganize the state chartered S&L—one of five considered*—was submitted by Southern Californians Ben Weingart, 70, publicity-shy Los Angeles real estate mogul; Maxwell Greenberg, 38, lawyer and secretary of the Baldwin Park S&L, and Morris Shapiro, 50, restaurant supply company and realty operator.

According to Banking Superintendent David O. Saunders, the book value of the S&L's assets is \$34.1 million. Probable actual value is estimated at \$31.5 million. Clouding the picture are some \$5 million in lawsuits involving loans made to Elbel for foundered building ventures in Kansas and Missouri and some \$6.5 million in doubtful assets. Elbel got the loans through the former S&L president, V. Frank Kanan, an old crony.

The Weingart plan would set up two corporations: Greater Arizona S&L which would operate with what good assets are federally insurable (estimated at about $40 \, \phi$ to $55 \, \phi$ on each \$1) and the Arizona Shareholders Co which would liquidate the doubtful assets ($35 \, \phi$ to $40 \, \phi$ on \$1). The S&L shareholders have been asked to vote on the proposed plan before it is submitted to the court.

The recognized S&L would have Arizona residents for seven of its nine directors. Says Greenberg: "We're not going to run a carpet-bagging type of operation." How much will the shareholders who leave their money in the new S&L ultimately get back? Greenberg's prediction: between 80¢ to 95¢ on a \$1.

Long Beach S&L seized

For the second time in 15 years, the Home Loan Bank Board has seized control of Long Beach (Calif.) Federal S&L on grounds of "unsafe and unsound operations."

The board, among other things, accused the S&L of lending millions of dollars to home-builders already delinquent on previous indebtedness. And it asserts that S&L records "fail to reveal its true financial condition."

continued on p 58

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee who retains servicing.) As reported to House & Home the week ending May 13, '60.

					L.		1					1		
FHA	53/4s (S	ec 203) (b)		i		VA 5	¹ / ₄ s					ntional	16 · · ·
FNMA	Minimum		uction On	,	Existing *		FNMA	No down	lew Const	ruction Or	lly ore down	Comm.	Savings	C
Scdry	30 year	DOWN	20-25 year		25 year		Scdry	30 year		20-25 year		Insurance	banks.	Construction loans w
Mkt ×3	Immed	Fut	Immed	Fut	Immed	City	Mkt xy	Immed	Fut	Immed	Fut	Cos.	S & Ls	Interest +fee
96	96-97	96	97-98	97	96-96 1/2	Atlanta	92	а	a	a	а	6-61/4	6-61/2	$6-6\frac{1}{2}+2\frac{1}{2}$
97	par-101 °	par-101 º	par-101 º	par-101 °	par-101 °	Boston local	93	98	98	98 b	98 b	5 1/2-6	5½-6	51/2-6
_	95-96g	95-96 g	а	a	_	out-of-st.	_	91-92 ⁿ	91-92 n	. 8	a	_	-	
96	96-97b	95-97b	96-97b	95-97ь	96-97ь	Chicago	92	90-92ь	90-92b	90-92b	90-92ь	6-61/2	6-61/2	61/4-61/2+11/2-21/
96	96-97	95-96	961/2-971/2	951/2-96	96-97	Cleveland	92	91-92	91 b	91-92	91b	6-61/2	6-61/2	6-61/2 + 11/2
951/2	95-97	941/2-97	96-98	96-97 1/2	95-97	Denver	91 ½	92-93 b	91-93b	91-93ь	91-93b	6-61/2	6-63/4	$6\frac{1}{2} + 1-2\frac{1}{2}$
95½	961/2	96	97	96 1/2	96	Detroit	91 ½	92	91 ½	93	921/2	53/4-6	5 3/4-6	6+1
96	96	95-96	$961/_{2}-97f$	96½-97f	96	Houston	92	92	a	8	a	53/4-61/2 c	6-61/2	$6-6\frac{1}{2}+1-1\frac{1}{2}$
96	95½-96½	951/2-961/2	961/2-971/2	961/2-971/2	941/2-951/2	Jacksonville	92	911/2-921/2	911/2-92	1/2 921/2-93	t a	6-6 1/2	6-61/2	61/2 + 11/2
95½	95 ½	95	96½-97b	961/2	941/2-951/2	Los Angeles	91 ½	911/2	91	91 1/2 0	91 ь	61/4-61/2	6.6-7.2	6 + 1½-2 e
96½	97	97ь	971/2	97½b	971/2	Newark	921/2	A		a	8	6	6	6 + 1-11/2
97	97	97	97	97	97	New York	93	93	93	93	93	6 .	6	6 +1-2b
95½	95 1/2-96 1/2	95-96 ^b	971/2-98	a	95½-97 j	Okla. City	91½	91½-92b	90 ½ b	91½-92b	90 1/2	6-61/4	61/4-61/2	$6\frac{1}{2} + 1-2$
96½	971/2-98	971/2-98	971/2-98	971/2-98	971/2-98	Philadelphia	92½	a	a	8	8	5 3/4-6	5 3/4-6	6 + 1-2
95½	95½	95-951/2	96-97	96	95	San. Fran.	91 ½	911/2	91-911	/ ₂ a	8	61/4-61/2	7.2-71/2	6-7 +1½-2½ d
96	933/4-97	931/4-97	94 1/4-97	933/4-97	92-97	St. Louis	92	a	a	а	8	6-61/2	6-6.6	$6-6\frac{1}{2}+1-2$
961/2	961/2	961/2	971/2	971/2	96-97j	Wash., D.C.	92½	92	92	93	93	6	6	6 + 1½-2

*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, Harold Finney, exec vice pres, Citizens Mortgage Corp; Houston, Donald McGregor, exec vice pres, T.J. Bettes Co; Jacksonville, John D. Yates, vice pres, Stockton, Whatley, Davin & Co; Los Angeles, Robert E. Morgan, exec vice pres, The Colwell Co; Newark, William F. Haas, vice pres, Franklin Capital Corp; New York, John Halperin, pres, J. Halperin & Co; Oklahoma City, M.F. Haight, first vice pres, American Mortgage & Investment Co; Philadelphia, William A. Clarke, pres, W.A. Clarke Mortgage Co; St Louis, Sidney L. Aubrey, vice pres, Mercantile Mortgage Co; San Francisco, Raymond H. Lapin, pres, Bankers Mortgage Co of Calif; Washington, 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—SLs charging 6-7% plus 2½-4 point fees. f—96½ is for 5% downs only. g—bulk at 95½. j—for better quality loans only. n—bulk at 91½, o—at 5½%, w—six-month construction loans unless otherwise noted. x—FNMA pays ½ point more for loans with 10% or more down. y—FNMA net price after ½ point purchase and marketing fee plus 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

Immediates: 901/2-92

Futures: 901/2-911/2

FHA 53/45

Immediates: 941/2-96

Futures: 94-951/2

VA 51/45

FHA 53/4 spot loans

(On homes of varying age and condition)
Immediates: 90-93

Prices for out-of-state loans, as reported the week ending May 13, 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

Quotations supplied by C. F. Childs & Co.

^{*}Among the others submitting plans: Los Angeles S&L tycoons Mark Taper and Charles A. Wellman. They later withdrew.

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Install the new Bryant Deluxe Gas Air Conditioner and watch customers' favorable reactions when you explain its control over the weather. When they find out it's Gas . . . and that just one control switches from winter heating to summer air conditioning . . . you'll be selling more homes faster than ever.

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Customers have come to know that Gas is their most dependable home servant . . in all kinds of weather. And that Gas is economical to install and to operate. There is nothing to wear out or make noise in a Gas flame.

Nothing heats, cools and conditions air like Gas!

AMERICAN GAS ASSOCIATION

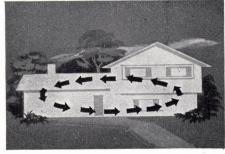




EASY INSTALLATION. The compact Bryant Gas furnace fits handily into closet-size floor space. The Bryant cooling unit goes outdoors. No expensive wiring, no bulky fuel storage tanks . . . because it's Gas!



EASY REMODELING. The Bryant furnace is specifically designed for add-on Gas cooling—an extra selling feature for your houses. Gas provides the economical way to have whole-house, all year air conditioning!



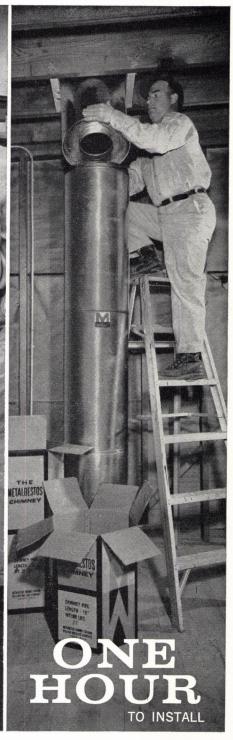
"FRESH-AIR" CIRCULATION, WINTER OR SUMMER. Bryant Gas heating provides an even flow of warm air, responding instantly to temperature changes. And, Bryant Gas air conditioning extracts pollen, and moisture.

ONLY GAS

does so much more...for so much less!







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So quick...so easy...and it's approved for all high-temperature fuels including oil, wood and home incinerators. For new or old construction, inside or outside installation.

Get complete details from your Metalbestos Distributor. He's as close as your telephone.

*Average time for an average installation.



WILLIAM WALLACE COMPANY . BELMONT, CALIFORNIA

Manufacturing Plants in Belmont, California . Logan, Ohio

The HLBB action came some three weeks after Long Beach Federal sought to convert from a federally chartered to a state chartered institution. It had also been criticized in some quarters for boosting its dividend rate from 4 to 4½% in January.

S&L President (and founder) T. A. Gregory is fighting back with a suit aimed at the HLBB and C. E. Ault, who was named to supervise the \$130 million institution. Gregory has asked a federal court to increase to \$20 million the \$1 million bond posted by the HLBB when it took control. He charges that the takeover was designed to: 1) prevent federal bureaus from having to account for association assets seized by the government in 1946 and under litigation ever since and 2) prevent accounting for \$5.3 million in S&L-held government bonds which (Gregory charges) the board illegally sold.

Rep James B. Utt (R, Calif.) is demanding a Congressional investigation of the seizure. He calls it "conspiratorial" because employes of the S&L were discharged and personnel of competing institutions installed in their place.

Rules for S&L land loans

The Federal Home Loan Bank Board has spelled out some of the regulations governing the new land development loans by S&Ls. Authority to make such loans was written into last year's Housing Act. In answer to questions raised by the Capitol Federal S&L, Topeka, HLBB General Counsel Thomas H. Creighton Jr ruled:

- Loans may not be made to a builder to buy land already improved or to buy land without making improvements.
- Loans must be based on valuation, not acquisition cost. They may not exceed 60% of the value of the land after it is developed, or 60% of the value of the land before development plus 60% of the cost of development, whichever is less.
- Land development loans may not exceed 3% of an S&L's withdrawable assets. But if a construction loan is made before the development loan is repaid, proceeds from the construction loan can be credited to the land loan, and to the extent of the amounts so credited the land loan can be deducted from the S&L's portfolio in determining the percentage of assets in land loans.

Commitment fee lawsuit

Validity of a mortgage loan commitment agreement has been challenged in an Illinois lawsuit.

In December 1957, Chicagoan Sol Vollen gave a \$4,000 "standby fee" to Penn Mutual Life Insurance Co for a commitment of a \$200,000 loan at $5\frac{1}{2}$ % to build a factory. Vollen later borrowed the money elsewhere at 5%. Now, he is suing Penn Mutual for return of the \$4,000. His argument: the pledge agreement required approval by the insurance company of such items as plans, specifications, lease forms, survey, title company, and construction loan agreement and the company could refuse to go through with the loan at any time for whatever reasons it wished. Therefore, argued Vollen, the agreement was void because it lacked mutuality and was unenforceable.

Penn Mutual, in its defense, cited a 1953 case in St Louis where the State Court of Appeals ruled that Van Cleve Building & Construction Co had to pay a \$1,450 standby fee as liquidated damages in an agreement for a \$290,000 loan from Continental Assurance.

\$290,000 loan from Continental Assurance. The Chicago Mortgage Bankers Assn has intervened as a friend of the court to support Penn Mutual. The commitment agreement is typical of thousands made in the area by lenders, says the MBA, and a decision in favor of Vollen could disrupt the mortgage business by jeopardizing the validity of loans involving millions of dollars.

Alaska OKs savings banks

The first expansion of mutual savings banks into another state in 35 years was authorized last month when Gov William A. Egan signed a bill to permit chartering of mutuals in Alaska, putting MSBs in 18 states.

SBICs: will change help builders?

Small Business Investment Companies—which are just beginning to help finance housing (News, Apr)—would get some new—and controversial—ways to do business under plans before the Senate small business committee.

SBICs were set up in 1958 by Congress to funnel capital into businesses which 1) are growing so fast their need for money is too big for their resources and 2) are too small to attract equity funds by normal means. Private investors need a minimum of \$150,000 to start an SBIC. The Small Business Administration will match that in debentures to provide working capital, will lend the SBIC \$150,000 more on top of it. The SBIC can use these funds to buy convertible debentures of small businesses or make loans to them.

The changes urged by the committee are in a bill that passed the Senate last year, is pending in the House. They would:

- 1. Let SBICs make *any* kind of investment in small businesses. Convertible debentures may not always be the best kind, the committee says; the limitation "has prevented and will prevent many SBIC transactions."
- **2.** Remove a rule that borrowers from SBICs must buy shares in them—à la Fanny May—with a part of the money (this was intended to cut and eventually end the need for govern ment participation). Both SBA and the industry demand its removal, says the committee. Borrowers consider it an added cost of the money, are discouraged from borrowing.

The most sweeping changes await introduction in a bill promised by the committee's chairman, Sen John Sparkman (D, Ala.). But Congress may not have time for it this session. They would:

- Increase SBICs' "leverage" in attracting money by 1) letting SBA buy up to \$1 million in their debentures instead of the present limit of 150,000, and 2) letting SBA lend SBICs (for 10 years at 5%) an amount equal to 100% of their total capital instead of the present 50%. Present limits mean that only the smallest (ic, under \$450,000) SBICs enjoy maximum leverage, and they are not big enough for really economic operation, says the committee.
- Allow stock options to SBIC executives to attract and hold top management talent.
- Let SBICs participate in SBA direct loans to small businesses that are too big for them to handle alone.
- Let them deduct 20% of their income from all loans outstanding as a tax-free reserve against bad debts. (This would be a bigger tax shelter than the 12% now enjoyed by S&Ls and mutual savings banks.)
- Let them distribute income to stockholders from liquidated investments as a capital gain.

If these changes spur formation of bigger, more flexible SBICs, they are likely to help builders (along with other small businessmen) by making more funds available to them. But, says Charles Noone, chief counsel of the Natl Assn of SBICs, the real meaning to homebuilding will depend on whether builders—and SBICs—get around to using the program the way Congress meant it to be used: to provide long-term financing or equity.

"SBICs are leaning heavily on the loan side instead of the equity side in the financial aid they are supplying the homebuilding field," says Noone. Builders go along with this because like other small businessmen they are reluctant to share control of their business. Noone argues that builders overlook that SBIC equity money to help build community facilities like sewer and water systems can help them hold the plants after their subdivision is completed, and eventually reap a bigger profit. Instead, they want the money for land development, seldom need or want it for the five-year minimum SBA has set for long-term loans under the program. So many plan to prepay their loans. SBA frowns on this, Noone notes, and could stop it through its regulation of SBICs. In fact, emphasis on lending by some SBICs has led the Senate committee to recommend imposing a 10% interest ceiling on SBIC loans. The present law is silent on this, but SBA has been enforcing a 15% ceiling administratively. Most builders using SBIC money are willing to pay 15% for such hard-to-get loans, among other reasons, because "That is the going rate." But the committee report says angrily:

"Congress did not think it was conferring government approval of loan sharks, nor did it anticipate it would lend SBICs public dollars at 5% for relending at 15%."

CANADA:

US investors eye Canadian market

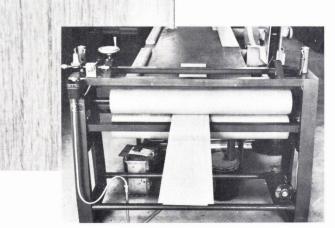
US lenders appear to be finding Canada's higher interest rates attractive. Two new pipelines for American dollars to flow north have opened up since Toronto Lawyer John Campbell and Eastman Dillon arranged New York financing of \$4 million of Canadian National Housing Act mortgages last month (News, May). Details:

- 1. Financier Charles W. B. Wardell Jr of Nassau, and President S. Joseph Tankoos of New York City's Tankoos & Co announced they have a \$5 million "continuous pool" available to buy construction loans, builderheld second mortgages, and junior liens in Canada. Their firm, Willard International Financial Co, says it has investor clients in the US, Great Britain, Europe, and several Commonwealth countries who have long been anxious to buy well secured commercial paper in Canada but have had no properly organized source to turn to in the past.
- **2.** Two big Toronto land developers who are having trouble selling their high-priced (\$6,000 and up) lots hope to lure customers with the offer of US-financed NHA mortgages. They have lined up a Chicago-based life insurance company to put up some \$3 million at 6¼% net yield. The loans will be serviced by a Canadian lender for a ½ point, so will cost builders the standard 6¾% price for NHA.

 NEWS continued on p 63



HOW TO POSTFORM KEVINITE



PRESSURE BONDING using contact adhesives. Pinch rollers remove air and provide excellent bond.

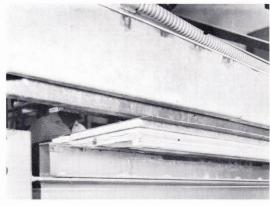


TIGHT BENDS possible with Kevinite permit the use of thinner cores.

Kevinite is a universal, hard-surfaced, decorative plastic laminate which bonds easily to any sound surface. It forms easily to 3/8" radii. It can be formed over a wide range of temperatures. Approximately 235° F. is recommended for tight bends. It will soften but will not further thermal cure. Spring-back is negligible.

Because Kevinite is manufactured by a continuous process, exact control of the product is possible. Postforming temperatures remain constant regardless of pattern, color or production run. Kevinite cuts as much as 25% from the normal heating, cooling and forming cycles. With contact adhesive, it is possible to die-form around the core material and bond concurrently. Rejects and production costs are dramatically reduced.

Kevinite is recommended for vertical surfacing on

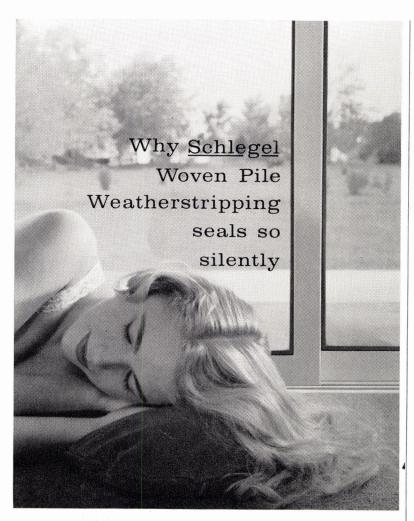


HEATING FOR FORMING with controlled radiant heat source.



doors; furniture, and wall panels; and as complete cabinet wrapping. Solvent-type, contact-bonding adhesives offer the greatest advantages in production and forming, but other types of adhesives can be used successfully.

Questions concerning unusual Kevinite applications or production problems should be referred directly to Swedlow. Our technical department will work with yours.



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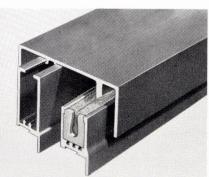
SMOOTH ACTION. Doors and windows ride smoothly on Schlegel Woven Pile Weatherstripping, under all weather conditions. They never stick or bind. Schlegel Woven Pile is friction-free.

GIVES SURE PROTECTION. Schlegel Woven Pile compresses, is truly resilient. It cushions doors and windows snugly and compensates for irregular metal or wood surfaces.

WEATHERPROOF. Neither air, rain, wind, nor dust can seep in. Only Schlegel Woven Pile is silicone treated to insure complete weatherproofing. Schlegel performance has been proven by rigid FHA tests for air infiltration.

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Cross-section view showing Schlegel Woven Pile Weatherstripping installed in the aluminum frame head section of Arcadia Sliding Doors, Arcadia Metal Products, Fullerton, Calif.



for protection that's silent, smooth and sure

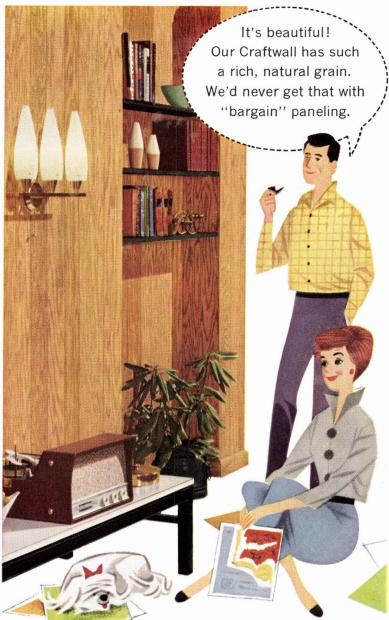




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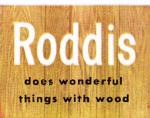
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GROWING PARTNERSHIP of aluminum, housing, renewal is personified by smiling foursome of (1 to r) URA Commissioner David Walker; Reynolds Metals' Executive Vice-president David P. Reynolds; Reynolds Aluminum Service Corp Executive Vice-president (and former HHFAdministrator) Albert Cole, FHA Commissioner Julian Zimmerman. They met at Reynolds' luncheon for industry in Chicago.

How Reynolds Aluminum is moving to use renewal as its showcase

A little more than a year ago, when Reynolds Metals hired HHFAdministrator Albert M. Cole away from the government to develop new residential markets for aluminum, everyone wondered just what was in store. Today, the pattern is clear: with sponsorship of one redevelopment project in Cincinnati in hand and proposals outstanding in Philadelphia, Washington, D. C. and Kansas City, Mo., Reynolds has made a strong bid to become a major national redevelopment company. It is the first materials firm to do so.

Reynolds' quiet entry into renewal has drawn mixed reactions. Builders-especially in Philadelphia where a group of local men are currently deadlocked with Reynolds in competition for the big Eastwick projectare alarmed at the competition. They fear Reynolds may be the first of a herd of companies that will move in on a part of renewal that looks better and better to homebuilders all the time. Indeed, Reynolds' plans involve just the kind of units homebuilders are best equipped to put up row houses and maisonet-

But if builders are chary of the new entry, city officials seem delighted. In Cincinnati, Reynolds' subsidiary, Park Town Corp, estimated downpayments at \$300-\$500, carrying charges from \$62 to \$100/mo for Sec 213 management-type co-ops ranging from efficiencies to three-bedrooms in size. Enthused Mayor Donald D. Clancy over the designs (which may use only 25% of the land area): "I was impressed . . . They lend much to upgrading of the area." Surveying the team of Cole and his top assistant, former URA operations chief Sid Jagger who made the presentation, Councilman John Gilligan remarked: "That's really a hot-rock combination."

Revnolds itself insists local builders have nothing to fear from its operation. "We don't want to get into building," says Al Cole. Instead, Reynolds wants to work with local men, stand by to provide seed money and know-how to insure projects of success. Reynolds' stake: another prime showcase to help aluminum crack the residential market, and a start in getting what should be a huge part of that market off the ground at last.

In Cole's words, Reynolds sees the renewal market as "an economic time bomb. When it explodes, the impact on the national economy will be of tremendous significance." By using top planning and design talent like that of City Planner Constantine Doxiadis of Athens, the company is aiming for outstanding community plans and striking uses of aluminum that will put it in line to harness some of the blast.

In Cincinnati, Reynolds is paying the city \$35,000 for 12.5 acres in the Laurel-Richmond redevelopment area, hopes to begin 328 units in aluminum-veneer, concrete block town houses and maisonettes by midsummer. In Kansas City, it proposes 600 units of row houses, seldom seen in the Midwest, for Negro occupancy in the Crispus Attucks renewal area. Land cost for 18 blocks will be \$760,000. In Washington, it proposes a 400unit elevator apartment building and 103 town houses on 10 acres in the Southwest area. Total cost: \$8 million.

In getting renewal off the ground, Reynolds evidently will also add its weight to that of Chicago's Julian Levi in trying to make Sec 213 co-ops work (News, Mar). It plans 213 financing for all these projects, a form which in Kansas City, says Cole, will permit monthly charges after down-payments "15 to 20% lower than monthly rents under any other avaliable financing plan" (\$200 down, \$75-\$80/mo). As one who headed the nation's renewal effort for six years, Cole speaks with authority when he says such a wedding is important, that "failure to produce housing for moderate income families has poised the nation's urban renewal program on the brink of stagnation."

Biggest of all Reynolds' proposals is its bid for Philadelphia's huge Eastwick redevelopment area, the nation's biggest. The 2,000-acre plan for residential, commercial, public redevelopment includes 107 acres for some 2,400 units of new row housing and garden apartments. Reynolds has allotted \$750,000 for planning, fees and land purchase-but might invest another \$2 or \$3 million more for equity if needed. Co-sponsors are Philadelphia Builders Samuel and Henry Berger, whose projects include a 219-unit apartment house in the city's Southwest Temple renewal

"Urban renewal," says Cole, "is a very good facility for corporations because of the very small equity involved. Moreover, it uses land in a place where the development can be seen. We're suggesting other firms get in this too.'

Producers expanding despite falling profits

Despite many a first-quarter drop in sales and/or profits, major building materials producers are still betting on 1960 to equal or top 1959.

Many leading firms are making plans for or are already executing expansions and acquisitions to make them more competitive. Some producers whose net slipped in the first quarter of this year say preliminary looks at second-quarter figures indicate improve-

Says Chairman I. J. Harvey Jr of Flintkote: "As expected, earnings for the first quarter of 1960 were somewhat less than those for the corresponding quarter of 1959 due largely to unusually adverse weather." Net fell from \$1.8 to \$1.3 million. Second quarter volume "shows a satisfactory improvement," Harvey adds.

Most producers blame bad weather for dipping earnings. Scarce mortgage money runs a close second. Says President Joseph A. Grazier of American Radiator & Standard Sanitary Corp: "The next few months could clarify whether or not the slowdown was due to poor construction weather . . . or wider economic influences." His company's sales fell from \$116 million to \$113 million. Net skidded from \$3.6 million to \$3.3 million. At Johns-Manville, both sales and earnings gained under 1% from the first quarter of '59.

One measure of confidence is Flinkote's announcement of the biggest capital expansion program in its history. It involves some \$50 million of new plants and production facilities. Some \$20 million will be spent this year, up \$4 million from '59. National Gypsum, which dropped in both sales (from \$44.7 million to \$43.1 million) and net (\$4.4 million to \$3.6 million), is also expanding. The company has finally realized Chairman Melvin Baker's old dream of tapping the rich market west of the Rockies by acquiring Union Gypsum Co of Phoenix in a \$4.5 million stock swap.

At Armstrong Cork, heavy but planned expenses for modernization and expansion caused first-quarter net to drop to \$3.9 million from \$4.3 million in first quarter '59, despite \$69.9 million in sales—up 4.6% from the period last year. The company still expects to beat its record 1959 sales and earnings by year's end.

In appliances, profits are off despite good sales, largely because of overproduction and overstocking by producers, wholesalers, and retailers who feared strike-caused steel shortages that did not hit as hard as expected.

How some leading producers did:

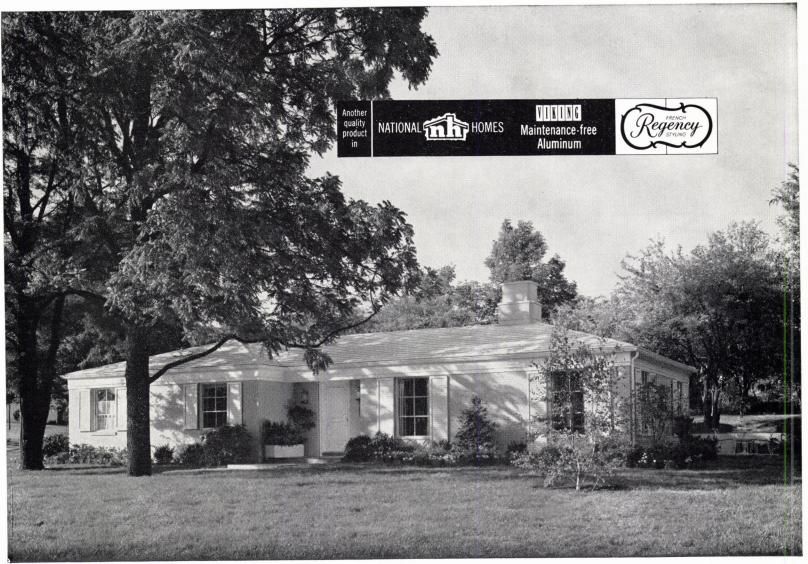
COMPANY	SALES	PROFIT
Flintkote	+ 1.1%	-30.5%
Whirlpool		-13%
Westinghouse-Electric	+ 4%	+35%
Johns-Manville	+ .08%	+ .13%
American Standard	- 2.8%	-25.5%
Pittsburgh Plate Glass*		+43.5%
Congoleum-Nairn	-13.1%	†
US Gypsum		-12.5%
National Gypsum		-18.8%
Armstrong Cork		-9.3%
Crane		+65.2%
Borg-Warner		+ 7.1%
Ruberoid		-59.6%
Kawneer		-63.4%

* The company was strike-plagued during the first

period of last year.

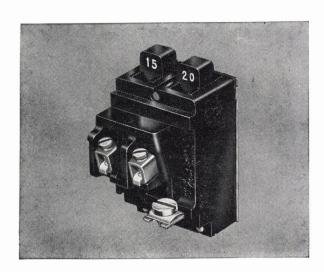
† Net loss of \$335,776 compared to \$21,218 for corresponding '59 period.

NEWS continued on p 65



National Homes Corporation's 1960 French Regency "Lorraine" home

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Is archaic zoning the real cause of monotony in subdivisions?

Zoning—as it is practiced across the US today—is hindering good neighborhood design and promoting the dreary monotony that designers decry in new subdivisions.

This outcry is not brand new—experts have been complaining for at least six years that the single-lot approach is too rigid for large-scale developments. But it is being raised more and more insistently. Two of the latest complaints:

- **1.** A study just issued by the Philadelphia Housing Association contends that local zoning and subdivision rules are fastening "undesirable uniformity" on the city's new housing. "These regulations interfere with good neighborhood design," it says.
- **2.** Single-lot zoning is threatening to fasten "sterile boredom" on the rebuilding of cleared city slums instead of the "exciting new in-town living which its supporters predicted," asserts Redeveloper James H. Scheuer and Lawyer Eli Goldston.

The Philadelphia Housing Association finds these troubles with today's zoning.

"Entire developments of houses are arranged on the land in fixed patterns, each house set back the same distance from the street and from the rear lot line, each house located precisely the same distance from its neighbors. Streets are all the same width, frequently wider than they need be because the subdivisions are now traffic-free. All the houses look alike, all have yard or garden areas, but there is seldom any provision within a subdivision for small parks or community play space for young children. Lot dimensions and building types vary somewhat, but within each development there is only uniformity."

Zoning is more at fault than any other part of the web of local controls that enmesh housing everywhere, says the PHA. "Zoning regulations of the currently favored type produce uniformity by restricting residential developments to a single dwelling type—all detached houses, all twin houses, all garden apartments or all high rise. Further, the dimensional specifications of almost all zoning ordinances are too rigid. Requirements for front setbacks, side yards, rear yards, lot widths and lot areas are to blame for the way houses are placed on the lot and for the uniform lot size . . . The zoning ordinance designs the development, not the builder, the planner, and the architect."

The zoning straitjacket compounds the problem by putting developers into an economic straitjacket, the PHA study points out. How? Because "land value is determined by the number of houses that can be built on a tract." The more people are crowded onto an acre, the more rent the land will yield, and land, as economists know, is worth its rental income capitalized. Theoretically, developers need not build to maximum permitted densities. But land costs so much today, there is no profit-incentive not to. Says the Housing Association: "In practice, therefore, the developer has no choice. He must build what the land is zoned for, and at a density close to the maximum."

To show what could be accomplished with the "totally different type of control" needed for large scale developments, the PHA commissioned two young designers, Alan G. Levy, assisted by Marjorie Olweiler, to sketch alternate development plans for a 37.3 acre tract in northeast Philadelphia. They envisaged what could be done with the typical twinhouse currently being built in the area. But they disregarded the city's zoning and subdivision restrictions "whenever they interfered with good planning." The results (see

sketches) make the case against rigid zoning vivid. What comes through most are amenities that help neighborhoods keep their tone for generations—items like private garden areas, public areas, totlots, and park areas.

In renewal, "zoning-ordinance inadequacies have caused difficulties in almost every city in which a project is well advanced," say Redeveloper Scheuer and Attorney Goldston, writing in The Harvard Law Review. "Procrustean rules offer little chance for imaginative architecture and planning. What little opportunity for creativity remains is eliminated when builders believe, as many presently do, that rising land prices require them to obtain the maximum internal space by filling the zoning envelope."

To dodge such difficulties, many a city now approves large scale projects as a variance to its rigid ordinance. The difficulty with this, contend Goldston and Scheuer, is that decisions are "likely to be compelled by political pressure rather than sound planning," and that, moreover, such procedure may be upset in court as a misuse of spot zoning.

Seventy-eight cities have special provisions in their laws for planned developments. But Goldston and Scheuer find fault with many. Some do not require approval of planned developments by the city council. This may raise constitutional questions of illegal delegation of legislative powers, they warn. Many ordinances refer to a "single owner" when the better test would be single control of project planning. This also conflicts with FHA's preference for several mortgage units in big projects, with each unit designed to be self-sustaining. Some cities abuse planned-development provisions to put light industry in residential areas instead of only the neighborhood stores that give big developments their urban flavor. Goldston and Scheuer have drafted a model provision for incorporation into existing municipal zoning ordinances to cover large scale residential developments.

Big lot zoning illegal? Law study sees chance

Will surburban towns' overuse of big-lot zoning ultimately lead the courts to strike down the principle?

A new study by Richard Hodza, senior in the New York University law school, suggests that the answer may be yes.* And, says Hodza, the same principles that have led the courts to uphold big-lot zoning in the past may cause the reversal.

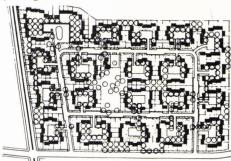
Reviewing the legal history of building and lot size minimums, Hodza finds the courts cont'd on p 73; NEWS cont'd on p 66





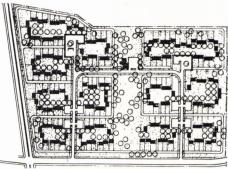
EXISTING LAWS (under "B" zoning) produce this kind of tracts. Curving streets only partly obscure monotony of uniformly-spaced houses. Access from boundary roads invites traffic.





ALTERNATE SCHEME for same number (280) of families replaces uniform twin houses with groups of varying lengths and setbacks in a street pattern excluding through traffic.





NEW SCHEME would house only 165 families on same site ("A" zoning density), group 12 houses on pedestrian courts, provide auto access via looping rear driveways. Note generous open space.

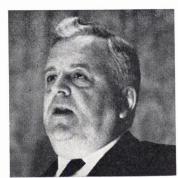
^{*}Published in the *Intramural Law Review*, New York University, Vol. XV, p. 83, 1959.



PLANNER SHURTLEFF ... a question of partnership



PLANNER GROSSMAN ... pursuing flexible goals



SOLICITOR GALLAGHER ... or a battle of suits



ARCHITECT POSKUS ... for the right to build?

NAHB growth huddles win new friends for builders

New soft-sell tactic in thrashing out who pays for facilities surprises some, pleases many

By Robert Seaver

Can a soft sell woo the sympathies of local planners and municipal officers for builders' problems with land restrictions and costly community facilities?

NAHB is betting that it can. Since last fall, it has backed the bet with a series of community growth conferences designed to raise these problems from the level of private commercialism to that of broad public policy.

Now, says Robert Ledermann, NAHB staff director for community facilities and urban renewal, returns from the first few conferences show that the idea is working.

What is a community growth conference? "It is an opportunity," says Ledermann, "for local officials, planners, and builders to meet in an atmosphere different from their usual contacts, where they can 1) lay their cards on the table and thrash out bothersome questions without reference to individual cases and 2) share the experience, advice, and broad perspective of nationally known workers in this field."

Take, for example, one of the most recent, held in Boston. Like the others,* the one-day session was sponsored by the local chapterin this case, the HBA of Greater Bostonwith cooperation of NAHB and the state chapter.

The crowd totaled 250 (attendance has ranged from 100 to 400 at others). Who were they? The breakdown is typical: 20% homebuilders, 40% local officials, 15% planners (private consultants and community staff), and 5% general public. Also typicaland surprising for such an explosive subject -was the open-minded air of sweet reason in which they heard these ideas:

Who should pay for community facilities is pretty well settled for streets, sewers, and water, said Planning Consultant James F. Shurtleff. "Because the homebuyer will pay for them anyway, it is best to have them installed by the builder . . . who can do it quicker and more efficiently at less cost. But there is an area of grey in . . . schools, parks, open spaces." His solution: let the builder pay for those "that will enhance the value of his subdivision and primarily serve it," but where town plans call for schools, or other facilities that would serve the rest of the community too, the town should pay.

Zoning standards and subdivision requirements should follow some uniform pattern if not set the same goals, suggested Planner David Grossman. For builders to follow all the requirements in the municipal patchworks around big cities is "like expecting a lawyer to be able to practice in all 50 states," he contended. He attacked towns' willingness to grant zoning variations in recognition that "land is not uniform, even if zoning must be in districts," but urged that zoning ordinances be drawn to more flexible standards (eg, population density or building/ lot size ratios instead of absolute setbacks, building heights).

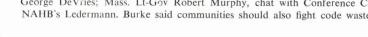
The right to build exists just as does the right to preserve a community, said Architect Edward Poskus, chairman of the Brockton planning board. For communities to say only high-price houses-or big lots-are permissible is like solving the traffic problem by ruling all cars but Cadillacs off the road. "When I was inching my way through traffic, I saw only one other Cadillac on the road,' he said. "We could have zipped right along if all those other cars weren't there."

Builder participation in deciding what laws govern building is weak and ineffective, said Medford City Solicitor Mark Gallagher. He reminded builders that the idea of zoning itself won support from the US Supreme Court "by a hair-only because there were so many zoning ordinances already in effect . . . Often towns pass laws just to see how they'll go. Blackmail, it's called. Well, it's only blackmail because the individual builder doesn't feel strong enough to contest it." It would be "a sign of maturity," he said, if builders organized support for "decent zoning and not make this a battle of suits." But he also warned: "In this country, you never did have an untrammeled right to build. Even before this was a nation, in Cambridge thatched roofs were prohibited because of fire hazard." He declared that "avant-garde thinking" among some planners leads to regulations that can be overturned in court.

Costs of growth aren't as great as some communities fear, two town officials told an afternoon panel. Planning Board Member (and planning consultant) Homer K. Dodge of Framingham told how his town, faced with "whether to fight growth or encourage it," found no figures available on the costs. So it made its own study, found that houses averaging \$7,200 assessed value (at 45%) paid their own way in taxes, and showed a profit if new commercial establishments to service subdivisions were counted in. "And land prices went from \$200 to \$3,000 an acre in residential areas. In industrial, one fellow I know is holding out for \$35,000 an acre where 15 years ago he couldn't get \$1,000."



KEYNOTE SPEAKERS (1 to r) E. J. "Jim" Burke, NAHB 1st vice president; Boston HBA President George DeVries; Mass. Lt-Gov Robert Murphy, chat with Conference Chairman Michael Campanelli, NAHB's Ledermann. Burke said communities should also fight code waste.



URBAN RENEWAL:

City Solicitor A. Ankeles of Peabody took a swipe at "street-corner economists who blame the most easily observed social phenomenon for undesirable effects... forget to take into account the effect of inflation on the costs of government." He said his own study of towns which resisted growth indicated their governmental costs rose more in proportion to their size than towns that grew.

Ledermann sees the conferences working three ways for builders:

- 1. They give them the posture of constructive leadership on growth problems which gains them the respect of city officials and planners. "In Milwaukee, community officials after the conference called on the local chapter for advice on pending measures—something that never happened before," he says. In another case, the local chapter was invited to join in a common legislative program with the state planners' group. Co-sponsors for the conferences have included planning groups, educational institutions, newspapers, similar interested factions, often created for the first time a mutually beneficial bed-fellowship.
- 2. They put the problems of municipal and area growing pains into a much broader perspective. "It works both ways," says Ledermann. "The builder sees his specific trouble in the context of the community's overall problems. And the officials see the homebuilders' problems in a better light. Where they have enacted restrictive regulations and hear nationally known planners say this is not real planning—and no solution—they are impressed." Planners, by hearing the give and take in the meetings, become "more aware of the facts of life" and leave enlightened too, says Ledermann.
- **3.** They provide a focus that is often lacking for community concern about growth. In most cities where conferences have been held, local participants have followed up with later, even more specific, ones on their own. "In Hartford, the community officials asked the builders to set up another conference to concentrate on more specific problems."

The atmosphere of detachment leads in some cases to pretty plain talk. In Pittsburgh, two speakers on opposite sides of the table revealed frankly that bribery was a real problem in some communities. In Milwaukee, where the second conference was so "institutional" that it concentrated on central city problems, William E. Finley, director of the National Capital Planning Commission noted the downtown dirt, asked: "Don't you people have any sand blasters?"

What about cost? "Usually," says Ledermann, "the local chapter, which handles all local arrangements, breaks even." NAHB supplies the chief speaker, and Ledermann's time. "Of course, it depends on how many outside speakers you have and how far they must come," he says. In Boston, a \$6 fee covered the tab, including lunch.

Is such activity far afield from builders' bread and butter? No, says Ledermann. "Builders are not going to have any money in their pockets tomorrow because of what happened in Milwaukee last week, but central city growth promotes met area growth... We try not to consider the conferences an end in themselves. Instead, we want to get people thinking about growth, not running away from it. Obviously, these problems of all kinds are not going to be solved overnight. But obviously, builders have a big stake in getting them solved."

Suburban town balks slums by buying up old homes

Whitefish Bay, an upper-class* north shore Milwaukee suburb, is giving the rest of the nation an object lesson in how to prevent blight without federal subsidies, condemnation, or court action.

The village simply buys up old, rundown houses one by one, as they are put up for sale. It razes the buildings and resells the land for new homes or other uses. Last year, the village spent \$25,000 this way. It expects to spend \$90,000 this year. Officials predict the plan will more than pay for itself within a few years by preventing property values from dropping and because the re-used land will yield more taxes. Village Manager John M. Katzban cites this example: one old home was bought for \$8,400. It had an assessed valuation of only \$2,500. When a new home is built on the cleared lot, it will probably be assessed at about \$11,000. The old home and lot was producing \$162 a year in village, school, county, and state realty taxes. With a \$11,000 assessment, the new house and lot would produce \$728 in taxes.

Each purchase must be approved by the village board. Before the village resells the house, the village planning commission must approve the proposed re-use.

* Almost half its households had more than \$10,000 income last year.

New York City renewal gets three new chiefs

New York City has a triumvirate of seasoned government housing professionals to replace the near-dictatorship of Robert Moses over the city's slum clearance programs, biggest in the nation.

Gov Nelson Rockefeller's signature was hardly dry on the enabling law when Mayor Robert Wagner appointed City Real Estate Commissioner J. Clarence Davies to the chairmanship of a new Housing & Redevelopment Board. It absorbs the functions of Moses' Slum Clearance Committee in coordinating redevelopment and rehabilitation along

Walter Daran



NEW FACES FOR OLD SLUMS
Chairman Davies (seated); Weaver, Fried

lines proposed by J. Anthony Panuch (News, Apr). Davies was soon joined by Walter S. Fried, regional HHFAdministrator since 1955, and Robert C. Weaver, state rent administrator under the Harriman administration who is now a Ford Foundation public affairs consultant and chairman of the NAACP, as board members. All three relinquish their other posts.

Davies is the only one of the three who was on Moses' committee. Among his first acts was a disavowal of Moses' charge that scandals over conflict of interest in the committee had made Title I a "dead duck" in New York. "I hope not," said Davies. "We will use all our energies . . . to carry it forward." Then he hustled off to Washington and a meeting with Rep. Albert Rains (D, Ala.) whose House subcommittee has been quietly investigating New York's urban renewal mess.

After that, the new board got down to work, almost at once displayed independence of its predecessors' policy of blasting neighborhoods off the map while virtually ignoring relocation problems it caused. The board dropped a pending Title I project in the city's Lower West Side Chelsea district. Reason: impact of the big Penn Station South project just north of it, already underway, would have to be absorbed first. The move got cautious approval from Chelsea residents who were protesting the project (but do not yet believe it is really dead) and garnered a bouquet from the World Telegram & Sun: . . . a hopeful sign that the new management will be more responsive to public criticism when circumstances indicate . . . that such criticism is warranted."

Chamber of Commerce hits subsidies for renewal

Should urban redevelopment pay its own way without costly federal subsidies for land write-down? The idea is gaining adherents.

Already suggested by a New York City tax study (News, Apr), it is now a major point in a drive by the US Chamber of Commerce to back up its national policy that federal aids to renewal, community facilities and planning should be ended as soon as possible.

In its new "Community Development Series," seven pamphlets designed to help local chambers mobilize private leadership for community development, the chamber says:

"It is important to recognize that the most rigid control over the volume of urban renewal in the United States is and will continue to be the fact that public money is involved . . . Urban renewal has to compete with all other demands on the tax dollar."

Instead of financing this way, asks the chamber, why not go to the private money market and borrow the needed funds, relying on good planning to create enough increased property values to provide revenues to repay the debt? In support of this, it cites three examples of existing or possible self-liquidating renewal:

1. In Pittsburgh, redevelopers of the Golden Triangle got firm 20-year rental commitments for most office space even before the land was sold. This established "such high values for the land that its sale not only returned all costs involved in the development, but also an income of \$50,000

continued on p 69



per year to the redevelopment agency for the life of the rental commitment."

- **2.** In Sacramento, tax revenues to the city are frozen at pre-renewal rates for the city's first downtown project (H&H, NOV.). When the project is completed, all revenues over the frozen amount will be earmarked to pay local share of project costs.
- **3.** In Indianapolis, the Redevelopment Commission is empowered to borrow up to $\frac{1}{2}$ % of the city's total assessed valuations to finance redevelopment, and the local government is empowered to levy enough taxes on the area to service the debt.

As for federal participation, says the chamber after surveying redevelopment's sorry record of slow starts nationally: "The record seems to indicate that the ideas contributed . . . have been of greater benefit to localities than the money."

Overall editor of the pamphlets is S. Howard Evans, former director of URA's urban renewal service branch, and longtime student of public administration and housing. They were conceived two and a half years ago, produced in a year-long collaboration among three Chamber committees. Legislation to implement their main points is being pushed by the Chamber.

PUBLIC HOUSING:

\$9,420-a-year families made eligible

Rising vacancies have led the Hartford Housing Authority to ease family income limits for admission to state-subsidized "moderate income" housing.

The State Housing Division has approved a new limit of \$4,800 a year income plus \$600 for each of the first three dependents, \$500 for the fourth and \$400 for each dependent beyond that. Additionally, a wife's income up to \$1,500 a year will go uncounted. Families with incomes 20% above the move-in ceilings already living in the state projects, may remain.

This means a family with three children can now stay in a state-aided apartment with an income of \$7,920—or up to \$9,420 if the wife earns \$1,500. (Many private lenders would approve such a family income for purchase of a \$20,000 to \$25,000 home.) The old income limits were \$4,200 a year for admission with the same allowances for dependents but no exclusion of a wife's earnings.

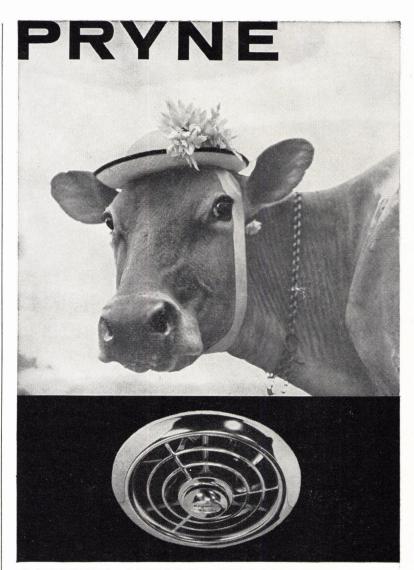
In late April, there were 90 vacancies among the 1,184 units in three state-aided projects. This was enough to threaten their financial solvency, say authority officials. Three-room apartments rent for \$65 a month, four-room units for \$73 a month.

Earlier, the authority relaxed its four-to-one ratio of white to Negro families—intended to prevent a ghetto in public projects—because it became impossible to fill four-fifths of the units with white families. Most of the families who become eligible under the higher income limits are expected to be Negro.

NEWS continued on p 71



BASEMENT ATOMIC FALLOUT SHELTERS can be incorporated into lived-in areas of a home, contends the Office of Civil and Defense Mobilization. This actual-size shelter was exhibited last month at the National Housing Center in Washington to show how. Said a press release: "The trend in fall-out shelters is toward a dual purpose room. Gov Leo A. Hoegh, Director of OCDM, suggests in this relaxed pose that a shelter may become a daily refuge from the vicissitudes of family life. . . . The shelter suggests alternate decorating themes, such as a stereo music room, card room, or guest room. Survival equipment can be kept near and carried inside the shelter before the fallout reaches the danger level."



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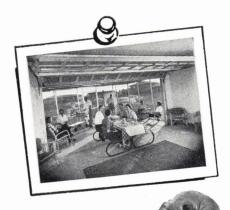
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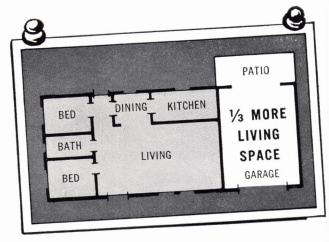
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Builder Morris Milgram's plans for six new interracial subdivisions move ahead

continued from p 47

itself to projects under way and offering consultant services at a fee to the rest.

- MCD is having no legal troubles so far in six other enterprises, most of them begun or firmed up after the Deerfield troubles. The locations and projects:
- 1. Wilmington, Del. Through stock interest in and consultant agreement with Runnemede Corp, MCD is participating in a 28-house subdivision on 23 acres in Newcastle County. Prices: about \$27,000. Construction is under way.
- **2.** Waterbury, Conn.: Meadow Homes, Inc, a wholly owned subsidiary, has bought a 37-acre site, won subdivision approval for 101 houses in the \$15,000 to \$19,000 bracket. Construction will begin in the fall.
- **3.** Downington, Pa.: Just 25 miles from Philadelphia, MCD has participation through a stock interest and consultation with Chester County Community Developers Inc in plans for 40 to 80 houses in \$16,500 to \$19,000 bracket. One 27-acre site is in hand.
- **4.** Washington, D. C.: Through Home Parks, Inc, another wholly owned sub, MCD has optioned one site, is considering another, both in the Maryland suburbs of the capital.
- 5. New Jersey: Through another wholly owned sub, MCD is seeking sites near Princeton and in commuting areas serving New York City.
- **6.** Bronx, N. Y.: MCD is participating through loans and consultation in two co-op apartments, one under construction, another in planning stage.

In some of the projects, says Milgram, his companies will not impose controls on racial mix that have made his others* both successful and controversial. "Where states have open-occupancy laws," he says, "we will abide by them. Those states don't have the same market pressures that make controls necessary anyway." The pressures: extreme Negro demand that tends to make any mixed development go all-Negro (and thus defeat its purpose) in a short time.

"In areas where there is open occupancy, with careful marketing there shouldn't be any problem," says Milgram. He cites Chicago Realtor Ferd Kramer's Prairie Shores development, where selective advertising yielded a 70% white occupancy ratio (News, Mar '59).

'Still a dirty word'

Discussing his projects, Milgram tends to a reticence about details on projects in early stages, but is candid about his reason: "Interracial is still a dirty word," he says. "Sites have a way of vanishing when you make an issue of your plans."

Milgram, an intense, crew-cut and youthful (at 43) builder from Philadelphia, says his company is also dickering for participation in a Brooklyn, N. Y. co-op, and that a Des Moines, Iowa project that fell through last year is still alive, but dormant. He radiates quiet enthusiasm when he talks about stock-buyers and their interest.

"This is investment in conviction," he says of the stockholders. "Everyone knows this stock is highly speculative and probably won't yield a dividend for years."

Cities where groups have asked about or sought MCD participation include: Lincoln, Neb.; Pittsburgh; Colorado Springs; San Diego; Los Angeles; Phoenix; Seattle; Toledo; Buffalo; Rochester; Detroit, Flint, Ann Arbor, and Ypsilanti, Mich.; Cincinnati; Louisville; Daytona Beach; St. Louis.

Penalties of litigation

The Deerfield troubles—where MCD is fighting Park District condemnation of its site and a federal court has denied the company's suit (through Progress Development Corp, a wholly owned local subsidiary) for civil rights damages against town officials—have put a crimp in MCD operations, Milgram admits.

For one thing, the company has a \$113,000 investment in land, plus development costs, and the cost of building two models. "We have completed the models to show our faith that we'll win," says Milgram. "But otherwise we'll have to wait and see." For another, sales of MCD stock have been held up by the need to modify its prospectus to reflect the Deerfield troubles. And a side observation by the court in the civil rights decision has set off an SEC inquiry into the company's registration, to see if it should have been registered as an investment company (which it was not).

Finally, costs of carrying appeals from the federal decision and fighting condemnation are heavy, says Milgram. "There are 3,000 pages of record in these cases now," he says. "And they all have to be printed every time we appeal."

NEWS continued on p 73

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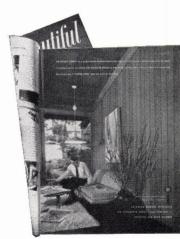


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^{*}Two in Philadelphia, two in Princeton, N. J., all built by companies formed before MCD.



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MATERIALS BRIEFS

More steps toward industrial revolution

More signs of the vertical integration that Burnham Kelly has long prophesied as a vital part of the industrial revolution in housing:

- Southern Pine Lumber Co., already one of the most thoroughly integrated companies in the nation, from woodlot to lumber yard, has started its own prefabrication company, hired veteran National Homes Executive Wilbert S. Johnson, 44, to run it. Southern Pine grows and harvests its own wood, hauls it on its own railroad to its two sawmills, finishes it for sale in the company's lumber yards or its several factories. The firm owns two furniture mills, is one of the largest manufacturers of finished furniture parts in the nation. It also makes broom and mop handles, laminated structures, flooring, pressure-treated lumber, uses its waste materials in fibreboard and pressed wood toilet seats, and is the largest maker of beverage cases in the Southwest. It owns 60% of Southland Paper Mills, Lufkin, Tex.
- Certain-Teed Products is nearing completion of a test run on marketing home packages through a chain of 19 Texas wholesale lumber branches. The experiment began when in 1958, its William Cameron division had sold more than 2,000 Cameron "Easy-to-own" Homes not as prefabs, but materials packages including dimensional lumber, asphalt roofing, gypsum and paint products manufactured by Certain-Teed and Bestwall Gypsum Co, a spun-off, independent affiliate which shares sales facilities. Some 3,000 dealers in Texas and Oklahoma also sold Cameron products into 70,000 homes last year. The Cameron division also developed land for its houses; Certain-Teed has provided some financing. This success leads Certain-Teed to ponder national expansion.
- Flintkote, planning the largest capital expansion program of its history, says one main purpose is to establish vertically-integrated operations from natural resources to finished products and distribution channels. One example: entry into the asbestos-cement pipe business. The company will build plants in California and New Jersey. Ultimately it plans another in the Midwest and one in the South. They will use cement from Flintkote cement plants, asbestos from Flintkote's Canadian mines. Estimated cost: \$20 million.

Will 'general welfare' upset big lot zoning?

continued from p 65

have been "increasingly reluctant to apply brakes to zoning boards."

Both building sizes and lot areas have, in the past, become favorite means of barring cheaper homes and the families with children who buy them. Why? Such families boost school and other municipal costs, often driving local taxes up. So many suburbs don't want them.

Only in Michigan, Pennsylvania and Illinois do opponents of big-lot zoning show a record of success, says Hodza, and then only on more than half-acre zoning. "While the issue has not been litigated in many more than a half-dozen jurisdictions, decisions upholding the ordinances are in decided majority," he notes.

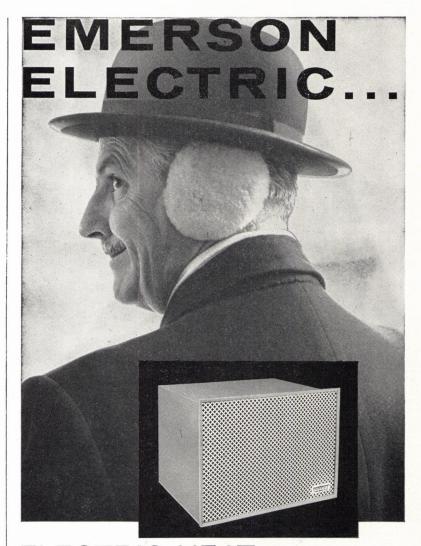
In Massachusetts, New York and Missouri, one-, two- and three-acre minimums have been upheld. And the New Jersey Supreme Court has upheld five-acre zoning in one town. But, says Hodza, the legal basis for such regulations lies in the community's right to exercise police power to protect "public health, safety, morals and the general welfare."

"Public welfare," he says, "is a concept which in recent years has been widened to include many matters which in former times were regarded as outside the limits of governmental concern." Among these is preserving land and tax values. Other permissible objectives of zoning, courts have found, may be maintaining esthetic appeal, lessening traffic and preventing population congestion, providing adequate light, air, safety from fire and panic, and preserving neghborhood character.

But, he asks, in the face of a population explosion, will the courts maintain their stand? "... It is incredible that the trend [to big-lot zoning] can long continue. Urban population pressures at the periphery of suburbia grow unabated. Each municipality has the power to limit population density and at the same time prohibit the erection of low cost homes—all without regard to regional needs.

"The courts, if they choose to exercise it, have the power to invalidate edicts of exclusion masquerading as ordinances for the general welfare. Just as the courts have erected the concept of the broadened general welfare, so too might they erect a broad countervailing doctrine of anti-exclusion. The general welfare—the regional general welfare—requires it."

NEWS continued on p 75



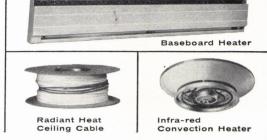
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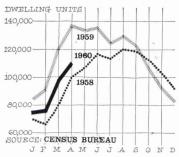
Float-Away metal closet doors are made to fit all standard modular openings — available in Flush Panel, Louver or Colonial, prime coated — also prefinished Lauan and Birch. Five-year guarantee.

STATISTICS:

Housing's 24 biggest markets

Almost half the nation's new housing is concentrated in just 24 metropolitan areas, Census figures show. They accounted for 47.1% of the 1,122,408 permits issued last year—a little more than the 46.5% they accounted for in 1958. San Diego, Atlanta, and Seattle show up as among the nation's fastest-growing cities. San Diego jumped from sixth to fourth place in housing markets last year.

Area	PER	RMITS	%	RAI	NK	
	1958 1959		change	1958	1959	
New York-N. E. New Jersey	84,167	106,052	+26	1	1	
Los Angeles-Long Beach	80,562	90,269	+12	2	2	
Chicago	43,631	51,136	+17	3	3	
San Diego	22,839	30,086	+32	6	4	
San Francisco-Oakland	25,157	29,497	+17	4	5	
Philadelphia	20,793	25,704	+24	8	6	
Washington, D. C	22,455	25,061	+12	7	7	
Detroit	23,742	21,847	— 8	5	8	
Phoenix	16,196	17,905	+11	10	9	
Miami	18,761	15,794	-16	9	10	
Atlanta	10,337	12,770	+24	14	11	
Seattle	10,300	12,699	+23	15	12	
Cleveland	10,426	12,425	+19	13	13	
Denver	11,170	10,871	— 3	11	14	
Baltimore	10,979	10,683	— 3	12	15	
Boston	8,803	9,971	+13	17	16	
Columbus, Ohio	8,967	7,888	-12	16	17	
Birmingham, Ala	6,649	7,203	+ 8	19	18	
Indianapolis	4,987	6,350	+27	21	19	
Milwaukee	6,660	6,335	— 5	18	20	
Buffalo	6,328	5,669	-10	20	21	
Norfolk-Portsmouth	4,715	5,110	+ 8	22	22	
Salt Lake City	4,196	4,149	- 1	23	23	
Rochester, N. Y	2,969	3,653	+23	24	24	



Source: Census Bureau.

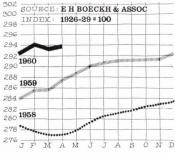
65 1959 1960 DWELLING
55 DWELLING
45 WA 15 WA 15

NEWS continued on p 77

HOUSING STARTS in April rose 12.9% from March to 110,400 (108,900 private and 1,500 public). The private total was 20.7% behind April 1959's record high for the month of 137,400. The seasonally adjusted annual rate of private starts was 1.135—0.9% above March and 20.9% lower than last April.

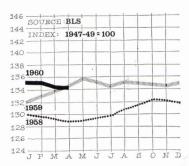
Starts for the first four months reached 361,000 (352,800 private, 8,200 public). Average annual rate of private starts is 1.148 million, 18.1% below the same 1959 period.

FHA APPLICATIONS on new units fell to 28,207 in April—down 17.6% from March and down 37.8% from April of last year. Applications on 1- to 4-family homes totaled 22,490, 18% below March and a whopping 42.4% behind last April (which was a record month for applications as well as starts). Project applications of 5,717 were down 15.9% from March and 9.5% from April 1959. VA appraisal requests on new units rose 6.4% from March to 13,697—still off 27.4% from last April.



RESIDENTIAL BUILDING COSTS rose 0.5 point in April to 293.9 on Boeckh's index. Minor adjustments in labor rates in four cities accounted for the increase. Lumber, asphalt products and plumbing

equipment declined slightly in price.



MATERIALS PRICES fell another 0.2 point in April to 134.2. BLS' index is now below its year-earlier level—for the first time in 19 months. Biggest price declines were in plumbing equipment and metal doors, sash, and trim.

EMERSON ELECTRIC...

FINISHING TOUCHES

in planned packages save you money!

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



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



RUBEROID gives you quality where it will be seen!



HARRY R. BLACK, General Manager of Sales, United States Steel Homes: "The dealer-builders who erect our pre-fabricated homes insist on quality materials. Quality is particularly important in a roof covering because no other part of the house is subjected to as much wear and tear from the weather.

"RUBEROID asphalt shingles not only answer our requirements for a quality shingle

but also contribute substantially to the appearance of our homes. RUBEROID helps us and the dealer-builder offer his customers a home that is quality throughout."



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

Pat Harness quits prefab post

Conrad (Pat) Harness, 40, is resigning as executive vice president of the Home Manufacturers Assn to return to his native Texas to set up his own building and real estate firm.

For HMA, it is a big loss. When energetic troubleshooter Harness took over the



HARNESS

former Prefabricated Home Manufacturers Institute three years ago, the trade organization was conservative often to the point of being stodgy. Revamping the organization from top to bottom, Harness gave it new and needed zip. He changed the name and moved the Washington headquarters from a dingy building to

spacious, more impressive suite. Doubling the staff to 14, he hypoed promotion, stressed neglected technical services. He de-emphasized the word "prefabricated," stressed "manufactured" and "packaged" house. Membership grew from 50 to 85 companies.

Onetime (1946-50) real estate editor of the Washington *Post*, Harness set up NAHB's public relations department in 1950 and directed it until 1954 when he went to Houston to become executive vice president of the HBA there. He came to HMA in the fall of 1956. His resignation is effective September 1. Explains Harness: "I'm going on 41. If I'm ever to start my own business, it will have to be now."

Harness has long dabbled in housebuilding as a sideline. Since 1952, he has been president of Northern Virginia Builders Inc. The company has been putting up six to eight homes a year, has just drawn up plans for a 27-unit low-rise apartment building.

Eight weeks after President Eisenhower nominated him to succeed Charles Slusser, the Senate at mid-May confirmed Realtor Bruce Savage as the nation's 7th public housing commissioner.

OFFICIALS: New chief of HHFA's Region 5 is John A Foster, 39, Denver realty broker and appraiser. He succeeds Waldemar H. Sindt who is leaving the Fort Worth post to co-ordinate defense planning in the west for the HHFA.

Reports persist that Pennsylvania Republicans want personable, savvy URA Commissioner David M. Walker to run for governor when Dave Lawrence's term expires in 1962. Replies Walker: "My answer is a definite no. I have a completely absorbing job on my hands now."

ARCHITECTS: Award-winning San Francisco Architect Worley K. Wong has been appointed to the California State Board of Architectural Examiners. He replaces Wendall R. Spackman whose four-year term expired. Clarence Stein, FAIA, internationally renowned planning expert, has been awarded the British Town and Country Assn's Howard Medal for his contributions to land planning. The venerable (77) New Yorker, whose accomplishments include Radburn, Greenbelt, and Kitimat, is the first American

to receive the honor since Critic Lewis Mumford in 1946. Wayne S. Hertzka, of San Francisco was elected president of the California Council of AIA.

Louis Bruce, N.Y. dairyman, takes over FHA co-op post

FHA's new special assistant for cooperative housing is **Louis R. Bruce**, 56, New York State Dairyman and cooperative enthusiast.



RRUCE

Though new to housing, Bruce is an old hand at co-ops, is a member of 15 including the Dairymen's League Cooperative Assn-thus satisfying a specific requirement of law that the post be filled by someone who "believes in" co-ops. Of Mohawk and Sioux ancestry, Bruce has also been a longtime leader in American Indian af-

fairs, is a former New York state director of Indian affairs and past president of the Six Nations Indian Assn. He replaces **Dwight Townsend**, the old friend who recommended him for the job. Townsend resigned to become Washington director for the Cooperative League of America.

Herbert C. Broyhill, 39, a former Arlington, Va builder and brother of Rep Joel T. Broyhill (R, Va), was sentenced to a year in prison for not filing tax returns in 1955 and 1956 for incomes of \$28,719 and \$32,879.

Harry J. Morchower, head of the Eastern Mortgage Co in Newark pleaded guilty to embezzling \$208,928 in mortgage payments due Aetna Life over the last five years. Morchower, 58, said he pocketed money given to him to prepay mortgages, spent it on "bad investments, costly medical care for my wife, and the education of my daughter." He said he was broke. The theft was discovered when a woman complained to Aetna that she had paid up her loan but hadn't received the cancelled mortgage.

Maurey Garber



BRAND NAMES PROMOTION has won Builder Harry W. Reed (left) of Unionville, Conn. the top award for homebuilders in the 1959 Brand Names Foundation competition. His plaque was presented by Paul B. Shoemaker (right), vice president of Masonite Corp and vice chairman of the Brand Names Foundation executive committee, at a banquet in New York.

Miami's controversial slum rehabilitation boss, Frank A. Kelly, has resigned.

Kelly, 55, a former New Jersey State policeman and one-time enforcement investiga-

H&H staff

FLLY

tor for the Office of Price Stabilization, quit shortly after the city moved to abolish his \$9,300 a year job. He charged that his department is "undermanned and understaffed." He said he did not want to be responsible for producing results without sufficient help.

Kelly had been slum chief since the department was created eight

years ago. Several times he has been criticized for moving too slowly. In 1957, Mayor Robert K. High called for an investigation of his department after local newspapers disclosed that records of 500 units condemned as dangerous three years earlier had been put in the dead file and the units were still being rented. Kelly was also accused of favoring some slum rental agents.

National Homes Corp has named Anson M. McAdams, 38, and Richard E. Larimer, 44, as senior vice presidents in charge of two newly created sales divisions. McAdams, who has been with National since 1947, will direct the Lafayette, Horseheads, and Tyler division. Larimer, with the firm since 1951, will head the company's home manufacturing subsidiaries: American Houses, W. G. Best Corp, Knox Homes Corp, Tyler Manufacturing Corp, Lester Brothers, Fairhill, and National Homes Corp of California.

Edward P. Clark heads savings banks association

Edward Pultz Clark, 48, president of the Arlington (Mass.) Five Cents Savings Bank, is the new president of the Natl Assn of Mu-

tual Savings Banks. Clark, who was NAMSB vice president, succeeds John deLaittre, president of the Farmers & Mechanics Savings Bank, Minneapolis.

As a youth, Clark insisted he would never follow his father into banking. But after graduating from Harvard and taking a law degree at Northeastern Uni-

Vincent A. Finnigan

CLARK

versity, he went to work for Arlington in 1928, found he liked it after all. He became treasurer in 1941, president in 1955.

A believer in helping his customers spend their money wisely, Clark has trained officers in Arlington's five branches to counsel families on budgeting—even to explain the advantage of prepaying a mortgage to someone who may inherit a nest egg. "We try to give them the right answers—all the answers," he says. "In a middle-class community, where we must count on the same people to come back again and again, that is the only policy. If our officers don't know the answers, they are instructed to find out."

"I'm mostly a banker," says Clark of his continued on p 78

hobbies. But he admits he likes boating at Cape Ann, Mass. He has a summer home at Rockport, Me., where he has kept both motor sailers and power boats. "Right now, I'm between boats," he adds. Why? Hurricanes. This month, he is scheduled to become first vice president of the Savings Bank Assn of Massachusetts, a post from which he would succeed to the presidency next year.

Succeeding Clark as NAMSB vice president is Samuel W. Hawley, 50, president of People's Savings Bank, Bridgeport, Conn. Hawley, a Yale and Harvard Business School graduate, credits his policy "putting a branch near the family garage" for People's rapid growth since he took the helm in 1957 (from \$196 million of \$265 million in assets).

People's now has eight branches; they account for over 60% of the bank's business. Hawley figures customers prefer the informality of branches to the marble temple of the main office. People's pays depositors 334%, highest among Connecticut banks.

Married, with three children, Hawley finds time to garden, golf, fish, and play tennis, has just taken on a big volunteer job as chairman of the Bridgeport Citizens Action Commission, which is working to redevelop the city's slums.

Vander Ende, Cramer picked to head Natl S&L League

The Natl League of Insured Savings Assns has nominated Vice President Gerrit Vander Ende to succeed Oscar Kreutz as president.



VANDER ENDE

It picked Floyd Cramer, president of Washington Heights Federal S&L of New York City to be next year's vice president.

Vander Ende, 59, is president and chairman of the \$240 million Pacific First Federal S&L, Tacoma, the nation's 15th largest. He has headed it since 1948. Earlier, he was president of the Federal

Home Loan Bank of San Francisco. He is also chairman of the Tacoma Housing Authority.

Cramer, 55, was born on a farm in Smackover, Ark., quit high school to seek his fortune with \$4.16 in his jeans. He worked as a minor, lumberjack, and railroad section hand. He joined the Marines at 19 and while in service wrote a book, "Our Neighbor Nicaragua." Later, he got lost in New York's financial district while seeking a job as a bank guard, but landed a messenger post with another bank at a different address.

He founded Washington Heights S&L in 1941 in a 12'x20' store, has seen its assets grow to \$190 million, which ranks it 21st in the nation. He is a former president of the New York State S&L League,, a graduate of the American Institute of Banking and in 1954 was the Republican nominee for the House seat vacated by **Jacob Javits** (now in the Senate) to run for state attorney general.

Kreutz, former managing director of the league, has headed First Federal S&L of St Petersburg, Fla. since 1953.

MANUFACTURERS: Ned A. Ochiltree has been named chairman of the board of Ceco Steel Products, Chicago. C. Foster Brown,

Jr, takes his place as president. Major General Clarence J. Hauck, Jr (ret), former senior military assistant for legislative affairs for the Defense Dept, was appointed president of Indiana Limestone Co, succeeding H. H. Sackel who will continue as a director and chairman of the finance committee. Howard A. Davis was elected president of Ardmore Products Inc, producer of the textured metals and a subsidiary of the Berry Steel Corp. Judson S. Sayre was elected chairman of the board and chief executive officer of the Norge Division of the Borg-Warner Corp. Succeeding him as president is Robert H. Quayle, Jr.

Lee B. Thomas, founder and board chairman of Thomas Industries, Inc., manufacturers of lighting fixtures, reassumed the post of president following the death of Frederick Keller.

George MacNichol takes over as top man at LOF

Libbey-Owens-Ford has named **George P.** MacNichol, Jr chief executive officer, succeeding John D. Biggers, 71, who stepped down as chairman after 30 years as top man in the giant glass company. MacNichol, 61, was re-elected president, a post he has held since 1953, and **Curtis W. Davis** was elected executive vice president.

Walbridge & Bellg

MacNICHOL

Under Biggers, the Toledo company grew from a \$12 million annual sales volume in 1929 to a record \$306 million last year. He also made a reputation as an industrial statesman, serving as the first \$1-a-year administrator of the US Census of the Unemployed under President Franklin D. Roosevelt in 1937-38 and then as director of

production in the Office of Production Management. He will continue as a director of LOF and chairman of the company's finance committee.

MacNichol, fourth generation of his family in the glass industry, started with the former Edward Ford Plate Glass Co 39 years ago. He became vice president of sales of LOF in 1930 when Ford merged with Libbey-Owens.

Tall, softspoken and urbane, MacNichol is respected in the industry for his acumen in merchandising, marketing and advertising. His campaigns to promote the use of glass are credited with opening up the market for storm windows, picture windows, and glass curtain walls. One of his pets: the solar house.

NAHB Chief Martin Bartling has a 'day' in his home town

On a drizzly afternoon in Knoxville, Tenn. last month, an airliner from Washington, D.C. was greeted by a motorcade of city officials and builders. Red-lettered signs proclaimed: "Martin Bartling Day Celebration" "Local Boy Makes Good". . . . "Welcome Home."

From the plane stepped the boy who'd made good: towering (6'6"), 43-year-old Martin L. Bartling Jr, president of NAHB. Escorted by police with sirens wailing, the motorcade took Bartling 15 miles into the

Lunsford—Knoxville Journal



DICKERMAN, BARTLING & GERHOLZ "I never thought I'd see the day," he said.

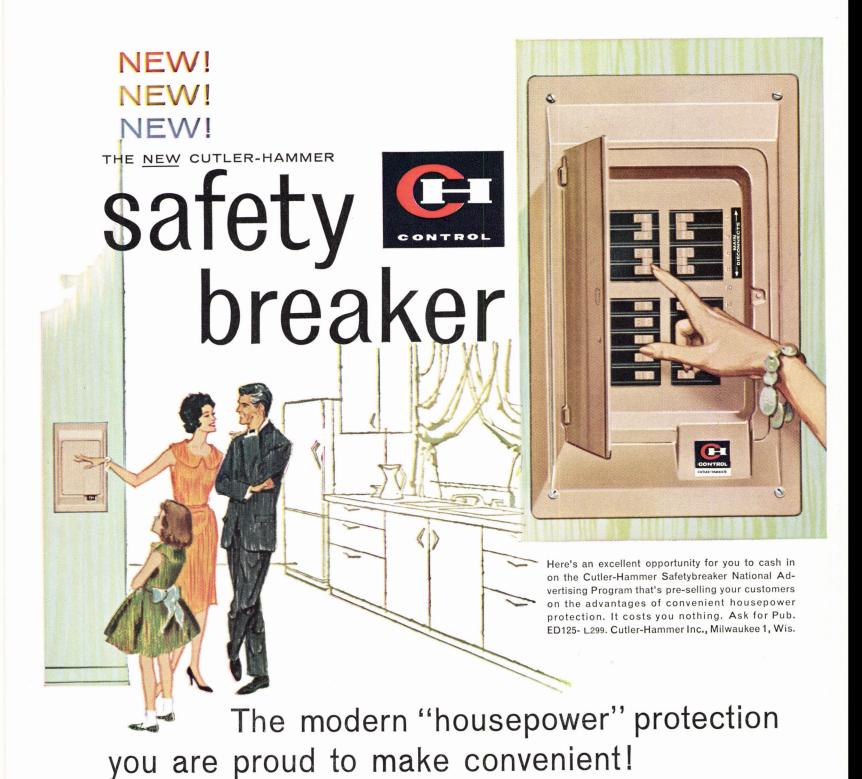
city and to a reception at the Andrew Johnson Hotel. That evening, at a banquet, past NAHB President (1944) Robert P. Gerholz, Flint, Mich. builder, told 350 guests: "I predicted 10 years ago that Martin Bartling would get this national honor. He is a gifted, tough-minded, self-assured young man and research is one of his great enthusiasms. Research will trigger the achievements of homebuilding in the 1960s. More research is necessary if housing is to get its share of the consumer dollar. A quality product must be produced at a competitive price."

In a telegram to Gerholz, President Dwight Eisenhower said: "His [Bartling's] constructive leadership of a great industry materially helps in meeting the housing needs of our people and in advancing the Administration housing program." Vice President Richard Nixon wired: "As the elected president of the NAHB, you represent not only a large segment of our nation's industry but also an organization which is certainly an outstanding testimonial to our American system of free enterprise which is so essential to the well being of our country." The Knoxville and Tennessee HBAs, sponsors of the event, gave Bartling a color television set.

Said Bartling: "I never thought I'd see the day when my home town would give me, a simple country boy, such an honor." Of housing's future, he predicted: "The population explosion will help keep prices up and the gradual increase in the cost of materials practically assures one of never being able to buy a house any cheaper than he can today."

Bartling, who calls himself a "small volume" builder (up to 12 houses a year), told newsmen that he doesn't expect to have much time to build this year. He has been spending most of his time in Washington so far. And he and his wife will go to Hawaii this month and in July to Canada and to Alaska, where a regional NAHB meeting will be held during his visit.

DIED: Albert C. Martin Sr, 80, architect and engineer whose firm designed some 1,500 buildings, including Los Angeles' city hall, former president of the Southern California AIA chapter, April 9 in Los Angeles; Fred B. Huebenthal, 66, Chicago realtor for 30 years, former FHA director for northern Illinois, past president of the Chicago Real Estate Board and the Illinois Assn of Real Estate Boards, April 13 at Oak Park, Ill.; Charles J. Kasselman, 52, president of George A. Kasselman Sons Co, Cincinnati cut stone contractors, and a member of NAHB, April 19 in Cincinnati; John J. Byrne, 44, assistant chief counsel of FHA. April 23 at Silver Spring, Md.; Harry Drazen, 69, president of Drazen Lumber Co, one of the largest lumber concerns in Connecticut, May 8 in New Haven.



Home builders, now a new breaker panel that's designed to help sell your homes . . . it's the all new Cutler-Hammer Safetybreaker. Appliance-styled to match the finest kitchen equipment and finished in muted sandalwood, the new Safetybreaker can be installed on or near a kitchen wall for new safety, convenience, and economy.

No longer must the breaker panels for your homes be hidden in the basement or garage because of their drab appearance. Now you can have your Safetybreaker installed where it belongs . . . in or near the kitchen where it can serve your customers with safe, easy-to-reach

circuit protection when it's needed most.

You'll find it doubly sensible to have Cutler-Hammer Safetybreaker installed in your homes. Not only will they provide extra convenience for your customers, but they will be nearer the high wattage equipment. Shorter runs of heavy duty wiring will make the installations cost less.

Be sure the plans and specifications for your homes include the all new Cutler-Hammer Safetybreaker, and take advantage of the extra "sales appeal" and economy it affords. Your electrical contractor will quickly approve your choice because he knows the Cutler-Hammer name always insures quality...at no extra cost.



A dining room of distinction, designed by Emily Malino Associates. Wall is 44" Octagon and Dot in 56 Leaf Green, 345 Cr. Cobalt and 365 Cr. White. Floor: 1\(\frac{1}{16}\)" x 2\(\frac{3}{16}\)" Oblongs, Azure Textone. Color Plate 89.

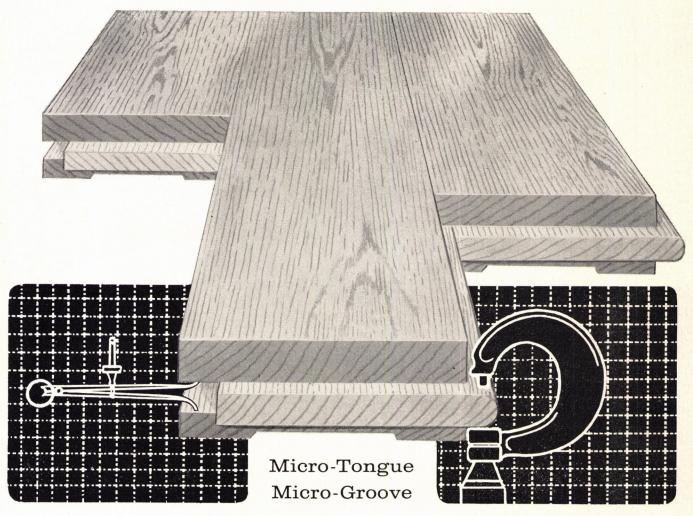
New look for dining rooms ... new lift for sales

Ceramic tile works the magic... creates a dining room that glows with jewel-bright color, sparkles with care-free beauty—adds a dramatic new sales feature to the homes you build. And with American-Olean's exciting tile colors, new textured surfaces and cost-saving scored designs, decorative possibilities are endless.



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Long-Bell Oak Flooring

Saves Even Skilled Floor Layers Hours Per House

Every strip of properly seasoned, kiln dried Long-Bell Oak Flooring is carefully machined to hairline tolerances. Edges and ends are milled to the most exacting standards. Every splinter-free strip goes down quickly and beautifully...fits like a glove.

Because homeowners prefer the warmth and beauty of Long-Bell Oak Flooring, it is the first choice in residential construction.

Long-Bell Oak Flooring gives you a wonderful selling advantage . . . for it is truly the best flooring money can buy.

Produced in Volume...For Lower Unit Cost



WRITE-WIRE-PHONE Your Nearby Long-Bell Supplier

NEW DESIGN FLEXIBILITY! GREATER SALES OPPORTUNITY!



Nothing brightens "traditional" like Andersen's all new Strutwall Divided Light Windows. Note clean, sharp lines.

Demand for the traditional home is growing. You can meet it this easy profitable way: New Strutwall <u>Divided Light</u> Window!

Three years ago Andersen introduced its first Strutwall unit, a component, making a quality window an integral part of the wall. Industry response was immediate. Many builders hailed Strutwall as a profitable advance in building technique. Everywhere users reported consistent big savings in installed cost, even when figured against cheap conventional windows.

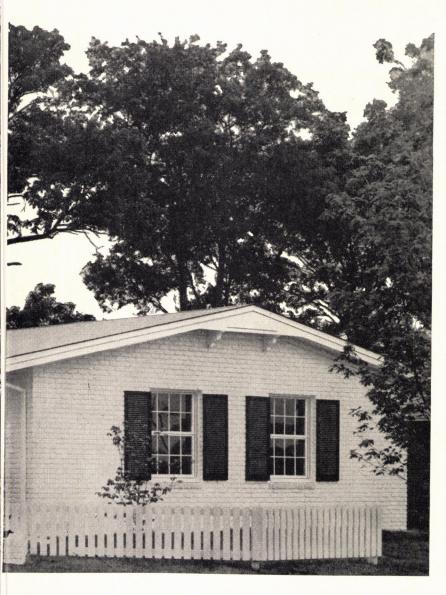
Now Andersen gives you another Strutwall design, pre-tested and customer accepted. Strutwall Divided Light Window makes architectural design variations easy . . . lets you alter the general

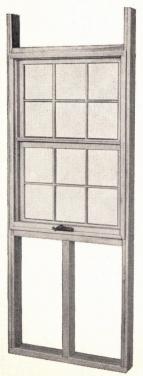
appearance of your homes without sacrificing Strutwall's construction advantages. Exterior window detailing is sharp and clean due to the *interior* self-storing screens.

There's a range of Strutwall sizes to meet every building need. And all give you the same moneysaving, time-saving advantages.

If you're not yet a Strutwall user, find out today the total savings that can be yours. For complete fact and figure information, including Strutwall sizes and details, call your dealer. Or write Andersen direct. Use handy coupon at right.







New Strutwall Divided Light Window

Save hours! Save dollars! Cut conventional window installation steps two-thirds. Assembled complete, including operating hardware, with Strutwall you eliminate: Cripples over header, insulation and blocking around unit, sill plate, jack studs, cripples below window. Saves ordering, cutting, fitting. Waste is practically eliminated.

New! Strutwall box header! This optional feature further simplifies window installation in either conventional or panelized construction. Plywood box header is precisionnailed and glued at the Andersen factory. Eliminates double 2 x 6 header construction.



Add traditional distinction . . . with wood's warm beauty and natural insulation. Brighter, cleaner exterior appearance because screen panels are *inside*. Strutwall gives you the full selling power of the famous brand name, Andersen . . . all at lowest installed cost!



Fits all frame wall and panel construction! Here unit is set in standard stud wall construction. In multiple openings just butt Strutwalls against each other for large economical glass areas. Absence of separate casings provides clean, trim lines. Note narrow meeting rail gives more glass area.

PRE-TESTED SALES APPEAL!

Andersen Strutwall <u>Divided Light Windows</u> proved their sales appeal in these test homes:

John Fiser, Knoxville, Tenn.: "We have never had any trouble selling our quality homes, and the addition of this new 'consumer demand' product makes the job even easier."

Charles Conry, Grimes and Conry, Louisville, Ky.: "We chose Strutwall initially for superior design and workmanship. The addition of the divided light unit makes it even easier to satisfy customers with a top quality product.

"This unit is far superior in appearance to the conventional double hung with its cumbersome storm and screen. The small, trim, self-storable storm panel on the Strutwall has proved to be a real favorite."



FOR FULL DETAILS CLIP AND MAIL TODAY!

Andersen Corporation • Bayport, Minnesota	H&H-60
Please send me complete information on Strutwall new box header.	
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FIRM NAME	
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THE FIRST PRICE BREAKTHROUGH FOR A QUALITY PATIO DOOR

COMPARE THESE QUALITY EXCLUSIVES WITH ANY OTHER DOOR . . .

- Deep-Alumilited PermaSatin or Champagne
- All-points weatherseal of Silicone-treated, Schlegel deep-pile mohair
- Fixed-slider in standard 6', 8' & 10' widths, OX and XO models. OXO models in 9' & 12' widths.
- For single or %" dual glazing
- Tension Screen, guaranteed . . . can't jump track
- No need to order XO or OX models as all ShoLume doors are REVERSIBLE to install either

PRICED TO GO TO BUILDER GLAZED AND WITH SCREEN-FOR AROUND \$100

Completing the ShoDoCo line of patio doors....

1 Vue-Lume's DEVILLE & DEL RIO...

DeVille:recognized as the ultimate answer when quality is the deciding consideration. Multislider in widths to 24'. Two standard heights.

Del Rio:Identical quality of excellence as DeVille, designed to glaze with 5/8" or 1" insulating glass. 2 HercuLume ... Engineered to retain the famous Vue-Lume quality and still meet moderate price

competition. Fixed-Slider in standard widths to 24'. For single or 5/8" dual glazing.

And don't forget...

As the name implies - Shower Door Company

of America STILL produces the world's bestknown line of Shower enclosures... Three price ranges "Permalume", "ShowerGlass", "Cameo" to meet all specs and budgets.



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Please send me literature and price	ce lists on
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	State

Letters

Quality recognition

I thought the story in your March issue about FHA recognition of quality was particularly well handled.

JULIAN ZIMMERMAN, commissioner

Your article "FHA gives Quality a big boost" is terribly important to homeowner-

ROBERT P. GERHOLZ, president Gerholz Community Homes Inc Flint, Mich.

Underground wiring first

We have introduced into the planning several ideas never before used in the Omaha area, including underground wiring.

An article in the August 1959 House & Home is the primary reason for this new installation. After reading the article, I took the subject up with Mr Abernathy, vice president of our Land Development Division, and he, in turn, took a copy of the magazine to the Omaha Public Power District. From there, that issue of House & Home became a guidebook and, as a result, Omaha is seeing its first underground wiring installation.

CHARLES PETERS, executive vice president N. P. Dodge Co, realtors Omaha.

Seattle realtors

Your exposition and explanation [H&H, April] of the very effective working relationship between realtors and builders in the Seattle area is the most constructive contribution to home marketing that I have seen. Realtors and builders alike will gain from it. In the final analysis, the public will be the beneficiary.

EUGENE P. CONSER executive vice president NAREB

Pension funds and mortgages

Congratulations on your excellent article, "Will pension funds end the mortgage pinch?" [H&H, April, News]. Send us six or eight reprints, please. We wish to pass them on to the investment officers we have been contacting regarding mortgage funds.

> HARRY D. GRIFFITHS, vice president Jay F. Zook Inc Cleveland.

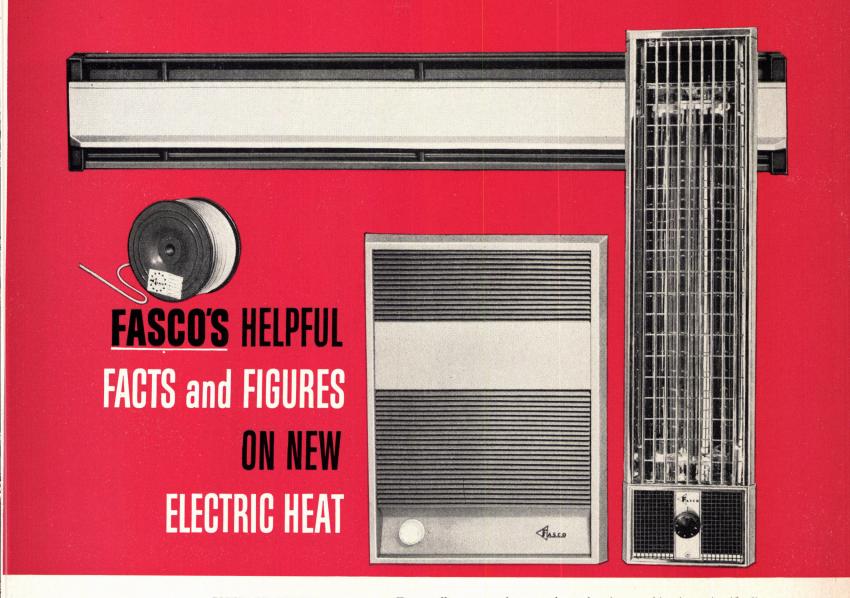
The quoted opinions from the pension funds for mortgage money meeting are very encouraging. I am convinced that pension funds are the most logical and most likely source of increasing monies for mortgage investment.

COWLES ANDRUS, president New Jersey Bank & Trust Co Passaic, N.J.

Segregation in housing

We were extremely gratified by the forthright and objective way in which the press -including House & Home (H&H, Mar, News)-handled our book (Privately Developed Interracial Housing).

GEORGE W. GRIER, researcher N.Y. State Commission Against Discrimination

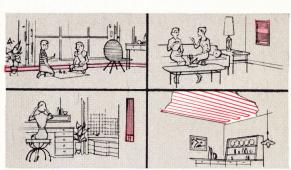


BASEBOARD HEAT BB-2408

7½" high, 2½" deep in 48" and 32" sections; built-in temperature control; corners, blanks, receptacle sections; removable front panels; ideal where decorative appearance is essential.

FORCED AIR HEATERS (Models FW-2415, 2420, 2430, 2440)

22 1/8" high; 10" wide recessed into wall 4" while protruding into room 1 1/4"; four wattage sizes in 240 volts, 1500, 2000, 3000, 4000 watts; ideal for basements, recreation rooms, garages, hallways, kitchens and large living areas; baked enamel finish.



RADIANT WALL HEATER (Models RW-1215, RW-1210)

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RADIANT CABLE (CC-2250 thru CC-2265)

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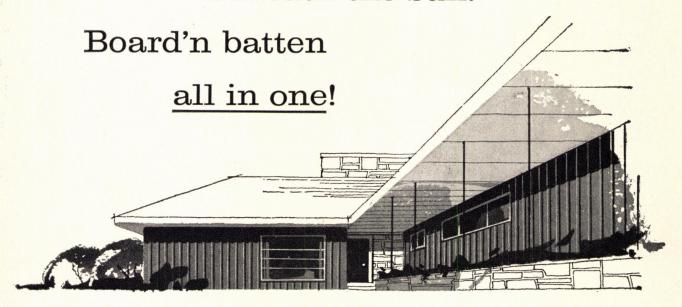
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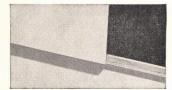
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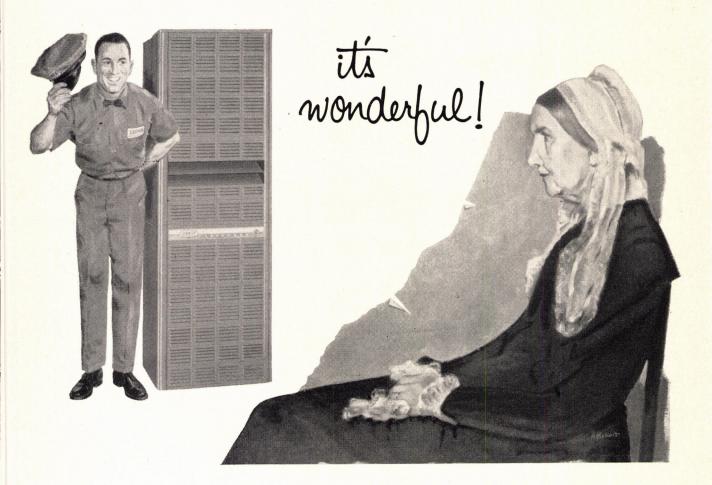
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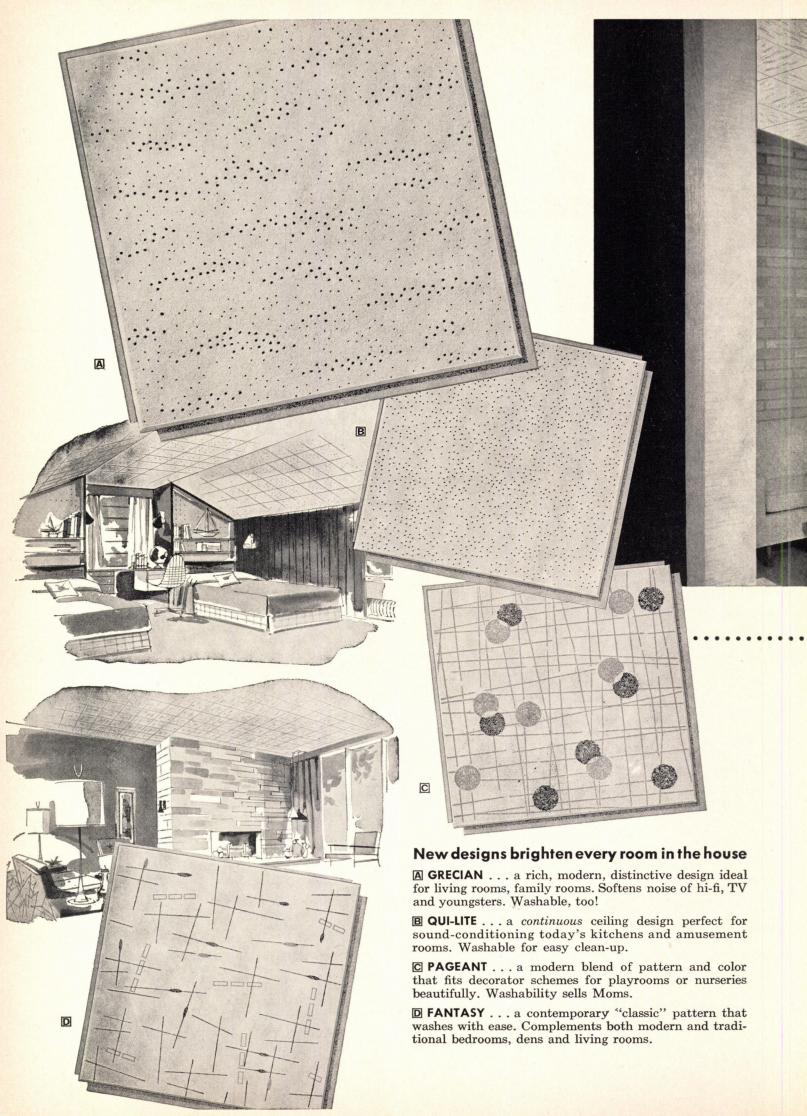
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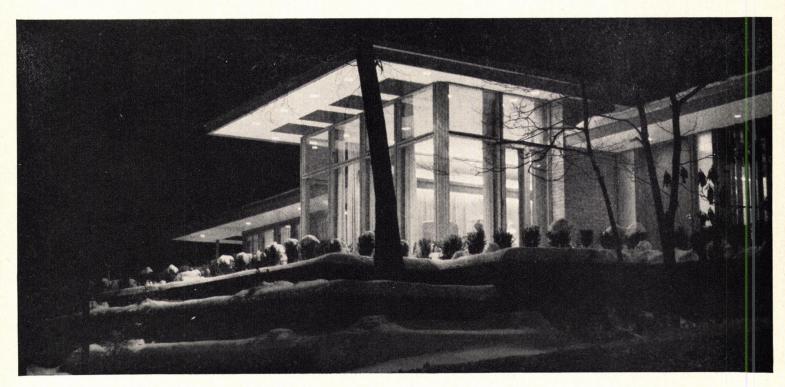
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GREENE RESIDENCE, Short Hills, N. J. All exterior window walls were constructed of prefabricated modular load-bearing

window and door frames dimensioned around standard *Thermo*pane sizes. The window frames served as the sole exterior wall supports for the conventional roof structure of wood joists.

*Stanley James Goldstein, A. I. A., a practicing architect for 10 years, holds three degrees in architecture and engineering from the Massachusetts Institute of Technology. Served two periods of engineering duty with U. S. Navy. In spite of a brisk practice, takes time to teach related subjects at the Graduate School of Architecture of Princeton University

... says Architect Goldstein*

"I always design with one eye on a glass catalog," says Architect Stanley James Goldstein. "In fact, most of my houses are designed around standard-size insulating glass units and standard sash. It helps keep costs down, assures prompt delivery, speeds construction... resulting in savings I can pass on to my clients.

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of balancing sizes and shapes to room requirements. The only justification, that I can see, for using nonstandard sizes is in rare situations where nonrectangular or odd sizes are required.

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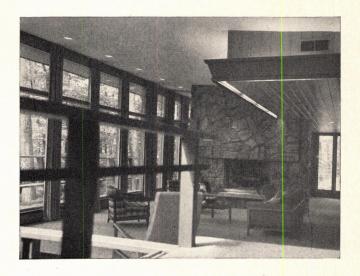
"New Jersey climates justify using insulating glass throughout the homes. Some of my window walls are up to 80 ft. long, yet these houses have small heating plants. Summer comfort is assured by proper orientation, careful siting, tree shading and roof overhangs.

Thermopane STANDARD SIZES

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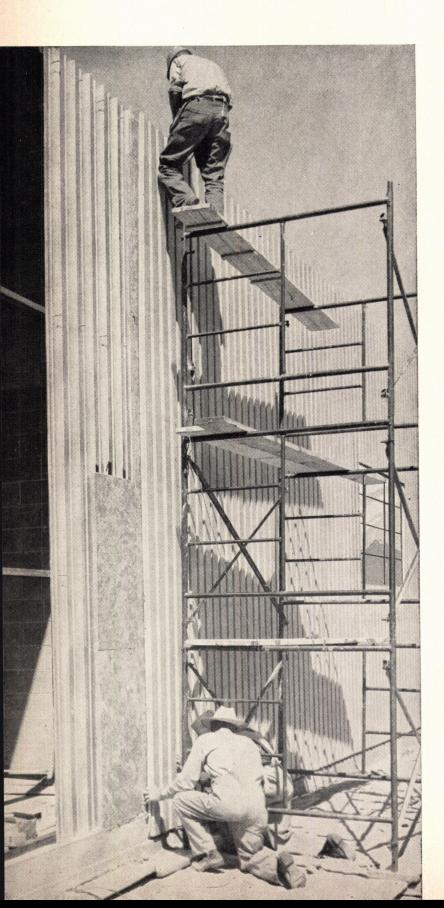




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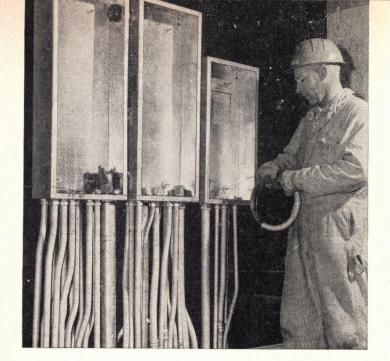
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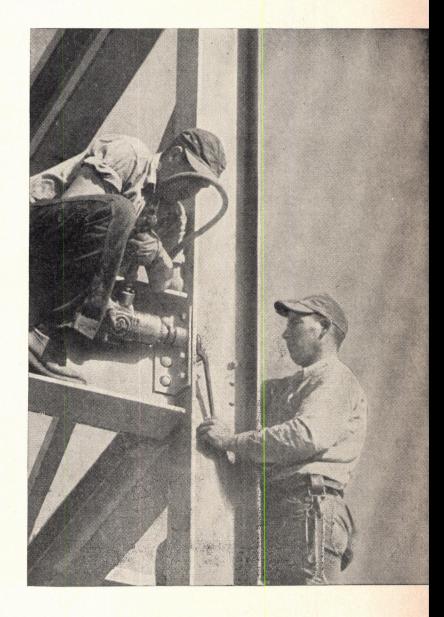


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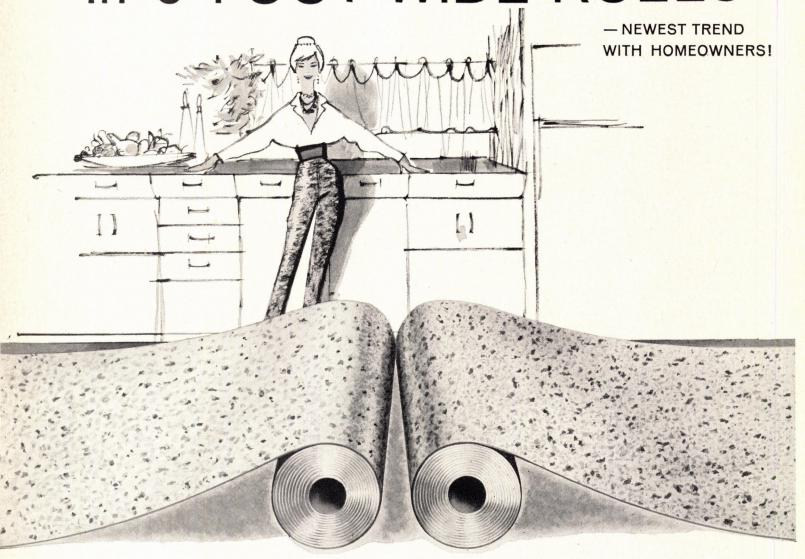
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JUNE 1960

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DESIGN

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Medium-house class

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Honorable Mention: Architect Harry Weese p	129

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House in Illinois by I. W. Colburn & Assocs

COMING NEXT MONTH

Round-up of the home modernization business H&H Round Table report on wood and the housing industry



Honor Award house in Altadena, Calif. by Architects Buff, Straub & Hensman. For other photos and description, see p 124.





15 **AIA Award-Winning Custom Houses**

On the following pages you will see the 15 custom-house winners in the 1960 Homes for Better Living Awards program sponsored by the AIA in cooperation with House & Home and Life.

This year, for the first time, the program was held on a national instead of a regional basis, and the 437 custom-house entries (plus 117 merchant-built-house entries) made the 1960 program the largest design competition the AIA has ever sponsored.

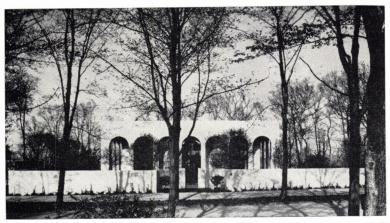
A distinguished five-member jury (see p 130) gave the custom houses two Honor awards, nine Merit awards, and four Honorable Mention awards. Taken as a group, the premiated houses show some clearly discernible trends:

Two-thirds of the winning houses are two-story, or have a twostory wing, and most of these houses have decks and balconies to provide indoor-outdoor living on every level. Seven of the houses are solutions to hillside sites. Almost all the designs show the architect's attention to privacy, both for the house itself and for the outdoor living areas. In a third of the houses, the outdoor living space is in courts enclosed by wings of the house.

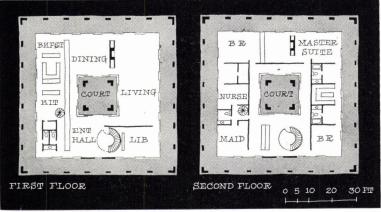
To see the houses and evidence of these trends, turn the page.

Honor Award

Large-house class (over 2,800 sq ft).



Arcade is continuous around house; glass wall enclosing living space is set 6' behind arches. Architects wanted outlines of house to be as abstract as possible.



House is 72'x72', on a 3' module. Arches in the outer wall are 9' oc, 21' high. First floor has court, entrance hall, and library, plus conventional living areas.

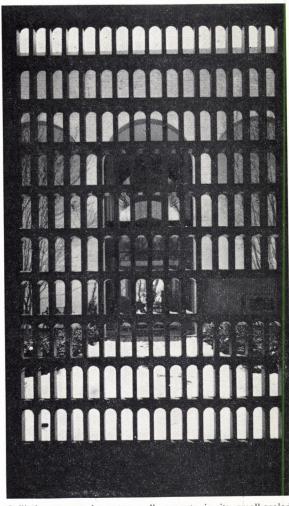


Interior garden court is two stories high, 21' square, contains fountain, pool, sculpture. Here again glass curtain walls are set behind the brick arches.

Architects: I. W. Colburn & Assoc

Builder: Edward A. Anderson Co. Location: Illinois.

Photos: Rose & Mayer



Grilled gate, set in outer wall, repeats in its small-scaled pattern the form of the brick arches to be seen behind it.

CITATION: "The jury was delighted by this entry. It is an elegant yet disciplined expression of romantic space which is too seldom encountered in our present scene. It is an unusual concept, developed with great skill. The various spaces flow gracefully into each other around a comparatively small central court—a court that plays a subtle but pervasive role in giving light and spatial meaning to each part of the house."

The editors add: One of the most important ideas in this large (6,000 sq ft) house is the way its all-glass walls are screened by the arched brick wall that surrounds it. This combines the light and openness of the all-glass house with privacy from public view and a handsome architectural treatment.

A second dramatic idea in this house is the twostory court. Not only does it bring a private garden into the center of the house, but it doubles the number of rooms that can be opened up and provides even more privacy than would be possible with a one-story court.

Dramatic entrance is through one of the arches; terrazzo \rightarrow floors extend through glass wall to edge of outer walls.

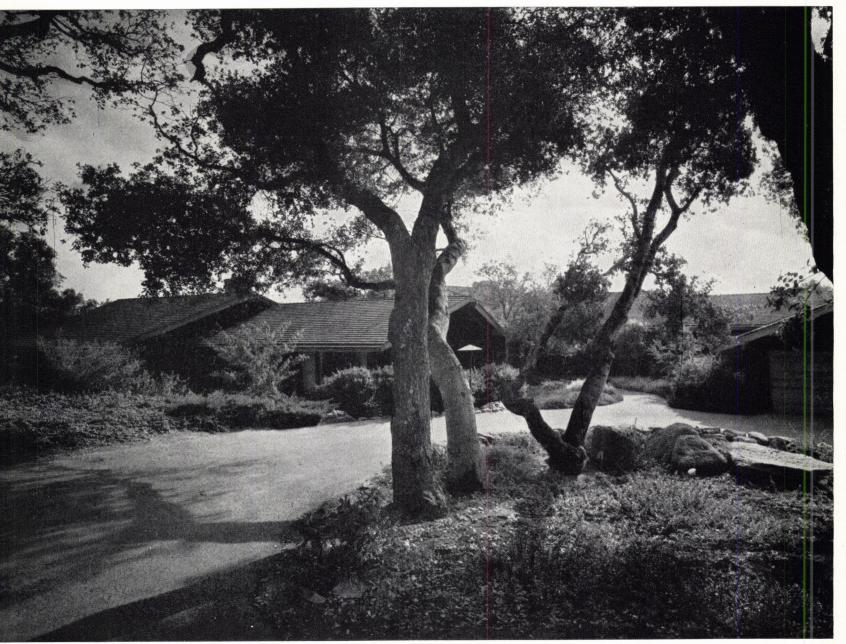


Merit Award

Large-house class (over 2,800 sq ft)

Architect: Germano Milono

Builder: Chester C. Robbins Landscape architect: Thomas D. Church Location: Santa Rosa, Calif.



Seen from entrance road, house looks small. Broad low roofs, finished with redwood shingles, help make it seem to hug the ground.

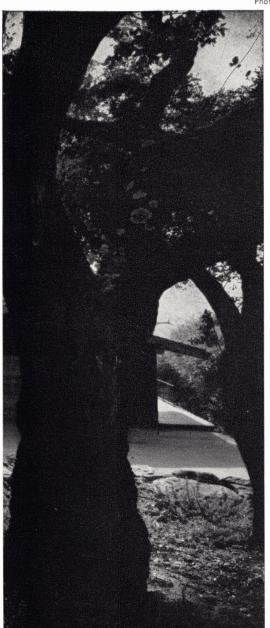


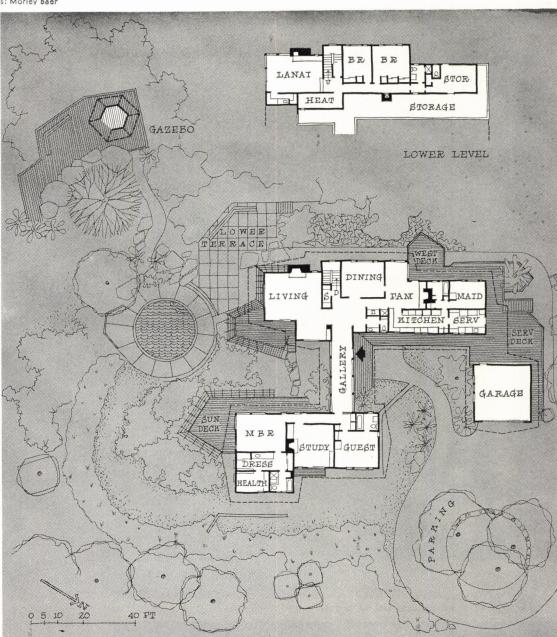
Two-story wing of house shows on downhill side of lot; in foreground is owner's bedroom suite, with its own large private deck.

CITATION: "This entry . . . conveys the joy of living—making the most of the site, the trees, and the view. In a relaxed unselfconscious way, this is a design that serves the owner first, without pretention, pomp, or preciousness, but with delicate feeling for varied moods and circumstances. Unfortunately, the interiors do not quite carry the same feeling the exterior setting invites one to expect."

The editors add: Here is a good example of how a house can be designed to preserve the beauty of a site. The architect provided the required floor area with a minimum of grading by using a sprawled-out plan with a two-story wing on the lower part of the slope. Ample decks provide outdoor living for all rooms raised above grade.

Photos: Morley Baer

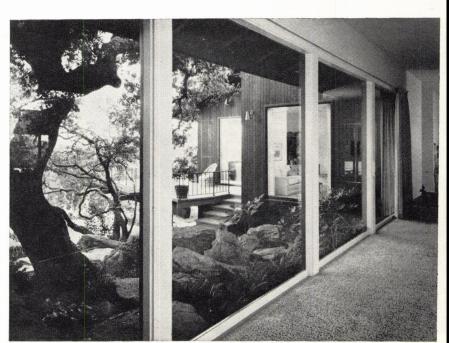




Sprawling plan fits house to hilly wooded site, separates activities within the house.



Owner's study has one of house's four fireplaces, plus a small deck outside windows, left. Walls and ceiling are plastered.



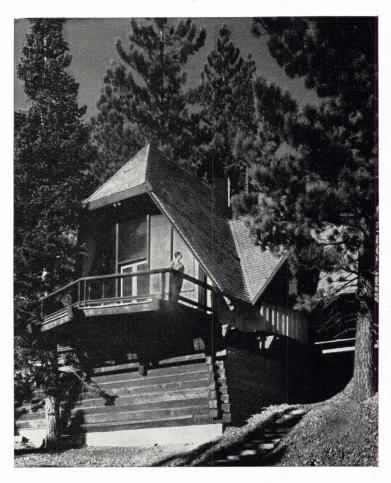
Gallery connecting owner's quarters to rest of house, overlooks rocky site. Two-story wing is in background. All exterior siding is redwood.

Merit Award

Medium-house class (1,600 to 2,800 sq ft).



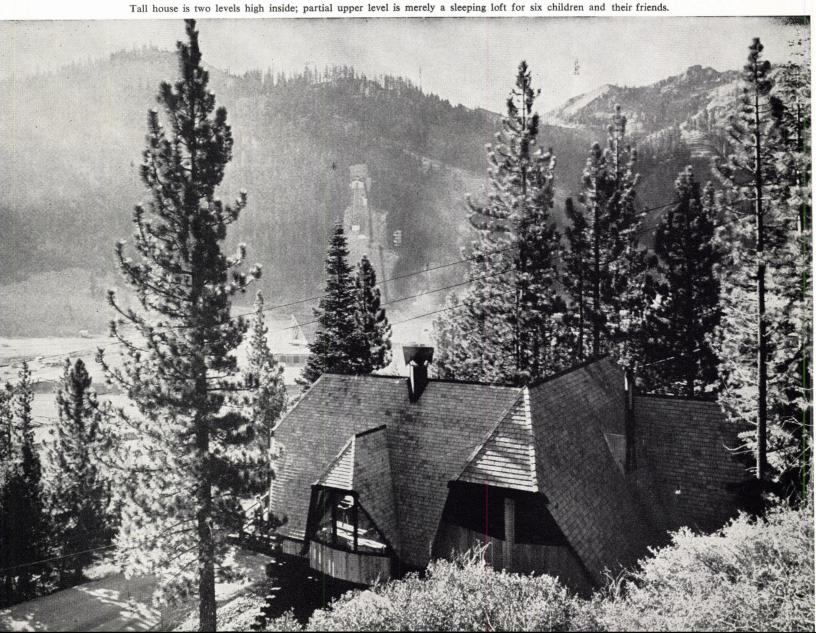
Builder: L. R. Van Wetter. Location: Squaw Valley, Calif.



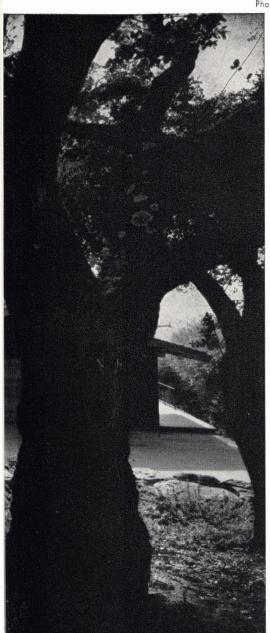
CITATION: "This design is subtle and original with out effort or trickery. Only its very limited scope, as a vacation house, kept it from earning a higher award. The more the jury studied this mountain vacation house, the more beautifully appropriate they found it to be to both its purpose and its setting. It is a delight to discover that every part seems to have meaning. The architects have shown enormous design ability and an understanding of the moods of people and of nature."

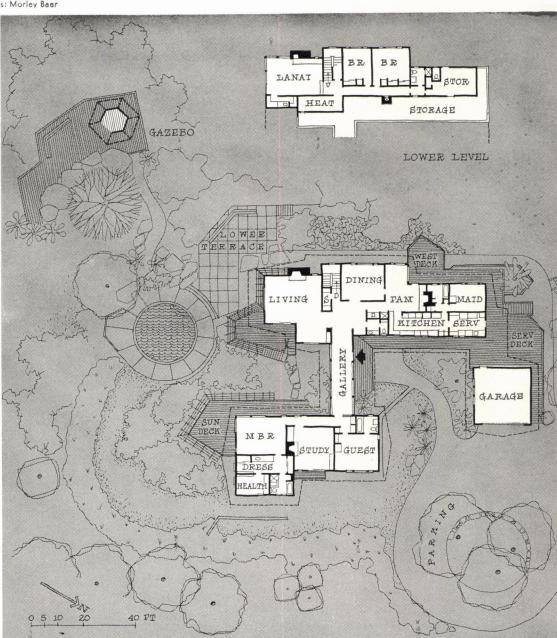
The editors add: Like the other award-winning vacation houses (pp 116 and 129), this house points up the fact that people will often accept much more fanciful form in their second houses than in their year-round houses. Yet this steep roof with its turned down gable ends has a practical value; it is steep enough so snow slides off (important since house is in the mountains, gets heavy snow loads) and high enough so an upper level for sleeping lofts can be tucked in.

Heavy cribbing raises the house off the ground on the downhill side. Roofs are turned down over every gable end.



Photos: Morley Baer

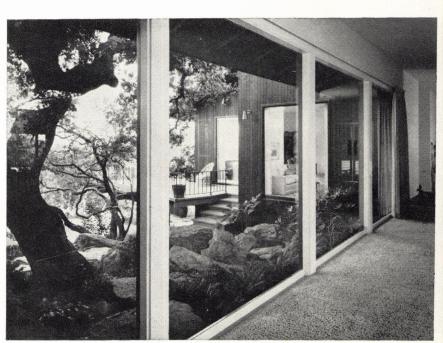




Sprawling plan fits house to hilly wooded site, separates activities within the house.



Owner's study has one of house's four fireplaces, plus a small deck outside windows, left. Walls and ceiling are plastered.



Gallery connecting owner's quarters to rest of house, overlooks rocky site. Two-story wing is in background. All exterior siding is redwood.

Merit Award

Small house class (under 1,600 sq ft).

Architects: Killingsworth, Brady & Smith

Builder: Al Dorsey. Location: Long Beach, Calif.



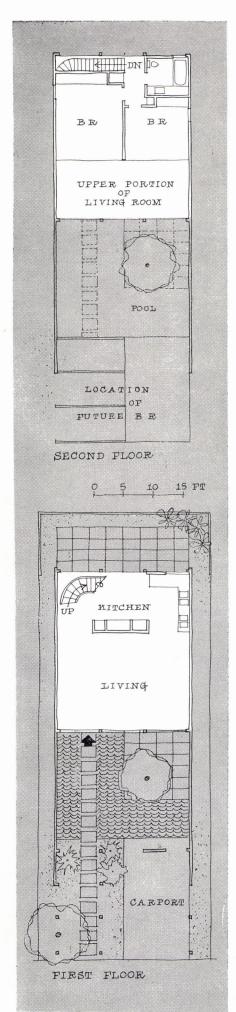
On 30' lot hemmed in by older houses, two-story house is screened by 17' high redwood side walls on 3' setback line, and by carport.



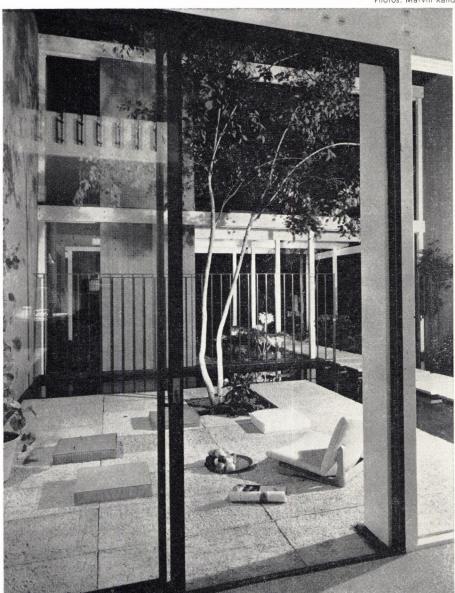
Two-story living room with full-height, full-width glass wall faces court and reflecting pool. Balcony bedrooms open to the living area. House is for two adults.

CITATION: "The jury was much impressed by this engaging solution of a common yet difficult problem—that is, of providing a maximum of private indoor-outdoor space with a minimum of means. Designed with great self-assurance and carried through with flawless details, this serves well as an example of how to develop a tiny house on a tiny lot without loss of scale, grace, or privacy."

The editors add: This house successfully combines privacy and outdoor living on a small (30'x80') intown lot because both house and site were developed as a complete unit. The overall plan alternates enclosed and open areas, so the carport screens a court from the street at the front of the lot while a small walled garden gives the house a second private outdoor living space at the rear of the lot. The good ideas in this small house include two ways to make the living area seem bigger: it gets extra space because it is two stories high and because only an all-glass wall separates it from the court.



Simple house gets maximum size and interest because whole lot is developed as a unit.



Private court is hidden from neighbors by two-story walls at sides, left and right, carport, and shear-wall at rear of carport. Flooring of terrace is concrete precast in blocks.



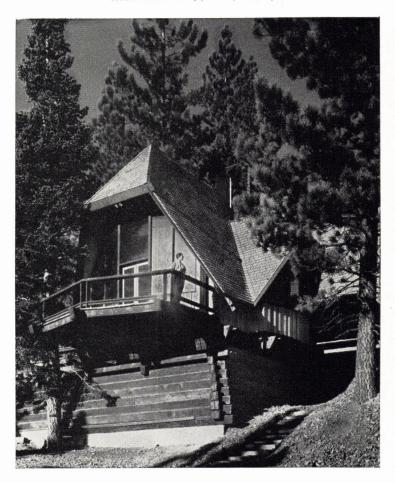
Open stair is at rear of house, next to kitchen; beyond is small walled garden. Open stairwell repeats two-story effect of living room; delicate lines keep stair small in scale, suited to house.

Merit Award

Medium-house class (1,600 to 2,800 sq ft).



Builder: L. R. Van Wetter. Location: Squaw Valley, Calif.

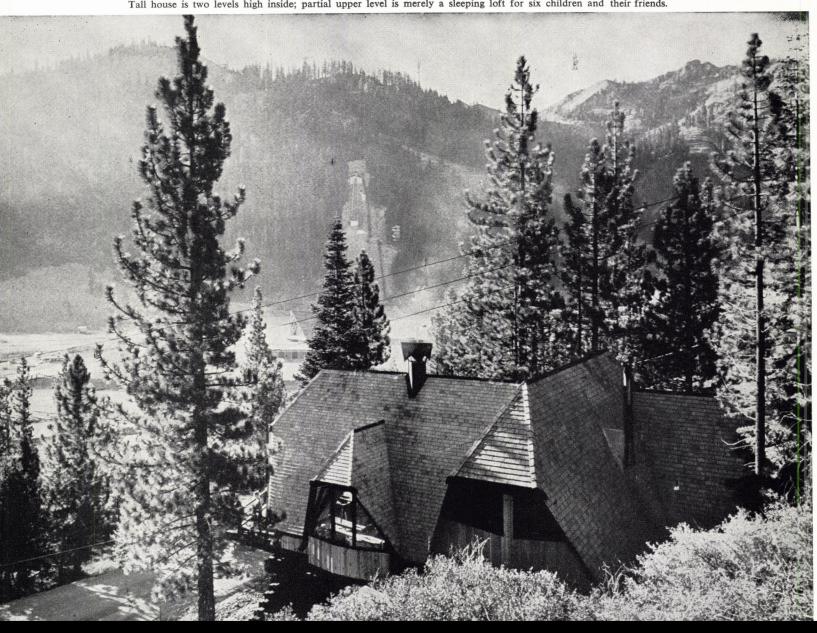


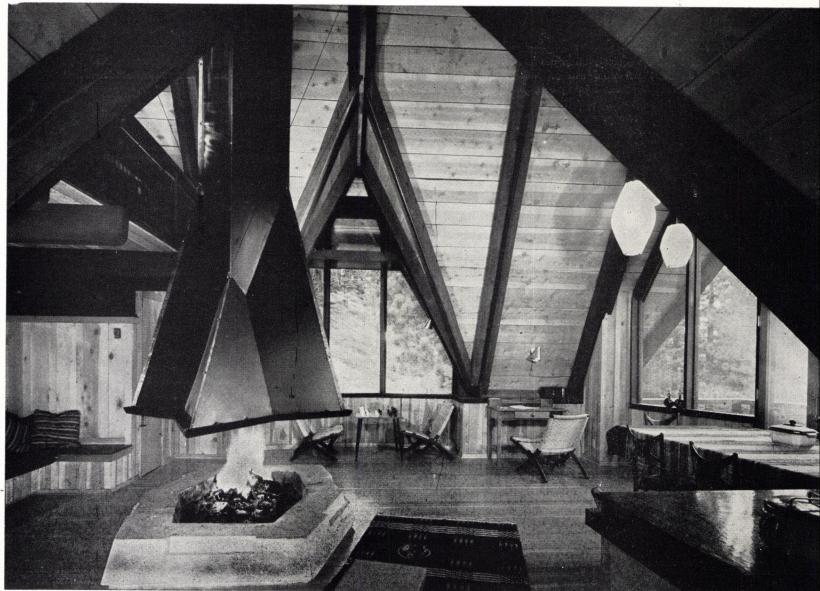
CITATION: "This design is subtle and original with. out effort or trickery. Only its very limited scope, as a vacation house, kept it from earning a higher award. The more the jury studied this mountain vacation house, the more beautifully appropriate they found it to be to both its purpose and its setting. It is a delight to discover that every part seems to have meaning. The architects have shown enormous design ability and an understanding of the moods of people and of nature."

The editors add: Like the other award-winning vacation houses (pp 116 and 129), this house points up the fact that people will often accept much more fanciful form in their second houses than in their year-round houses. Yet this steep roof with its turned down gable ends has a practical value; it is steep enough so snow slides off (important since house is in the mountains, gets heavy snow loads) and high enough so an upper level for sleeping lofts can be tucked in.

Heavy cribbing raises the house off the ground on the downhill side. Roofs are turned down over every gable end.

Tall house is two levels high inside; partial upper level is merely a sleeping loft for six children and their friends.

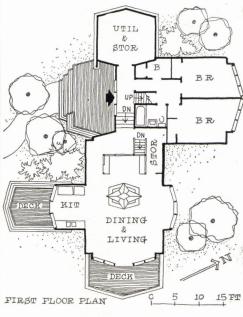




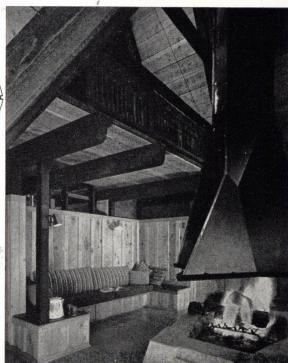
Large living area, 18'x24', is two stories high. Dark-stained structural framing is a decorative accent against lighter 1x12 ceiling boards.



Deck overlooking view is off one end of living area. Gableend glass wall continues up behind turned-down roof peak.



House is designed for entertaining large groups of children and their parents, so adults' wing has double facilities, while children sleep in upstairs lofts (not shown). Upper level also has its own baths.



Bunk-alcove, an intimate corner set under one sleeping loft, provides two extra sleeping spaces.

continued

Merit Award

Large-house class (over 2,800 sq ft).

Architect: George W.W. Brewster

Builder: George Cheney Inc. Location: Brookline, Mass.



House is treated—in New England tradition—as a succession of separate buildings with steep roofs, big chimneys, clapboard siding.

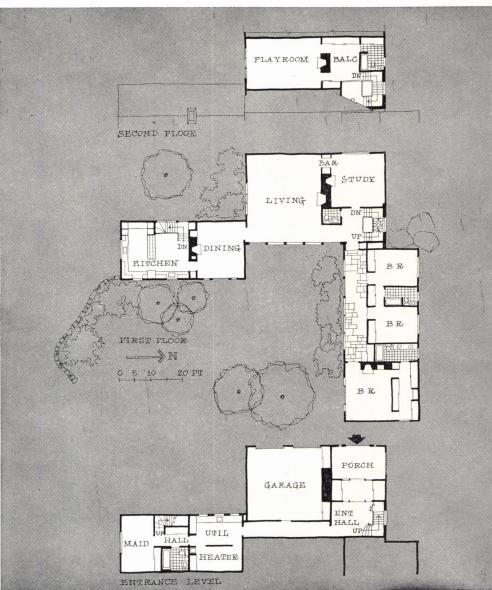


House is set into hill so its full three-story height is not immediately seen. Native stone foundation wall matches adjoining wall in field.

CITATION: "The jury was very happy to find a house which has used the sources of the American tradition with such skill, good taste, and self-assurance. It was a pleasure to realize how much good imaginative architecture can yet be done in this idiom without sacrificing the essential gains of our modern thinking. The architect is uncompromising in what he wants to say and quite convincing in saying it. The result is a beautiful and livable house which belongs to its site, to its region, and to our time."

The editors add: This house shows how traditional lines and materials can be used in a contemporary form. The high-pitched roof, clapboard siding, white trim, and many fireplaces are part of the New England tradition, but the functional plan, good scale, and simple precise detailing keep the house modern.





Plan shows how "house-plus-later addition" layout common in early New England houses can be developed to suit modern living habits.



Main entrance is on lowest level; entry hall is large, finished with plain plastered walls, carefully laid slate floors.

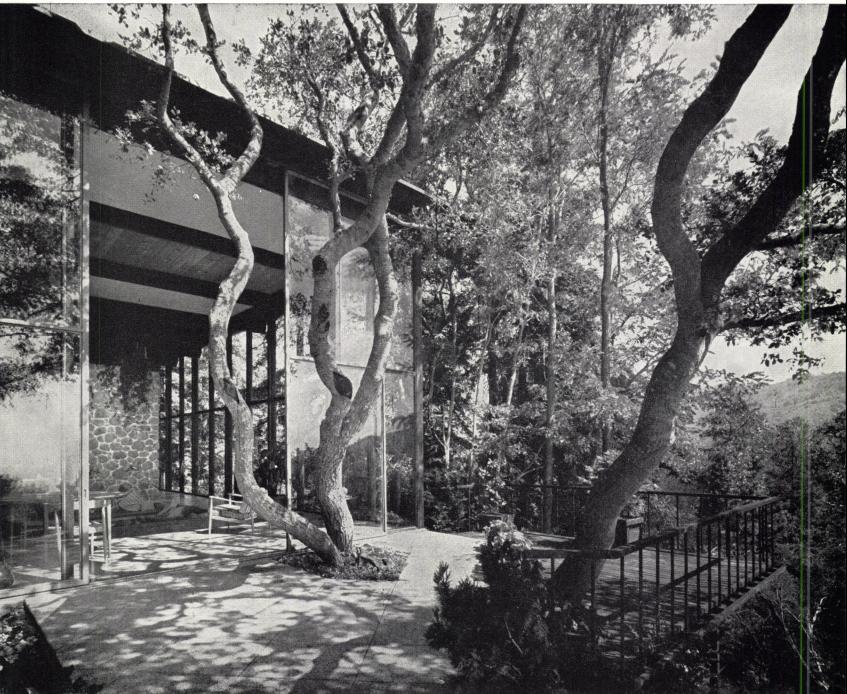


Living room has traditional overtones in paneled fireplace wall, while large panes of fixed glass in contemporary fashion give sweeping view of outdoors.

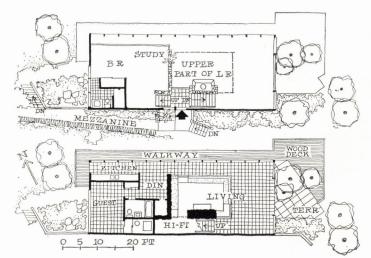
Small-house class (under 1,600 sq ft)

Builder: Ralph Briggs Location: Mill Valley, Calif.

Photos: Ernest Braun



Large deck adds to space of living area, especially since 16' high sliding glass wall is the only separation between indoors and outdoors.



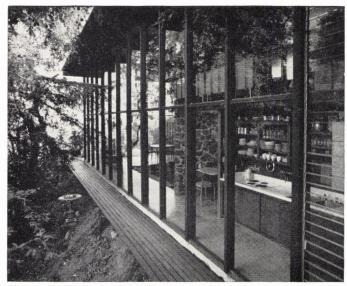
Plan is a simple rectangle. Living room is two stories high; kitchen, dining, guest room, and bath are beneath owner's mezzanine bedroom.

CITATION: "This is indeed a house to be enjoyed and to be lived in. Natural materials are effectively used to create warmth and comfort without effort or preciousness and the house has a compact and simple plan, sensitively developed to fit the site, the view, and the very special needs of a bachelor client. The jury admired the fine sense of space which is apparent in every part of the house; space which is meaningful in a restrained way and never breaks the essential unity of the plan."

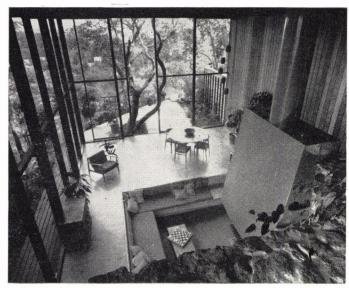
The editors add: This is a fine example of how a small house can be made to seem much bigger. The living room has most of the floor area and gains extra space because it is two stories high. And because the plan is so open, most rooms borrow space from each other and through the all-glass wall from the outdoors.



Living room centers on fireplace and conversation area set below floor level, framed on two sides by stone walls, two sides by all-glass walls.



Glass wall, 52' long and 16' high, opens living, sleeping, and kitchen areas to view of nearby stand of redwood trees and distant bay.





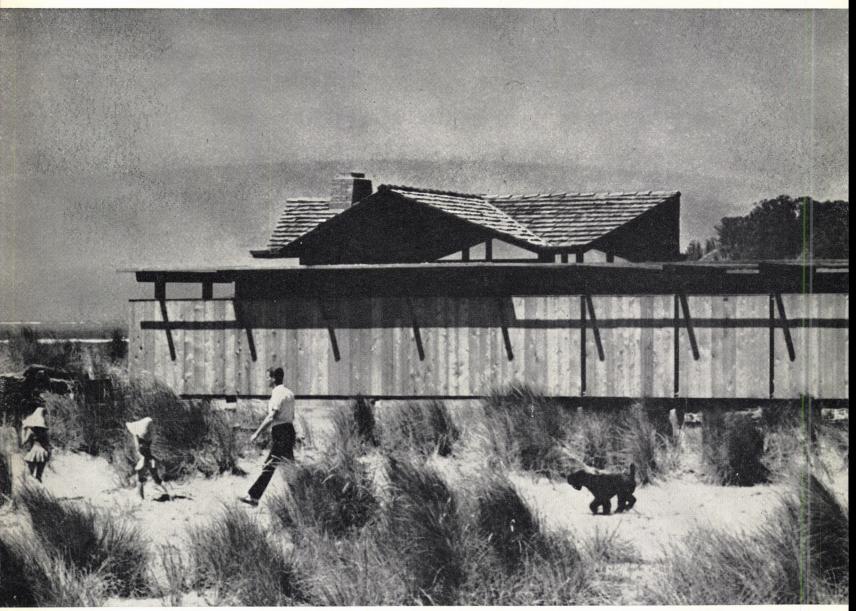
Galley-style kitchen has work counters tucked under mezzanine. Catwalk outside windows, like all-glass wall, runs full length of house.

View from mezzanine bedroom-study emphasizes changing levels inside the house. Room overlooks the two-story living room and the view.

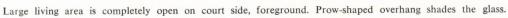
continued

Small-house class (under 1,600 sq ft).

Builder: Thomas Tawns. Location: Stinson Beach, Calif.

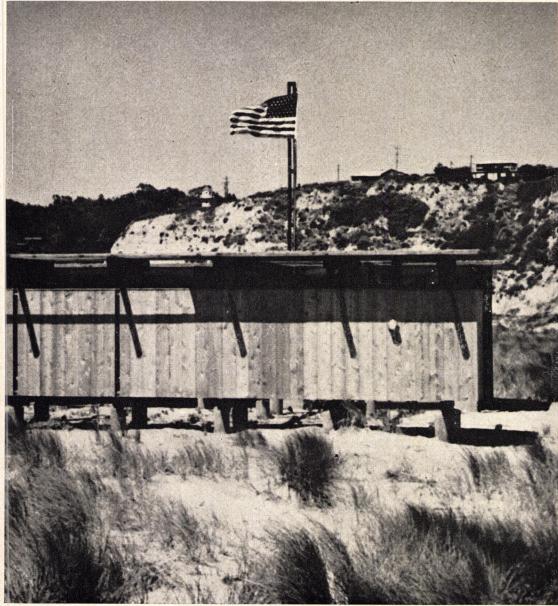


Unbroken wall plane of natural cedar has only a strip-opening under the roof line, so all activities are screened from neighbors.





Photos: George Knight





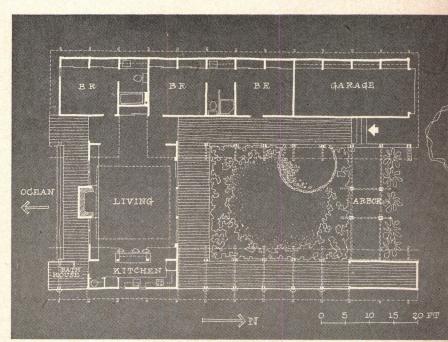
View from living area shows deck that surrounds court on three sides; fourth side, left open, will be planted.



View toward living area shows how stained deck framing is decoration. Roof and decks are natural fir.

CITATION: "This beachhouse has captured with great skill and sympathy the essential mood of life on the seashore. The meeting of wood and sand, the simple structure, the use of natural unfinished materials, proclaim its purpose with clarity and restraint. The jury also liked its form and proportion and the feeling it gives of shelter."

The editors add: Here is a weekend-vacation house that enjoys both view and site, but still has plenty of privacy from neighbors. The U-shaped plan works around a court, so not only is the outdoor living kept private, but it is also protected from wind and blowing sand. The long unbroken sidewalls are the barriers. And the house shows another way to add indoor space: the four-gabled roof puts a high ceiling over the living area, so it has a light and open quality.



Central living area, a bridge between two wings of plan, opens up to the view and still another deck on the ocean side, left. Fireplace is set in ocean-side wall.

Medium-house class (1,600 to 2,800 sq ft)

Architects: Malone & Hooper

Builder: Skaggs & Kirchman Location: Santa Rosa, Calif.



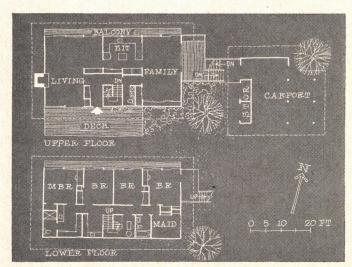
Wide balconies provide outdoor living on the downhill side of the house and act as sunshades for the ample windows on the lower level.



Wide deck extends the main living areas outside the house on the uphill side. Deep overhangs are carried on post & beam framing, 6'8" oc.

CITATION: "Extreme simplicity of plan combined with directness of construction make this entry an outstanding example of excellence in architecture. This house gave the jury great delight. They found that the architect was most skillful in detailing and was endowed with an unerring sense of scale."

The editors add: This two-story house shows that it is possible to get plenty of outdoor living on a steeply sloping site. The architects put balconies at both levels on the downhill side. And they set the lower level into the hill so the upstairs could open to a ground-level deck (photo, above). And here is an idea for shading ground floor windows in a two-story house: the upstairs balcony acts as an overhang to protect the windows on the lower level.



Upper level has separate living areas for adults and children, zoned by stairs, third bath, and kitchen. Bedrooms are on lower level.



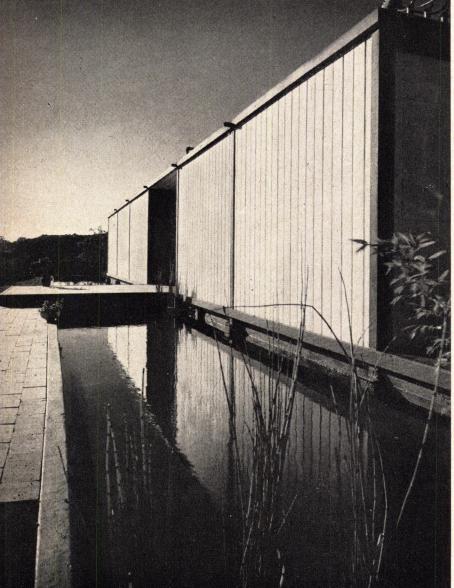
Living room opens to outdoors on both sides: to deck at rear and to balconies (behind camera) on downhill of house.



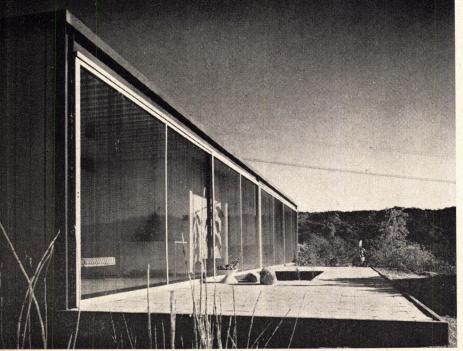
Playroom is open to kitchen for control of children and ease of serving family meals. Roof is laminated 2x3s.

Merit Award

Medium-house class (1,600 to 2,800 sq ft)



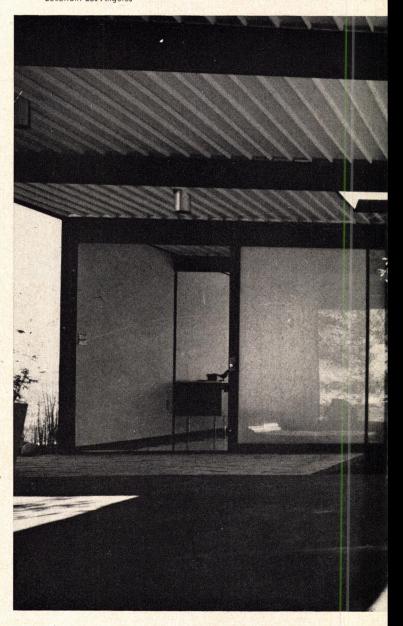
Long pool that parallels house is broken only by brick platform that leads to main entry. Scuppers drain from built-in gutters into pools.

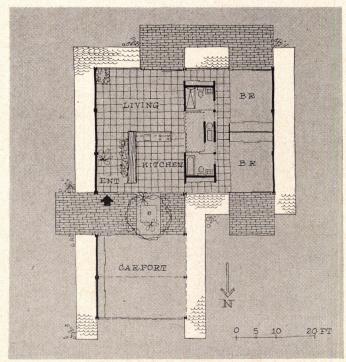


On south elevation, architect used bronze sunscreens instead of deep overhang. Overhang would not have been in keeping with design.

Architect: Pierre Koenig

Builder: Pat Hamilton Location: Los Angeles





Main living area and kitchen are one big room partitioned by cabinets (see photo, right); bathroom core separates this area from bedrooms.



Carport side of house shows entrance, far left, open walls of kitchen-dining area, center, and study-second bedroom, far right.

CITATION: "This house is easier to admire than to love, but it is a significant architectural experience nevertheless. Within the idiom imposed by the structure and by the materials selected, the house is carried through in a most elegant and consistent way. However, some members of the jury felt that the very perfection of concept and execution was somewhat at the expense of livability."

The editors add: This house makes an important point for everyone in housing: the architect has expressed modern technology, techniques, and materials simply and directly. (Its black-and-white treatment is currently the vogue in the Beverly Hills area of California.) One reason more such houses have not been built: they have made a complete break with the past and are, in general, far too extreme for the tastes of the average American. The style reflects the idea that architectural elements should be used as line, plane, and volume rather than as walls, columns, or roofs.



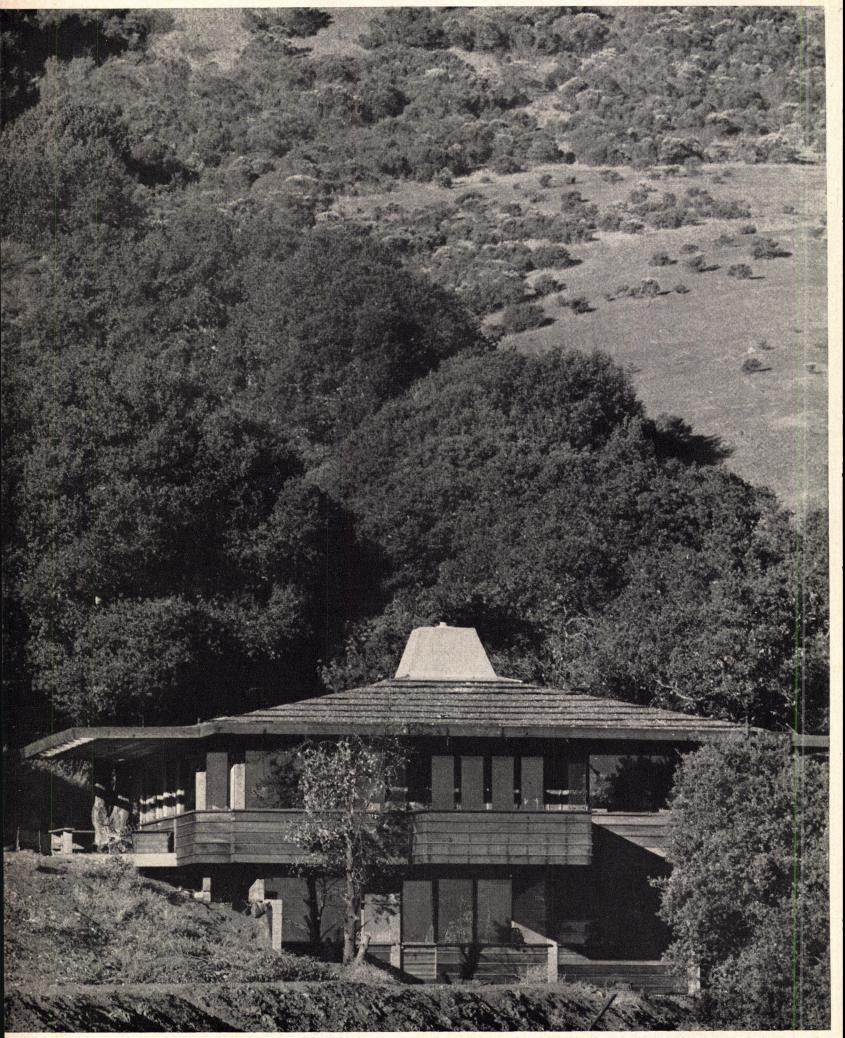
Kitchen cabinets and equipment, made in 8' lengths, form freestanding partition between kitchen-dining and living area at rear.

Merit Award

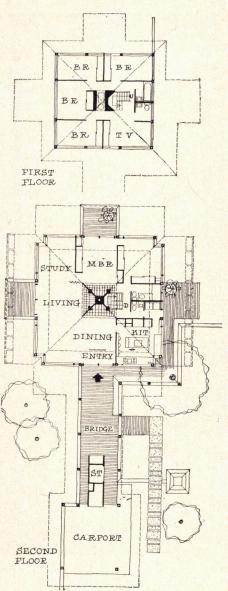
Medium-house class (1,600 to .1,800 sq ft).

Architect: Walter Thomas Brooks

Builder: Robert A. Hansen. Location: Orinda, Calif.



Hip roof fits house into surrounding hills; finish roofing is built-up, with battens nailed on to break the plain surface.



Square plan, usually associated with much more formal style of house, gives complete separation of adults' areas and children's areas with a minimum amount of traffic space. Fireplace and stair are core of plan. Bridge ties house to hill and makes possible entry on the upper level.

CITATION: "A well ordered and compact plan, a sensitive use of a difficult terrain, and skillful but straightforward detailing are the obvious virtues of this well proportioned house. Some jury members questioned the way the partitions of the rooms on the upper floor met the sloping ceiling, but everyone admired the efficient use of space, the separation of children's rooms from the living areas, and the interaction of house and nature on such a difficult site."

The editor adds: Here is a basic way to gain maximum space at minimum cost: use a square, two-story plan. This reduces roof area, inside and outside wall surface, footing perimeter, and heating and lighting loads. This 2,500 sq ft house cost only \$11 a sq ft.





Living room (with its own separate deck) cantilevers out into trees. Roof flattens out into wide overhangs to shelter decks and entry bridge.

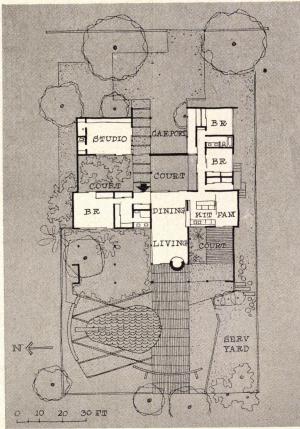


Fireplace core is skylighted on all sides. Exposed ceiling is laminated of alternate 2x3s and 2x4s. Interior partitions are 6'8" high with glass above.

Small-house class (under 1,600 sq ft). Location: Altadena, Calif.



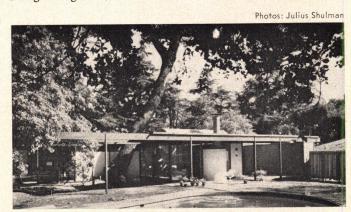
Entrance court, off dining area, is enclosed on all sides. Roofed and graveled walk leads to inner entrance, right.



Plan shows outdoor spaces are as important as indoor spaces.

CITATION: "To the jury, this house represents California domestic architecture at its best: free but disciplined, at one with nature but comfortable and elegant—truly a better living house. The architects, by very skillful manipulation of space, have created a house full of surprises yet serene and joyful. In less sensitive hands the hollow-core plywood vaults could easily have been overemphasized; here they are kept subordinated to the whole structure."

The editors add: This house is outstanding for the way it integrates indoor and outdoor living (H&H, Mar '59). Three large courts are made a part of the overall plan, and sliding glass walls open the rooms to the courts. And here is another one-story house that gets vertical space in its living area: plywood vaults add both height and openness to the living-dining room.



Strong roof line ties together court, terrace, and living room.



Vaulted living and dining areas are separated only by hanging screen. Two sides of living room overlooking terrace and pool are entirely glass.

Architect: Pancoast, Ferendino, Skeels & Burnham

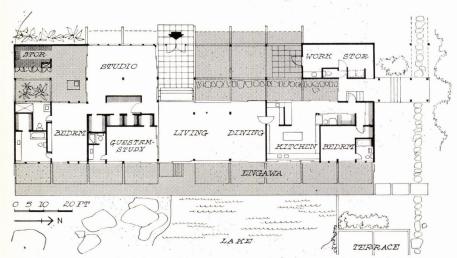
Builder: Ben Meyers. Location: Miami.

Large-house class (over 2,800 sq ft).

Dad-



Screened "engawa"—12' wide and 120' long—lines entire lake side of the house. Raised living area beyond gets both view and breezes.



Plan shows how screened "engawa" and open courts (in grey tone) are included in rectangle of house itself. Most of house is only one room deep for good cross-ventilation.

CITATION: "This is a house beautifully suited to the demands and moods of the Florida climate. It achieves interest and visual meaning through a skillful play of contained spaces and open vistas. It sits well on the site and lets the lake be an integral part of its design. The jury also commends it because it is detailed with great skill and delicacy."

The editors add: This outstanding example of the new Florida house (H&H, Mar) has screened outdoor living areas as an integral part of the plan—the transition between indoor and outdoor living is barely noticeable. The house shows what can be achieved when preconceived patterns are abandoned and the design is deliberately developed to meet the requirements of a climate and a way of life.

Small-house class (under 1,600 sq ft).

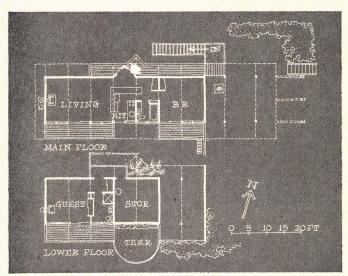
Architect: Evelyn Kosmak

Builder: Helm-Savoldi. Location: Carmel, Calif.

Photos: Gerald Ratto



Overhangs and balconies are 5' deep so large glass areas have ample shade; cross bracing in board and batten section takes shear in this wall.



Owner's quarters are on upper level; lower-level guest room has separate entrance. On sloping site, two-level plan was economical solution.

CITATION: "This is an extraordinarily economical house for a difficult site. [Contract price for 1,124 sq ft: \$9,000.] It achieves its purpose with conviction and grace; within very limited means it has elegance and charm and a good domestic scale throughout. Even with its many balconies and its two-story plan it manages to preserve a feeling of unity."

The editors add: Here is a different approach to using a hillside site: the house runs at right angles to the slope, and there is practically no grading involved because the one-story part of the house works as a bridge to the two-story part. And here again is an example of how balconies serve both as outdoor living space and as overhangs.



Living room opens to one of three balconies. Wall is prefinished luaun plywood; floors and ceilings are 2x6 t&g; balconies are 2x4s, 4" oc.



Only carport is on grade at upper level; main entrance to house is by cantilevered walk, center. Board and batten exterior was left with natural finish for low maintenance.

Medium-house class (1,600 to 2,800)

Architect: Henry H. Hester

Landscape architect: Harriet Wimer Location: San Diego, Calif.

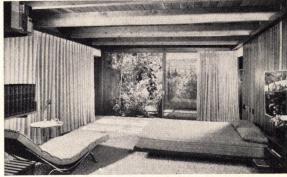
Photos: Julius Shulman



Pool and large garden fit between wings of house, are only a step from every room. Photo is from dining court (see plan).

CITATION: "The natural materials, the good landscaping, and the sense of privacy give spatial interest and great richness to this luxury house. Here is a house where life can be fun. The only criticism may be that it is too diffused, too expensive, and too regional to serve as an example for 'good living' everywhere."

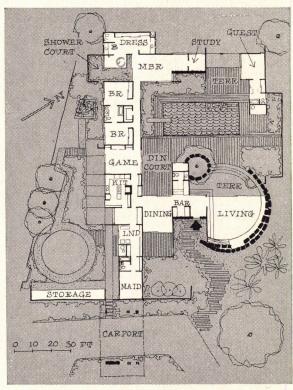
The editors add: This house shows what can be done with a typical flat site. House and fenced-in plot were designed as a unit, so every room has both pleasant and private outdoor living.



Owner's bedroom opens to its own private garden area.



Living room, right, is sunk below garden area to relieve monotony of the flat site. Brick paving of garden area extends into living room.



Plan was spread to wrap around garden areas and give maximum privacy from street. Much of site was fenced-in.

Medium-house class (1,600 to 2,800)

Architect: Harry Weese

Builder: Rieke Construction Co. Location: Rarrington, III.

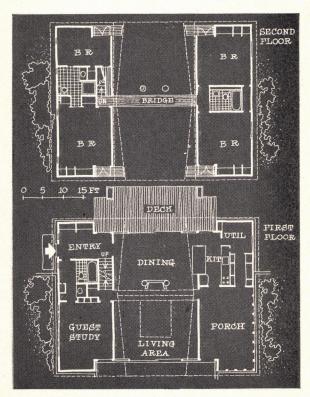
Photos: Hedrich-Blessing



Unusual roof provides two levels in the gable-end wings, high sloping ceiling in the living-dining area, sheltered bedroom balconies.

CITATION: "The jury admired the architect's skill, taste, and ingenuity in designing this original and beautifully executed house. However, it is perhaps a little self-conscious, and certain features, such as the catwalk leading to the bedrooms can be accepted only because this is a weekend-vacation house."

The editors add: Here is another example of playful but practical form in a vacation house: the steeply sloped twin gables actually make space for four good-sized upstairs bedrooms.



Symmetrical plan has central two-story-high living area, two-story wings for study, kitchen, bedrooms, and baths.



Openness of living-dining area is emphasized by high ceiling, free-standing fireplace, entrance arch, and catwalk joining upper levels.

continued



The jury (1 to r): Pietro Belluschi, Mary Hamman, Vincent Kling, Hugh Stubbins, Perry Prentice.

Here is the jury that chose this year's 15 custom house winners

The five members of this distinguished jury each have had an important role in advancing better housing. Three are architects whose notable careers have had widespread influence within their profession and the housing industry as well as on the general public. The public itself is represented by a fourth juror, an editor of the largest consumer magazine; and the fifth juror, also an editor, has long been prominently identified with the housing industry. Collectively, the jurors brought to their task not only a high standard of critical judgement but a rich background of practical experience and personal achievement.

The jury:

Pietro Belluschi, FAIA, the jury chairman, is the head of the Department of Architecture at MIT. He made his first impression on the architectural profession with the development of a distinctive regional house for the Pacific Northwest. In the late '40s he designed this country's first curtain-wall office building (for Equitable Savings & Loan, in Portland, Ore.). He is now a member of the three-man team retained to design the giant Grand Central office building to be built in New York City.

Vincent Kling, FAIA, is a practicing architect in Philadelphia. He began winning awards for his designs even before he opened his own office. His practice, in addition to houses, has included an almost endless number of prize-winning schools, hospitals, and office buildings, including the RCA Cherry Hill building. He is well known as a spokesman for the architectural profession.

Hugh Stubbins, FAIA, is a Southerner who practices architecture in Massachusetts. He too began taking awards early in his career, and has produced a series of outstanding houses and schools. His latest and best known building: the Berlin Congress Hall. He teaches architecture (at Harvard) and is active in urban renewal work.

Mary Hamman, the only woman member of the jury, is LIFE'S Modern Living editor. She won for LIFE an AIA journalism award for the series (published in September and October of 1958) on "The US Need for Livable Homes," which brought a new concept of housing to the attention of millions of American families.

Perry Prentice is editor and publisher of House & Home and was editor and publisher of Architectural Forum from 1949 to 1954.

These award-winning houses are important to the whole housing industry

Almost all good design ideas originate in custom houses and then spread out to the mass-produced house.

Programs like the Homes for Better Living Awards help publicize and popularize ideas that might otherwise take years to reach the average homebuyer. As you look on this page at the top award winners from the years 1956 to 1959 you see houses that have done much, for example, to gain increased acceptance for the idea of indooroutdoor living. The idea itself has changed somewhat as it has passed through many hands (not all have used it well) but this is part of the process of putting a design idea into wider and wider use.

And this year's awards program continues to publicize good ideas: There are more refinements and variations on indoor-outdoor living, like balconies and courts; there are more variations on space, like two-story living rooms; there are more solutions to difficult sites, like hillside houses and designs for small flat lots.

This is the fifth year that the AIA has sponsored the Homes for Better Living Awards and that House & Home has cooperated with the Institute on the program. (Each year a mass-circulation consumer magazine—Life in 1960—has also participated.) This year there were not only more entries and more awards but, to a greater degree than ever before, the jury gave recognition to houses that represent the range of today's design concepts.

—The Editors





1956 Honor Awards



Quincy Jones



Mark Hampton

1957 Honor Awards





Meathe, Kessler & Assocs







1958 Honor Awards



Donald E. Hustad







1959 Honor Awards



Swenson & Linnstaedter



Buff, Straub & Hensman (see p 124) 1960 Honor Awards



I. W. Colburn (see p 104)

/END



MARKET RESEARCH

"If you want more new buyers, go back and learn all you can about your old ones"

So says Washington Builder Milton Kettler who hired a research firm to study families who have bought Kettler Bros houses like those at left.

To survey his buyers, Kettler called in Louis Harris & Assocs, a top marketresearch firm whose clients range from automakers and food packagers to political hopefuls (eg, Sen John Kennedy, who entered the West Virginia primary because his victory was predicted by Harris).

"I think this was the smartest move we've ever made," says Kettler, marketing vice president and one of Kettler's Bros' four partners (the others: brothers Clarence and Charles, brother-in-law Bill Forlines). "What amazes me is how little it cost, how much we got out of it, and why we didn't do it sooner."

Did Kettler turn to market research in an effort to prop up sagging sales? Far from it. The company has a steady record of success, has been selling 80 to 100 houses a year (price range: \$32,000 to \$42,000) in three Maryland and Virginia subdivisions.

"We were doing fine," says Milton Kettler, "but we figured that if we knew why, we could do even better. Jim Mills, our merchandising consultant, agreed and suggested the survey by Harris."

Harris interviewers made a "depth study" of 50 Kettler homebuyers. Results—analyzed and interpreted by Harris—were reassuring ("We found we were on the right track," says Kettler) but also surprising ("We learned some things that led to important changes in our operation").

"Most important," adds Kettler, "the study gave us the answers to two questions every builder faces: Exactly what are you selling and exactly whom are you selling it to? We used to *think* we knew our market. Now we *know* we know it."

"Housing can gain as much as other industries from consumer research"

So says Researcher Harris, who points out that most other industries lean heavily on research to find out what their buyers really want ("The automakers have cased their market down to the last bolt on the bumper").

Adds Harris (who has a 20-man staff in New York and can call on 1,100 interviewers throughout the US): "Oddly, there have been many studies of people in public housing but almost none of the millions of families who have bought new homes. So far, most builders have been unwilling to pay for surveys because they do not understand their advantages.

"Few builders realize that for \$1,500

to \$4,000 they can find out all about their markets. With the kind of facts we can get out of the buyers' own mouths, a builder can know what designs to offer, what price brackets to build in, what sales tactics to use, and even where and when to build. He should be able to make the right decisions 90% of the time. I doubt that many builders can boast that high an average today."

Sums up Builder Kettler: "More and more professional builders are getting help from experts on house design, land planning, and merchandising. I'd say an expert on consumer research is a logical addition to this list."

To see how Researcher Harris studied Kettler's buyers, turn the page

"Depth study"

of homebuyers

continued



GATHERING FACTS for consumer survey, interviewer (right) talks with homeowners. Fifty interviews averaged 90 minutes each.

Here is how the study of Kettler's buyers was made

"This survey was not the sort of thing a builder's Aunt Harriet could handle in her spare time" observes Milton Kettler. "It was planned, conducted, analyzed, and interpreted by a team of professionals."

Researcher Louis Harris and his staff prepared more than 100 questions

Their purpose: to reveal exactly what kinds of families bought Kettler Bros houses and exactly why they bought. Questions probed the buyer's opinion of his house, his neighborhood, and the builder, and also the less obvious influences on his decision to buy—how many friends he had in the neighborhood, how he entertained in his home, what he read, what TV programs he watched, what make and model of car he drove, etc.

After the questionnaire was roughed out, Ruth Clark, the "study director" in charge of the survey, tested the questions in several Kettler homes. Then Mrs Clark trained the four interviewers assigned to the survey—pointed out which questions required full answers ("We want people to ramble on"), sat in on the first interviews, and made suggestions afterward. Explains Harris: "These people were all experienced interviewers, but every survey demands special interviewing techniques to suit its subject."

The interviewers visited 50 homes and spent an average of 90 minutes with each family

They were careful to say they were with Louis Harris & Assoc but equally careful not to say that Harris' client was Kettler. Instead they simply explained that they were making a "survey of attitudes about houses."

Interviewers asked a mixture of "closed" and "open" questions. "Closed" questions called for simple "yes" or "no" answers ("Do you drive to work?") or a selection from predesignated answers ("Do you feel you read more or fewer books than your neighbors—more, fewer, about the same, not sure?"). "Open" questions required longer explanatory answers in the homeowner's words ("What changes would you like to make in your house?").

But whether the answers were short or long the interviewers wrote them down word for word. "There's a trick to this," says Harris. "If you repeat what someone has just told you, he will say it over again—and thus give

you more time to write down all of his answers."

Did the homeowners talk freely? "Yes," says Harris. "We seldom have trouble getting people to answer. They want to unburden themselves, are glad to talk to someone who asks about what really interests them. And, of course, people are particularly interested in their homes."

Harris's staff analyzed the interviewers' reports and made recommendations to Kettler

Reports were sifted in Harris's "code department" to find a pattern of response to each question. Sometimes key words and phrases (eg, "gracious living", "outdoor living", "casual entertaining") that recurred often were the tip-off. Findings were then reduced to statistics and tabulated.

The "study director" (Mrs Clark) translated the statistics into a detailed report that interpreted the findings and recommended action by Kettler.

Kettler accepted most of the recommendations (see p 136) but disagreed on a few points. Says Harris: "This is as it should be. Research is not infallible and it certainly should not deprive the client of the final judgment. But we feel it is up to us to make suggestions on the basis of our findings."

Walter Daran



ANALYZING FACTS, research firm's "code department" studies reports by field interviewers and tabulates answers to more than 100 questions.



INDOOR-OUTDOOR LIVING appeals strongly to Kettler homeowners because they feel it encourages "informal but gracious" entertaining.

... and here is what it revealed about them

Kettler homeowners are a special segment of the market for houses in the \$30,000-and-up price range, the Harris study shows.

Says Louis Harris: "Another builder in the same price class and even in the same area, might well find very different people buying his houses for another whole set of motives."

Here are some of the basic attitudes that influenced Kettler buyers:

They think of themselves—and quite accurately so—as conservatives

"This feeling poured out of them in our interviews, though they were not asked the question directly," says Harris. "They said they thought their homes would best suit 'people interested in the past, in tradition,' or 'people who value old concepts,' or 'conservative people.'"

Says the survey report: "Kettler owners see themselves not as young moderns—though their average age is 37.4 years—but as carriers on of the traditions of the past."

They want gracious living, but they want to be casual about it

The term "gracious living" cropped up repeatedly in homeowners' answers to interviewers' questions. Advises the Harris report: "The gracious-living concept cannot be overdone in reaching this market."

Though Kettler's buyers want to live in a gracious way, they also put a premium on informality. Said one young housewife: "Informal entertaining is very popular among my friends—outdoors when we can, otherwise in the rec room." Two-thirds of the families entertain in the family room—about the same number as use the living room.

Says Harris: "The desire for 'gracious but casual living' was also reflected in comments on the size and shape of lots. Three out of four Kettler buyers prefer deep narrow lots to shallow wide ones. Their chief reasons: 'better outdoor living' and 'more privacy for entertaining in the back vard.'"

The report points out that outdoor living is "particularly desirable" to Kettler's buyers "because of its luxurious informality" and is "the key to selling any lot."

They are looking for new friends—and expect to find them in the kind of neighborhoods Kettler builds

In their decision to buy a Kettler house, the neighborhood was one of "the two most crucial factors" (the other: size of the house).

"These people are looking for a different way of life," the report says. "They want a good neighborhood and good neighbors, but also 'new' neighborhoods and 'new' neighbors. . . . It is not so much the desire to live among friends that motivated the purchase as the desire to live among the kind of people they want to have as friends. People moving into these homes are on their way up."

Kettler's buyers are finding the new friends they want, according to the survey. Three out of four did not know anybody in the neighborhood when they moved in, but now about 70% have more than ten friends living nearby. Ninety per cent say they would buy a house in the same neighborhood if they were moving into the Washington area.

They want lots of space in the active living areas, are not so interested in large bedrooms and baths

So they are pleased with Kettler's houses, which put most of their space into living, dining, and family rooms and have relatively small bedrooms.

Asked what features of their houses appealed to them most, buyers singled out "the separate dining room," "the large family room," and "the well planned kitchen." And the major change most often requested was to add a second family room.

Most of them shopped widely before they bought a Kettler house

Twenty-two per cent looked at more than 40 other houses, 25% at 21 to 40 houses, 15% at 11 to 20 houses, 10% at 1 to 10, and 20% at an unspecified number. Only 8% did no shopping.

Commenting on those findings, the report observes: "The important fact brought out by the very extensive shopping these families carried on is the large number of salesmen who let them get away."

"Depth study"
of homebuyers
continued





LITTLE TOUCHES like gardening hat on kitchen table and playing cards in family room, point up "gracious living" theme in model house.

Here are some of the things the Kettlers are doing because of what they learned from the Harris survey

They are continuing to furnish their models with many details indicating "casual but gracious living"

Says Milton Kettler: "The survey shows that the way we have furnished our models has been right on the nose. In the kitchen (above left) details like the clippers, the gardening gloves and hat, and the basket of roses suggest that the housewife has just come in from the garden and is planning a flower arrangement to welcome guests. We furnished the family room (above right) to make it look as if a card game had just been interruped—possibly by visitors at the door."

Kettler makes sure that each room has at least one knickknack or unusual furniture piece that will interest prospects and thus keep them in the model longer. "All these little items make the model look more lived-in, and visitors can easily see themselves as the owners. We often sell to people who have come back after six months or as if a card game had just been interrupted—possibly by the house because they remember these unusual items."

They are landscaping their model houses to emphasize privacy for outdoor entertaining

Reason: In their talks with interviewers, Kettler homeowners repeatedly revealed their enjoyment of outdoor social gatherings shielded from neighbors' eyes. So the builder's new models are being landscaped to show the seclusion possible with terraces and patios.

They are making only a few basic changes in their plans and designs

"The survey showed us that, with one exception, our plans are exactly what our buyers want," says Milton Kettler.

The exception: "Although our homeowners are satisfied with relatively small bedrooms, some of them would like a private living area where they could get away from their children."

So Kettler's newest model—a split-level priced at \$34,450 to \$36,450—includes a 34' long master bedroom

suite with not only a bath and dressing room but also a den. Says Kettler: "I think the private hideaway for parents has made this model our bestseller."

They are making it easier for each buyer to get a house that suits his individual tastes

"We knew most of our buyers wanted changes made in the basic models," Milton Kettler explains, "but it took the survey to show us how much they want the changes. They want a neighborhood with the kind of houses and the kind of people they like, but they want their own house to reflect their individuality."

Now the Kettlers stress how easily a model can be changed to fit any prospect's needs or whims. They have made hundreds of plan variations on transparent sheets that fit over the six standard floor plans. As soon as the salesman knows what kind of changes the prospect wants—a larger kitchen, a carport, an added fireplace—the appropriate transparency is brought out. This helps convince the prospect quickly that the exact house he wants is easy to get.

They are seeing that their salesmen pay more attention to selling the neighborhood

Prospects who visit a Kettler tract today are almost certain to get a tour of the neighborhood. The salesmen also quote statistics from the Harris survey to show how friendly the neighbors are.

But the survey has led to few other changes in the salesmen's methods. Milton Kettler explains why: "One of the most important findings was that our two sales managers—Charles Phillips in Virginia and James Walker in Maryland—were already doing an excellent job. Judging from what our homeowners told interviewers, both men seem to have the knack of establishing immediate rapport with our kind of buyer. For instance, they know that our buyers have faith in a salesman who doesn't hesitate to point out unavoidable flaws in a house ('You can expect these floors to open up when the heat is turned on')."



OLD AD showed single house, played up size, price, and quality.

They are planning a service department to systematize the handling of complaints

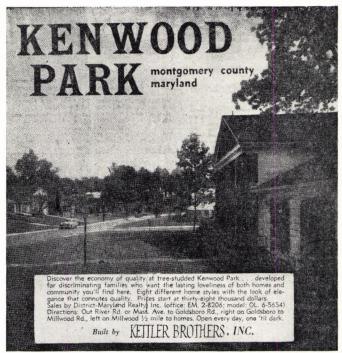
Only 12% of Kettler buyers told interviewers they are unhappy about their homes, but among these people, one of the two main causes of dissatisfaction was slow service on complaints (the other main cause: construction flaws). So the builders will add a service manager to their staff.

They have changed their trademark from a gas lantern to a federal eagle

Explains Jim Mills, Kettler's merchandising consultant: "To Kettler's buyers - who set great store by early American tradition—the lantern has a bit of a cartoon overtone. It does not sufficiently recall the colonial tradition, but the eagle does. And the eagle is not so obvious and looks more dignified on our letterhead."

They are switching the emphasis in their advertisingnow stress neighborhood instead of models and terms

For example: A full-page newspaper ad early this year showed a picture of one model, and devoted most copy



NEW AD shows streetscape, plays up quality of neighborhood.

to price, terms, the size of the house. But a typical ad in the new campaign shows several houses in a wooded, rolling setting and asks: "Are you sure . . . that your next home will offer good neighbors, convenience, a beautiful community, quality, and value?" Prices and terms are played down.

Although their survey is only four months old, the Kettlers have already boosted their sales goal by 33%

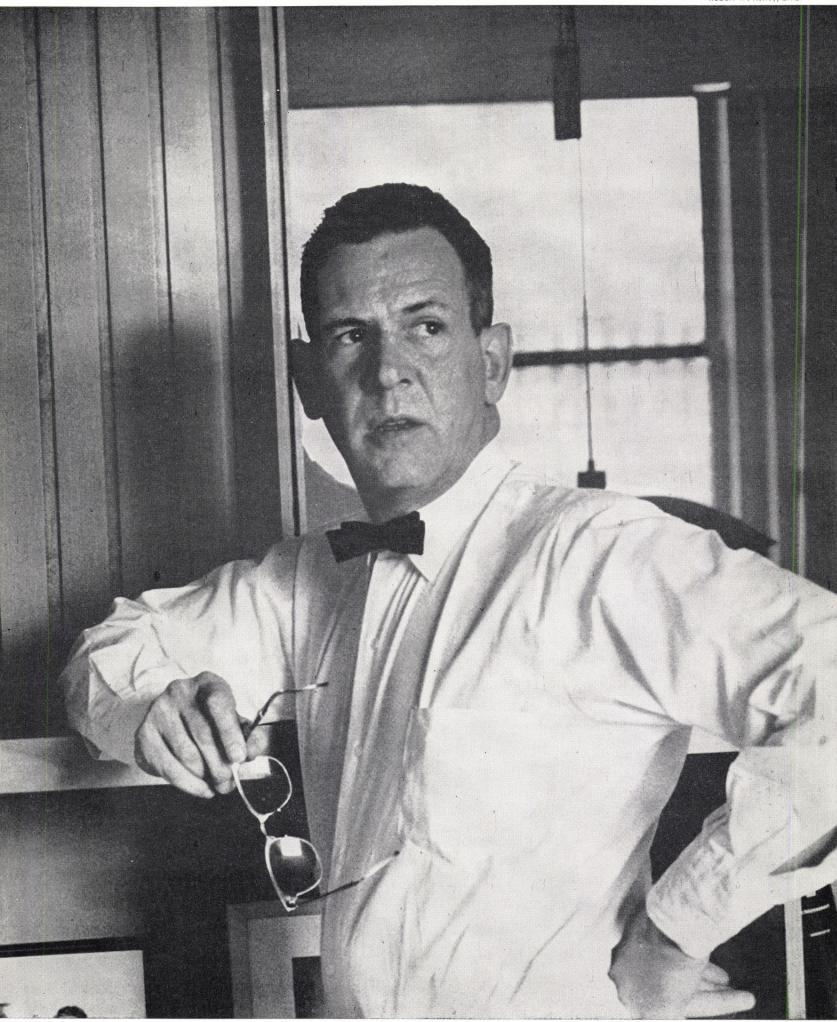
In January they set a 1960 target of 75 houses. But by May 1, they had sold 41. So now they expect to sell 100 by the end of the year.

"We're selling faster than ever because of the changes we've made as a result of the survey," says Milton Kettler. "We made some of these changes right away—like stressing the neighborhood instead of single houses in our ads. But we took longer to consider others. For instance, we have just decided to use big photos of neighborhood living in our display room. It will probably take us at least two years to reap all the benefits of the survey. By that time, I hope we will be sold out a year in advance."

Ankers



SELLING NEIGHBORHOOD, Salesman Charles Phillips now makes it standard practice to drive prospects around Falls Hill tract.



This, the third in House & Home's series of profiles of the leaders of housing's professional groups, is by Paula Treder, AIA, and Kathryn Morgan-Ryan.

Says the AIA's new president Phil Will:

"We must start building communities to fit people—instead of forcing people to fit the community"

"It is high time that we all started thinking about planning and building complete, well balanced communities.

"A well balanced community must begin with an overall concept. It must provide for a wide range of income levels. It must provide for a wide variety of human interests and ways of life. So it needs a variety of housing types—single-family, multi-family, town- and court-type houses—mixed together in a thoughtful pattern. It needs all the amenities like parks, stores, squares with fountains, playgrounds, courts, and plazas. And it must take its plan, its form, its being from basic human facts—the root of all good design."

No one segment of the industry can do this job alone, says Will

"The well balanced community cannot be created by the architect alone, or by the builder, or the engineer, or the land planner. It needs the combined talent, training, and experience of all of these men. "Strong architect-builder teamwork is essential in planning the well balanced community. The bickering that now goes on between architects and builders is nit-picking. I am impatient with it. I am not concerned with the little complaints. We will have to forget them and get on with our work. The architect and builder have much to gain from each other.

The top brass get along fine and know that each stands to profit by the other. But when you get down to the guy who builds 30 to 60 houses a year, he says, 'I don't need an architect.'

"Architecture was once recognized as a personal, individual service. But today it is a team sport. Today's needs can no longer be supplied by an individual. By the same token, the architect and builder, too, must team up to do the whole job."

"What is being done so far is being done by too small a number in the profession and for too limited objectives. Our scale of needs far exceeds the objectives towards which we are now working.

"My crystal ball is no clearer than anyone else's



ARCHITECT WILL, right, shares top responsibility in his firm with Partner Larry Perkins, center, his one-time college roommate.



WILL'S FAMILY includes, from left, Will, wife Callie, son Philip (Phip), and daughter Elizabeth (Liz).

but this I know: if we do not begin to build communities for people, we merely hasten the day when we must rebuild the slums we are even now creating."

Will says we are making "hideous mistakes" in building our communities today

When Phil Will speaks of the "slums" we are building, he does not mean jerry-built housing. He is speaking instead of the "monotonous sameness of single-family houses which imposes its own pattern and rigidly dictates a way of life for the inhabitants." He is speaking of the "forced sales which result when one house on a street of look-alike houses is allowed to run down and causes the property values of all the other houses on the street to plummet." He is speaking of "intellectual deprivation which comes when you have too many people of the same income, class, and interests grouped together." He is speaking of "the cruel segregation of age groups into stratified levels." He is speaking of problems which, he believes, should concern the housing industry as much as they concern sociologists.

Will knows whereof he speaks—building the overall community is his business. He has been an architect for 30 years—of houses, schools, apartments, and of the communities into which they fit. Here is more of his thinking:

"We must stop building monolithic communities of single-stratum houses"

Says Will: "Today all pressures seem to force builders into putting up whole communities of the same kind of single-family, detached houses. I have no use whatever for some of the meaningless compromises we now build—the little box with the 5' side yard, neither urban nor exurban, a criminal waste of the land that God gave us. We are consuming the good earth at a fantastic rate that we can ill afford. We can no longer afford the detached house for everyone. This is patently silly for 90% of our population and a sheer waste of money—a cost burden we impose on ourselves in the form of sewers, water, paving.

"We must stop putting people in human anthills. Every community looks like every other community and every family is being forced into the mold of every other family. We are creating communities of robots, where everyone buys the same kind of grass seed and drives the same kind of car, where everyone has the same income level—often the same kinds of jobs—and where everyone is literally forced to have the same kinds of interests or run the risk of being called the neighborhood 'oddball.'

"I don't care how you curve the streets, when you've got 500 houses in a subdivision—houses that cost, say, from \$14,500 to \$17,000 with uniform down payments, you know you are going to attract only a certain kind of buyer. We are making similar frightening mistakes in urban renewal and slum clearance programs. There is the same lack of variety, the same ignoring of very human needs.

"When you force people into the same mold, you set the groundwork for a slum. I have a friend who works on a newspaper in Detroit. He lives in a community where, if one man gets a Chevy Bel-Air, every man buys not just a Chevy, but the same model. This fellow has no room to grow in this environment, so he is trying to sell his house. But the problem is that too many other people in the community are also selling for the same reason and he is having trouble getting out."

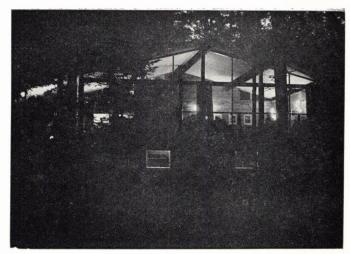
"The well balanced community is our industry's greatest challenge"

"We must start now on a massive planning and replanning of communities on a scale which dwarfs anything ever undertaken in the past. As an industry we could not, even if we wished, confine ourselves to the design of single buildings or even complexes of buildings or neighborhoods. I believe that we must undertake the responsibility for shaping our entire physical environment. This is my goal, nothing less."

Phil Will made this statement a few days before he was elected president of the American Institute of Architects. He made it again in a post-election speech to AIA delegates in San Francisco in April. He will make this statement again and again in speeches, meetings, and conferences this year, for it represents the single, most immediate aim that



W!LL'S OWN HOME in Evanston was an early example of "electrical living," won a General Electric prize in the late 30s.



WILL'S VACATION HOUSE, a glass and frame design, is located on Higgins Lake in the Michigan woods.

Architect Will believes each member of the housing industry must pursue.

"I plan to spend my time learning to understand, and then working out, the problems that face the architectural profession," says Will. (He believes only 10% of his time this year will be available to the firm of Perkins & Will of Chicago, of which he is a senior partner.) "But I do not mean to suggest that any single person is capable of solving them. As architects our goal will be to plan specific studies and activities which will be needed to do the job on a long-range basis. But we cannot do it alone. We need, and must have, the help of builders, engineers, city and land planners. Only by working together can we do what must be done."

"Architects must take back many responsibilities they have given up"

"There is now an ambivalent attitude within the profession. A large segment are narrowing their fields of interest and thereby, their effectiveness.

"Architecture used to be a highly comprehensive profession, but architects have ceded interiors to decorators, total responsibility for large-scale planning to land developers and builders. Some have even let house design go by default.

"We look to doctors to take care of our nation's health, lawyers to be concerned with law and order. Should not architects expect to take some responsibility for the shaping of our physical environment? The answer is, they must.

"It is surprising that architects do as well as they do, considering how much they have given away and how little they know about the fundamentals of human behavior. Yet, here is where they are needed most. No plan for the well balanced community can be made until we learn more about the human response to physical stimuli—reaction to space, form, light, color, and texture."

"Builders—like architects must take back their full responsibilities"

"I am distressed by the typical homebuilding that has been done. I'm not talking about the best—some builders are responsible men of considerable vision. I'm talking about the irresponsible men who blight the land and box in the mental and emotional capabilities of people, either because they don't care or because they don't know any better."

The builder must begin to see housing as one part of the well balanced community, Will thinks, not as "all there is." And builders can help bring about the legislation Will feels is necessary to correct overaged zoning laws "so that the laws would permit within the same community building types considered incompatible up to now: detached houses and apartments—both high- and low-rise and garden duplexes. In other words," says Will, "the builder must work toward—and for—the overall effort and he must work with others because we have far greater problems than any one of us can solve alone.

"I am afraid that if the builder keeps on as he is now, he will find that he has built for (and absorbed) our population surge and achieved nothing, because it will all have been done by small, uncoordinated increments. This is what I would like builders and architects, alike, to grasp. It is their joint responsibility to stop building the kind of mentally and physically restricting communities they are now building and to find, instead, the solutions that make possible the well balanced community.

"In the long run, it will be easier to convince the architects than the builders that they must work together. The architects are like disappointed brides, still wondering if the offspring will be legitimate."

"Engineers, sociologists, and land planners must help us find the right way to use land"

"Much of our large-scale planning and community development will have to include land already built up on the periphery of the city," says Will. "We need the help of land experts as quickly as possible. We must begin to use land differently and to re-use land we have already used poorly. It is up to these experts to help us figure out the ways and means. Certainly we can cut costs and land wastes if we stop trying to house everybody in detached houses. But more important, we must predetermine the use to which every bit of our land is to be put. As an industry we will need a collective means of assembling land and we will need big chunks of money to get it, too big for any of us as individuals to get alone. This, of course, will be fought by every

vested interest. As Economist Kenneth Galbraith has said, 'The familiar is always defended with moral fervor just before it becomes foolish.'"

"The well balanced community will become a reality when all of us want it to be"

"All we need to do," says Will, "is open up our vistas and learn to work together. To say that what we can create jointly will be a new architecture is not an idle term. We can no longer think of our selves just as the architects and builders and planners of neighborhoods. We must not congratulate ourselves when we put in a park or a playground. For in truth, we are the architects and builders and planners of towns and cities and what we do now will come back, either to haunt or to fulfill us. The decision as to which it will be must be made right now."

Will is a reserved, quiet man with unreserved, tough ideas

He is a tall (6'2"), slender, pleasant-faced man, reserved, even shy of manner. When he takes off the glasses he wears for reading and close work, he appears younger than his 54 years. When he speaks, his sincerity and his thorough familiarity with his subject are evident. Mild-of-manner as Will may appear, his ideas and the beliefs which he holds as a practicing architect are anything but mild—and he speaks from personal knowledge.

When Will pleads with architects to stop allowing their role in community planning to erode away, it is because he believes it is the architect's responsibility to undertake the design of communities, as he himself has done in study projects such as that for New York's East Harlem.

When he tells builders that single-stratum houses for single-stratum families do not alone constitute a community, it is because Will has worked since 1939 on the schools, playspaces, parks, malls, and varied housing types that he believes do constitute the well balanced community.

And when he urges, not just architects and builders, but engineers and planners to work together as a team to share and solve their common problems, it is because in Will's own office such professionals do work together.

While Will the architect is serious and intent, Will the man is not without humor. On a bookshelf in his office is a sign which reads, "Don't start vast projects with half-vast ideas." Says Will: "It expresses the thought I want to get across without my having to say it aloud to anyone."

Will has expressed some fears that he may disappoint a few people in his new job as AIA president. "For example," he says, "I am not going to be able to accept every speaking invitation I get. I find problems, rather than front-running public relations, challenging. I am interested in organizing things. There's always a better way of doing anything except maybe generating babies. It's a habit of mine to question philosophies, procedures, and objectives."

Will got into Institute work "by deliberate choice, simply because I found it interesting and challenging. I got into national activity because my arm was twisted. I had no intention of staying with it as long as I have, but I find a certain satisfaction from it. I'm as human as most and I'm not without ego, but also, I think, I'm not without some humility. There is one thing I have learned from working in the Institute: there are an awful lot of able and dedicated men in this profession."

Will and his partner, Larry Perkins, met at Cor-

nell where they were architectural students, fraternity brothers, and roommates. ("I think Perkins still has some of my socks," says Will.) The friendship continued after college. Will, who graduated with honors in 1930, found himself "broke and without a job in 1933." Undaunted, he got married, with Perkins as best man.

Will's early career was a series of constant ups and downs

After their mariage, Will and his wife Callie went to Chicago, Perkins' home town. Will went to work for General Houses Inc as a designer. "And after 21 months that collapsed. I then got a job with PWA as a designer for \$1.10 an hour—big money then. Finally Perkins and I decided to start our own firm because we obviously weren't going to get a job working for anybody else. A cousin of Perkins' had us do a house in Miami Beach that is still there. We got odds and ends and worked our way up the hard way. We got our big break in 1939 with the Crow Island School." (For pictures, see opposite.)

Perkins & Will also took to homebuilding. Will designed a Lockweld Engineered Home, a mass-produced, semi-fabricated house that has been called "one of the greatest influences in better design of builder-built homes that has ever come along."

"The houses," muses Will, "looked modern to some people, quite conservative to others." A rival architect agrees. Says he, "Put a white picket fence in front of one of Will's houses and the man who likes Cape Cod Colonial is sure that this must be its finest expression. The man who likes modern will pick the same house—picket fence or not—as the cleanest design he has ever seen."

Will's own home, in Evanston, was built "years ago." Says Will: "Back in 1938 or '39, it won a GE award. It had four circuits then. Now it has 16!!"

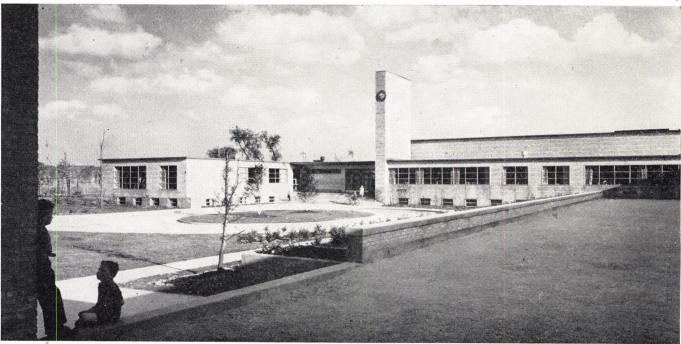
Will spends as much time as he can with his wife Callie and their children Phip, 20, and Liz, 22. Both are in school at Cornell—where Phip has just transferred to architecture—but the Wills get together during holidays and vacations in the contemporary glass-and-frame vacation house Will designed and had built at Higgins Lake in Michigan.

Will expects a lot of his time this year to be taken up with the mechanics of travel. "I'm not someone who can hop on a plane and go to sleep," he says. "In fact, flying scares the hell out of me. I took the Zephyr to San Francisco; it takes longer than the other trains—45 hours—but it's the prettiest trip!"

Will's practice today is big enough "to get the interesting jobs we want"

The backbone of Perkins & Will's work is educational buildings, office buildings, and hospitals. But it also includes the constant plans and ideas Will works on in his drive towards professional teamwork in developing the well balanced community. "The trouble with Phil," says Larry Perkins, "is that he's an incurable perfectionist. He would even rearrange the sunset."

Phil Will will not rearrange the sunset, but he may go a long way, or so he hopes, in rearranging the attitudes and the thinking of housing professionals about how they should work for their common good. "Each man," says Phil Will, "must contribute to his job what gifts and talents he possesses—and sometimes as you go along you find you have more of each than you knew. I believe that's true of most of the men in this industry. One day—soon—you'll see us standing shoulder-to-shoulder—not just for our good, but for everybody's good."



CROW ISLAND SCHOOL, which P&W did in collaboration with Eliel Saarinen, was a breakthrough in school design and in the firm's career.

Hedrich-Blessing

Here is some of Perkins & Will's outstanding work

Walter Sanders, LIFE



HEATHCOTE SCHOOL in Westchester, the firm's latest pace-setting school design, has cluster classrooms.





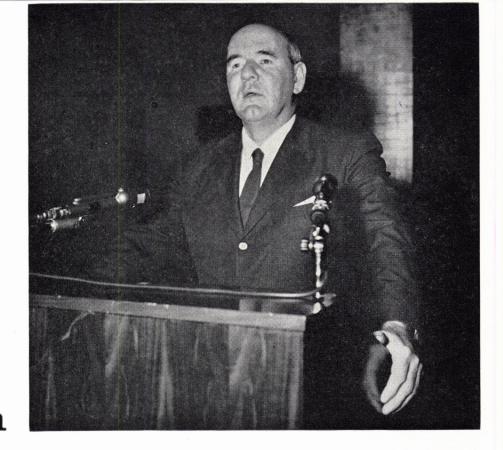
INTERNATIONAL MINERALS BUILDING in Skokie, Ill., won a 1960 Merit award from AIA for design excellence.



CROW ISLAND SCHOOL was the first school in the US where details, like low window seats, were scaled to fit children.



MOTEL ON THE MOUNTAIN, at Suffern, N.Y., designed in collaboration with Architect H. H. Harris, broke new trails in motel design for the Northeast. /END



Civilization

is the art of living in cities

This was the message brought to the 92nd annual convention of the American Institute of Architects by C. Northcote Parkinson, historian, satirist, and author of the best selling Parkinson's Law and the current The Law and the Profits. Born in England in 1909, Dr Parkinson holds the chair of Raffles Professor of History at the University of Malaya. He lectured at Harvard in 1958, at the University of Illinois in 1959, and is now teaching at the University of California in Berkeley. Extracts from his convention address follow:

My opening remarks will outline a tale of two cities—first of the city of York, in which I spent my boyhood and to which I was and am extremely loyal.

York commands your admiration for a number of reasons but is satisfactory chiefly for these: it has a focus around which it is grouped; it has clearly defined limits-being in fact still fortified -with country outside which once was wilderness; it has the essentials of civilized life-cathedral, theater, concert-hall, assemblyrooms, art gallery, guildhall, and library—all grouped within easy walking distance; it is a regional capital with its markets, law courts and racecourse, its annual festival and its country club; it has remained a place in which to live; and it retains its own tradition, character, and balance.

You will often hear it said that an old city, like York, owes its beauty to its age. This is nonsense. Cities owe little more to age than do human beings. They owe their beauty to the men who planned and built them and who were sometimes more intelligent than

their descendants (who sometimes lacked the money to replace what they could not appreciate). Some earlier residents of York would seem to have been very intelligent indeed.

Later in life I came to live for a time in Liverpool. Studying its history, I came to realize that its decline as a place to live in began in 1775 or thereabouts, but was hastened by the rise of democratic local government in the 1830s. Here, as in so many other places, the architectural collapse comes in 1845. I have never heard a complete explanation of why all sense of style should have been lost so completely and abruptly in about that year, a change observable not only in Europe but also in a city like Detroit. Be that as it may, the flight of Liverpool's more important inhabitants left it prey to the municipal corruption for which it has since been so famous. The result is Liverpool as we know it, lacking any single focus, poorly defined, the capital of no distinct region, not quite without character but quite unfit to live in.

With the contrast before me of York

and Liverpool, and comparing both with London, Edinburgh, Paris, and Rome (and later with Singapore, Tokyo, New Delhi, and Bangkok) I have formed some idea of what a city should and should not be. More recently, I have applied these standards to Quebec, Boston, New York, and Chicago. I feel that in the United States the cities are, many of them, all but dead; and that civilization must suffer in consequence.

In the US over 50 million people live neither in country nor city

Having now had some experience of that life, I have come to the conclusion that the American suburbanite, trying to combine the amenities of city and country, enjoys the advantages of neither. The car and the TV set are no real compensation for all that he has lost. In the one direction the urban sprawl has put the countryside (in so far as there is any) out of effective reach. In the other direction, the city's magnetism has been lost. It can no longer sell itself. It has little to offer

that would balance the real inconvenience of returning there in the evening.

This is not true of New York, nor of San Francisco, both of which owe much to the limiting effect of their shoreline. But how many other cities would justify a tourist's pilgrimage from Europe? Many, after dark, are cities of the dead and a few relapse into disorder and chaos. The lives of millions have come to center on the suburbs, and very dull their lives are apt to be.

The urban and suburban landscape now consists not merely of sprawling ranch houses, for which there is no room, but of pylons, masts, and poles festooned with connecting cables. Towns stretch on for ever—stretch on, in fact, until some other town is reached. The urban sprawl which abolishes the city can abolish the countryside as well. Many American centers of population are difficult to recognize as cities at all.

Much could be done to improve the suburban way of life

Now, I do not advocate a war against suburbia. What I do feel is that people should go to suburbia if that is what they like; they should not be driven there by the lack of any reasonable alternative. For the vital life of the city must go on if civilization is to survive. This is more often repeated than explained, but the explanation is in fact fairly simple.

When the explosion occurs in the afternoon, projecting the city's daytime population into the suburban areas, each working inhabitant is taken from his professional world and deposited in a neighborhood unit. From Madison Ave and Wall St (each representing not merely an area but a professional atmosphere, as in London from Harley St or Saville Row) each commuter is whirled into a different suburban world. He becomes for a greater and greater part of the week-Friday to Monday inclusive plus each evening-one of the folks in the block northeast of Prospect and Vine. His neighbors are drawn from all trades and vocations, and among them he may be the only journalist, the only banker, the only en-

Up to a point it may be good for the banker to mingle with people who are not bankers. It may even be good for the professors. But can the same be said with confidence of authors, artists, musicians, and actors. The dangers are two. First, it is easy for me to be the best historian in a society which includes no other historian. Second, it is probably bad for me to confine my ordinary social conversation to such topics as grade schools, gardens, gossip, and golf. In such a life we are all dragged down to the intellectual level of the PTA meeting. The greatest intellectual and artistic achievements do not spring from suburban lawns. There are poets who commune with nature in the

lonely hills, but the masterpieces of prose and canvas, the symphonies and ballets, are more likely to come from a harsher world of criticism and rivalry, from Shaftesbury Ave or Fleet St, from the Latin Quarter or from Montparnasse. One man can be supreme only among many who are good. And what is obviously true of art and architecture is true, to some extent, of all intellectual life—journalism, medicine, science, history, and law.

Is the national pattern of living to be replanned for a few eggheads?

There are people in this democratic country who would point out that suburban life offers peculiar scope for participation in local government and communal life. I should like to comment upon these attitudes of mind which have a special bearing on our economic and political horizons.

Take the economic horizon first. The assumption current among many of my business friends is that the realities of life are to be found among the bankers, real estate agents, car salesmen, and storekeepers. These admirable people do the world's work and support by their efforts a picturesque fringe of people who are not really essential—novelists, motion-picture actors, TV stars, and absent-minded professors.

There may have been a time when this belief was more or less justified. Today the position is reversed without either group fully realizing either the fact or its corollaries.

We have moved into a new phase of our history in which a handful of experts matter enormously and the mass of car salesmen do not matter at all. In cold economic fact, one absent-minder professor (call him Einstein, just for example) can matter more than all the real estate agents put together. In Britain a few experts in the commercial application of nuclear power are about to put the whole coal industry out of business—miners, geologists, engineers, managers, and distributors.

For reasons such as these I would maintain that the revival of city life as an effective background for intellectual discussion and constructive thought is a thing of vital importance. I want to see the open-air cafes fronting on the piazza (as they do in Venice) one known to be the haunt of poets, another devoted to the playing of chess, a third where photographers display their art. But the great piazza at Venice has no traffic! If I dared speak for the intellectuals and artists of the world, I should say to you architects: "Ours is an age when the many rely more and more upon the abilities of the few. Give us a city in which we can live and work and argue and compete!"

The architect's temptation is to devise a monster plan—capital M, capital PLAN. And this, we are to understand, is to control a city's destiny for the next half century.

Actually, as we all know, master plans are always discarded after 20 years and usually after five. . . . We don't live long enough to implement any master plan and our successors, when they succeed us, are apt to have ideas of their own. Why shouldn't they? They will know much that we do not. What an individual can do is to set a standard in design up to to which later generations must struggle to measure themselves.

Sir Christopher Wren was never allowed to complete his master plan for London after the great fire. . . . But what he did do was to build St Paul's Cathedral as London's central feature and to this day, whatever anyone plans, it is against St Paul's Cathedral that that plan is measured. And I think Wren should be satisfied with that. The focus is what matters, not the development plan which is never carried out.

Many forces work to block change and improvement

The region which needs replanning and rebuilding is usually a crazy patchwork of petty local authorities, strangling all development amidst the jungle growth of their regulations, loyalties, and jealousies. New York City is bad in this way, but the Bay Area is no better and Chicago is worse. To complete the picture, the more distinguished and able inhabitants have gone to live 30 miles away, outside the bounds of the city and often outside the boundary of the state. They have lost any interest they ever had. Economically, the money for reconstruction is there, but it is being squandered on a dozen futilities, ranging from civil defense to education. The difficulties are immense.

But if the difficulties are immense, so are the opportunities

For the city of the future—were one constructed—would soon find imitators; for imitation is something for which many architects have something of a gift. The movement "back to the city" would spread, were it once begun. In leading such a movement, what must we provide? We must provide, first of all, a central focus, at once dominating and beautiful. We must provide, centrally, the most attractive accommodation for millionaires, luring them back to the city. We must group the essential amenities within walking distance of each other, with all vehicles banished to a level below that upon which people live. We must so define the city area that we know where our city begins and ends. We must abolish traffic confusion, dirt, smog, corruption, disorder, and crime, in all of which effort the architect must play a vital part. Without his initial success in drawing admiration, affection, and pride to the city, nothing will succeed. That first success achieved, much else will follow of itself.

Still building with little pieces

because you think you build too few houses to use components?

Or because you think your houses are too varied?

Or because you think components will raise your costs?





H&H staff

Let a builder who has used all kinds of components

to build all kinds of houses tell you why

Every builder can—and should— start using components now

"I've heard a lot of builders say they can't use components. What most of them mean is they can't adopt a *complete* component system—and in many cases they are right.

"But what most of these builders don't realize is that they can cut their costs and improve the way they build by using at least *some* components."

So says Builder and ex-NAHB Research Institute Chairman Bob Schmitt, who has used components since he was a ten-house builder.

"There is no reason why," Schmitt continues, "you have to choose between building your whole house with components—or not using components at all. You can start adopting components in easy stages—start with just roof trusses, then go on to as many more components as make sense and cut costs for you [for details, see p 148]. I use components in different ways in my custom houses than in my repeat-plan houses [see p 150]. Once you know that you don't have to go whole hog, it becomes clear that:

"You can use at least some components no matter how small you are. In fact, the smaller you are the more you need components to smooth out your operation. And if you can find a big-volume component dealer, you can get many cost benefits of bigness without being big yourself.

"You can use some components no matter how varied your houses are. Roof trusses, for example, permit more design flexibility than you can get using load-bearing partitions in conventional building.

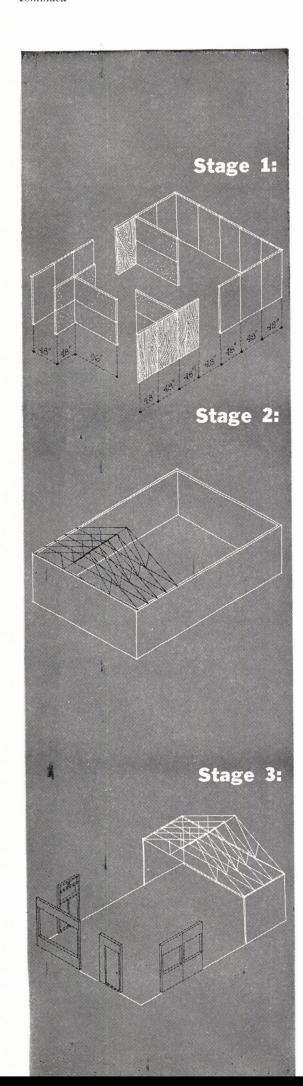
"And you can always cut your total building costs. Some small-volume builders think they are saving money because they pay themselves carpenter's wages when they build conventionally, but it never makes sense to pay yourself as a \$3.75 carpenter instead of a \$10-an-hour manager. Other builders, who think components will raise their costs, make the mistake of adding up the higher prices for labor-saving materials without deducting the direct and indirect labor savings they make.

"The way to judge how much components save is to look at total costs [see p 152] and not to compare, for example, just the installed cost of trusses vs joists and rafters. Components affect your final cost many ways:

"Components speed building, thus cut construction costs. They get a house out of the weather, thus reduce costly downtime. They let you build more houses with the same number of men or the same number of houses with a smaller labor force. They simplify management, supervision, and purchasing by eliminating details. They help you spot bottlenecks and costly practices that are obscured by all the pieces and all the men on a conventional house."



You can start using components in easy stages



The four stages of component building described below—and the savings indicated for each—are based on Bob Schmitt's experience in building single-story component houses. In deciding how far you should go in adopting components, remember it is purely a question of economics and, most important, it is a question of your *total building cost* and not the comparative in-place cost of a component vs its conventional counterpart.

Plan your house dimensions to fit the big sheet materials

Says Schmitt: "Many builders get started on the wrong foot by dimensioning their houses for the most economical joist size. When you set the width of your house to fit joists, the the width hardly ever fits any of the other materials you use.

"And too many builders still use board sheathing because it is a cheaper material to buy than plywood. What they forget is that the small saving on material is more than offset by all the extra nailing to fasten board sheathing.

"To get the maximum saving from the big sheet materials like insulation board, plywood, and gypsum wallboard (which conform either to the traditional 16" oc stud spacing or the more economical 24" spacing) you should dimension your house in multiples of 4'. This does two things: 1) It saves the material that is wasted when big sheets are cut to fit non-modular dimensions, and 2) It saves the labor that is wasted in measuring, marking, and cutting the material.

"And dimensioning the house for these standard sheet materials makes the use of all the structural components listed below possible."

Use roof trusses instead of joists and rafters

"Roof trusses," says Schmitt, "are the single most important component a builder can use.

"They will save him more money than any other component—and can be used by every builder, no matter what his volume and no matter what shape his houses are.

"Builders who think trusses cost more than joists and rafters are making the mistake of thinking of trusses just as a means of framing a roof. But the greatest savings from trusses come not in roof framing, but in all the other cost-saving advantages they give you:

"1. Trusses are the most important element in getting a house closed in fast, so that weather cannot upset the building schedule. In winter, the faster a house is closed in and heated, the faster interior work can move.

"2. Trusses allow you to complete

much of the house as 'one big room.' It is faster and easier to insulate the house while it is still one big room. Wiring can be done faster and more efficiently—even though an electrician has two rough-ins. The entire ceiling and the perimeter walls can be drywalled faster if partitions are not in the way. The furnace and other pieces of big equipment are easier to move in before partitions are up. The whole floor can be laid and finished in one sweep, then covered with building paper before the partitions are erected.

"3. Because the partitions in a trussroof house need not be loadbearing, you get much more plan flexibility. And this means partitions can often be placed so they cover butt joints in drywall, which saves taping and finishing. Because partitions are nonload-bearing, double plates can be eliminated."

Use window- and door-walls instead of framing openings

"From a cost-saving point of view, these components are next in importance to roof trusses.

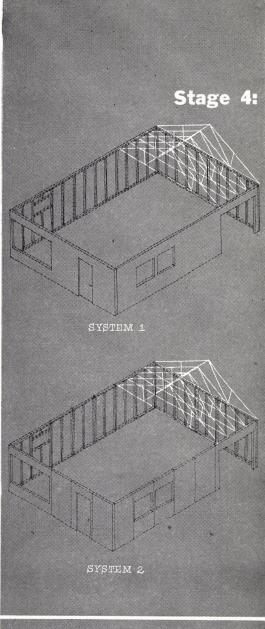
"And any builder can use these components—again no matter how many or how varied his houses are. For example, I use them on my custom houses, no two of which are alike (see *p 150*).

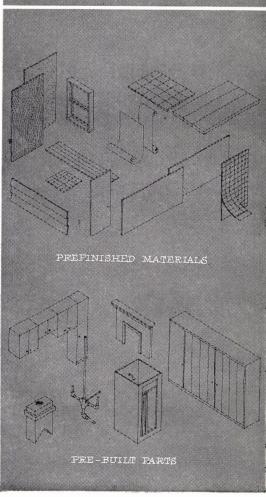
"Here's why these components make sense for every builder:

"1. Most builders have already standardized on a relatively few window sizes which they use in all their houses, so these components do not detract from design flexibility.

"2. Because the window and door parts of the wall are complicated, they require a lot of labor and a high degree of skill. Therefore it is much faster, more accurate, and more economical to build these components in a shop where volume cutting and sizing can save labor, and jig assembly can save skill and time.

"No builder would think of building his own windows and doors. It is only a step further to realize that a window or door can be joined to a wall more economically under shop conditions than it can in the field."





Use a complete exterior wall system

"You have to make a choice between two basic systems—wall-size components and modular components," says Schmitt. Which makes the most sense for you depends on many factors: your volume, the volume of your component maker, how standardized your houses are, the cost and skill of local labor, the cost of using handling equipment, the proximity of your component supplier.

System 1. Big wall-size components. These big components make sense only if you build a volume of repeat-plan houses or houses that are so similar they have common elevations (so the same component can be used for both). "These components can be made simply as framing with sheathing attached, or can be made with doors and windows and pre-finished siding in place. The more complete the component is, the less on-site labor you need; but if they become too heavy for your men to manhandle, you will have to add the cost of using power handling equipment into your cost calculations.

"To get these panels at a competitive price, you must generally build 20 or more standardized houses. It will seldom pay to tool up to produce fewer.

"The special advantage of these big panels is that they reduce on-site labor to a minimum, since they need be joined only at corners of the house. Even so, they are not always best even for volume builders [see below]."

System 2. Modular components. These smaller components (examples: LuReCo, Koppers foam-core panel) can be used by any builder on any kind of house.

"They sometimes make economic sense for volume builders of repeat plan houses. If there is a nearby component maker turning out these standard components in great volume (so the price is very low), it could be cheaper to build with these panels—even though they must be joined together every 4'than to build with big wall-size sections. So far, this is not common. But as industrialization continues and more and more modular panels are produced under factory conditions (perhaps with prefinished surfaces) more and more repeat-plan builders may find that low unit costs of modular panels will outweigh the cost of joining them together.

"The modular component system is the only system for small-volume builders, who cannot get wall-size components built for them.

"And the modular component system makes sense for custom house builders, who need the plan and design flexibility that small panels offer."

And be sure to use all these money savers, too

"Regardless of whether you adopt any or all of the structural components available," says Schmitt, "there are two kinds of products that can save you money by eliminating on-site labor and simplifying the management of your operation:"

1. Prefinished materials. "There are few materials that can be finished better or more economically on site than they can be finished in a plant. A major exception is interior drywall that can be sprayed or rolled with paint quickly on site.

"I look at it this way: a pre-finished surface which is a combination of materials and skilled labor is just as much a component as a structural unit—and so it will give you the same kinds of savings.

"Here are some of the pre-finished surfaces that can give you component savings: prefinished plywood and hardboard, prepainted block and strip flooring, prefinished siding, prefinished doors and windows, plastic laminates, plastic wall coverings, wallpaper, acoustical tile, wood or fiberboard roof deck, pre-finished gypsum, sheet-mounted tile. These prefinished materials save you money four ways:

"1. They combine several separate operations into one. Example: a prefin-

ished door eliminates the several stages of sanding and lacquering.

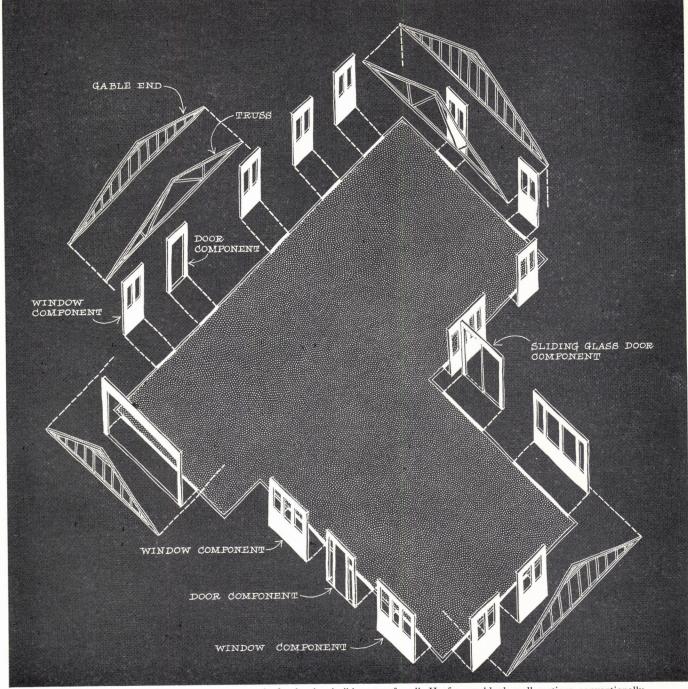
- "2. They give you a higher quality finish than is possible with hand methods.
- "3. They eliminate the problem of waiting for clear weather. Once you've applied a sheet of prepainted siding, you're finished.
- "4. They shrink your building time since each stage of finishing doesn't depend on a previous stage.

"Whenever you can get prefinished surfaces as part of a structural component, you compound your savings."

2. Pre-built parts. "Today there is hardly a product for a house that you can build cheaper than you can buy it.

"Here are some of the pre-built components that you can buy—in almost every part of the country—cheaper than you can build them yourself: kitchen cabinets, chimneys, shower stalls, medicine cabinets, stairways, and garage doors. And in many areas you can now get fireplaces, closet and storage walls, even preassembled plumbing walls cheaper than you can make them. You should use as many of them as you can buy right, because you get the same kind of cost-saving advantages from them that you get from structural components and prefinished surfaces."

Why you should use components continued



FOR CUSTOM HOUSES, Schmitt uses components only for hard-to-build parts of wall. He frames blank wall sections conventionally.

This is Schmitt's minimum use of components

This drawing shows the component system Schmitt uses for his custom houses. For them, he is at stage 3 of industrialization (see p 149).

"For these houses, no two of which are alike," says Schmitt "I use only these components: 1) trusses and gable ends, 2) modular window and door components. I fill the spaces between doors and windows with conventional framing."

Why does Schmitt not go further in using components on these houses? "I get the greatest part of the possible savings with just these few components. Even though each of my custom houses is different, I can use standard-size trusses, windows, and doors in all of them. Trusses are basic to my whole building method [see stage 2, p 149]. I use shopbuilt window and wall components because these are the sections of a wall that take the most labor and most skill to build. My component manufacturer [Home Materials Co, Mansfield, Ohio—about 60 miles from Schmitt's site] can produce these standard-size components far more accurately and economically than my men can. By using these components I cut my building time and get out of the weather fast.

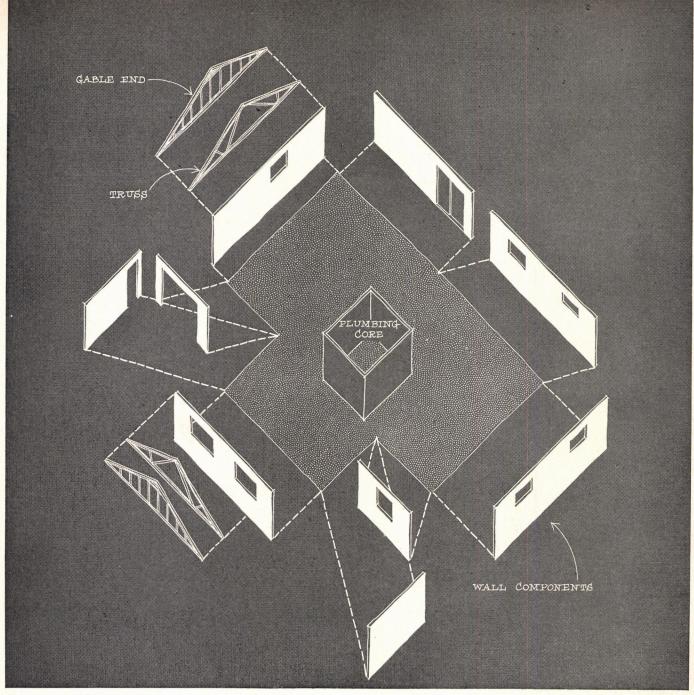
"Although I could use modular blank-wall components to fill most of the gaps between window and door components, I have found that, at least at present, it is cheaper for me

to job-build these sections. Neither my volume nor my suppliers' volume is sufficient to reduce the cost of these blank-wall components to the point where they would be cheaper than conventional construction; particularly since it would take another truck to carry them to my site.

"It is harder to get a saving with blank-wall components than with more complicated parts, because there is less labor and labor skill involved. But I will continue to study new blank panels as they are developed. If they can lower my costs, I'll switch over."

Here is how Schmitt builds his custom houses around his components

"The window and door components are taken from the truck and set in place around the slab. All except the biggest window wall can be carried by two men. While one two-man team is erecting and plumbing these components, another team begins building the blank wall sections between them. We can either sheathe the blank sections while they are lying flat or erect them unsheathed, since we can put trusses on top of the walls before they are completely sheathed. We always leave the sheathing off some sections so men and materials can move in and out of the house at several points."



FOR REPEAT-PLAN HOUSES, Schmitt uses large wall sections built as a single component and tilted into place on the slab.

This is Schmitt's maximum use of components

This drawing shows the component system Schmitt uses in his volume-production, repeat-plan houses. For them he is at stage 4 of industrialization (see p 149).

"I build these houses with only two sizes of truss and nine basic wall panels. With these standardized parts, I can produce five different versions of the house, and all of them can be oriented on the lot four different ways (see next page and drawings on p 154).

"At least for now, and in the volume I build these houses," says Schmitt, "these wall size components give me greater economy than I can get with smaller, modular panels that must be fastened together in the field and require no less on-site finishing. But I am always watching modular-panel developments and when mass-produced prefinished panels are available in my area I will change to them if they can lower my total building costs.

"Meanwhile," says Schmitt, "my wall-panels give me a big saving from standardization, and let me build these houses with relatively unskilled labor.

"The wall panels come delivered to us as framing sheathed with plywood. The spaces for windows and doors are precision cut, so prepainted windows can be surface-nailed in place with a minimum of on-site labor. The exterior siding

—prestained cedar shingles in 4' panels or preprimed beveled siding—is applied on the job with prepainted nails.

Getting the big panels completely finished would save little, cut down on variety

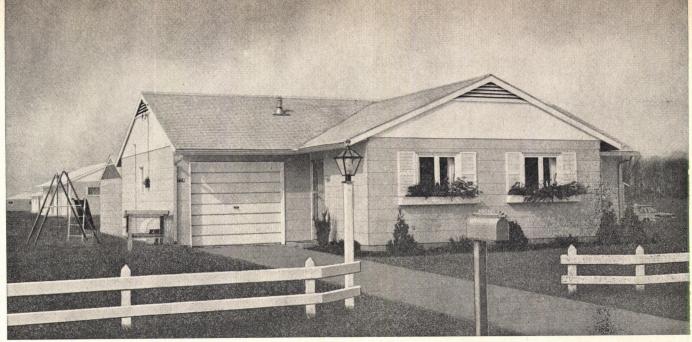
"I didn't want my component manufacturer to install windows," says Schmitt, "because this would have made the panels much heavier and harder to handle. And it takes no great skill to insert windows quickly at the site. We don't have the panels delivered with siding applied for three reasons: 1) the added weight; 2) inside and outside corners can be fitted more precisely with site-applied shingles or siding; and 3) we can change to color of the shingles or siding at the last possible moment to please a buyer."

The standardization in these houses also lets Schmitt use prefabbed plumbing

"All of these repeat-plan houses—no matter how the basic plan is varied to avoid look-alikes—are built around a central mechanical core. So I can get additional savings by having plumbing subassemblies prefabbed in a shop, which both speeds my construction and cuts the labor cost."

Why you should use components

continued



T-SHAPED HOUSE has 1,368 sq ft under roof, is only one of six variations possible from Schmitt's basic L-shaped plan (see drawings, p 154).

You get the payoff from components in the sales price—this component-built house sells \$2,000 below FHA

This house and 59 like it were sold by Schmitt—in advance of construction—at \$15,200 to \$15,450 including lot. Their FHA valuation: \$17,500 or more.

Schmitt was able to beat the FHA valuations on these repeatplan houses (and still turn a handsome profit) because he used just a few big shop-built components on each of the houses (as shown on preceding page). No house required more than nine big exterior panels, 36 trusses, and three gable ends. Yet each house looks different from the street (see drawings on p 154).

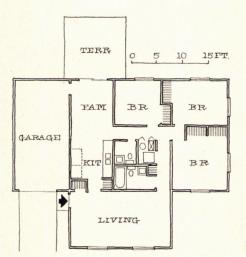
Schmitt was able to simplify and standardize the number of components used on each house because each house has the same basic L-shaped floor plan built around a compact bath-kitchen plumbing core.

FAMILY-DINING AREA opens to the rear yard through sliding glass door at rear, but here the room is shown furnished for winter living.





LIVING ROOM has ample wall space for furniture, can be reached from bedroom corridor (rear) or from kitchen (see plan below).



PLAN shows basic L-shaped living area built around compact kitchen-bath plumbing core.



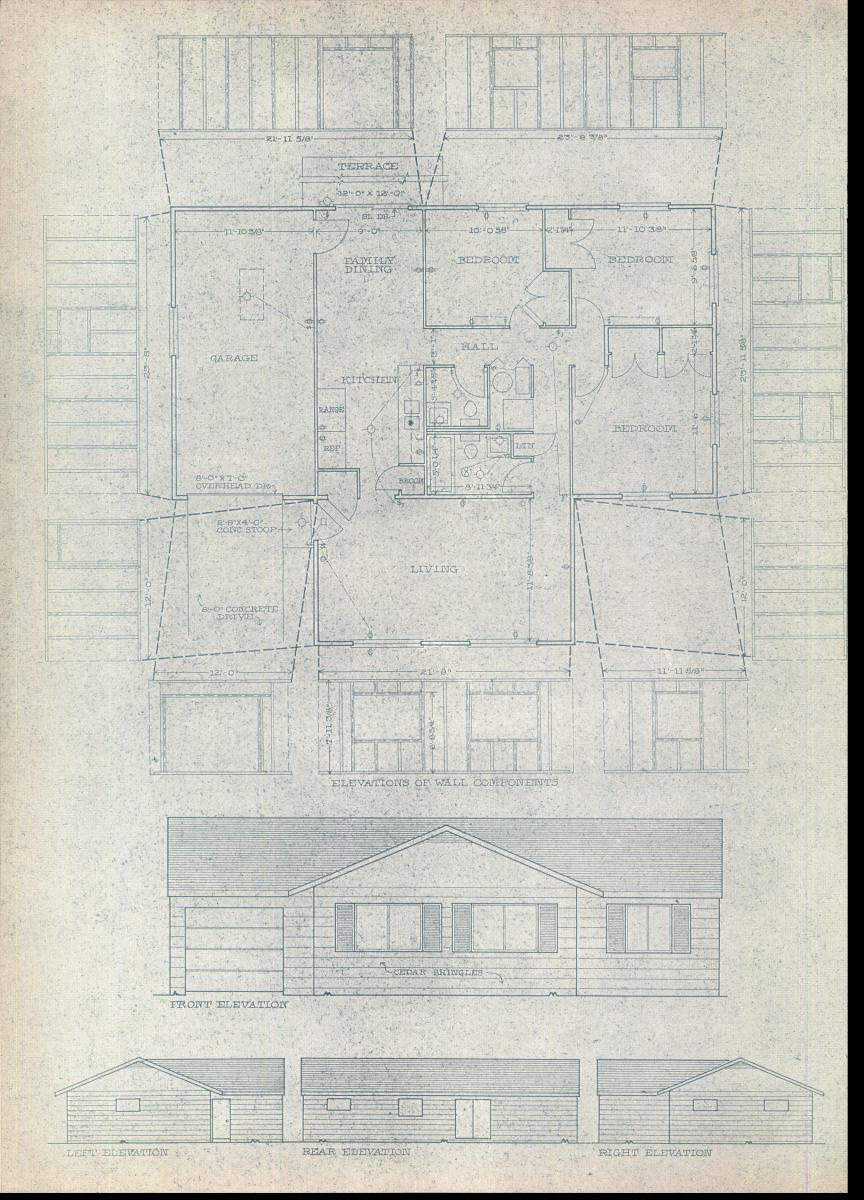
BATH CORRIDOR is faced with perforated hardboard for racks and bulletin board.

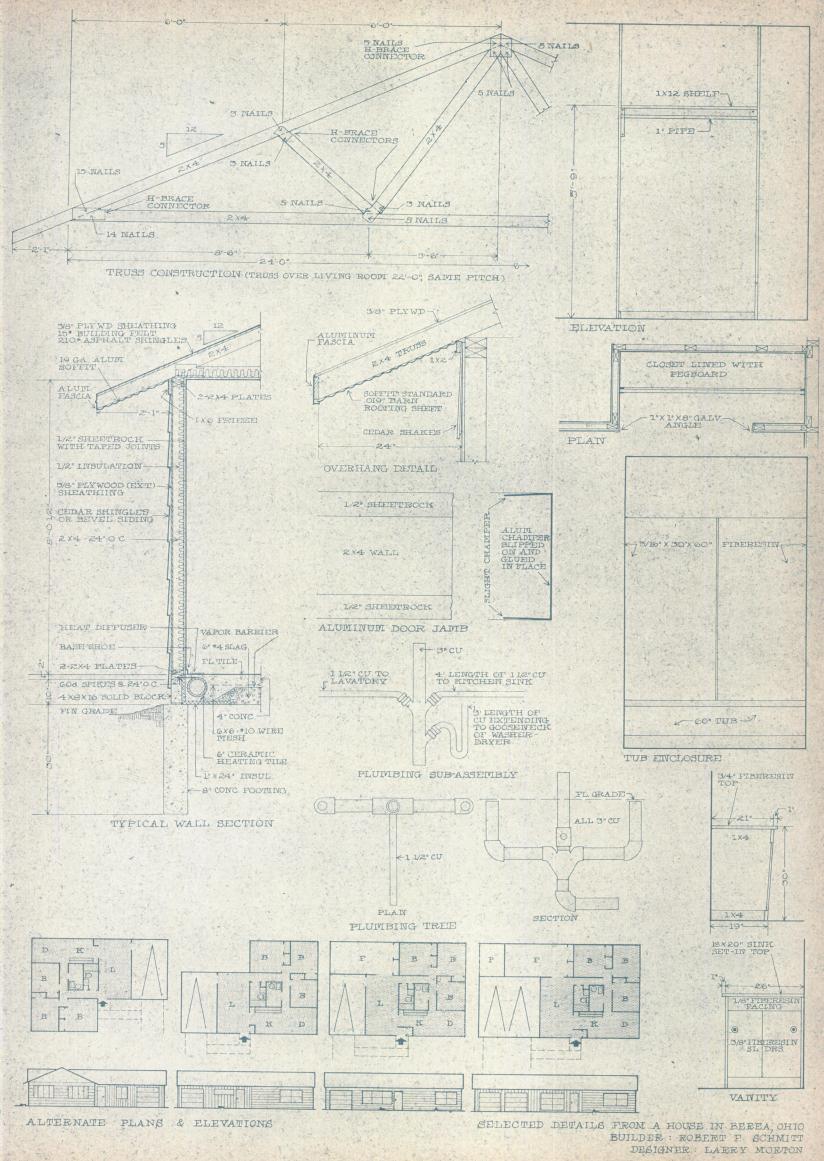


BEDROOM CLOSETS run floor to ceiling, have perforated walls, curved plywood doors.



IN KITCHEN, wet wall backs up to baths. Pantry closet beyond cabinets and guest closet opposite it screen kitchen from living room at rear.





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Michael N. Motto has built in the Utica, New York, area for 25 years, constructing quality homes in the \$18,700 to \$40,000 bracket.

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NEW WAYS TO BUILD BETTER

A monthly report on home building ideas, products, and techniques

Starting here

New products



Built-in pantry gives 49 cu ft of dry storage space. Central area has 12 shelves: one permanent $3\frac{1}{2}$ 'x2' for large items, 11 adjustable. Center shelves tilt forward so cans will roll to the front. Wire shelves mount on the door. Four

wood-faced aluminum drawers—two of them ventilated—ride on oil-impregnated slides. Overhead cupboards hold seldom-used items. Size: 84"x42"x24".

Kitchen Maid Corp, Andrews, Ind. For details, check No. 1 on coupon, p 240



New look in plastic comes from the sharp-lined corrugations in Alsynite's Ridgeway fiberglass building panels. The new sheet is designed for porch, carport, and patio use, contains a filtering additive to control light and heat. Ridgeway is finished with Alsynite's new Superglaze, carries a written ten-year guarantee.

Alsynite, San Diego.

For details, check No. 2 on coupon, p 240

And on the following pages

Technology

Steel post & beam house for \$7.65 a sq ft . . . Two new gypsum partitions need no framing . . . New experiment in Bermuda roofs . . .

page 183

What the leaders are doing

Is there a two-story house trend . . . New way to use magazine tie-ins . . . H&H panel report finds most builders' houses are designed by architects . . . page 191

Publications

How to do industrial gluing . . . How to plan plug-in wiring . . . Basic construction manuals for plywood, hard-board, insulation, copper tubing How to judge a house . . .

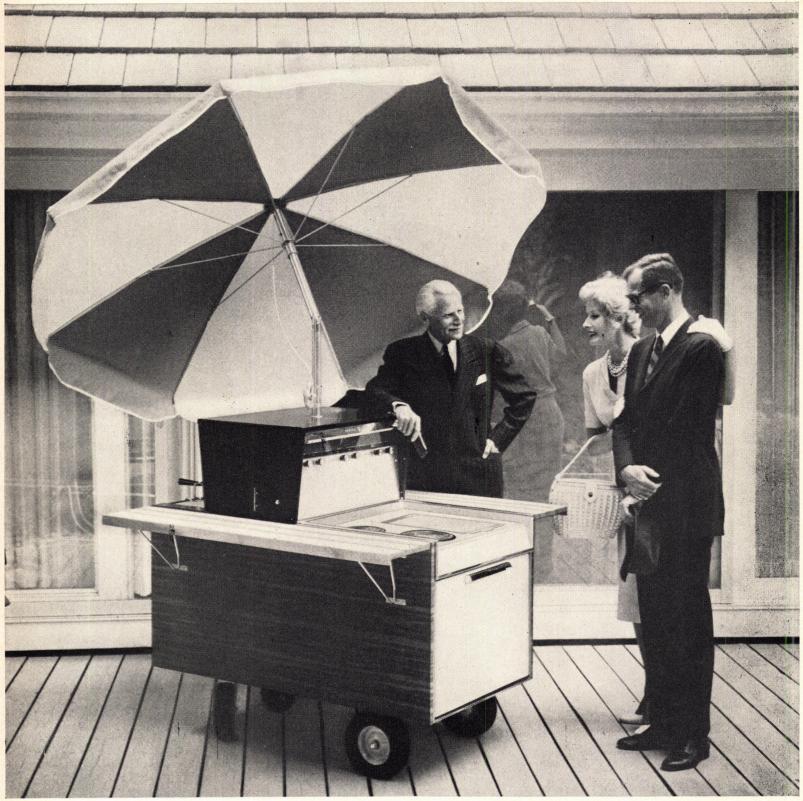
page 225

More

New Products

New look in residential lighting . . . New cement for acoustical tile . . . New ventilating skylights . . . New kitchen cabinet lines . . .

page 199



NEW SELLING IDEA! PUT THE CART BEFORE THE CUSTOMER

*The new General Electric **Partio Cart**—an electric range, a charcoal barbecue, a serving bar—all in one!

Partio Cart* is the newest brainstorm from General Electric and an exciting new way to promote home sales. Yes, we mean you should include one in the price of the home. Why not?

Partio Cart is a complete outdoor cooking center, in fact a complete party center. It's an electric range with a built-in griddle. And it's a charcoal barbecue with electrically driven spits. All on big wheels and under a tremendous canopy. Makes

a nice impression and a colorful display.

For the heck of it, park a Partio Cart in back of your model home. Watch how many people stop, ooh, ah, gape, touch, ask, smile, walk away and come back again. You see, Partio Cart is worth its wattage in good publicity. And good publicity never hurt any builder. Right? So buy one! Range Department, General Electric Co., Louisville 1, Ky. *Trademark of General Electric Co.

Progress Is Our Most Important Product

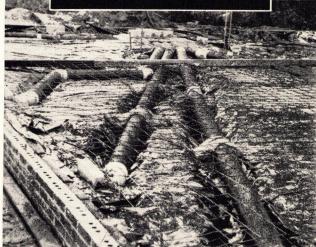


Jobs Move



hen you install





Residence, Hartsville, S.C. Heating Contractor, Kent Hungerpiller

Used in slab perimeter heating or combination heatingcooling systems, economical Sonoairduct Fibre Duct speeds construction—helps you hold down initial costs and installation costs without sacrificing quality.

Working with Sonoairduct Fibre Duct, contractors like

the long lengths, the absence of sharp cutting edges, the ease of handling and leveling. And, this duct won't chip, crack, or break when dropped —every piece is usable!

Order Sonoairduct Fibre Duct in 23 sizes, 2" to 36" I.D., in standard 18' shipping lengths-special sizes available. Cut to exact length with hand saw. Meets or exceeds F.H.A. criteria and test requirements for products in this category.

See our catalog in Sweet's



step-by-step installation data for Sonoairpuct Fibre Duct. For copy, send us name, address on company letterhead.

For complete information and prices, write

- HARTSYILLE, S.C.
 LA PUENTE, CALIF.
 FREMONT, CALIF.
 MONTCLAIR, N.J.
 AKRON, INDIANA
 LONGYIEW, TEXAS
 ATLANTA, GA.
 BRANTFORD, ONT.
 MEXICO, D.F.

Construction Products

SONOCO PRODUCTS COMPANY 4494



Build Better... Manage Better... Better... with



Fact: Today's Home Buyers Prefer Brick Over Any Other Building Material

Brick is the undisputed first choice of prospective home buyers. This fact was most recently confirmed at the 1959 Family Conference on Housing, at which 79% of the delegates stated they prefer brick homes over all other types: Brick was rated 98 of a possible 100% in appearance, durability, economy, prestige, safety, and total value.

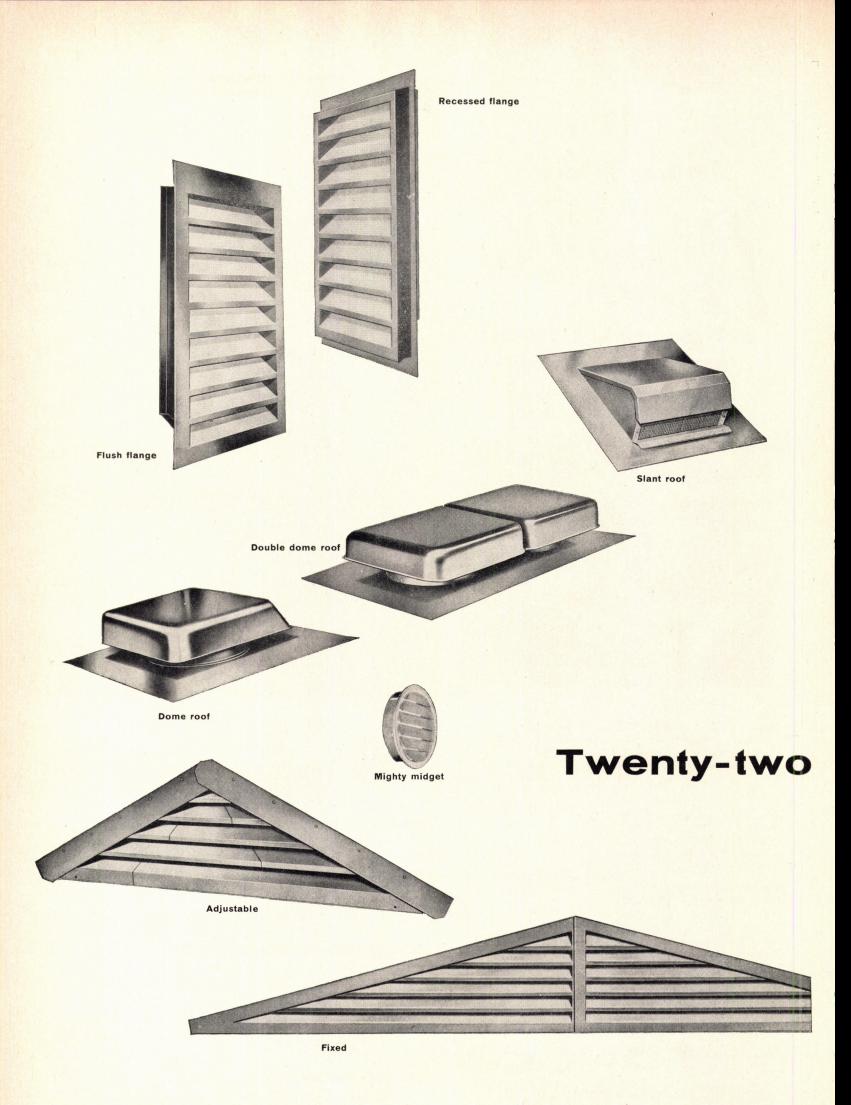


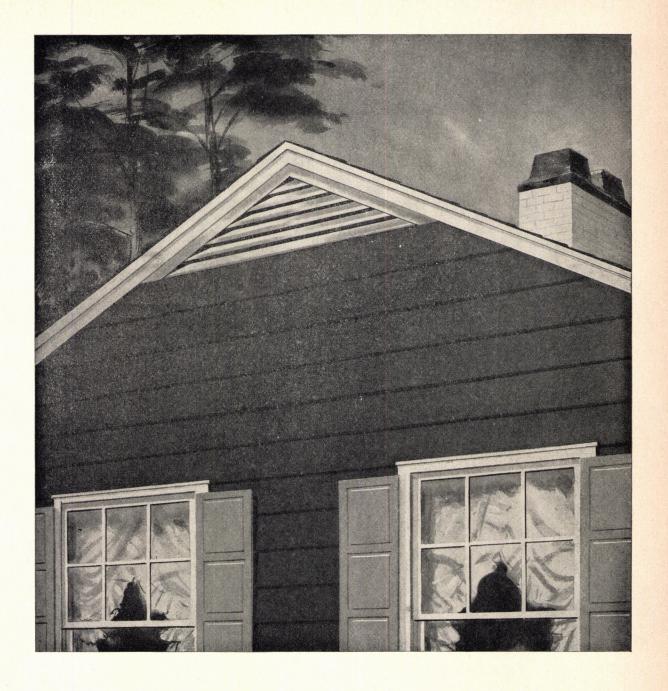
Brick has natural selling features: An exposed brick wall lends warmth and luxury to any room, helps sell prospects. A brick patio, wall, walk, or fireplace adds elegance and beauty, built-in sales appeal that turns prospects into buyers. Too, brick's infinite variety in color and texture lends individual distinction to custom and tract houses alike.



To learn more about using brick to sell your homes, ask your brick supplier for a copy of the new booklet, "Mer-chandising Magic With

Structural Clay Products Institute 1520 18th St. N.W., Washington 6, D.C.





Louvers for cooler summer attics!

Careful selection of louvers can make a big difference in the comfort you build into your houses. Gold Bond louvers, for example, are designed with an extra-large free space area to allow maximum air circulation. This keeps attics and upper rooms cooler in hot summer weather, helps prevent paint peeling, condensation spotting and premature deterioration of wood framing.

Whatever style of home you build, there's a Gold Bond aluminum louver to fit. We have 22 types of adjustable, fixed, flush or recessed louvers, dome roof louvers, wall and under-eave louvers—all sturdily built, all of rust-free aluminum. Your Gold Bond® Representative is proud of his full line of louvers. Ask him about them, or write Dept. HH-660 for free Bulletin #2534.

NATIONAL GYPSUM COMPANY, BUFFALO 13, NEW YORK





Gold Bond ... a step ahead of tomorrow

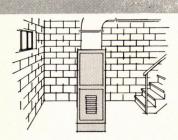
AS LITTLE AS \$875 WILL AIR CONDITION AND HEAT YOUR HOMES

WITH THE AMAZING CARRIER THERMO-CENTER!

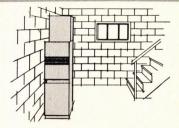
Now, for little more than the price of heating alone, you can also offer your prospects all the benefits of year-round air conditioning with the exclusive Carrier Thermo-Center. This unique method, which combines a forced warm air heating unit with a self-contained air conditioner, provides low-cost, twelve-month air conditioning for small and medium size homes. The key to the method is the prefabricated wall sleeve and the transition assembly which provides a simple, through-the-wall mounting for the air conditioner and controls the air flow

between the heating and cooling units, as shown below.

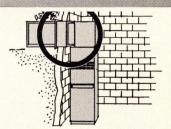
With a Thermo-Center you save hundreds of dollars per home: (1) No water supply or drain piping is required, (2) No refrigerant lines are needed. (3) Ductwork and wiring are simplified. (4) No specialized on-the-job construction is necessary. (5) Installation time and labor are greatly reduced. (6) Less than 5 square feet of floor area is required. Get the full facts about the Thermo-Center from your Carrier dealer listed in the Yellow Pages. Or write Carrier Corporation, Syracuse 1, N. Y.



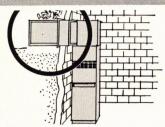
1 The first step is to put aside outdated notions of where a heating unit can be located. Planting the furnace in the middle of the basement was good enough years ago when people were satisfied simply with heating their homes.



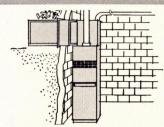
2 In the Thermo-Center, the unit is moved to an outside wall. There's no change in the amount of ductwork required, nor is the system operation affected in any way. Heating units can be upflow, downflow or horizontal; gas or oil.



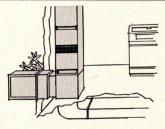
3 Next, the prefabricated sleeve and transition assembly is built into the wall and joined to the furnace plenum and ductwork. The sleeve and transition assembly can be applied to any standard type of wall construction—frame, brick or concrete.



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*.



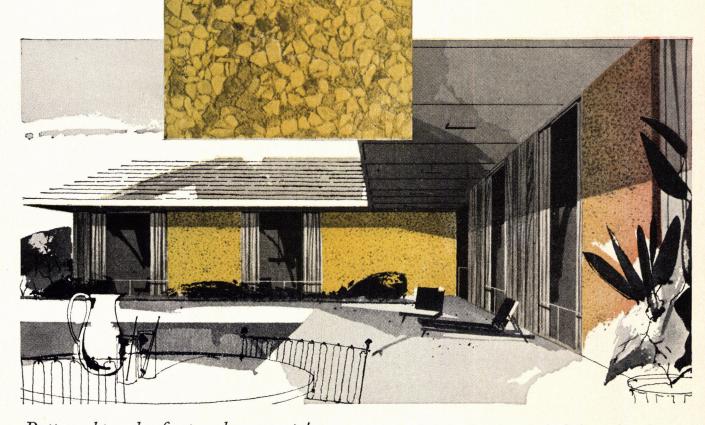
6 In a house built on a slab, the transition is joined directly to a Thermo-Center downflow plenum which supports the Winter Weathermaker. The plenum directs air from the heating and cooling units into the regular duct system.

*Reg. U.S. Pat. Off.

MORE PROOF OF
BETTER AIR CONDITIONING FOR EVERYBODY



PATTERNED PANELS ... A SURE WAY TO GET YOUR HOMES TALKED ABOUT ... AND SOLD!



Patterned panels of exposed aggregate! For that unusual style that buyers look for today, decorative panels of precast concrete offer builders a profitable answer . . . a way to faster sales and a reputation for originality. As wall sections or accent units, exposed aggregate panels create a charm and richness. Aggregates, in a vast variety of sizes, shapes and hues, make possible any texture, pattern and color effect. In addition to durability, minimum upkeep and cost advantages, concrete offers builders so much that's new—from decorative panels to the newest in masonry. This is living concrete . . . for modern living!

For the newest in homes...

LIVING

CONCRETE

PORTLAND CEMENT ASSOCIATION

... a national organization to improve and extend the uses of concrete

"ISAVED \$40 TO\$50 HOUSE!" says Jim Pearson, Pearson Bros. Builders, Minneapolis, Minn.

Part of the Pearson Bros. Project at 83rd and West River Road in Brooklyn Park, Minn., Minneapolis suburb, where they saved \$40 to \$50 a house by using Barrett "Rigidwall" Sheathing. Homes are in the \$13,600 to \$14,800 price range.



BARRETT RIGIDWALL[†] SHEATHING UPS PROFITS for well-known Minnesota builder!



"We switched to Barrett 'Rigidwall' Sheathing for our new project—Pearson Park," Jim Pearson says. "Smartest move we ever made. The lower cost of the ½" 'Rigidwall' helped save us \$40 to \$50 a house over the standard 25½" sheathing we had been using. Lower labor costs were part of the big saving, too. We've had such success with 'Rigidwall' that we're going to use it 100% on a new project of over 300 homes we now have under construction."

Barrett "Rigidwall" is stronger than FHA requirements for application without corner bracing. No nailing strips needed when siding shingles are applied. Handles easily, scores and snaps cleanly, saves time on every start, gives you less waste.

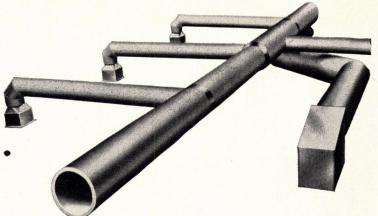
"Rigidwall" is made by Barrett's exclusive CHEM-FI process that brings the fiber strength of natural wood to insulating board, and is asphalt-treated to provide protection from weather during application. These large panels go up fast. Despite their economies, they produce a more soundly constructed and a more rigid wall than most other types of sheathing, and have two to three times the insulating value of plywood! Jim Pearson is just one of many big builders who are switching to "Rigidwall" to cut building time and application costs. No reason why you can't do the same! Call your Barrett representative or contact us direct today.

†Trade Mark of Allied Chemical Corporation

BARRETT DIVISION
40 Rector Street, New York 6, N. Y.



"Show HER the kitchen . . . show HIM



G-B DUCT

and you've SOLD another home!"

So say builders who capitalize on the powerful sales appeal of new "prefab" glass fiber duct.

HERE'S WHAT YOU CAN TELL YOUR PROSPECTIVE BUYERS:

- "G-B Duct cuts fuel bills because it's made entirely of insulation."
- "Every foot of G-B Duct contains millions of sound absorbing cells. This means there's no 'whooshing' noise in your air conditioning system. You won't even be able to hear your furnace go on and off."
- "Because G-B Duct carries hot and cold air equally well, you can add air conditioning later without additional ductwork."
- "G-B Duct is encased in a vapor barrier sleeve that positively prevents moisture condensation. There's no maintenance or repair because G-B Duct will not deteriorate . . . ever!"

YOUR SUBCONTRACTOR WILL TELL YOU:

- "We can install G-B Duct in half the time—often at less cost than insulated metal duct."
- "So simple to install there's no margin for error—and for all practical purposes, homeowner complaints and callbacks are eliminated."
- "Permanent in every way—will last as long as the house itself."

SEND FOR SAMPLE MERCHANDISING KIT

For complete product information, plus a sample G-B Duct merchandising kit, which includes a two-color display sign and customer folder, write today.

GUSTIN-BAGON Manufacturing Company GBACON
258 W. 10TH STREET, KANSAS CITY, MO.

Bound to please... See for yourself



MR. BUILDER! Here are six sure-fire General Electric Textolite laminated surfacing patterns and colors that will enhance any wood cabinet selection you make . . . light, medium or dark. Conserve your selling time by showing these six patterns and colors, instead of the bulky sample chain that leads to indecision for the feminine home buyer. Textolite is well-accepted, adds quality to the home. Let Textolite help sell your kitchens . . . your homes.

General Electric Textolite offers a wide range of woodgrain patterns for cabinet fronts, including the new textured finish that looks and feels like real wood. Would you like to see samples? Contact your nearest G-E Textolite dealer or fabricator...check under PLASTICS in your YELLOW PAGE directory.

Progress Is Our Most Important Product



Coshocton, Ohio



GENERAL ELECTRIC CO., Dept. HH-60 Coshocton, Ohio

Gentlemen, please send me samples of:

- () Ideal counter-top patterns for wood cabinets.
- () Your woodgrain selection, including textured patterns.

ME_____

FIRM_

ADDRESS_

CITY____ZONE__STATE_



Ceramaflex installation in residence of E. L. MEISTER, Kirtland, Ohio





Ceramaflex installation at Plate No. 1098 NAHB RESEARCH HOUSE, East Lansing, Mich.

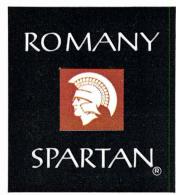
New floor tile discovery from Romany · Spartan...

CERAMAFLEX

rubber-cushioned ceramic mosaics in 9"squares

To you, Mr. Builder, Ceramaflex can be a powerful sales tool. This labor-saving, high quality product embodies all the most-wanted qualities of ceramic tile, plus two important additions: floors that are both quiet and easy on the feet! This makes resilient Ceramaflex ideal for kitchen and family room as well as bath, entrance hall and utility room. You're well aware of customer preference for ceramic tile in the bath. Now—try Ceramaflex in other rooms, too, and see how promptly and enthusiastically your prospects respond.

Ceramaflex is as *new as tomorrow*. If samples and product data are not available through your tile contractor, write for Bulletin RS-228. United States Ceramic Tile Company, Dept. HH-12, Canton 2, Ohio.



CERAMIC TI

*Trade Mark. Ceramaflex is the exclusive product of United States Ceramic Tile Company.



UNITED STATES CERAMIC TILE COMPANY







It's flexible and resilient!

Ceramaflex, because of its unusual flexibility, adjusts automatically to minor imperfections in sub-floor. But the rubber grid which makes this possible serves other functions, too. Ceramaflex floors are quiet because they are mounted in *resilient* rubber which acts as a cushion between the ceramic mosaic tiles and the sub-floor. And it's so easy on the feet that it makes the perfect floor for high activity areas, such as kitchens and family rooms. Heavy furniture and appliances can be moved without denting or harming the surface.

Tiles are mounted in rubber pockets!

Each of the 64 ceramic mosaics that make up one 9" x 9" unit is permanently bonded in a pre-formed rubber grid. Because the edges of Ceramaflex 9" x 9" units are beveled, they lay up so tightly that joints are unnoticeable in the finished job.

So easily installed!

Because Ceramaflex is pre-grouted, installation is simple and fast. It's ready for use the instant it's laid. Ceramaflex is installed with a special adhesive as quickly and easily as conventional resilient floor tile. It can be installed satisfactorily on or below grade as well as above grade, over proper sub-flooring. Simple, rapid installation results in application cost substantially lower than that of conventional ceramic mosaic floors.





Convertible kitchen boosts sales of medium-priced homes

2nd in a series of practical, profitable ideas featuring Suburban built-in ranges

Designed by Bruce McCarty, A.I.A.
PAINTER, WEEKS, McCARTY-ARCHITECTS

Another best-seller kitchen — all blueprinted and ready to use—each designed to give you the most value, the most sales-talk for a home in a specific price range. Suburban's Idea Kitchen shown here is pre-engineered especially for homes in the \$14,000 to \$16,000 price range, a kitchen you can easily recreate in the home you build. The plans—complete with specifications, product lists and all the know-how—are yours free for the asking. Just mail the coupon at the bottom of this page.



More sales appeal than any other built-in range!

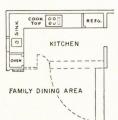
The Suburban deluxe single oven is ideal for smaller kitchens... features an amazingly low initial cost with all the traditional Suburban high quality and fine construction. Most appealing to home buyers:—the Verti-Vue window, interior light, fully automatic controls and "sculptured" look—in beautiful brushed chrome or 8 decorator colors. Rotisserie, optional. Guaranteed by Good Housekeeping as nationally advertised.





Home buyers love this quick switch from family room to kitchen privacy!

Permanent custom-look is made possible in convertible rooms with the use of a hinged, swingout wall that features decorative shelves and storage cabinets,



Free plans; free "Ideas File"

The sketch above shows how easily the Idea Kitchen presented on these pages may be adapted for varying space requirements. The details on design, equipment, sizes and dimensions are yours for the asking. A specially prepared expansionfile, "New-Home Ideas Kit," is also available for you to collect other ideas, articles and product dope with separate indexed sections for every room in the house. Just say "send it!"

plus a built-in bar underneath. That's why this newest kitchen idea deserves the most modern built-in range — Suburban, of course!

Samuel Stamping & Enameling Co., Department HH, Chattanooga 1, Tenn. I want more information on Suburban: Built-in Electric Ranges Built-in Gas Ranges I am an architect realtor kitchen remodeler builder (sales mgr.) builder (in charge of purchasing) Please send me free Kitchen Plan & Specs for Medium-Priced Homes for New-Home Ideas File Kit.						
Name						
Firm						
Street						
CityState						
SUBURBON® Built-in Ranges						
LOOK FOR SUBURBAN IN YELLOW PAGES						



Wood built-ins are always in good taste in the kitchen. Ample and attractive cabinet space, a fun-inviting snack bar, or out-of-the-way storage units for household implements are wonderful with wood.

There's built-in beauty in built-ins of wood . . .

built of WOOD means built to sell



The wood cupboard and shelving unit adds elegance and efficiency to a low-budget house. Dining accessories are handy and the countertop can be used as a serving bar or buffet, leaving window-walls uncluttered.

With built-ins of wood, you can change a house into their house. A little time, a little thought and a little wood add so much warmth, wished-for individuality and convenience that any house will have the custom look and feel. Built-in bookshelves, magazine racks and cabinets . . . all of easy-to-work-with and easy-to-finish wood . . . make a home more distinctive, more desirable. Wood is wanted and wood sells, because wood excels in so many ways. For more information on better homes of wood, write:

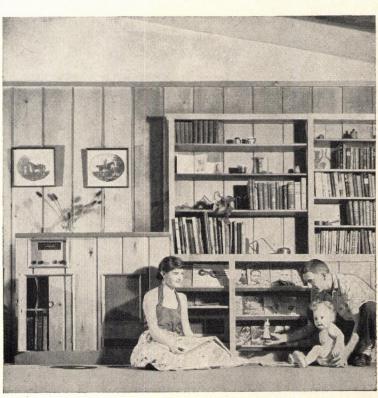
NATIONAL LUMBER MANUFACTURERS ASSOCIATION
Wood Information Center, 1319 18th St., N.W., Washington 6, D.C.

nlma
the place of Wood

For built-in sales appeal, nothing takes the place of WOOD



This room will grow as the family grows, and change as its needs change. Wood built-ins never go out-of-date. With wood, you build for the present and plan for the future. A strong selling point for growing families.



Where there's wood, there's a way to add wanted individuality and eyepleasing extra features at low cost. By turning wasted wall space into a highly usable wall, you give prospective buyers more home for their money.



available for the first time to meet the rising demand for noise control in all types of institutions and homes

Qui-ett is the new technological advance developed for America's greatest market for builders, contractors, decorators, suppliers and independents . . .

A MULTI-PURPOSE COATING WITH EXTRAORDINARY SOUND-ABSORBING QUALITIES

Qui-ett is an alkyd-latex material with chemically treated ground cork. Spray-on, brushon any surface, all colors and tints-handsome, washable texture

RENDERS EVERYTHING ELSE OBSOLETE

Hailed by the nation's leading acoustical engineers and testing laboratories



Our business—to make a great new product and its application system available. We are franchising rights—not just selling territories.

a year-round operation supported by national advertising and promotion

an exclusive specialty away from low-margin, cutthroat bidding

You may be the applicator You may hire the applicators You may supply the applicators

MR. C. P. GILKISON, President THE DUR-E-CON CO.
777 Busse Highway, Park Ridge, III.



field-tested

SEND FOR

REPORTS

the liquid sound conditioner

greatest advance since jets . . .

the revolutionary technique that decorates and soundproofs all at once . . . at one-half the cost

EXCLUSIVE APPLICATOR RIGHTS FOR OUI-ETT MAY BE OPEN IN YOUR AREA IF YOU WRITE . . .

ACME...again chosen for important installations!









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Architects everywhere find ACME Space-Saving Units ideally suited for apartment conversions, homes, motels, hotels, cabins, resorts, playrooms, etc. Send for our fully illustrated catalog with complete specifications and prices.

See our complete line in SWEET'S CATALOG 25 BAC



ACME NATIONAL REFRIGERATION CO., INC.

OFFICES & FACTORY: 19-26 Hazen Street, Astoria 5, N. Y. Mailing Address: P. O. Box 188, Astoria 5, N. Y., RAvenswood 1-5510



In today's architecture, all eyes are on CEDAR SHAKES

the roof. In today's market, all eyes are on quality. Put the two together... and you see why handsplit shakes are selling as fast as craftsmen can produce them. When you top off your homes with handsplits, you're offering the finest. A roof that will last for generations. A roof with natural character and good looks. A roof of proven acceptance. Put the compelling texture of genuine handsplit

cedar shakes on your next roof. It's like having another salesman on the ground!



For complete handsplit shake application details, see your Sweet's File, or write...

RED CEDAR SHINGLE BUREAU



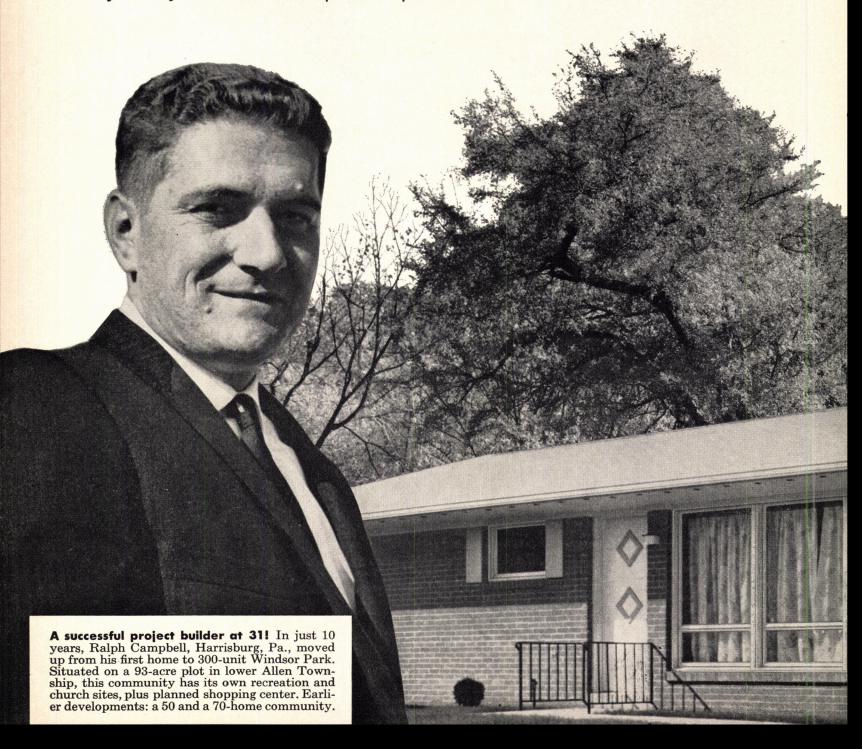
5510 White Building Seattle 1, Washington

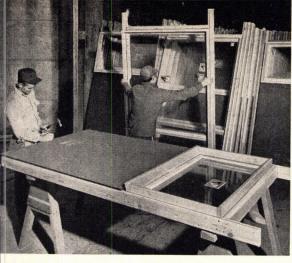
550 Burrard Street Vancouver 1, B.C.

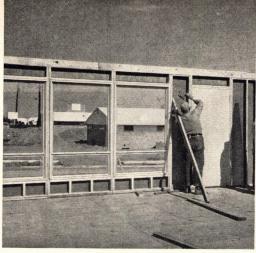
Framing time cut to 45 seconds per running foot!

"Andersen Strutwall* saves us big money in labor and materials over cheap double hung windows"

says Project Builder Ralph Campbell









Strutwall: Integral part of the wall! Workers at M. R. Campbell, Inc. pre-cutting plant add sheathing to Andersen Strutwall Lu-Re-Co components. Strutwall fits tighter, looks better because all parts are precision nailed and glued by Andersen. Provides tightest joining of window and wall.

Down go construction costs! Up go quality and sales appeal! With Andersen Strutwall, three man Campbell crew sets up 68 lineal feet of wall in 40 minutes. Can completely enclose a home, lock the door and walk away in 6 to 8 hours. Strutwall cut Ralph Campbell's window framing and installation time 30 %.

More glass area at lowest installed cost! Strutwall eliminates separate outside casing to give trimmer, cleaner lines. Flexible window arrangements make every room more livable . . . with far more usable wall space. Andersen Windows add real punch to any builder's sales story.

How to cut construction costs and add extra quality? With Andersen Strutwalls, Project Builder Ralph Campbell reduced window installation time 30% in his 300-home development in lower Allen Township, Pennsylvania.

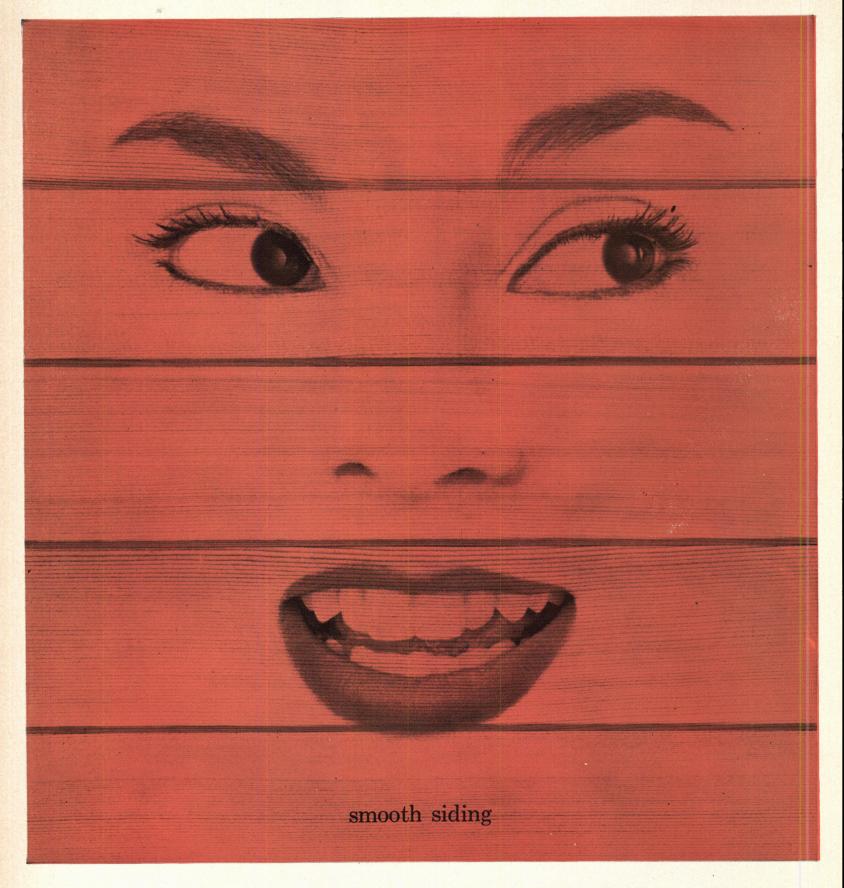
Cost and method conscious, Ralph Campbell runs his home construction business with slide rule precision. Efficiency had been increased by using the Lu-Re-Co four-foot panelization system. However, Campbell made a comprehensive window cost analysis to determine if any additional savings were possible.

Says Ralph Campbell, "Our findings were conclusive. Strutwall gives us an *additional* big savings in labor and material costs. This complete window unit adapts perfectly to our modular, component construction system. And the Andersen Strutwall practically eliminates window complaints and call backs."

Andersen Strutwall is assembled complete . . . including operating hardware, load-bearing side struts, jack studs and normal framing members already in place. Eliminates cripples, sill plate, jack studs; requires only two 2 x 6's instead of heavier headers in multiple openings. Saves inventory, cutting, fitting . . . plus waste.

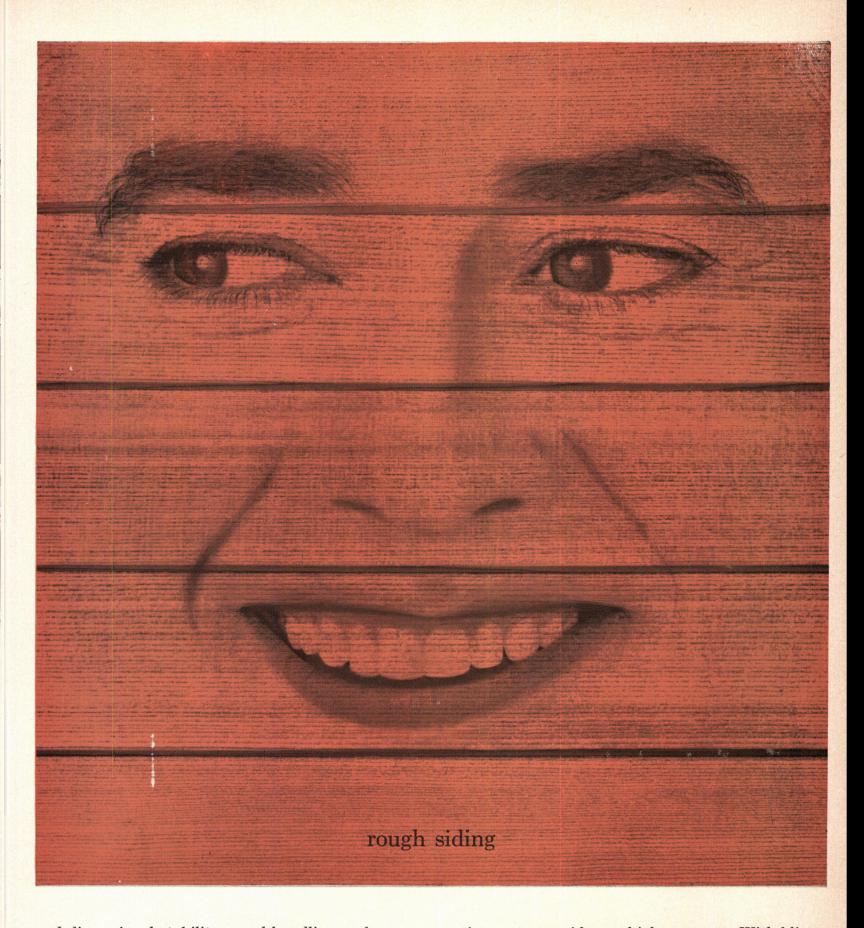
Why don't you, too, figure your total opening costs? Find out how Andersen Strutwall can save you dollars and hours on every house you build. Call your local lumber or millwork dealer. Or write to Andersen Corporation direct.





Be a two-face builder

Here's how...CLEAR Western Cedar SIDING'S 2 face combination—fine-resawn, rough textured one side, smooth surface on the other—gives you a choice of faces, lets you feature the one popular SIDING that's proven, that lasts and lasts. Rough or smooth, it's the one SIDING buyers believe in and have believed in for years and years—in combination with other quality materials or alone—wherever you live. Cedar's light weight



and dimensional stability speed handling, reduce construction costs, provide you higher returns. With blister resistant paint, Cedar allows up to 48% more coverage, requires fewer application hours. With stain you've a wide choice of handsome finishes. And Cedar's natural insulating quality cools in summer, captures heat in winter. So, plan on it—sell and side with Cedar.

For more information write us: WESTERN RED CEDAR LUMBER ASSOCIATION, White-Henry-Stuart Bldg., Seattle, Washington

WESTERN (EDAR

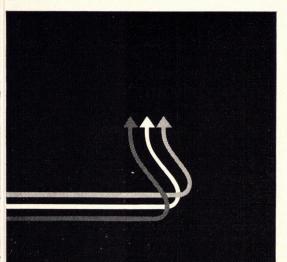
CRANE DIRECTION 70 CRANE announces a low-profile, 5' Recess Bath with edge wide enough for sitting NOTE STRAIGHT FRONT. NO TILE CUTTING AROUND BASE TO INSTALL.

THE FAIRFAX Designed by Henry Dreyfuss

Crane quality—a Dreyfuss design—yet priced in the medium range. The floor to top height of the Fairfax is only 14", for easy entry and exit...a full two inches lower than most baths. Available in regular or acid-resisting porcelain enameled cast iron. Trim is exclusive Crane Dial-ese. You can specify the Fairfax in any of the full range of Crane colors and white.

The Crane Fairfax-Length: 5'; Width: 30"; Seating Edge Width: 5"; Height: 14"

New Crane Star*Lite Accessories and Fairfax Bath are available through your Crane Distributor who also has a complete line of Crane quality plumbing ware for every installation. Call him for full facts on these new Crane products.



IMPORTANT NEW DEVELOPMENTS FROM CRANE TO MEET THE CHALLENGE OF THE SOARING SIXTIES

The Soaring Sixties have begun. This is predicted to be the biggest decade for America's biggest industry-building-and everyone associated with it.

There's the booming population growth -a 34 million net gain, or a 16% increase.

There will be more households. We need homes and schools and hospitals-and buildings of all kinds. We have to provide new construction for the newcomers...

and also to replace those made obsolete.

Crane announces Direction '70...to help you meet the challenge of the Soaring Sixties. These are products to improve building quality. These are products to increase efficiency. These are products to help curb rising costs.

On these pages are the first of these new Crane developments . . . the first of many you'll be seeing in Crane's Direction '70.

Announcing CRANE

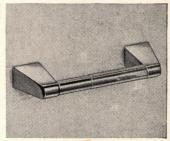
Bathroom Accessories

Beautifully designed with polished chrome plating...Solidly Built... Moderately Priced... Easily Installed. Metal accessories are preferred by over half your clients



2-900 Soap Holder with Plastic Tray 2-902 Tumbler and Toothbrush Holder

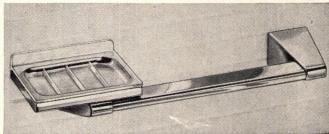




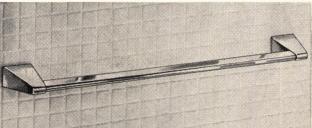
2-904 Paper Holder with Metal Roller



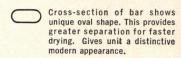
2-910 Robe Hook



2-906 Soap Holder and Grab Bar with oval-shaped Metal Bar and Plastic Tray



2-908 Towel Bar - in lengths of 18", 24" and 30"



RECESS ACCESSORIES

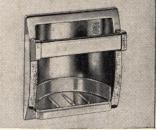
Overall Size: 61/8" x 61/8". Wall Opening: 51/4" x 51/4" x 21/4". Recess Accessories are regularly furnished for wood screw installation.



2-915 Paper Holder with Metal Roller



2-917 Soap Holder with Plastic Tray



2-919 Soap Holder and Grab Bar with Plastic Tray

VALVES . ELECTRONIC CONTROLS . PIPING PLUMBING . HEATING . AIR CONDITIONING

Crane Co. Plumbing-Heating-Air Conditioning Group Box 780, Johnstown, Pa.





Rugged Van-Packer Chimney takes only a few more minutes to install than most lightweight types, yet lasts far longer, is sturdy, safe and trouble-free.



Attractive Van-Packer asbestoscement housing looks like brick, won't rust-can't streak or stain roof. Butyl finish on colored housings preserves original beauty.

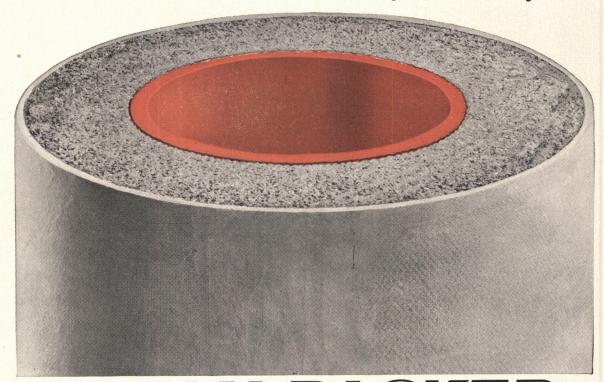
Fire-clay tile liner of the Van-Packer Chimney won't corrode. It outlasts other factory-built chimney flues. Fire-clay tile is 5%" thick, with 3-inch vermiculite insulating wall and asbestoscement jacket. Only Van-Packer offers such rugged, durable flue construction.

Safe Van-Packer Chimneys are UL listed for all fuels and all home heating plants, are safe even for incinerators. The fire-clay tile-lined flue withstands 2100° F.

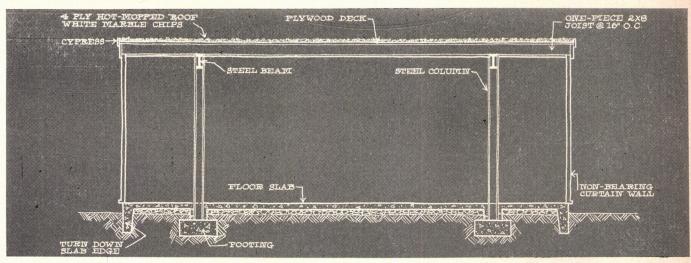


See "Chimneys - Prefabricated" in the Yellow Pages, or write for Bulletin RS-19

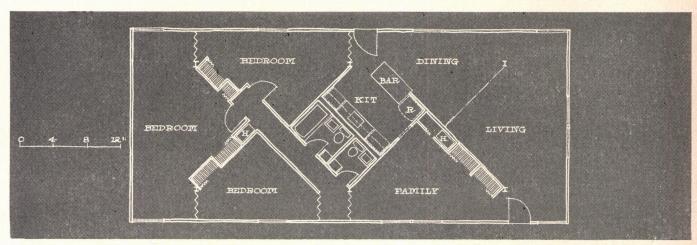
Durable Flintkote-Van-Packer Chimney is fire-clay tile lined



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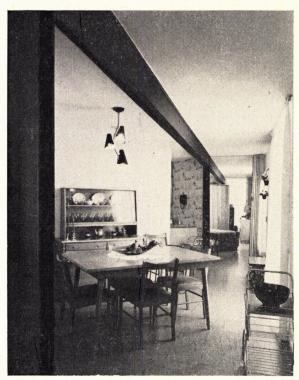


CROSS SECTION of house shows how steel frame carried 24' joists. Columns are set in 4' to reduce span, cut beam and joist sizes.



FLOOR PLAN can be flexible because all partitions except central plumbing wall are movable. Partitions are set at 45° to exterior walls.

This steel post & beam house cost only \$7.65 a sq ft

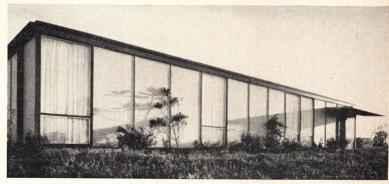


STEEL BEAM, seen here in dining room, runs length of house and is supported by three steel columns 20' oc.

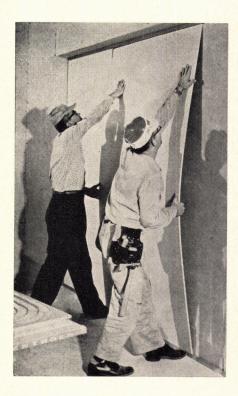
Its simple frame is made up of six steel columns that rest on footings 20' oc and support two steel beams. The roof is framed with 2x8 joists 16" oc.

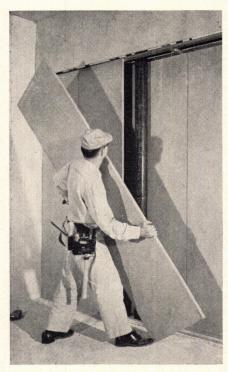
Floor is a thickened-edge slab over gravel fill. Exterior walls are 4'x8' curtain panels framed with 2x2s, faced outside with flexible asbestos cement, inside with gypsum drywall. They come in only three types—door, sash, and insulated wall. Movable interior panels also have 2x2 studs.

The 1,400-sq ft merchant-built house won a Special Award in the AIA Homes for Better Living Awards (H&H May). Designed by Architects Wadlington & Marshall for Memphis Builders Trezevant & Kelly, it sold with land for \$10,700.



THREE KINDS OF PANELS (wall, window, and door) are interchangeable—all are 4'x8' to use stock sheet materials. Front entry is at far right, bedrooms at left.





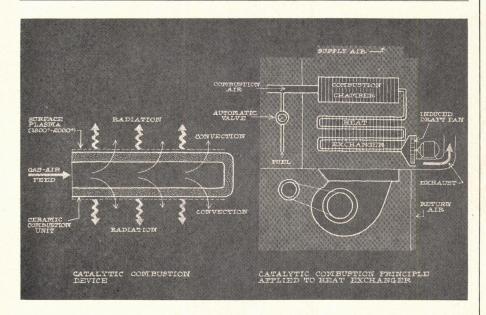
These two new gypsum partitions need no framing

The new systems—developed by US Gypsum for apartment houses—are the Solid Partition (left) and the Double Solid Partition (right).

The 2" Solid Partition has a 1" monolithic gypsum core and ½" gypsum face plies. The core—24" wide and available in 8', 9', 10', and 12' lengths—is tongue & grooved on the long

edges. The face plies are snapped into floor and ceiling runners (see photo) and laminated to the core with adhesives.

The Double-Solid Partition is used for party walls or to enclose plumbing. Coreboards (1" thick) are spaced a minimum of 11/8" apart and screwed to L- or U-shaped floor and ceiling runners. In both systems, joints are taped.



Catalytic combustion promises better furnaces

So says Herbert T. Gilkey, technical director of the warm-air heat association (NWAHACA).

Gilkey says new developments in miniature combustion chambers include a porous ceramic tube (drawing above) which, when brought to an incandescent temperature, produces "practically flameless" combustion of gas and air. Hot gases from the chamber pass through a heat exchanger similar to the cooling coil in an air conditioner.

Units of this type—probably available within the next five years—would be half the size of present gas furnaces and could cut fuel costs 15% because of their higher efficiency, according to Gilkey.

How can heating/cooling be controlled at partial loads?

Some answers to that question may come out of a new "mild climate" research program conducted by the National Warm Air Heating & Air Conditioning Assn.

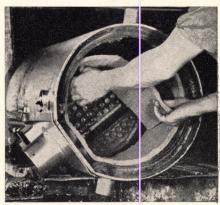
The program will study heating and cooling problems peculiar to high, dry areas where the climate is mild but temperatures vary widely within a single day (low at night, high in the daytime).

Under these conditions, heating and cooling units—sized to handle hot and cold peaks—work under partial loads most of the time. So under light loads it is hard to maintain even temperature.

Says Herbert T. Gilkey, NWAHACA's technical director: "In colder climates warm-air heating systems are expected to operate at 50% load or higher during the two or three coldest months and from 10% to 50% for the rest of the heating season. But in milder areas a heat system has to run for weeks at a time against a load of only 10% to 30%."

The study—to be made in California between the Sierra Nevada mountains and the Pacific coast—will seek ways to:

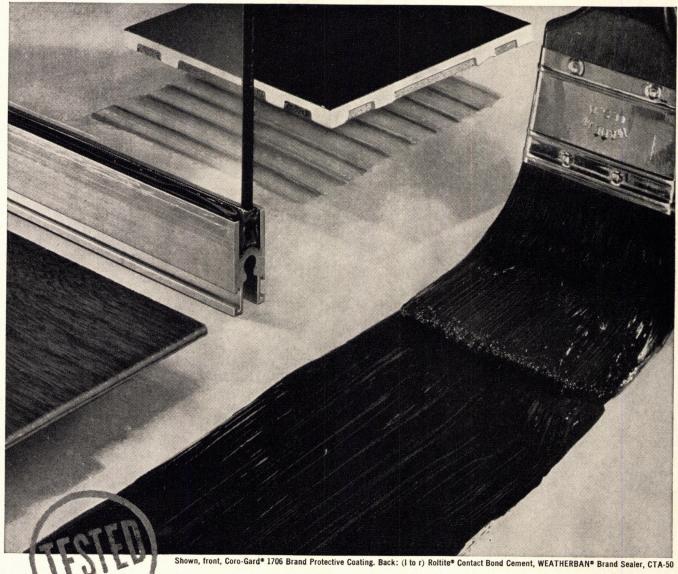
- 1. Supply heat at more frequent intervals or in uniform reduced quantities when heating loads are light.
- 2. Maintain constant—or nearly constant—blower operation.
- 3. Provide more uniform heat removal and dehumidification when cooling loads are light.



New furnace lining is said to cut oil-heat costs by 20%.

Reason: Installed in a combustion chamber (above) the fibrous mat of silica and alumina reaches incandescent heat—assuring complete combustion—almost as soon as the burner fires up, (Conventional ceramic liner takes 10 seconds to reach incandescence; until it does, about 20% of usable heat is lost as soot and odor; this loss can cost \$40 a year since an oil burner makes thousands of starts in a 200-day heating period.) New liner, called "Cerafelt," also absorbs flame noise It was developed by Johns-Manville, tested by Edwards Engineering, Pompton Lakes, N.J.

Technology continued on p 186



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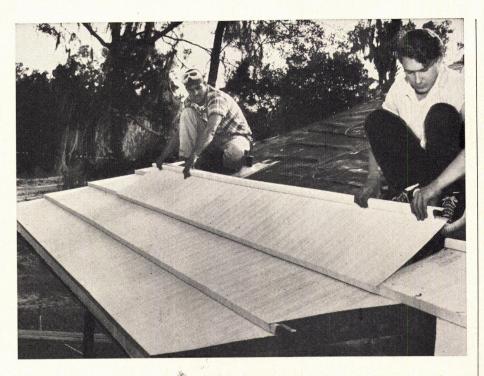
"Coro-Gard," "WEATHERBAN" and "Rollite" are Reg. T.M.'s of 3M Co.

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MINNESOTA MINING AND MANUFACTURING COMPANY

... WHERE RESEARCH IS THE KEY TO TOMORROW





Here is a new experiment in Bermuda roofs

The aluminum Bermuda strip shingles above were developed by Alcoa and installed on a big split level by Fulton Development Corp of Jacksonville.

The job took six man-days, cost \$42 a square. But eventually the new system should cost less than other Bermuda roofs, according to Alcoa.

The shingles are aluminum sheets with white, baked-enamel finish. They

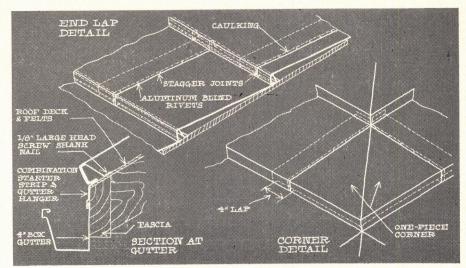
can be used for gable or hip roofs (detail drawing of hip-roof corner below). The system's other components: inside and outside corners, gable end cap, starter strip with provision for a gutter, starter strip with drip edge, ridge cap, and aluminum spiral-shank roofing nails. (For experimental Bermuda roof by Kaiser Aluminum & Chemical Corp, see H&H, June '59).



FINISHED ROOF of Jacksonville model has heavy shadow line produced by use of aluminum Bermuda strip shingles.



RIVET GUN (single-shot, hand operated) speeds up roofing.



DETAILS show how aluminum Bermuda shingles are installed. They start at the eave

line, work up the roof with staggered joints, and take corner pieces for a hip roof.

To stop nail pops, glue or glue-nail your drywall

That was the consensus of a meeting on the use of adhesives in building at the Building Research Institute's Spring conference. The key points covered:

The best way to apply single-layer drywall is to glue it instead of nailing it, said Alex O'Hare of Miracle Adhesives Corp. But he added that though this method has been used successfully, it still has to be proved under a variety of climatic conditions.

Next best, said O'Hare is the gluenail system now used by many drywall contractors. It uses 50% less nails than conventional methods. And it doubles the wall's strength, according to recent tests at Ohio State University. Gluenailing also reduces sound transmission because the resilient rubber adhesive between drywall and stud forms a cushion that cuts down "drum-head" sound action.

Here is what you should know about glue-nailing drywall:

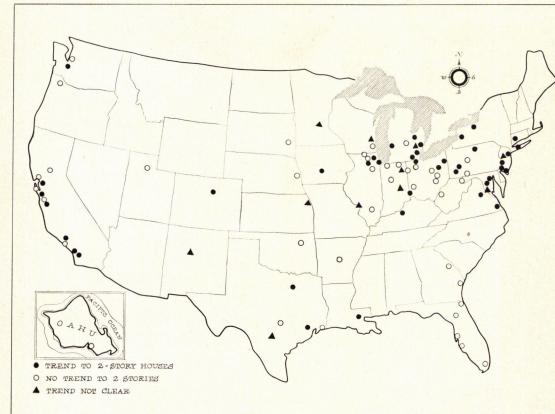
Apply a continuous bead of adhesive to the center of the face of all framing members. On framing members where two pieces of drywall will meet, zigzag the bead. The bead should be no less than ½" deep so that the face of the stud will be covered with a 1/16" layer of adhesive after the adhesive is flattened under nailing pressure.

You can get even better quality by laminating your drywall

So said Rodney Buergin, National Gypsum's associate director of research projects. You can glue a finish ply of 3/8" drywall to a nailed drywall base or laminate several layers of drywall to form a non-load-bearing partition without framing (see p 284). Said Buergin: "These systems provide characteristics above the sum of the plies—more strength, more sound deadening, more fire resistance."

Here are three ways to laminate drywall:

- 1. Spread joint adhesive on the back of the face ply. Use a notched trowel that forms ½" to ½" ridges 2" to 8" apart. Press the face ply against the base ply immediately. Use temporary nailing or shoring until the adhesive hardens (about 24 hours.) Then set the nails below the drywall's surface (or use double-headed nails you can pull out).
- 2. Spread a rubber-base mastic on the back of the finish ply or the face of the base ply. Press the finish ply against the base ply immediately. Use temporary nailing or shoring.
- 3. Spread a thin coat of contact adhesive on both surfaces to be joined. Use a roller or brush. When the adhesives are tack-dry, press the finish ply against the base ply. The adhesive will grab immediately.



trend to 2-story houses in . . .

Beverly Hills, Daly City, Newport Beach, San Jose, San Leandro, Stanton, Calif./ Denver, Colo./ Bridgeport, Conn./ Wilmington, Del./ Chicago, Elmhurst, Wilmette, Ill./ Des Moines, Iowa/ Louisville, Ky./ Baton Rouge, La./ Baltimore, Silver Spring, Md./ Ann Arbor, Dearborn, Flint, Grand Rapids, Lambertville, Royal Oak, Mich./ Rumson, N. J./ Buffalo, Merrick, Rochester, N. Y./ Canton, Cincinnati, Vannetown Ohio/ Lima. Monroeville, Mich./ Rumson, N. J./ Buffalo, Merrick, Rochester, N. Y./ Canton, Cincinnati, Youngstown, Ohio/ Lima, Monroeville, Philadelphia, Pittsburgh, State College, Pa./ Dallas, Houston, Tex./ Arlington, Norfolk, Va./ Issaquah, Wash.

no trend to 2-story houses in . . .

Little Rock, Ark./ Los Angeles, Novato, Rancho Cordovo, San Francisco, San Mateo, Calif./ Gainesville, Jacksonville, Miami, Sarasota, Tampa, Fla./ Augusta, Savannah, Ga./ Honolulu, Hawaii/ Aurora, Mt Vernon, Park Forest, Rockford, Waukegan, Ill./ Gary, Kokomo, South Bend, Ind./ East Lansing, Mich./ Omaha, Neb./ Berea, Columbus, Dayton Dover, Girard, Lima, Ohio/ Tulsa, Okla./ Portland, Ore./ Harrisburg, New Cumberland, Northumberland, Pa./ Sioux Falls, S. D.; Austin, Port Arthur, Tex./ Salt Lake City, Utah/ Seattle, Wash./ Morgantown, W. Va.

trend not clear in . . .

Washington, D. C./ Fort Wayne, Indianapolis, Ind./ Detroit, Mich./ Minneapolis, Minn./ Kansas City, St Louis, Mo./ Haddonfield, N. J./ Albuquerque, N. M./ San Antonio, Tex./ Milwaukee, Wis.

Is there a trend toward the two-story house? It all depends on where you are building

As the map above shows, there is a trend toward two-story houses, but the chances are only about 50-50 that it has appeared in your market.

A House & Home survey of homebuilders in 92 cities shows that the trend has developed in 40 cities, has not been noticed in 41, and is questionable in 11. Some of the markets covered are in metropolitan centers like Chicago and Detroit, others in widely distributed smaller cities like Sioux Falls, S.D. and Augusta, Ga.

The only region where nobody reports the trend is the South Atlantic. But these houses are going up in surprisingly scattered markets all across the US.

Fifty-seven of 150 builders report they are building two-story models

Among the 57 builders, two-story houses account for from less than 1% to 100% of starts, according to the survey. The average for this group is about 25% two-story houses. Only 12 of the 150 builders say their two-story models are their most popular ones. Ranch houses are still the best sellers by far.

Sixty-six of the 150 builders see a trend in their markets toward two stories, 65 do not, and 19 did not comment. Of those who build two-story models, five of every six builders see a local trend toward two stories. On the other hand, one out of three who do not build two stories see the trend.

Chief cause for the two-story trend: "more space for the money"

That was the point stressed by nearly every builder who commented on the reasons for the trend. A few varied this to say buyers get "more house on a small lot" or that a two-story house "looks like more house."

A detailed analysis by New Jersey Builders Cantor & Goldman of sales in their Sayre Woods tract shows that "the two-story house has more appeal than split-level models among buyers who want traditional design, and larger families prefer two stories because the bedroom area is better planned."

In Oak Forest, Ill. Builder Neil Medema finds that "people want more space and we know we can give them substantially more space for the money in two stories."

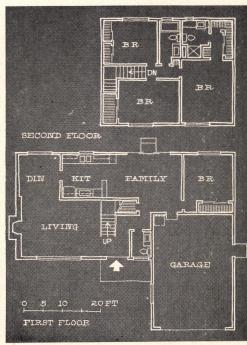
What the leaders are doing

Rental units for older people fill up fast in New York.....p 195

Most leading builders are using architects, H&H survey shows.....p 197

For four other builders' reports and a look at their two-story models, turn the page





Buyers like the third bath and separate dining room in this California model

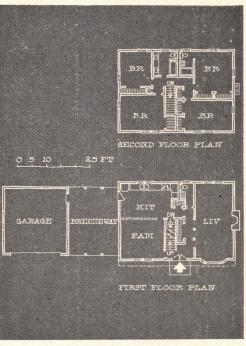
The model quickly became Mackay Homes' best-seller when it was introduced last winter to test interest in two-story houses among buyers in the San Jose area.

The \$25,350 house has 1,783 sq ft of living area, enough more than in typical

California ranches to provide a third bath and a formal dining room. Says Sales Manager William Driscoll: "These extra rooms appeal to people otherwise uninterested in moving up to the \$25,000 range. And with two stories we use less of the lot

for the house. So there is more room for outdoor living." Plan permits placing the upper level at the rear of the house "to avoid the heavy look of most two-story houses," Driscoll says. Roof was notched (left, in photo) to save limb of walnut tree.





This Illinois model appeals to buyers who want a house that looks big

So says Vice President Steve Fitzsimmons of Lynwood Development Corp, which has had a steady success selling houses like the one above at \$35,000 to \$40,000.

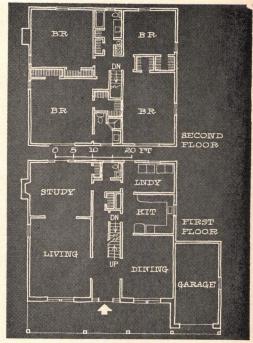
"We were one of the first in the Chicago area to build two-story models in volume,"

says Fitzsimmons, "and in the last four years we have found many reasons why buyers in the upper income brackets like them. Not least is the desire for a house that looks big. A house like our 2,600 sq ft, \$39,900 garrison-front model (above)

gives our buyers the feeling that they appear more responsible in the eyes of other people"

Also, he points out, two stories can pack in a lot more living area on today's smaller and higher-priced lots in metropolitan areas.





This Pennsylvania two-story model outsells the split-level next door 4-to-1

In the five months since Builder Louis Glansberg brought out his two-story model in Philadelphia, he has sold 21 two-story houses and only five of his split-levels.

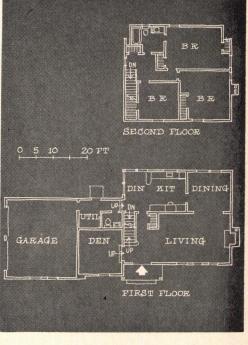
Yet each is offered at the same \$32,000 price, each has about 2,600 sq ft of living

space, and each is air-conditioned and filled with appliances.

"The reason for the two-story's success," says Glansberg, "is that it appeals more to younger families with several children, and they are the bulk of our market. They get

bigger bedrooms, and four of them on one floor. Older buyers and one-child families seem to prefer our Tudor split-level. Also, the two-story Colonial design by Architect Henry Berg appeals to more buyers in our Colonial-minded area."





In a conservative Long Island area, this two-story design is a sales success

In Smithtown, L. I., a pre-Revolutionary community, many buyers balk at the appearance of split-level houses, popular elsewhere on the island, and want more space than they can get in traditional Cape Cod models offered in the area.

Builder Saul Seiff's answer is this twostory house designed by Architect Herman York. It has 1,800 sq ft of living space and sells for \$23,000.

Seiff says the model sells well because it gives buyers what they don't get in a split-

level or a Cape Cod: "Unlike a split level, it fits in with older houses in the area. Unlike a Cape Cod, it has all its bedrooms on the second floor. So bedrooms are more private, and there is more space on the first floor for family activities."



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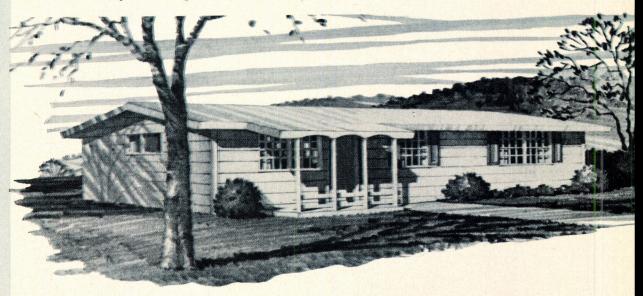
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ZONE STATE

starts on p 191



This fall-out shelter draws crowds to model house on Long Island

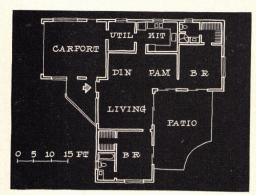
Builders Newell & Daniel got widespread publicity in New York newspapers when they opened a new \$40,000 model in East Norwich, L.I. with a fall-out shelter in a corner of the basement recreation room. The 9'x6' shelter (with glass window for display purpose) is offered for \$500 extra.

A buyer survey can show you where to look for the best prospects

So says Gene Fisher of F&R Builders, Miami and Orlando, Fla. "Study your last 100 buyers, and you'll learn some surprising things," he reports. "We analyzed where our buyers lived and worked. We knew we were selling to a lot of renters, but we didn't know until we surveyed them that they accounted for 50% of our sales. Now we have changed our sales methods to go after more of them."

Don't overlook the little things: even an umbrella can help you

During last winter's heavy rains in Mobile, Builders Berg & Diehl found a new way to make people talk about their models. They bought large golf umbrellas which salesmen used to escort women from the curb to the model. And this had the practical effect of making prospects less reluctant to visit the models in bad weather.



Separate suites give retirees the kind of privacy they want

In Pompano Beach, Fla., Haft-Gaines' bestselling model to older buyers is promoted as featuring "two master bedroom suites." As the plan shows, each bedroom has a bath and dressing room and in each sliding glass doors open to the pation.



Rental units for retired people go up in New York

A ready market for rental units designed for older people has quickly filled the first 60 units of a 360-apartment tract opened by Developer Mitchell Berenson at Crugers, N.Y., a few miles north of New York City. And Berenson reports leases are running well ahead of construction.

Shown above are two of five completed buildings (12 units each) on a 44-acre side overlooking the Hudson River. Efficiency and one-bedroom apartments rent from \$69.50 to \$94.50.

Features include grab bars in baths, lowered kitchen cabinets, horizontal sliding windows, ramps for some grades, and low risers on all stairs.

Architect Edward Luders puts groups of five buildings around a "village green," an adaptation of a Swedish plan for retirement housing. There are no hallways or central entrances; each unit has a private outside entrance, and each has a terrace. Free bus service is provided to shopping areas two miles away.



Here is a new way to use magazine tie-ins

Bell & Valdez's big painted sign in Seattle capitalizes on awards or promotion help the builder has received from eight maga-

zines. The company also uses 30 billboards playing up the name of either LIFE, American Home, Parents', or McCall's.

Leaders continued on p 197



FINGER ADJUSTING HANGER ENDS COSTLY CALL-BACKS!

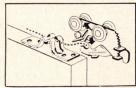
Sensationally DIFFERENT. Astoundingly SIMPLE. A new Kennatrack triumph that permits Instant adjustment and alignment of all by-passing and open or closed pocket doors. See illustrations.

Specify Kennatrack FA (Finger Adjusting) Hardware and even the "all thumbs" homeowner won't be bothersome by demanding unprofitable call-backs. It is actually easier for him to raise or lower a Kennatrack-hung door 5%" himself—or to re-align it for minor adjustments—than it is for him to phone for service.

QUIET! Besides being finger-adjusting and instant-mounting, Kennatrack Hardware gives you the quietest, most easily gliding pocket and by-passing doors ever known. Write for details on this money and time-saver as well as complete information on budget "Scottie" hardware for by-passing, pocket, and folding doors.



FINGER-TIP ADJUSTMENT . . . mere finger-tip pressure on ratchet-type adjuster gives immediate and perfect door alignment, and raises or lowers the door as required.

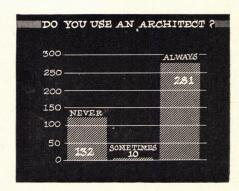


INSTANT DOOR MOUNTING . . . simple retainer lock engages, disengages at flick of a finger, yet never loosens in use. No need to remove stops or trim when removing door!



NEW SERIES 600 FA KENNATRACK... for quick, simple installation of 1" to 1¾" By-passing Doors. Kennatrack's exclusive top mount hanger eliminates extra millwork, permits maximum adjustment as well as instant removal and replacement of door without disturbing adjustment. Two hangers per door with eight floating wheels attached to grease-grooved axles that automatically compensate for door warpage. For doors up to 100 lbs.





no. of house: Built	JUNDER 50	50-99	100-199	200-499	500-999	1000 PLU
\$150 +	53	7	4	3	1	1
\$100 -149	10	3	3	1	1	0
s 75 - 99	2	3	1	0	0	0
\$ 50- 74	6	7	2	6	1	0
\$ 25 - 49	0	1	4	8	0	0
UNDER\$ 25	1	0	2	3	1	0

69% of the leaders use architects, H&H survey shows

The importance of the architect to the "builders other builders follow" shows up clearly in the answers to two questions in the latest survey conducted for House & Home by the C. E. Hooper Research Organization.

Overall, 281 of the builders queried always use an architect, and 10 others sometimes do. Of these 291 builders, 215 use an independent architect, 75 have an architect on their staffs. (One did not explain.)

Among the bigger builders—those who build over 100 houses a year—the percentage is even higher. Of the 178 builders in the survey who put up more than 100 houses in 1959, 137 (77%)

use architects regularly. Only 40 (23%) do not use architects.

Staff architects are more common with the big builders: 48 of them use staff men, 79 use outside architects, and 11 use both.

The second area polled by Hooper was the cost per house of architectural services. Here, the number of respondents fell off considerably. Many of the architect-using builders considered this a trade secret and preferred not to answer. Others, including almost all the builders using staff architects, could not figure their architectural costs on a per house basis in such a way as to get a meaningful figure. In some cases,

builders paid a relatively high fee for an original set of plans, but duplicated them for other houses for little or nothing.

However, 115 builders who use architects did answer with specific figures. These answers were crosstabulated by size of fee and size of operation (see above). The median figure for these 115 builders was \$100 (i.e., as many builders paid more than \$100 per house as paid less than \$100). As the chart shows, the fee range spreads pretty much across the board, with perhaps a slight tendency for the smallest and biggest builders to pay the higher fees.

... and here is why the other 31% of the leaders do not use architects

The 132 builders who do not use architects were asked three specific questions by the researchers:

- 1. Do you think you can develop just as good a plan and design the house yourself? An even 100 (over 75%) think they can.
- 2. Do you think architects are not familiar with tastes and needs of the families for whom you build houses? Seventy-seven (66.2%) think architects do not know their prospects' tastes well enough.
- 3. Do you think architects are more interested in promoting modern design than offering the kind of design your customers want to buy? Ninety-four (71.2%) think architects are too interested in modern design.

The builders were then asked if there was any other reason why they did not use an architect. Ninety-five of them took the occasion to express themselves.

The prime reason—though it was expressed in several different ways—was money.

Most of the answers—47 (or 35.6%)—felt an architect's fee adds

too much to the cost of the house.

Typical quotes:

"In homes of less than \$15,000 the time involved, the mechanical work of drafting, and the recurring fees place too great a burden on this class of home."

"We can do a good job and make changes less expensively. The cost of an architect would increase the cost of our houses."

Another 30 builders believe architects are impractical, underestimate construction costs, and do not know enough about low-cost houses. Comments:

"If an architect wants three or four more inches in a room, he may change things structurally throughout."

"They use odd size measurements that do not match lumber."

"They are not familiar with new materials."

"They can bring construction costs up without improving the house to warrant the extra cost."

Eight members of the panel expressed what they considered an unanswerable reason for not using architects: they build prefab.

Here is a breakdown of the builders' reasons for not using an architect

The breakdown of the 132 builders' replies adds up to 381 responses because most gave several reasons.

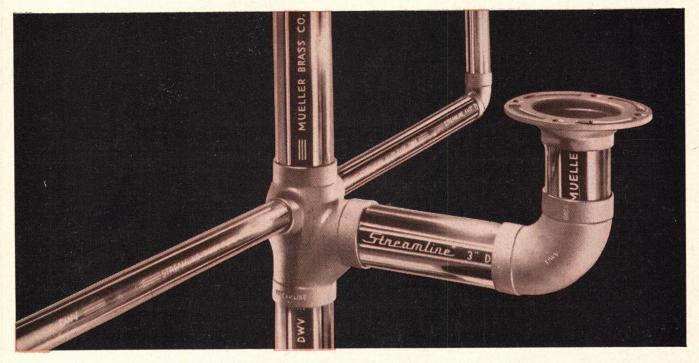
Reason for not using	No.
Can develop as good a plan	
without an architect	100
Architects are more interested	
in promoting modern design	94
Architects are not familiar	
with buyers' tastes	77
Architects charge too much	47
Architects underestimate costs	13
Architects are impractical	10
Architects don't want to work	
on small houses	8
Architects are too extreme	8
Don't need an architect because	
build prefabs only	8
Architects don't know enough	
about low-cost houses	7
Architects are too slow	5
Dislike architects' plans and	
use of space	3
Not enough volume to justify	
use of an architect	1





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TUBE AND SOLDER-TYPE FITTINGS CAN SAVE YOU UP TO 15% AND YOU GET A BETTER INSTALLATION TOO!



You can install STREAMLINE DWV COPPER TUBE AND FITTINGS at savings up to 15% and get the most modern drainage system possible... a compact, space-saving system that's lightweight, sanitary, non-rustable and clog proof.

COMPARISON WITH RUSTABLE MATERIAL PROVES INSTALLED COST OF STREAMLINE DWV COPPER TUBE AND FITTINGS IS LOWER!*

3" ALL COPPER DWV DRAINAGE INSTALLATION

COST TO PLUMBING CONTRACTOR

\$62.46

50.89

60.00

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Stack Fittings and Tube Drainage Branch Lines Solder and Flux Labor

TOTAL COST OF

\$174.66*

3" GALVANIZED AND DURHAM DRAINAGE INSTALLATION

COST TO PLUMBING CONTRACTOR

\$53.01

30.91

120.00

1.00

Stack Fittings and Pipe Drainage Branch Lines Lead and Oakum Labor

TOTAL COST OF

\$204.02*

3" IRON DRAINAGE INSTALLATION

COST TO PLUMBING CONTRACTOR

Stack Fittings and Pipe Drainage Branch Lines Lead and Oakum \$26.52 30.78 4.87 120.00

TOTAL COST OF

\$182.17*

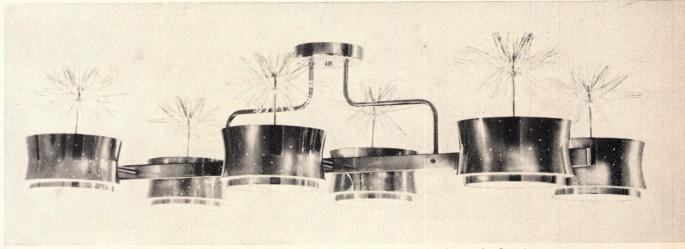


*This comparison is based on actual material and labor costs in effect on January 7, 1960, in a mid-west metropolitan area of 75,000 population.

Complete technical information on Streamine DWV Copper Tube and Solder-Type Fittings is included in big, new 32-page Bulletin D-459. Send for your free copy today.

MUELLER BRASS CO., PORT HURON 10, MICHIGAN

294



SIX-LIGHT LINEAR FIXTURE is made up of perforated brass tubs decorated with sparkling brass wire flowers.



OPERA CRYSTAL hides seven lights behind hand-faceted glass.



modern chandelier of walnut and brass takes three 60-w lamps.



PLEXISPHERE covers opal glass globe with bright colored plastics.



FOUR-LIGHT SPREADER has satin chrome and black finish.

Lighting fixtures are getting fancier

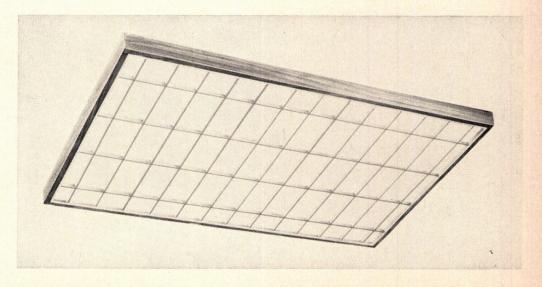
That is the clear impression given by the big show of new models from Lightolier. In its new Portfolio and Jewelry Look collections, Lightolier is combining contemporary geometric shapes with color and spangles in glass and metal, wood and plastic. The new lights are being used in traditional chandeliers and sconces as well as in modern pendants and brandnew linear arrangements.

Besides the linear model at the head of the page, the

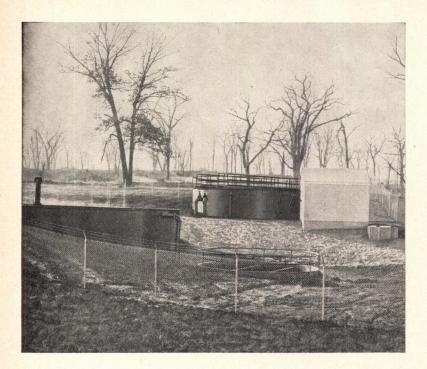
Jewelry Look group has 36 other fixtures designed by Paavo Tynell, priced at \$27 to \$795 at the four company showrooms. The Portfolio line designed by Tempestini, Mosler, and Thurston has models in Scandinavian, oriental, contemporary, and traditional styles in various sizes and types. Prices: about \$14 to \$650. Available at all Lightolier dealers. Lightolier, Jersey City, N.J.

For details, check No. 3 on coupon, p 240

NEW CEILING FIXTURE is framed in solid walnut with red birch baffles, white styrene diffusers. Surface-mounted units are only 3¾" deep, come in four sizes: two-tube 16"x54"; four-tube 32"x 54"; six-tube 30"x30"; eight-tube 54"x54". Diffusers completely shield lamps but whole shield assembly swings down for cleaning and relamping. Retail prices: \$82.50 to \$265. For details check No. 4 on coupon, p 240.



New Products continued on p 200



How developers provide low-cost sewage treatment in critical Kansas City area

Kansas City — like many fast-growing metropolitan areas — is faced with problems of satellite community sewage treatment. Yet, far-sighted Kansas City suburban developers are moving ahead, with a new solution to the sewage problem so realistic in cost and speed of installation that developers everywhere — faced with similar problems — should investigate it.

A case in point is that of Gracemor Subdivision, in Kansas City North, Missouri. When this 700-home community was planned by Bolling-Hausmann Development Company (Kansas City), President Glenn L. Bolling was faced with providing adequate sewage treatment along with living space.

Consulting Engineers Raymond W. Campbell & Associates (Merriam, Kansas) were asked to investigate every possible avenue of doing this within reason financially. Campbell & Associates suggested a "Suburbia" installation. The compact 245,000 GPD "Suburbia—I" illustrated above now serves the citizens of Gracemor... and its cost was most realistic.

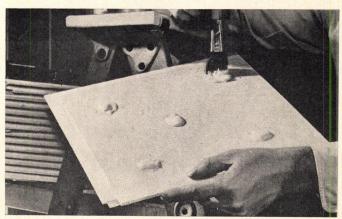
This new, low-cost sewage treatment plant provides conventional sewage treatment for communities of 200 to more than 10,000 homes. Individually planned and installed under the direction of your consulting engineer, "Suburbia" installations conform to State Department of Health requirements.

They can be erected and enlarged for permanent use, or can be dismantled and re-erected elsewhere after eventual hook-up with metropolitan central sewage treatment plants. Speed of erection (90-120 days) makes it feasible to begin building houses almost at once, since regulatory approval normally comes without delay.

"Suburbia" is so simple that unskilled help can operate it. With minimum maintenance, units produce no objectionable odor—no bacteria-laden foam. Best of all, "Suburbia" involves less initial and operating capital than any other type of conventional sewage treatment plant. "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



DABS OF ADHESIVE are applied to the back of acoustical tile.



TILE IS PLACED against ceiling; pressure spreads cement evenly.

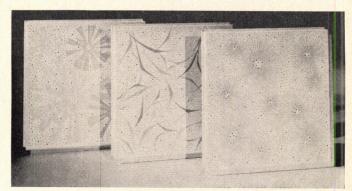


TILE IS TACKED with only four staples; cement supplies bond.

Ceiling tile can be glue mounted

Adhesive installation of ceiling tile has been simplified by the development of easy buttering cement. The new adhesive is brushed on the tile back in small dabs; the tile is pressed in place, tacked with four staples until the cement sets. The tile base can be any structurally sound surface; no furring strips are necessary. The cement spreads out evenly as the tile is pressed in place. New cement goes five times as far as regular acoustical cements. Clean-up can be done with soap and water.

Armstrong Cork, Lancaster, Pa. For details, check No. 5 on coupon, p 240

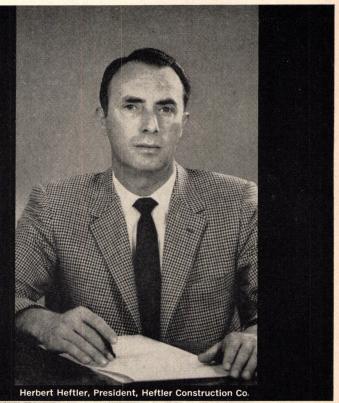


DECORATIVE TILE are also new from Armstrong. Centennial Cushiontone comes in soft colors in three patterns. Fine perforations give good acoustical control. For details, check No. 6 on coupon, p 240.

New Products continued on p 202

"GENERAL ELECTRIC'S REPUTATION FOR QUALITY HEATING AND AIR CONDITIONING PROVED A MOST IMPORTANT SELLING POINT"

And more than 200 homes were sold in 10 weeks!





View of model home of Heftler Construction Company at Howell Park (near Orlando), Fla.

Meet Herbert Heftler, head of Heftler Construction Co., the nation's largest residential unit construction company, which is developing the 5,000-home Howell Park community (near Orlando, Fla.) of homes in the \$12,000 to \$15,000 price range. Here's what Mr. Heftler says about General Electric heating and central system air conditioning.

"We selected General Electric equipment because we felt it was most suitable for our requirements in these Howell Park Homes.

"G.E.'s reputation for highest quality equipment proved a most important selling point—and more than 200 Howell Park homes were bought in the first 10 weeks the new community was in operation. These home buyers, from all parts of the country, evidently recognized the economy and efficiency of General Electric's modern equipment in our 'best home for the money' houses."

Whether you're planning 5 homes or 5,000, you'll find it's good business to include General Electric central heating and air conditioning for complete customer satisfaction. For full information on G.F.'s

new <u>Air of Satisfaction</u> builder sales program that helps you promote, merchandise and sell your homes, contact your nearest General Electric heating and air conditioning distributor or mail coupon today.

GENERAL ELECTRIC

Air Conditioning Department, Tyler, Texas

P. O. Box 3236, Station "A" General Electric Company Air Conditioning Dept., Tyler, Texas Attn.: Mr. J. J. Heffernan

HH-4

I'm interested in teaming up with General Electric's "Air of Satisfaction" program. Please give me full details.

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ing for complete customer satisfaction. For full information on G.E.'s COUNTY______STATE_



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 Structual® 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.

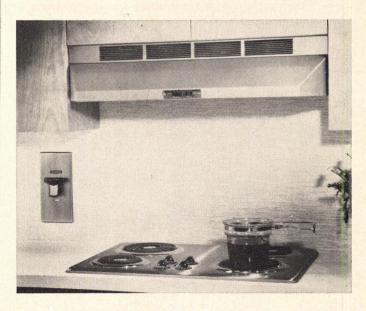
C.B.O. APPROVES LANCER

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Conference of Building Officials has given the LANCER Structur-

- 10 Year Guarantee on Workmanship & Materials
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- Minimum Maintenance—No Cracks, No Leaks—100% Laminated Structual **Fiberglass**
- Over 600 Dealers & Distributors Strategically Located Throughout the United Sates

nas given the LANCER Structure al Fiberglass lamination their approval. LANCER pools are the first fiberglass lamination to receive this extremely important Easy Financing Available recommendation. LANCER POOLS CORP Executive Offices 22 Jericho Tur Mineola, New York Ploneer 7-8255 Please have your representative call to explain LANCER's New Model House — LANCER No Investment Plan POOLS CORP. LANCER INDUSTRIES, INC



New hood uses four filters

Trade-Wind's new ventless hood has twice as much filtering capacity as other recirculating hoods-double aluminum grease filters and double activated-carbon odor filters. Vent fan is a multivane radial impeller. Filtered air is discharged upward at an angle away from the cabinet and the cook's face. Hood accommodates 120-w of lighting. Sizes: 30", 36", 42" in coppertone and satin chrome. Prices: \$95 and \$110.

Robbins & Myers Inc, Pico Rivera, Calif. For details, check No. 7 on coupon, p 240

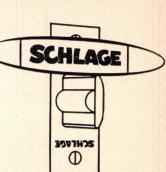


Here's Frigidaire's free-standing built-in

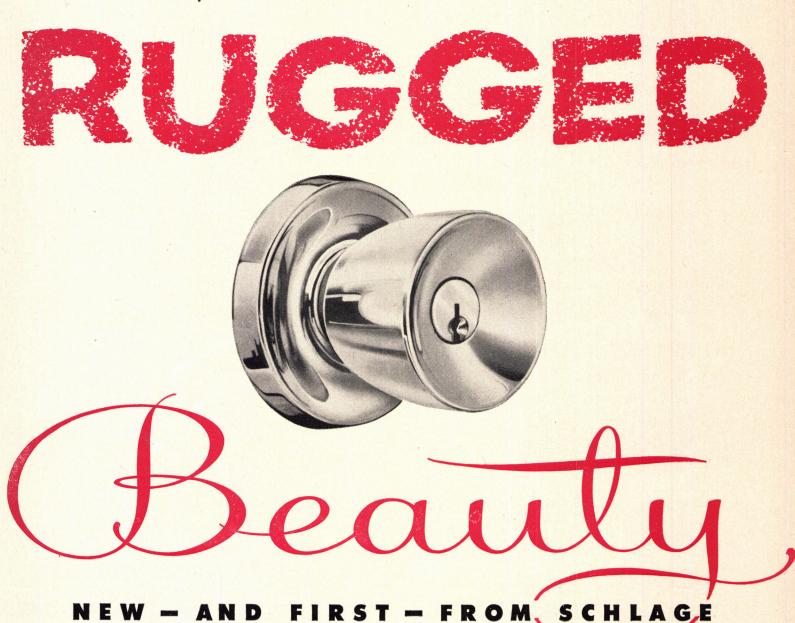
GM's appliance division has adopted the built-in look for its top-of-the-line ranges. New 30" and 40" models come in two degrees of trim—Deluxe and Imperial. All have arm-high ovens with counterbalanced doors that lift up. Pull-out cooking top is concealed when not in use; when pulled out, burners are 4" lower than usual countertop. Control panel is at eye level, above the ovens; full length fluorescent light is below control panel. All models are sold with or without base cabinet. Suggested retail prices: \$400 to \$560.

Frigidaire, Dayton.

For details, check No. 8 on coupon, p 240



Standard duty STAINLESS STEEL lock trim now ready for immediate delivery for light commercial buildings and moderate-priced homes. A real...



You know the advantages of Stainless Steel. And now Schlage offers these advantages in residential standard duty trim—

- Beauty with durability
- No maintenance, no lacquer to wear, low upkeep
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- In Tulip design lock trim and standard residential escutcheons

Whatever your lock needs, seek the answer FIRST FROM SCHLAGE!

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CYLINDRICAL LOCKS

Schlage Lock Company Display Rooms in
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ALL-WETHR WINDOWS

For many years it has been known as an assurance of high quality and correct styling in wood windows. People believe that if the windows are "IDEAL" the rest of the house must be good, too.

APPRAISERS AND F. H. A. RECOGNIZE THIS SEAL



"IDEAL" ALL-WETHR WINDOWS BEAR BOTH OF THESE SYMBOLS OF QUALITY

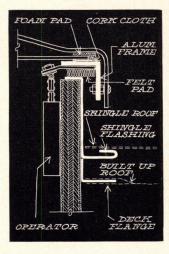
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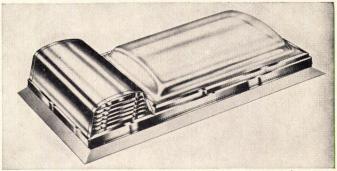


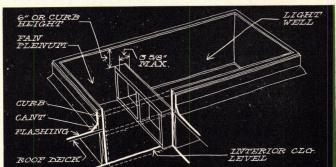
Ventarama roof windows now come in a double-bubble dome type that can be used on flat or pitched roofs. The acrylic upper and lower domes—inner domes may be translucent or colored—are sealed at the edges with a foam pad (see drawing, left). Skylights will open up to 12", are equipped with screens, can be operated manually or by motor. Sizes: 22" x 30" to 45½" x 45½".

Ventarama Skylight Corp, Port Washington, N.Y.

For details, check No. 9 on coupon, page 240

These skylights also ventilate





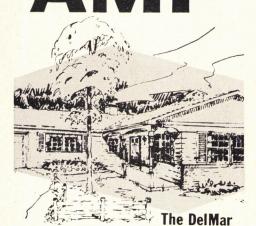
Jenn-Air Astro-Vent combines a dome skylight and a separate powered ventilator in a single extruded aluminum housing. Acrylic domes come in clear or translucent, single or double. Centrifugal ventilators have integral back-draft dampers, come in capacities of 180 cfm to 4,400 cfm. Skylights can be made up in various combinations of vents and lights for everything from small residential to industrial use. Nonventilating types are made under Astro-Lite label.

Jenn-Air Products, Indianapolis.
For details, check No. 10 on coupon, p 240

New Products continued on p 206

NOW

today's fastest selling package plus



The DelMar is the complete answer for today's "want more" market! Two full baths, one adjoining the 14-foot master bedroom, a 22½-foot family-kitchen, oversize garage, many more features. Priced for the most modest budget! DelMar's sell fast!

With Precision's exclusive "Assured Maximum Profit" program, you can see your profit and your market before you even start to build! For Complete Details, Write, on your letterhead, or call: Wes Harper, Sales Manager...



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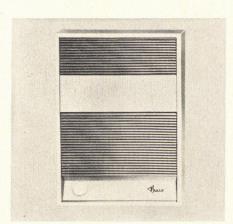
New products

start on p 199



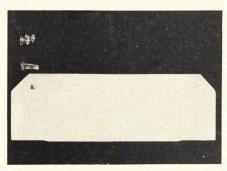
New corner tub has all the features of Contour model introduced last year: offset cavity; wide seats at two corners; narrow, easy-to-grasp front rim. Tub is 5' long, 32" wide, 16" high. Corner model adapts well to remodeling. In new construction, corner tub can make bathroom look roomier. Tubs come in white and six colors.

American-Standard, New York City. For details, check No. 14 on coupon, p 240



Electric heat from Fasco includes forced-air wall heaters (above), radiant wall heaters, baseboard system, and radiant cable. Forced-air heater is 16" x 225%" x 5¼", comes in 1500-w, 2000-w, 3000-w, and 4000-w models with built-in thermostat. Baseboard is 7½" x 2½", 32" or 48" long, 600-w or 900-w. Each section has overload control. System can use wall or baseboard thermostat.

Fasco Industries, Rochester, N.Y. For details, check No. 15 on coupon, p 240



Space-saving tub for remodeling jobs or small bathrooms fits a 5' recess but is only 29" wide, 14" high. The vitreous enameled castiron tub has a paneled apron. It comes in white and six colors, with right- and left-hand outlets.

Universal-Rundle, New Castle, Pa. For details, check No. 16 on coupon, p 240

continued on p 212



- ECONOMICAL no countersinking or puttying required
- STRONG easy to drive comply with F.H.A. requirements.

A type and size for USE where insurance against rust spots is

ALUMINUM

building corners



A complete line—all types and sizes. New straightline design. Packed in convenient job-size boxes.

ROLL VALLEY . FLASHING . TERMITE SHIELD

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town talking about your

model homes with



TALKING VALUE

AN EXCLUSIVE PROMOTION IDEA TO HELP YOU SELL QUALITY-MINDED PROSPECTS

You see the evidence everywhere—the trend in home-buying today is to *quality* . . . in design, materials, workmanship, financing. Most importantly, you see this trend reflected in the looking attitudes and buying decisions of today's home shoppers. They're looking for and buying quality. And that's why this "Lifetime Quality Walls" promotion, featuring walls of Sheetrock* Gypsum Wallboard, is so timely for you.







Plan your "Talking Walls" promotion right away.

MAIL THE COUPON FOR INFORMATION TODAY

UNITED STATES GYPSUM

the greatest name in building

"TALKING WALLS" IDEA PROMOTES IMPORTANT FEATURES OF YOUR HOMES

When your model homes are ready for this unique promotion, prospects passing through will hear walls that "talk." A hidden tape recording, using the voice of a professional announcer that seems to come right out of the walls, sells the important features of your homes, including the walls. You also get a 3-D "Talking Wall" display that hangs on the wall like a picture, an outdoor sign, newspaper ad mats, radio scripts, TV spots, and other promotion aids. And it's all FREE, to help you sell with "Lifetime Quality Walls."



UNITED	STAT	ES	GYPSUM,	Dept. HH-03
000 111 4				

300 W. Adams St., Chicago 6, III.

Gentlemen: Please send full information on the "Lifetime Quality" promotion, and ask your sales representative to call as soon as possible.

company____

city_______zone___state_____

New products

start on p 199



Shake-textured siding is new from National Gypsum. Gold Bond Classic-Shake is asbestos cement with an acrylic coating in ten colors. Deep wood-like striations are complemented by heavy shadow line at the butt. Siding is immune to rot, weather, vermin, fire, and dimensional change.

National Gypsum, Buffalo. For details, check No. 17 on coupon, p 240



New plywood siding gives the look of resawn lumber in a 4'x8' sheet, for a materials-plus-labor saving of 15% to 25%. The new panels may be applied directly to the studs eliminating the need for sheathing within the specifications of FHA minimum property standards.

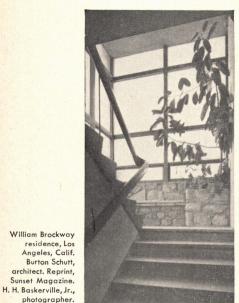
US Plywood, New York City. For details, check No. 18 on coupon, p 240



Flexible asbestos cement can be bent into a circle of 18" diameter and can be nailed or stapled ½" from its edge. The 4'x8' sheets come ½", 3/16", or ½" thick. Kamwall is proof against fire, rot, vermin, water. It is workable with carpenter tools

and takes paint readily.

Keasbey & Mattison, Ambler, Pa. For details, check No. 19 on coupon, p 240



THIS FREE **BOOKLET...**

Shows how decorative glass brightens and beautifies homes. It is filled with dramatic illustrations of the ways translucent glass adds a touch of luxury and smartness to every room. Specify Mississippi Glass. Available in a wide range of exciting patterns and surface finishes wherever quality glass is sold.





Create a distinctive decor with translucent glass by Mississippi that floods interiors with softened, flattering light, makes rooms seem larger, friendlier, important. Write for free booklet. Address Department 9.



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WORLD'S LARGEST MANUFACTURER OF ROLLED,

Use Trinity White





POOL BUILT BY PADDOCK OF CALIFORNIA

A swimming pool creates a bull market for residential sales

People enjoy swimming pools. They are fun for all the family.

Include this potent merchandising feature in your housing program whether it be a single dwelling, a tract development, or multiple housing. A swimming pool can be built for the cost of a low-priced car.

Trinity White portland ce-

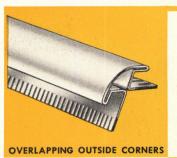
ment makes pools beautiful. With white aggregate it is used as a plaster finish. It is used in the manufacture of precast coping, trim, deck slabs; and concrete masonry units as a decorative fencing.

For further information write Trinity White Cement, 111 West Monroe St., Chicago.



A product of GENERAL PORTLAND CEMENT CO.

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Why QSM produces
49
building shapes
...all
different

Chances are you'll never need all 49 of QSM's building shapes.

ing shapes.

But QSM produces 49 different shapes, so that you'll always be able to get exactly the shape you need for any job, no matter how unusual. QSM's 49 shapes in both aluminum and galvanized are stocked by leading dealers everywhere.



SEND FOR THIS FREE BOOK ..

Tells all about QSM's complete line of metal building products. Shows you where to use 'em to save time and money; turn out better jobs at lower cost.



DRIP CAPS

QUAKER STATE METALS COMPANY Box R-1167, LANCASTER, PA.

Gentlemen: Please send me your free book that tells me about QSM's complete line of metal building products; shows me where to use 'em to save time and money.

Name....

Firm Name

City

Zone State



QUAKER STATE METALS COMPANY LANCASTER, PA.

A Division of HOWE SOUND COMPANY
MAKERS OF THE MOST COMPLETE LINE OF METAL
BUILDING PRODUCTS MANUFACTURED AT ONE SOURCE

ILCO Philippine Mahogany

An appearance of genuine richness that sets your homes far above the ordinary can be achieved at a modest cost...if you use Ilco Philippine Mahogany

Ilco is, of course, solid hardwood—not plywood or veneer. This accounts for the unusual beauty, the great variety of striking grain patterns that are yours with Ilco paneling. Ideally complementing this handsome paneling are Ilco moldings, which also are solid hardwood. Available in an extremely wide selection, Ilco moldings combine perfectly with stone or brick, papered or painted walls.

And for exterior use, consider the merits of Ilco siding: beauty, plus remarkable durability, for this finest of tropical hardwoods stands up under all kinds of weather, takes pigmented paints better than any other wood—no peeling or flaking.

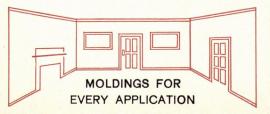
So insist on Ilco Philippine Mahogany . . . and, at a reasonable cost, give home buyers the quality they seek.

WRITE FOR FREE CATALOG

All-new illustrated catalog of the entire Ilco line, with special emphasis on moldings.

ILCO P

PANELING · SIDING · MOLDINGS · FLOORING · TRIM · ROUGH & SURFACED LUMBER



INSULAR

LUMBER SALES CORPORATION

1405 Locust Street, Philadelphia 2, Pa.

New products

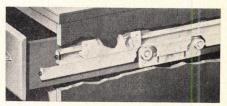
start on p 199



Folding closet doors can be combined in a floor-to-ceiling, wall-to-wall storage unit. Colonial doors are 24-guage bonderized steel. Lower panel has a recessed design, and the upper panel is louvered. Brass pull-knobs are colonial style. Doors are prime coated, come with all hardware and instructions.

Float-Away Door Co, Atlanta.

For details, check No. 20 on coupon, p 240



Full extension slide brings drawers completely out of cabinet, adapts easily to any drawer depth, installs easily. Only 9/16" side clearance is needed. Drawers roll on nylon; rubber pads and tips cushion rollers. Slides come 16", 18", and 22" long for drawers 15" to 29" deep.

Knape & Vogt Mfg Co, Grand Rapids. For details, check No. 21 on coupon, p 246



Louvered steel doors for wardrobes and closets make full width accesssible. Louvered top panel allows free air circulation, and the solid bottom panel keeps out dust. Doors come 3', 4', 5', or 6' wide, 6'8" or 8' high. Antique ivory finish can serve as neutral primer. Nylon pivots, brass pulls, upper and lower track, and all hardware are supplied.

Amweld Building Prods, Niles, Ohio. For details, check No. 22 on coupon, p 240

continued on p 216



for complete information and prices, see your building supply dealer or hardware dealer, or write us.

SOSS MANUFACTURING COMPANY

DEPT. HH-7 P.O. BOX 38, DETROIT 13, MICHIGAN





Slim fluorescent fixture is only 7/8" thick. Alkco's Little Inch undercabinet light delivers 40 foot candles at 15", can be mounted singly or in runs. Alkco's diffuser is acrylic, a tough plastic that will neither warp nor discolor.

For details, check No. 24 on coupon, p 240



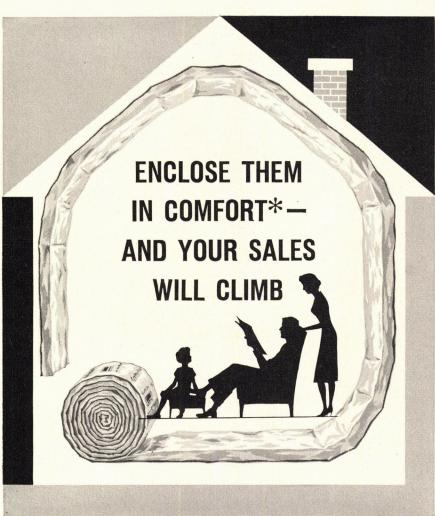
Side lighting for bathroom mirrors is provided by Dondelco's 3-D lighting fixture. Adjustable side arms have inside dimension of 19" to 23"; 5" of clear wall is needed on each side of cabinet. In remodeling uses, fixture ties into centermounted top light mounted 1" to 6" over mirror. Sidelights take two 60-w bulbs.



Alkco Mfg Co, Chicago.



Dondel Co, Phoenix. For details, check No. 25 on coupon, p 240



*Comfort means Full-Thickness **Certain-teed Building Insulation**

Today's new-home prospects want—and expect—yearround comfort. The most effective way to provide this is through full-thickness insulation with a proven widely-known product such as Certain-teed Fiberglas* Building Insulation.

With it, your new homes will have greater sales appeal. It provides top comfort, summer and winter, and keeps heating and cooling costs at a minimum.

It is also backed by the Owens-Corning Comfort Conditioned Home Program which includes national advertising. This promotion is merchandising comfort to new-home buyers—and is one every builder should take advantage of. Learn how you can tie in with it from your Certain-teed representative.

*TM Owens-Corning



Certain-teed®

perior Products through Creative Research

CERTAIN-TEED PRODUCTS CORPORATION

Ardmore, Pennsylvania

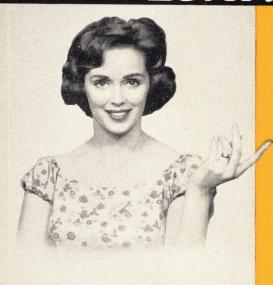
Plants and offices throughout the United States



continued on p 218

INTRODUCING.

THE NEW Brown MIXED-FLO RANGE HOOD



it combines the performance you want with the price that you like

Two important advantages come your way with this new contract winning hood. Both of them help make your bid look best.

Advantage No. 1 is a hood of superior performance. With the Mixed-Flo Fan you can point to an exhaust system that is revolutionary in development . . . that performs more efficiently, runs more quietly than any fan or blower-operated hood on the market.

Advantage No. 2 is cost. You can bid low with the Mixed-Flo because you have an initial price advantage. And you save valuable time and money on every job because this great hood, like all Broan hoods, comes to you as a complete package, factory wired, fully assembled, ready to mount in place. And the Mixed-Flo is engineered to fit your installation with either vertical or horizontal discharge.

MIXED-FLO HOOD FEATURES-

- Unitized Construction the fan is fully housed within the hood. There is no lost cabinet space whatever.
- Great In Exhaust Power the new Mixed-Flo Fan provides extra pressure needed for long duct runs and elbows . . . formerly achieved only by blower powered units.
- Remarkably Quiet In Operation the highly efficient Mixed-Flo Fan is designed for low sound level performance.
- Smooth Inside, Outside Construction no sharp screw ends.
- Smart Sculptured Hood Design only 5 slim inches high. Mitered corners permit cabinet doors to open fully.
- Equipped for Twin Lights for shadowless cooking. Recessed lifetime aluminum filters snap out with the greatest of ease. Front pushbutton controls.
- Accommodation For Vertical Or Horizontal Discharge to 3½" x 10" duct without fittings.
- A Fast Running Installation comes prewired, preassembled ...simply remove the outlet box cover to hook up power supply.

See your wholesaler or write for full information



In Canada — Manufactured by Superior Electrics Ltd., Pembroke, Ontario

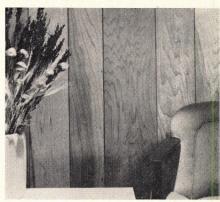


MANUFACTURING CO., INC. • 924 W. STATE ST., HARTFORD, WIS.



New products

start on p 199



Elm paneling is now available in Georgia-Pacific's pre-finished plywood line. The new paneling comes in brown elm and American elm (above). Both are marked by a distinctive brown color and a rich grain pattern. Georgia-Pacific's "family-proof" finish resists scratches and abrasions; common stains will wipe off.

Georgia-Pacific, Portland, Ore.
For details, check No. 26 on coupon, p 240



Walnut-grained hardboard now comes from Abitibi in a platinum pattern. The budget-priced Plateboard comes in five types—perforated, plain, vertical, block, and random grooved—and in 4' x 4' and 4' x 8' sheets. Plateboard paneling also can be ordered in oak or natural walnut finishes.

Abitibi Corp, Detroit.

For details, check No. 27 on coupon, p 240



Cherry-grained hardboard is made by Celotex in three tones—imperial, blond, and bleached (above, 1 to r)—in 16" x 8' and 2' x 8' panels for use with Handi-Clip and Handi-Wall systems respectively. The panels also come in three designs—plain, regular grooved, and random grooved.

Celotex Corp, Chicago.

For details, check No. 28 on coupon, p 240

continued on p 220

ELECTRIC HEAT NEWS from R&M-Hunter

BASEBOARD + FORCED AIR

gives ideal heating at low cost

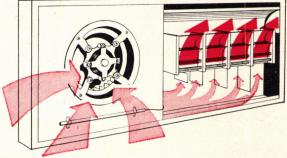


Costs less — easier to install

The new R&M-Hunter FORCED AIR BASEBOARD costs much less than convection baseboard, and is easier to install.

Engineered for compactness—Dimensions are: 33" long, 13" high, 3\%" deep. When recessed, unit extends only 1\%" from wall.

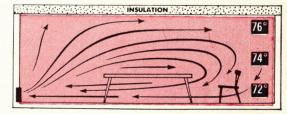
1000 to 4000 watt capacities—1000, 1500 and 2000 watt models with or without thermostats. Thermostats control two or more units in a room. 2500, 3000 and commercial 4000 watt models have individual thermostats. Listed by Underwriters' Laboratories.



R&M-HUNTER FORCED AIR BASEBOARD

This entirely new type of electric heating system gives even floor-to-ceiling temperature. A quiet low-speed centrifugal blower pulls in cool floor level air and moves it over a series of heating elements before sending it back into the room at the selected temperature. Floor level thermostat (optional) and return air inlet maintain ideal comfort conditions, with minimum heat loss. The R&M-Hunter FORCED AIR BASEBOARD gives safe, clean, quiet, automatic heat. No cold drafts or hot blasts. No ducts, no heater closet.

Mail the coupon below for complete information on "the best buy in electric heat."



EVEN FLOOR-TO-CEILING TEMPERATURE



HUNTER DIVISION— ROBBINS & MYERS, INC. Memphis, Tennessee

R&M-Hunter FORCED AIR BASEBOARD ELECTRIC HEAT It's Matchless!

Backed by R&M-Hunter's 80-year experience in electrical equipment

MAIL NOW FOR DATA

Hunter Division—Rob 2456 Frisco Ave., Men			
Send complete data on your new FORCED AIR BASEBOA to:			
Name			
Address			
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		WIE FI	

Profitable Planning (5) starts with PLAN HOLD®

Vertical and Roll Files

for PLANS, PRINTS, DRAWINGS

You increase efficiency and cut expense with PLAN HOLD filing equipment:

- Systematic filing is practically automatic; you find the plan you want in seconds...no clerical time wasted.
- 2. Your investment in valuable plans is protected; sheets never get mutilated or lost...
 ... no replacement expense.



Wall mounted out of the way, this unit holds up to 1200 sheets in only 24 lineal inches.



Made of furniture steel, these PLAN HOLD roll file units can be stacked as desired. Take sheets of any length up to 5' wide.



Adaptable to all your needs... PLAN HOLD vertical and roll files come in modular sizes, fixed, mobile, portable and in cabinets. At engineering supply and office equipment dealers. Mail this coupon for illustrated catalog and prices.

Plan Hold Corporation, Dept. 603 5204 Chakemco St., South Gate, Calif.

Please send me your current catalog and price list.

Name		
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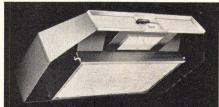
Street

City_____Zone___State____

New products

start on p 199





Ventless range hood from Swanson is self-contained, uses two filters—a permanent aluminum grease filter and a charcoal odor filter. The aluminum filter can be washed in soap and water; the charcoal filter can be reactivated by baking 30 minutes at 425F. Hood comes in ten colors, is prewired, has rheostat switch for infinite speed control.

Swanson Inc, Owasso, Mich. For details, check No. 29 on coupon, p 240



Counter-level broiler is a separate built-in from Roper that can be used for flat, vertical, or rotisserie broiling. Unit drops in 24" counter and is covered by chrome deck lid when not in use. Heat is supplied by twin high-speed radiant gas burners.

Geo. D. Roper Sales, Kankakee, Ill. For details, check No. 30 on coupon, p 240



Ductless oven hood teams with ductless range hood in line of self-contained filter hood manufacturer. Ovenmaster takes a space only 5¾" deep, 6" high over any built-in oven. Blower unit is twin axial squirrel cage. Sizes: 22¾", 25¾", 31¾". Six colors plus stainless steel and copper.

Ductless Hood Co, Manhasset, N.Y. For details, check No. 31 on coupon, p 240

continued on p 222

prestige at a rock-bottom price

Nationally advertised Fully guaranteed

Permaglas[®]
GLASS
LINED

WATER





One of the best boosts you can give your business is to standardize on the contractor-priced PERMAGLAS, Model PGCA. Your prospects know PERMAGLAS, through its national advertising in the magazines they read and respect. They recognize the relationship between a top-quality water heater and overall top-quality construction. And they will appreciate the protection of six full years of A. O. Smith-backed complete replacement guarantee . . . plus four more years of "frosting on the cake" in the form of a liberal pro-rated guarantee.

Phone or write for full details on how you can upgrade your homes with the established prestige of PERMAGLAS water heaters.

A.O.Smith

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Permaglas	Division, Dept	. H-60	

Please send more information about Permaglas to me.

Name.....

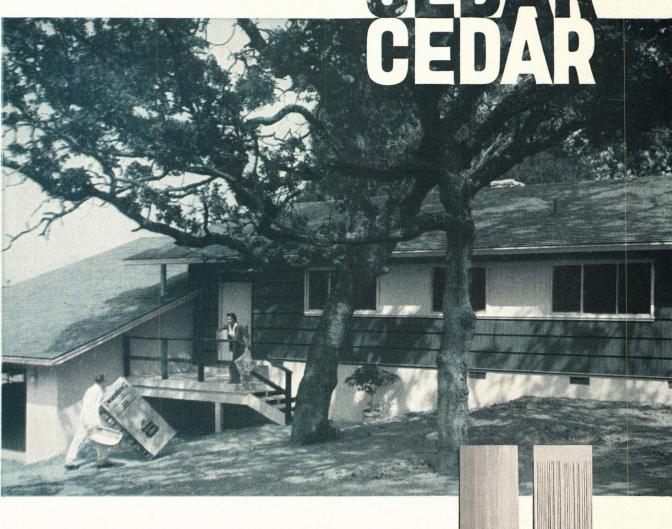
Street.....

City......Zone....State......

Quality will keep your houses moving. Especially quality in design . . . exterior quality . . . visible quality that makes a favorable first impression. This is one of the reasons so many successful builders today feature cedar shingle roofs and cedar shake walls. Cedar is the genuine. It appeals to the buyer of good taste. The buyer of sound . . . it moves judgment. The buyer who will not compromise with quality. houses

The buyer who, more and more, is becoming the typical buyer. That's why you should be moving up to cedar.





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.





start on p 199



LEVITON specification grade Switches and Receptacles

Compare Leviton wiring devices under any conditions . . . Leviton gives you the utmost in performance at minimum cost . . . with absolutely no compromise in quality.

SPECIFICATION GRADE INCLUDES

The Complete "5000" Line

Combination Line
Lev-O-lock Line
Quickwire Line
U-grounding Devices
Interchangeable Devices
Lev-O-let Line

CHECK THESE TYPICAL FEATURES

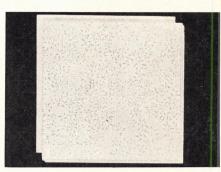
- · Heavily sectioned molded phenolic bases.
- Full gauge straps, completely rust proofed and riveted to assemblies.
- Plaster ears wide and break-off types.
- Terminal screws with large heads to accommodate No. 10 conductors and backed out for quick wiring.
- Individually packed with mounting screws attached to straps.
- All switch mechanisms utilize high grade bronze for wide, double wiping contacts.
- · Assemblies riveted for permanence.
- All power outlets have double-wiping phosphor bronze contacts.
- Meet U.L., C.S.A. and Federal Specifications.



Samples on Request

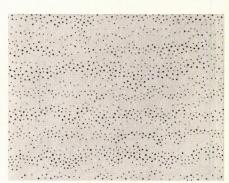
LEVITON MANUFACTURING COMPANY BROOKLYN 22, N. Y.

Chicago • Los Ángeles • Leviton (Canada) Limited, Montreal For building wire and cable contact our subsidiary: AMERICAN INSULATED WIRE CORP.



Decorative ceiling is possible with a new tile from Johns-Manville that is printed with gold leaf patterns. Decrobord panels come in 12"x12" tiles ½" thick. They are packed 64 sq ft to the carton. Panels have the Johns-Manville "lightning joint" to hide nails or staples and to speed installation.

Johns-Manville, New York City. For details, check No. 32 on coupon, p 240



Directional pattern of the perforations in Celotex' new Strata pattern acoustical tile can be used to increase apparent length or width of any room. Each tile has 1,800 drilled holes for sound control, double coat of vinyl paint for extra whiteness. Strata tiles come in 12" x 12" and 12" x 24" sizes with patented joint for staple installation.

Celotex Corp, Chicago.

For details, check No. 33 on coupon, p 240



New epoxy glue from Permacel is specially designed for adhering junction boxes to concrete or masonry walls. The two-part adhesive will tack a box in place in less than two minutes. After the resin is mixed, it has a pot life of 30 minutes; at 70F it will cure to full strength in three to four hours. Cured bond is stronger than the wall itself.

Johnson & Johnson, N Brunswick, N.J. For details, check No. 34 on coupon, p 240



Safety stair treads have two 1" abrasive friction strips built into the leading edge. They also have an added 1/16" thickness of rubber wear surface in the first 4" of step area. New tread comes in four lengths—36", 48", 66", and 72"—and in 27 colors to match company's floor tile and core base designs.

Burke Rubber Co, San Jose, Calif. For details, check No. 35 on coupon, p 240



Weather and insect seal is provided by a new aluminum threshold and scuff plate. The threshold has no toe- or heelcatching edges and no dirt-catching undercuts. The scuff guard can be installed on either side of door, has full-width vinyl tube to form tight pressure seal. Finish is mill, polished, satin, or gold anodized.

Skuff Guard, Inc, Miami.

For details, check No. 36 on coupon, p 240

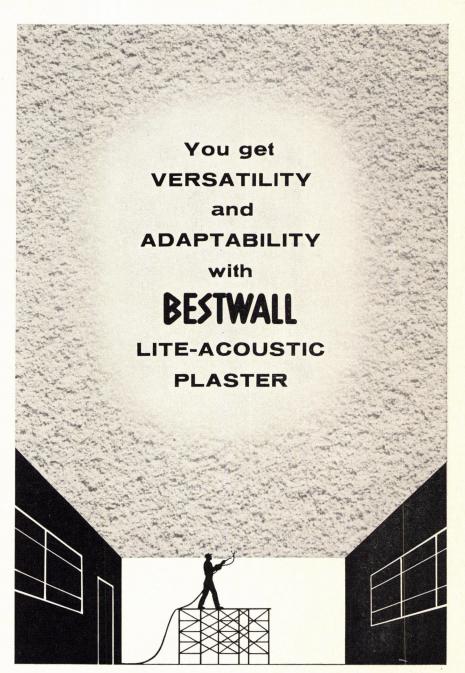


New pool system is designed to bypass specialty contractors, make installation a job for builder's crews. Sidewalls are formed of flexible corrugated steel that will take any shape, will flex with freeze and thaw cycles. Floor is made of reinforced concrete. Earth is backfilled against steel form, capped with a reinforced concrete ring. Average pool should go in place for less than \$2,000.

Coraloc Industries, Los Angeles.

For details, check No. 37 on coupon, p 240

Publications start on p 225



Bestwall Lite-Acoustic can be applied over monolithic surfaces, wallboard, oil paint—any clean, firm, water-resistant surface. It is designed for machine application, and various textures are easily obtained by simply adjusting the nozzle.

Also, Lite-Acoustic is highly sound-absorbent—noise reduction coefficient is .55-.60—and provides a highly decorative texture. The white finish reflects up to 69% of light, the ultra-white 74%.

Get complete information on Bestwall's full line of lath and plaster from your Bestwall representative.

BESTWALL GYPSUM COMPANY

Ardmore, Pennsylvania

Plants and offices throughout the United States



These values are writing sales history



RADIO INTERCOM MUSIC SYSTEMS The TRUE FIDELITY

reception of these versatile systems has shot the sales curve right off the chart since they were introduced. AM and FM radios, inside and outside speakers and stunning master control panels in antique copper or satin chrome.



BUILT-IN CANOLECTRIC AUTOMATIC ELECTRIC CAN OPENER Automatic

can openers are the cash register filing idea for '60 and the Trade.

of them all Ones and she hot item Wind Canolectric is the hot item
of them all. Opens any size can and delivers
it to vany waiting hand with inst the press of of them all. Upons any size can and delivers one hutton. The only huilt-in alcotric can it to your waiting hand with just the press of one button. The only built-in electric can one new construction or when one button. The only built-in electric can remodeling Stainless steel or antique conner. opener_ideal for new construction or when remodeling. Stainless steel or antique copper.



VENTLESS HOODS Again Trade Wind stole a march on the industry with dual filters (dual grease filters and dual activated carbon filters) to get BIG results—both in performance and in snowballing sales. The ventless really describe in horizontal sales. does the job and requires no ductwork. 30", 36" and 42" lengths in coppertone or satin chrome.

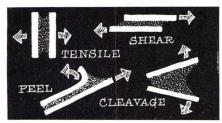


Write for information:

Trade-Wind

DIVISION OF ROBBINS & MYERS, INC.

7755 Paramount Place, Department HH Pico Rivera, California



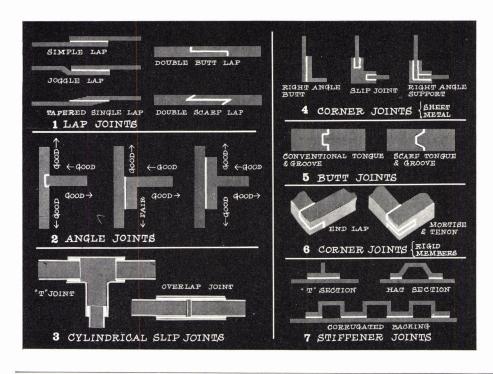
GLUED JOINTS work well in tension and shear, poorly in cleavage and peel.

Short course in industrial gluing

Basic information on products available, design concepts, joint designs, surface preparation, application techniques, and bonding equipment is contained in 3M's 12-page folder on structural adhesives. Besides straightforward how-to-do-it information like that given in these illustrations, the booklet shows many examples of uses and processes drawn from industry.

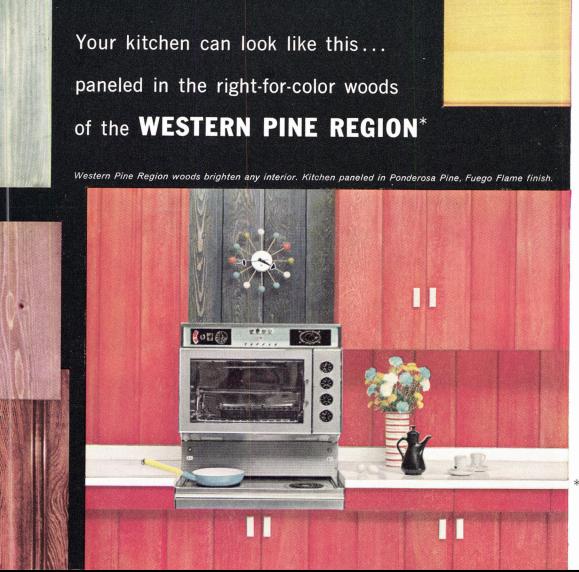
Minnesota Mining & Mfg Co, Minneapolis.

For copy, check No. 38 on coupon, p 240



- **1** Lap joints are improved by designing joint to bring adherends in line with load and to reduce peel and cleavage stresses.
- **2** Angle joints need careful design to avoid peel and cleavage. These three work.
- 3 Slip joints in tubing are a special case in lap joints. All adhesive contact area works in carrying the load.
- 4 Corner joints in sheet metal are made as a right-angle butt or with corner hardware. Void-filling adhesives work best.
- 5 Various types of t&g joint extend glued area, reduce glue-line thickness, offset weakness of butt joint in cleavage.
- 6 Corner joints in rigid members work best when glued area is large enough to resist racking and twisting, as these end-lap and mortise & tenon joints.
- **7** Stiffeners are readily bonded to thin sheets to cut deflection and flutter. Glued area should be big to minimize peel.

Publications continued on p 232



ONE IDEA CAN SELL A HOUSE

Everybody loves wood. Everybody loves color. So give your model home the double appeal of natural wood . . . and contemporary color. Install a room like this . . . paneled in Western Pine Region woods . . . finished in color. You'll stop shoppers cold. Chances are their appetites will have been whetted by our advertisements in American Home and Better Homes & Gardens. But to really sell them . . . there's nothing like the real thing . . . an actual room paneled in one of the right-for-color woods of the Western Pine Region.

For more information on color finishing Western Pine Region woods and a sample package of HELPFUL HOME MERCHAN-DISING AND SALES AIDS, write to: Western Pine Association, Dept. 430-V, Yeon Bldg., Portland 4, Oregon.

Western Pine Association



member mills manufacture these woods to high standards of grading and measurement...grade-stamped lumber is available in these species

*Idaho White Pine•Ponderosa Pine•Sugar Pine
White Fir•Incense Cedar•Douglas Fir•Larch
Red Cedar•Lodgepole Pine•Engelmann Spruce

Today's Western Pine Tree Farming Guarantees Lumber Tomorrow

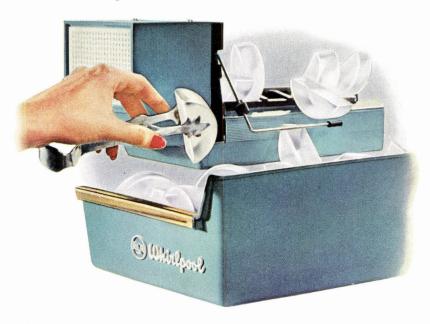
NEW HOUSE IDEAS YOU CAN MERCHANDISE...

NEWEST NO-FROST



REFRIGERATOR-FREEZER

with IceMagic[®] ice maker replaces every cube...automatically!



IceMagic is an important "extra" that really appeals to modern home buyers . . . a powerful sales feature available only in the all-new RCA WHIRLPOOL refrigerator-freezer line. Exclusive IceMagic makes distinctive, half-moon shaped ice cubes and stores them in a convenient ice bucket that can be used for serving. As cubes are taken from the bucket, they are automatically replaced; no trays to fill, no prying of cubes, no mess or fuss. Ice cubes are always ready for immediate use.

ELECTRIC OR GAS

RCA WHIRLPOOL refrigerator-freezers are made in both electric and gas models . . . in a wide variety of sizes to meet practically every need. They fit flush . . . can be built in. Another powerful sales feature!

Your family will love our family of home appliances

RGA UNIVERSE

Products of WHIRLPOOL CORPORATION St. Joseph, Michigan

It's easier to sell
*Tmk. RCA WHIRLPOOL equipped homes!

frost
never
forms
in the
refrigerator
OR THE
FREEZER
BECAUSE . . .

...all frost-gathering coils are located outside the food storage areas of the new RCA WHIRLPOOL refrigerator-freezers. No frost-covered packages to pry loose; no frost-packed shelves or interior walls; no messy defrosting chores. Housewives really love this important feature. A powerful selling point for you.

All these features, too!

There's the Constant-Cold Reserve to bring cooling back to normal faster . . . Air Purifying System and Activated-Carbon Filter that removes up to $97\frac{1}{2}\%$ of objectionable food odors . . Million-Magnet* door that seals all around . . . Jet-Cold* Shelf that chills food and beverages faster . . . Jet-Cold Meat Chest that maintains ideal meat storage temperatures . . . and many more outstanding features, all to help you sell.

Mail coupon for full details

Contract Sales Division Whirlpool Corporation, St. Joseph, Michigan	HH-6-0
Please send complete information on the new line of RCA WHIRLPOOL gas and electric refrigerator-freeze	ers.
NameTitle	
Firm Name	
Firm Address	
City	Zone
CountyState	

USEFUL THINGS FOR BUILDERS

Luxurious styling; unique vinyl effects; 2 distinctive designs – Armstrong Futuresq Corlon



Two dramatic, new designs in Armstrong Sheet Vinyl Corlon give your homes some special decorative and practical appeals. Both make full use of the unique properties of vinyl: its translucency, its strength, and the way it can be formed into fascinating visual effects.

The design illustrated by the swatch at the left—Futuresq Supreme (style 86854)—features shimmering pearlescent effects (a new effect in floor decoration), elegant colorings and trans-

lucent vinyl "pools" that have intriguing depth.

Futuresq Corlon (shown below, style 6804) has glittering metallic particles set in richly colored vinyl chips. The surface looks textured, but actually, it's satin-smooth.

Since Futuresq Corlon comes in long rolls, 6 ft. wide, it can be installed with next to no seams—providing a virtually unbroken sheet of vinyl from wall to wall. It gives home owners floors that require the very minimum of care—floors that have an appealing, built-in look.

Here's the data on these two new floors:

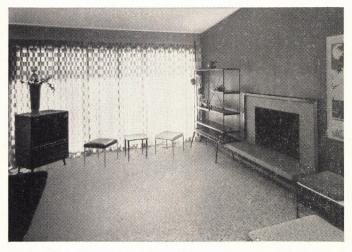
recommended uses: in any room; Futuresq Supreme can be used above, on, and below grade; Futuresq can be used above grade; durability: excellent; ease of maintenance: excellent; approximate cost per sq. ft. installed: 85¢; colors: 10 in Futuresq, 8 in Futuresq Supreme. For free samples and specifications of Armstrong floors, as well as merchandising help and other valuable services,

call the Architectural-Builder Consultant at your Armstrong District Office. Or write to Armstrong, 306 Sixth Street, Lancaster, Pennsylvania.



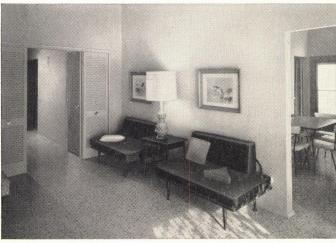


TO KNOW ABOUT VINYL FLOORS



Switch from Tile to Sheet Vinyl Floors Gives St. Louis Builder more buyer appeal

The built-in, permanent look and the well-known easy care of Armstrong sheet Vinyl Corlon are features that Mayer-Raisher-Mayer, progressive St. Louis builders, didn't have in the days when they used resilient tile floors in their Paddock Hills model homes. They report that Corlon contributes substantially to the distinctive impression that their model homes make on prospects' minds. And obviously the people who buy these homes think that the extra money the builder pays to have Armstrong Floors installed is an excellent investment, for most of them choose sheet Corlon.







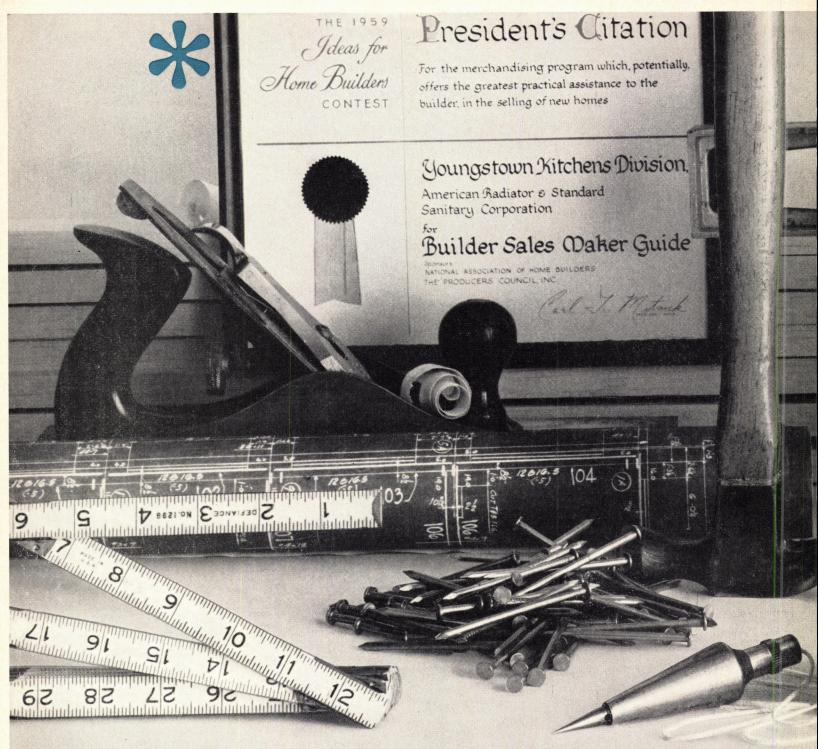
Decorator service offered to builders - without charge

Skilled, experienced designers at the Armstrong Bureau of Interior Decoration will gladly help you or your consultants decorate your model home. They'll provide color schemes, custom floor designs, and decorating plans which are all tailored to your homes and to your prospects' tastes. If you

wish, they will compose an assortment of color schemes from which buyers of your homes can choose. This decorating offer is an extra which Armstrong has designed to serve you. It shows prospects that you're out to help them in every way, and it doesn't cost you a cent.



SHEET VINYL CORLON • LINOLEUM • EXCELON (Vinyl-Asbestos) TILE • CUSTOM CORLON and OPALESQ (Homogeneous Vinyl) TILES • LINOTILE • RUBBER TILE • CORK TILE • CUSTOM VINYL CORK TILE • ASPHALT TILE



You need a blueprint

Selling homes (like building them) takes planning, equipment and skilled manpower. But do you have time to plan and follow through on constructive selling? Here in the BUILDER SALES MAKER GUIDE are all of the ingredients to help you do the job:

Selling Strategy. The *Why* of the GUIDE: To make your selling more *profitable*. The *How*: Experienced and detailed merchandising aid.

Selling Tools and Materials. Newspaper Advertising (mat and layouts). Radio & Television (scripts). Direct Mail. Publicity (news and feature releases). Your Open House. Promotion Timetable. Displays. Literature. Merchandising Aids.

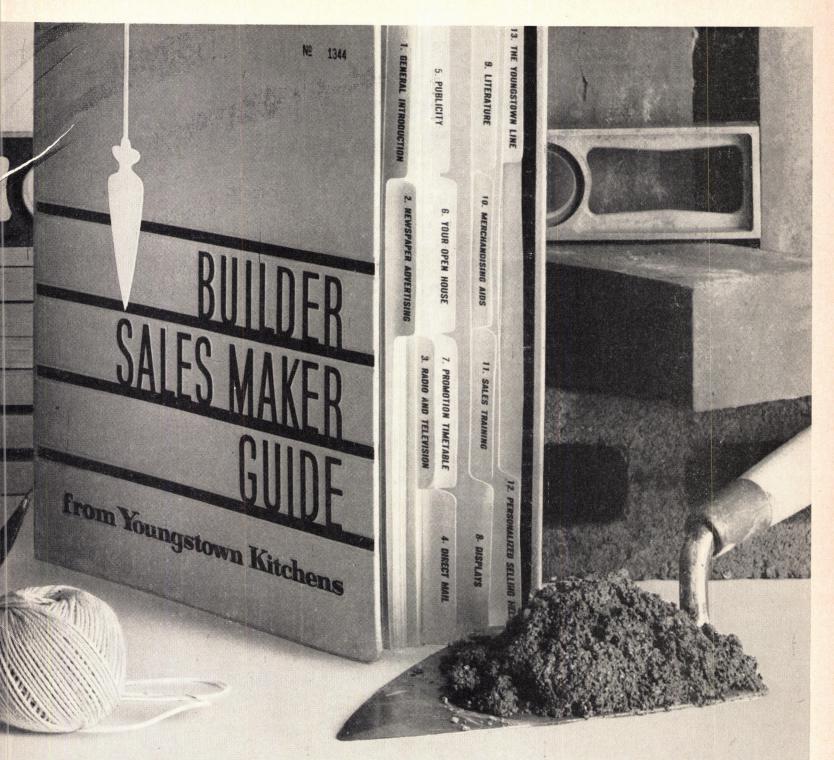
The GUIDE is complete, compact, concise . . . adaptable to

your needs. Includes advertising frequency and tie-ins.

Sales "Help." 30-minute sound slide film for your personnel: "We Can Help You Sell." New ideas, new methods of selling. What people buy when they buy any product (including a house), and the reasons why!

How Youngstown "manpower" can help you. A sample brochure and mailing piece shows how your kitchen will look. It's available to you when you install either Youngstown Steel or Woodcharm Kitchens in your homes.

A Youngstown Kitchens planning expert can lay out your kitchen installation to meet all VA and FHA requirements. You can take advantage of the Youngstown Kitchens Color Selector Kit and Plan-A-Kit, for accurate designing and decor selection in a wide range of kitchen plans.



for selling homes, too!

The Youngstown Kitchens Line. Presentation of the complete '60 line. It reflects the growing trend in the building industry today: Home-buyers want more *quality* in a home. They're ready to pay *more* to get it. This trend is of utmost importance to your future success.

Ask your Youngstown Kitchens Representative how you can get a BUILDER SALES MAKER GUIDE. It's your blueprint for building home sales.

Thank you, NAHB...for awarding FIRST PLACE to Youngstown Kitchens in your "Ideas for Home Builders Contest" for our SALES MAKER GUIDE.

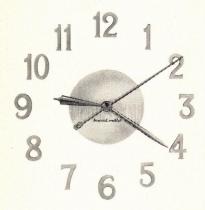
Thank you, Mr. C. T. Mitnick, Past President, NAHB... for your citation. "For the merchandising program which, potentially, offers the greatest practical assistance to the builder, in the selling of new homes." This assures us we have reached our goal.



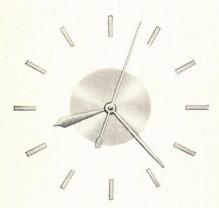
American-Standard, Youngstown Kitchens Div., Box No. HH660, Warren, Ohio Please send me further information on Builder Sales Maker Guide.				
100	epresentative call on me.			
Name				
City		State		

HOWARD MILLER

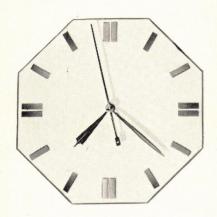
HOWARD MILLER BUILT-IN CLOCKS tell much more than just the time; they bespeak excellent taste and discernment!







Model 6721—Satin Brass, Copper, Chrome or Black Finish. 9" to 12" diameter. \$15.95



Model 6735—Polished brass hour markers mounted on mat finished white or black polystyrene panel. Brass hands. 11" overall. \$15.95

UL Approved

Easy installation according to template and complete instructions furnished. Write for complete, illustrated literature. Other models dial diameters to 24" and custom clocks to your specifications.

BUILT-IN DIVISION

howard miller clock company
ZEELAND, MICHIGAN

Publications

start on p 225

Floor tile guide

Mastic Tile has just published color comparison charts for the asphalt and vinyl asbestos tile lines packed by the 13 leading manufacturers. The charts list basic colors for marble, color chip, metallics, textured, and cork patterns. Model numbers from each maker's line are then keyed to the base colors. Charts are on heavy stock, punched to fit an $8\frac{1}{2}$ " x 11" binder.

Ruberoid Co, Newburgh, N.Y. For copy, check No. 39 on coupon, p 240

Separate mechanical contracts

The National Assn of Plumbing Contractors has just issued a public service booklet pointing out the virtue of splitting heating, plumbing, and electrical contracts from the general contract. Separate sections list the advantages claimed for the owner, architect, contractor, public. Charts show comparative savings on various jobs.

National Assn of Plumbing Contractors, Washington.

For copy, check No. 40 on coupon, p 240

Planning plug-in wiring

Wiremold has a new 6-page folder to show you how to make the best use of strip wiring. The folder lists 146 electrical uses with their wattages. It shows how to compute current draw per room, how to locate uses and outlets. An illustration panel shows how Plugmold is fastened to any wall surface.

Wiremold Co, Hartford, Conn. For copy, check No. 41 on coupon, p 240

Laminate patterns and colors

A new 8-page color brochure from Micarta shows 64 Micarta Holiday styles. Patterns include marbles, pearls, linens, spatters, metallics, wood grains, solids. Other color pictures show how laminates can be used in any part of the house.

Westinghouse, Pittsburgh.

For copy, check No. 42 on coupon, p 240

Plywood handbook

Basic information on all types of fir plywood is given in DFPA's new AIA File booklet. Two pages of tables give physical properties, types, grades, typical uses, sizes, etc. Application and use data cover floors, walls, roofs, codes, finishes, components, structural systems, concrete forms, etc. The pamphlet also includes grade markings and sample specifications.

Douglas Fir Plywood Assn, Tacoma. For copy, check No. 43 on coupon, p 240

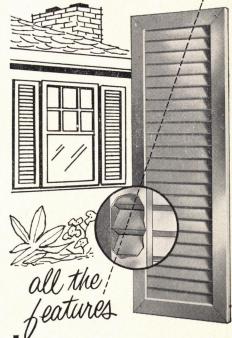
Decorative ceramic hardware

Yale & Towne has published a four-color brochure to introduce the line of its new Towne Hardware Div. The line is made up of plain and decorated ceramic door knobs, drawer knobs, switch plates, key plates, coat hooks, door knockers, and towel rings. Designs include florals, geometrics, sporting scenes, metallics, and solids. Shapes include modern, traditional, and rococo forms.

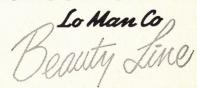
Yale & Towne, New York City.
For copy, check No. 44 on coupon, p 240

continued on p 234





home owners want



Aluminum Shutters

No other window shutters on the market . . . metal or wood . . . can match new LoManCo Beauty Line Aluminum Shutters for the combination of features and advantages builders and homeowners want! These rugged LoManCo shutters, with one piece aluminum slats locked into a heavy continuous aluminum frame, look good and last a lifetime! They provide the deeper shadow lines which set off and enhance the appearance of any window. They come from the factory completely assembled, with pre-drilled corner holes equipped with eyelets for faster easier mounting. And they're factory painted white ready for trim color. Investigate LoManCo Beauty Line Aluminum Shutters today. Ask your dealer or jobber, or write for information.

- * 100% Aluminum Construction . . . no rotting,
- ★ One piece aluminum slats locked in continuous frame . . . strong, durable, yet lightweight and attractive
- ★ Completely assembled ready for mounting . . . furnished with pre-drilled corner holes and eyelets and mounting screws
- ★ Factory painted white ready for trim color ... no prime coat necessary
- ★ Complete range of 16 sizes for all standard windows

America's Most Complete Line of Aluminum and Galvanized Louvers!



MANUFACTURING CO.

3607 Wooddale Avenue Minneapolis 16, Minn.



CELOTEX INSULATING SHEATHING

Cuts costly after-rain delays! Stays "dry as a duck under an umbrella"... because a "raincoat" of asphalt on both sides and all edges (in addition to core treatment for moisture resistance) keeps the Double-Waterproofed type "dry and ready"... even in wet weather. Build better, for less, with the best-known name in sheathing. Celotex "Life-of-Building" guarantee helps sell more homes faster, too! Your Celotex building products dealer inventories these sheathings. Call him now!



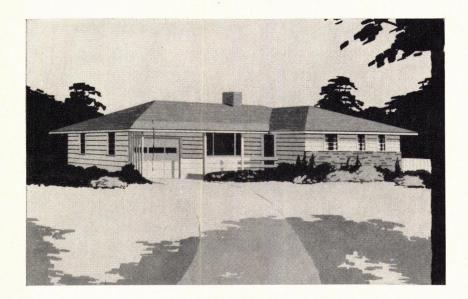
If it's "by CELOTEX"
you get QUALITY...plus!



120 SOUTH LA SALLE STREET, CHICAGO 3, ILLINOIS

Insulating Sheathings for every building requirement, every budget: Double-waterproofed, Asphalt Impregnated and Strong-Wall® (nailable) types.

Ford STYLE attracts more buyers... Ford QUALITY sells more homes!



When people invest in a home, they're apt to be careful, conservative, and forward looking. They buy with an eye to the comfort, the convenience, the economy of operating and maintaining a home . . . and they think of Re-Sale, too. They ask themselves, "What would it be worth if I had to sell it?"

That's where Ford style, Ford quality mean the most. Ford design combines modern styling with "engineered-in" efficiency of layout, the strength and economy of production manufacturing methods. That adds up for most new home customers . . .

Here's why Ford Homes add up for you, too!

- FORD lays the finish flooring, applies the drywall, does the wiring, applies the trim . . . all in one package!
- Ford quality Homes are ready for decorating 24 hours after delivery . . . lower on-site labor costs for you!
- FORD builds with famous brand name materials, equipment and components throughout; solid brass hardware, thermopane windows, top quality heating units and electrical fix-

234

- tures assure efficient, trouble-free operation.
- FORD "builds in" re-sale insurance with advanced wiring and outlet installations designed for the appliances and services of today—and tomorrow!
- FORD Homes meet or exceed FHA, VA and conventional mortgage requirements, and are accepted by leading building code authorities.

Quite a deal? You bet! And that's why you can offer more house for the money with FORD! Get your share of the quality market with the complete FORD quality package! For full details, write today on your own letterhead to Dept. HH:

IVON R. Ford INC., MC DONOUGH, N. Y.

Manufacturing and Franchise Opportunities Available

Publications

start on p 225

Hardboard manual

Masonite's new 28-page construction manual tells the full technical story of the company's hardboard line. Physical characteristics of all types and sizes are listed in tables. Working, fastening, finishing, and application instructions are given in full. Special sections are devoted to Panelok panels, Pegboard, and the hardware to go with them. Five pages are used for Masonite siding applications.

Masonite Corp, Chicago.

For copy, check No. 45 on coupon, p 240

Outdoor light fixtures

Eight pages of cast aluminum bullets in several modern shapes are included in Moldcast's new catalog. The lamps have adjustable swivel bases, specially designed louvers and lenses, gasket-sealed wiring boxes, epoxy outdoor finishes.

Moldcast Mfg Co, Newark.
For copy, check No. 46 on coupon, p 240

How to use asbestos cement

Johns-Manville tells the story of Flexboard in a 12-page construction manual. Among the aspects covered: where to use, how to apply, how to fasten, paint, and clean. Details are given on exterior walls, exterior joints, exterior corners, openings, board & batten, sheathing, interior joints, interior walls, ceilings, dance floors, etc.

Johns-Manville, New York City. For copy, check No. 47 on coupon, p 240

Built-in drapery hardware

Architects are the audience aimed at by the Kirsch Co in its new 12-page catalog. It covers cut-to-measure traverse equipment for all types of installations. Track for large glass areas and for partitions as well as regular lightweight draperies are included. Instructions cover measuring and ordering rod and track for corners, bays, curves, or other odd-shaped areas.

Kirsch Co, Sturgis, Mich. For copy, check No. 48 on coupon, p 240

Insulation manual

Owens Corning sums up its views on home insulation in a new 24-page booklet that covers design principles, design standards, application standards, as well as product descriptions. It covers insulation, ventilation, condensation, sun heat; offers specifications and standards for each. It contains detailed advice on insulating all parts of the house. New data on heating and cooling costs for 65 cities are included.

Owens Corning Fiberglas, Toledo.

For copy, check No. 49 on coupon, p 240

All about DWV tubing

Mueller Brass has a new catalog, covering all the DWV fittings made by the company, with a great deal of added information. There are comparisons of installed costs, photos of typical installations, engineering and technical information, soldering data, joining instructions, etc.

Mueller Brass Co, Port Huron, Mich. For copy, check No. 50 on coupon, p 240

continued on p 240

FOLLANSBEE

Seamless TERNE



gutter and downspout



chimney flashings



valley



window and door flashing



copings



flashings

Follansbee Terne . . . a complaint-free roofing and weathersealing metal

Every builder is aware that even minor complaints aren't good for future business—and good business is the best reason for using Follansbee Terne in the areas where inadequate materials frequently cause complaints from home owners. There are many reasons why Terne is a superior roofing and weathersealing metal . . .

First, when a roofer paints Terne, the bond between the paint and Terne's coating is excellent.—Home owners will appreciate the fact that they will not have to paint nearly as often.

Second, Follansbee Terne will last as long as the house stands. There are Terne roofs which have been in service for well over 100 years.

Third, in comparison to non-ferrous metal accessories, Follansbee Terne can be painted—a real advantage because home owners like color in such things as gutters and downspouts. Terne also gives them the opportunity to change the color of house trim to harmonize with other exterior colors.

Fourth, Follansbee Terne allows the roofer to do a better installation job.—It's easy to work with, solders perfectly because of its tin-lead alloy coating.

Fifth, Follansbee Terne requires fewer expansion joints than necessary with non-ferrous roofing metals—only one every 30 feet as compared to 8 for one metal and 3 for a second.

Sixth, Follansbee Terne, whether used for the complete roof or only for accessories, has advantages that your salesmen can point to in selling prospective buyers.

Using a competitively-priced, quality material like Follansbee Terne is good business—and helps make other sales possible. Ask your roofer or sheet metal contractor about Terne, or write

FOLLANSBEE

STEEL CORPORATION

Follansbee, West Virginia • Sales Offices in Principal Cities

KOHLER



VALVET UNIT

The Kohler Valvet interchangeable unit is engineered to eliminate the grinding action of conventional faucets. The valve is opened and closed with a piston-like movement, pressing seat against washer—with no wear on washer or seat.

POSITIVE FLOW

Water flow from spout remains constant at the volume you prefer when you turn the handle. A gentle turn shuts valve completely—a dripless seal assured.

NON-RISING STEM

Eliminates all unsightly packing residue; "O" ring needs no lubrication; prevents leakage ordinarily caused by packing wear.

EASY TO MAINTAIN

Unit can be replaced in seconds if necessary—slips into place as easily as putting your hand in your pocket—no special tools needed. Compact, easy to stock—ideal for multiple installations—schools, commercial building.

FITTING

W-Bras

All the metal in every Kohler fitting - including handles and escutcheons—is genuine brass, insuring maximum resistance to wear and corrosion, together with minimum main-

tenance. Brass also takes and holds chrome finish better than any other metal.

Star-like beauty. The Galaxy series with brushed or polished chrome finish, and the Constellation series in polished chrome, combine distinguished design with ease of operation. They fit the hand comfortably, respond to finger pressure, and complement Kohler fixtures in quality and style.

Always specify Kohler fittings for Kohler fixtures. Together they insure first quality throughout the installation, with matching beauty of style -and undivided manufacturing responsibility.

The Kohler mark of quality—on all Kohler products —is recognized and respected the world over.

Kohler Fixtures and Fittings:

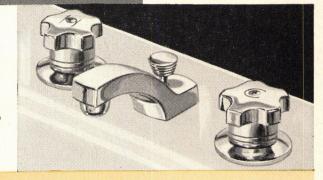
MADE FOR EACH OTHER

KOHLER CO. • Established 1873 • KOHLER, WIS.



er and bath fitting, K-6927.

BANCROFT, Constellation series, shelf-back lavatory fitting, K-7416.



KOHLER OF KOHLER

ENAMELED IRON AND VITREOUS CHINA PLUMBING FIXTURES . ALL-BRASS FITTINGS ELECTRIC PLANTS . AIR-COOLED ENGINES . PRECISION CONTROLS



W-K American-made Contractor's Transit No. 32 New for 1960 — only \$460.

BRAND NEW FOR 1960 WARREN-KNIGHT

The Finest **Contractor's Transit** You Can Buy . . . and ... AT SUCH A LOW PRICE!

If you're economy-minded AND value-minded, too, here's your transit! We've cut no corners in giving it the precision, ruggedness and features Contractors and Builders want! 24-power internal focusing telescope has finest achromatic coated lens system—5' close focus. Telescope plunges through standard for ease in sighting ahead back without resetting. Center is special alloy steel with all other parts tough cast Bronze or Brass—no die castings. Features include: ball bearing telescope axle, 2 plate levels, clamp and tangent for circle and center, double centers. Normally plain crosswires, but stadia can be installed. Complete with tripod, mahogany carrying case, plumb bob, magnifier, trivet pins. Weight only 13½ lbs.

SO DURABLE AND RUGGED IT SHOULD REQUIRE LITTLE MAINTENANCE DURING A LIFETIME OF SERVICE

Call or write for full details in Bulletin HH-60





STAIN...OR PAINT?

painted with no consideration given to staining. Experienced builders find it pays to know the advantages and limitations of each . . . the effect, performance, and cost on wood surfaces inside and outside the home. Cabot's Stains, for example, answered all requirements for the home shown at the right. Here's why more and more builders are specifying . . .



Architect: Pietro Belluschi, Cambridge, Mass. Builder: Eichler Homes, Palo Alto, Cal. Cabot's Ranch House Hues

Cabot's STAINS

- Economical ½ the cost of paints.
- Require no priming coat; are easier to apply and maintain.
- Need no thinning; surfaces need no scraping or sanding.
- Trouble-free no cracking, blistering, or peeling.
- Penetrate deeply, dyeing and preserving the wood fibers.
- Enhance the beauty of the wood grain; leave no brush marks.
- Offer unique color effects in a wide color range.
- Grow old gracefully, may be stained or painted over later.

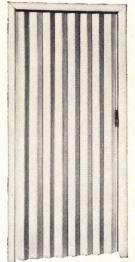
Cabot's STAINS TILE RED

For best results, the best in Stains . . . Cabot's Oil-base or Creosote Stains.

SAMUEL CABOT INC.

630 South Terminal Trust Bldg. Boston 10, Mass. Please send brochure and color cards on Cabot's Stains.

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.

Columbia-matic

FABRIC DOOR

Slashes Builders Costs

For complete details write

THE COLUMBIA MILLS, INC.

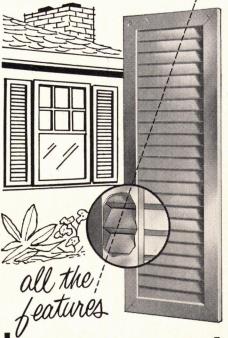
368 S. WARREN STREET

SYRACUSE 1, NEW YORK

Aluminum Shutters

FOR COMPLETE DETAILS SEE OUR AD ON PAGE 232

The only shutters with

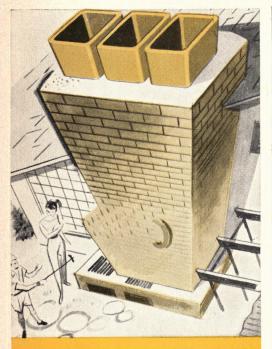


MANUFACTURING CO.

3607 Wooddale Avenue Minneapolis 16, Minn.

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	Gentlemen: Please send me complete information on new BEAUTY LINE Aluminum Shutters. NAME ADDRESS	
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e owners want	Gentleme on new B NAMEADDRESS	CITYSTATECOMPANY





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best protection against dangerous chimney and flue fires

Only Clay Flue Lining is adaptable to all fuels—coal, oil, gas and wood. With Clay Flue Lining, conversion to any new heating system, no matter what fuel it burns, is safe. Multiple purpose flues of Clay Flue Lining are safe for fireplaces, grills, incinerators. Clay Flue Lining is 100% fireproof... won't melt under heat. Chemically inert, it's unaffected by chemicals and gases... does not rust, rot or corrode. Specify and install Clay Flue Lining with confidence... it never wears out!

Write for free fireplace folder and data-filled booklet on safe chimney construction.

CLAY FLUE LINING INSTITUTE

161 Ash Street, Akron 8, Ohio

CONTACT AN INSTITUTE MEMBER WHEN YOU WANT THE BEST

Alliance Clay Product Co	Cleveland, Ohio
The Evans Brick Co	Uhrichsville, Ohio
Grand Ledge Clay Product Co	
The Kopp Clay Co	
Larson Clay Pipe Co	
Malvern Flue Lining, Inc	
Mill Hall Clay Products, Inc	
Natco Corp	New York, N. Y.
National Sewer Pipe, Ltd	
Owensboro Sewer Pipe Co	
Peerless Clay Corp	Toronto, Ohio
Thos. Somerville Co	Washington, D. C.
Straitsville Brick Co	New Straitsville, Ohio
Western Clay Products, LtdRegina, So	askatchewan, Canada
Worthington Ceramics	Worthington, Pa.

Plants and branches strategically located to serve the nation.



"How to judge a house"

This is the title of a new privately published book on home ownership. The 32-page booklet gives five rules for evaluating a house plan. It tells how to get adequate storage, good heating, wiring, insulation, etc. Special sections discuss the five biggest causes of house expense and the eight flaws most often found in old houses. A 120-point checklist for judging a house accompanies each copy. Price: \$1.

All About Houses Inc, 25 Ritie St, Piermont, N.Y.

For copy write direct to the publisher

1960 building material catalog

The new Pease Pricer, a catalog of the products of the Pease Woodwork Co, is now ready for distribution. The 110-page booklet is divided into three sections: Section I shows the 1960 line of Pease Homes—nine models of 1,055 to 1,978 sq ft; Section II covers building materials, millwork components, kitchen appliances, etc; Section III shows the new Pease Domes—

five models for holiday, utility, or display use. All prices are FOB.

Pease Woodwork, Hamilton, Ohio. For copy, check No. 51 on coupon below

Residential hardware catalog

A 12-page booklet from Stanley covers the new Surfaset line, standard swinging door hardware, sliding and bi-folding door hardware, pocket door frames, cabinet hardware, closet hardware, and exterior specialties.

Stanley Hardware, New Britain, Conn. For copy, check No. 52 on coupon below

Nail-base sheathing data

New 4-page data sheet on Graylite XXX-N½" sheathing—a fiberboard sheathing designed to eliminate cross bracing and improve nail holding—contains full information application, workability, insulating value, moisture resistance.

Insulite, Minneapolis.

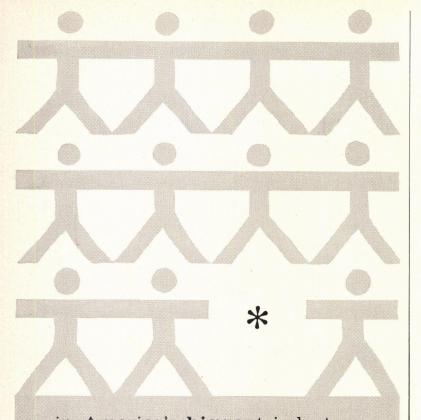
For copy, check No. 53 on coupon below

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 • June 1.	29. Swanson ventless hood 30. Roper counter broiler 31. Ductless oven hood 32. Johns-Manville Decroboard tile 33. Celotex Strata ceiling tile 34. Permacel epoxy glue 35. Burke safety treads 36. Skuff Guard weather seal 37. Coraloc swimming pool			
9. Ventarama skylight 10. Jenn-Air skylight 11. St Charles kitchen	PUBLICATIONS			
12.	38. 3 M's structural adhesives 39. Ruberoid floor tile guide 40. NAPC separate contracts booklet 41. Wiremold wiring handbook 42. Micarta pattern booklet 43. DFPA handbook 44. Yale & Towne hardware catalog 45. Masonite hardboard manual 46. Moldcast outdoor fixtures 47. J-M Flexboard manual 48. Kirsch drapery catalog 49. Owens Corning insulation manual 50. Mueller DWV tubing catalog 51. Pease building material catalog 52. Stanley residential hardware catalog 53. Insulite nail-base sheathing folder			
NAME				
POSITIONFIR	М			
KIND OF BUSINESS				
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IMPORTANT:				
House & Home's servicing of this coupon expires Sept, 1960. In addressing direct inquiries please mention House & Home and the issue in which you saw the product or publication.				
I wish to enter a subscription to House & Home for I year, \$6 \(\sigma\) 2 years, \$8 \(\sigma\) US and possessions and Canada only				
□ New □ Renewal				
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ALMOST EVERYBODY

reads





For example: practically all residential architects.

Says Architect Edward H. Fickett, AIA, Los Angeles, Calif.: "This office gives House & Home a total reading, from cover to cover. It is the most read building magazine in the office, from principal architect through junior draftsman. It gives us the 'temperature' of the buying public — what is selling and why, what is not selling and why. We search for new ideas, whether they are presented editorially or in advertising. And we find that many times the ideas are presented in advertisements in quick capsules."

Also: More Builders of more houses than read any builder magazine, more realtors, more lenders, more appraisers, more dealers and distributors, more prefabricators, more government officials regularly read House & Home.



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HARDWOOD PLYWOOD PANELING The hpi seal guarantees that the plywood you specify has met the rigid testing and inspection of the Hardwood Plywood Institute—30% more exacting than Commercial Standard. AMERICAN For more information about hardwood plywood or the Institute, write:

HARDWOOD PLYWOOD INSTITUTE
2310 South Walter Reed Drive, Arlington 6, Virginia



MOSLEY TV WIRING HELPS SELL HOMES

OVER 5,000 BUILDERS ASKED FOR THIS BOOKLET IN '59!

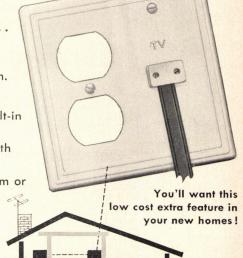
Complete packaged kits with wiring, wall plates and hardware... designed by Mosley electronic specialists for perfect-picture reception.

Gives each home a factory-engineered, built-in system that connects one rooftop antenna with two or four rooms.

(Have a set in each room or move one around.)

ALREADY USED IN THOUSANDS OF QUALITY HOMES

WRITE FOR YOUR FREE BOOKLET HH-6 NOW!



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New Fixture Beauty!

MARKEL RADIANT HALO HEAT

with CIRCULATING FAN

1000 or 1250 Watts . . . Perfect for Bathrooms, Hallways, Kitchens, Motels, etc.

Installs like a Fixture - - Heats like a Sun!

Surface Mount — Installs in Minutes to 3" or 4" Junction
 Box ● "Cherry Red" Radiant Heat ● Superior Long-Life
 Sheathed Elements ● Designed for Even Smallest Bathrooms

ONLY 10" Wide x 4 1/2" Deep

Rubber-mounted paddle wheel and low speed motor for quiet operation—keeps ceiling cool...no drafts or blasts.

Exclusive! AUTOMATIC RESET ... thermal overload safety control . . . resets automatically . . . saves



Lo-Wattage Radiant HALO HEAT

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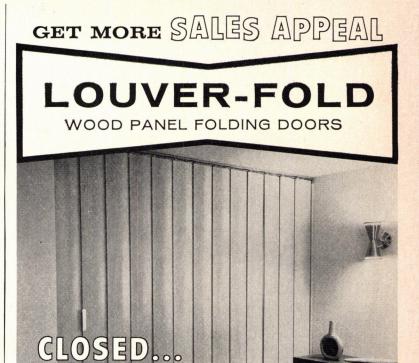
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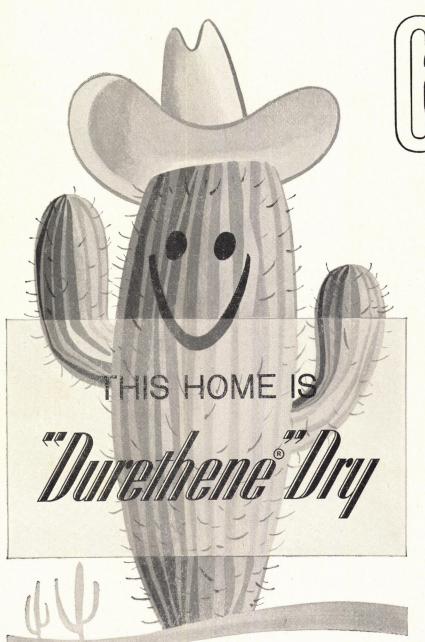


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