House & Home

JULY 1956 SIX DOLLARS A YEAR-ONE DOLLAR A COPY



Verdict of today's housing market: Time for new ideas, new models - page 108

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Report from 35 cities: Trade-ins are catching on big - page 127

THE KITCHEN SELLS THE HOME ... and NUTONE Sells the Kitchen



KEEP YOUR SALES AT A HIGH LEVEL with ... Nullone

In Builts Your Kitchen is the showcase of your new home! Nothing excites a woman's enthusiasm more than an attractive Kitchen with In-Built Appliances. Put the "Sales-Magic" of the NuTone IN-BUILT Kitchen Package in the homes you are planning. Thousands of builders agree . . . it's the greatest sales-clincher in the new home market today.

WRITE FOR CATALOGS AND INSTALLATION DATA TO NUTONE, INC., Dept. HH-7, Cincinnati 27, Ohio



NuTone HOODS available with Twin Blower also Solid Top with Wall Fan or the new Combination Fan and Hood. Five finishes fit all wood or steel kitchen cabinets. NuTone EXHAUST FANS - 10 models for wall and ceiling. \$19.95 to \$35.75 list prices.







This fabulous, new NuTone IN-BUILT Food Mixer, Blender and Sharpener is quickly installed underneath any type of kitchen counter. Stainless steel plate flush with

A 2-note door chime and modern kitchen TONE RANGE HOODS --- EXHAUST FANS --- FOOD CENTER --- DOOR CHIMES --- CEILING HEATERS



Builder: Bralei Homes, Inc. North Little Rock, Arkansas

Consoweld was supplied by Southland Building Products Co.

Bathroom wainscoting and shower stall are covered with Consoweld 10 Green Marble. This and a number of other Consoweld patterns were used.



View of Meadowcliff Addition to Bralei Homes, Little Rock, Ark.

Consoweld on walls cuts costs, helps make homes more salable

Consoweld plastic laminate, well known for counter tops in kitchens and bathrooms, is also available in an extra-thick 1/10-inch panel, easily applied to vertical surfaces with Consoweld adhesives.

Saves Money; Applied over Inexpensive Undersurfacing

Consoweld 10 is applied directly over gypsum lath, sheathing-grade plywood, cement block or, in remodeling jobs, over old plaster. Consoweld 10 makes an excellent, colorful, durable wall surfacing. It is economical to apply, and its appeal to home buyers makes it a preferred material for walls in bathrooms, shower stalls, kitchens, playrooms, libraries, stores and offices.

Beautifies Kitchen Counters, Bathroom Walls

Consoweld was used extensively in bathrooms and kitchens in the 450-home Meadowcliff Addition in Little Rock, Arkansas, by Bralei Homes, North Little Rock. Builder J. B. Bracy employed a designer, and offered buyers a choice of most of the colors and patterns in the Consoweld line. As photos show, the installations are most attractive. The harmonious colors, smooth finish, obvious durability, and low maintenance of Consoweld appeal strongly to prospective home buyers and people planning to remodel.

Consoweld Is Easier to Sell

Color-tuned Consoweld patterns are preference-tested for consumer acceptance by Color Research Institute. Consoweld helps sell houses.

Full Line Available

Consoweld provides Consoweld 6-the standard 1/16-inch thickness; the extrathick Consoweld 10; Curvatop—a preformed one-piece all-plastic laminate counter top that curves smoothly up into a 434-inch back-splash; Twin-Trim matched mouldings; and Consoweld adhesives. Get complete information-mail the coupon at right for literature.

"Twin-Trim" and "Curvatop" are Consoweld trademarks



The nation's finest plastic surfacing ... good for a colorful lifetime



Kitchen in one of Bralei's Meadowcliff Homes, showing Consoweld Tan Irish Linen pattern on counter tops. Bralei offered buyers a choice of Consoweld patterns.

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Consoweld Corpora Wisconsin Rapids,	HH76		
Send me architect-buil and name of nearest d	der file folder on Consoweld, istributor.		
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Company	-		
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City	State		

SALES SECRET: TELL BUYERS IT'S

Fight for Life

Ruberoid Color Grained Siding is *autoclaved* . . . it won't shrink ever! High pressure, high temperature steam curing takes shrinkage out – *at the factory!* Result: No unsightly gaps. No open joints for weather to penetrate. It's an extra siding sales feature your new homes get with Color Grained Siding. Sell their long-lasting beauty, too . . . tell buyers about the exclusive Duroc[®] finish that seals in beauty, seals out dirt.



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La Cienega Homes in san FERNANDO VALLEY

are all AllianceWare equipped



Bathtubs







Typical La Cienega Home Designed and built by BRS Development Co. • Plumbing Contractor-The Gluck Co. • AllianceWare furnished by Tri-State Pipe and Supply Co.

Gil Brown of BRS Development Company has installed AllianceWare in many developments, so it was natural that AllianceWare should be specified for the company's newest community-La Cienega Homes.

Situated on part of the famous La Cienega Ranch-the oldest ranch in San Fernando Valley-the La Cienega project comprises 700 three- and four-bedroom, two-bath houses in the \$13,000 to \$16,650 class.

AllianceWare fixtures-tubs, water closets, lavatories and sink and tray combinations-are used throughout.

Builders who know and use AllianceWare, select this famous sanitary ware again and again, because they have learned there is only one quality to AllianceWare-the finest we know how to produce.

AllianceWare-porcelain-on-steel-is designed to meet modern building needs. Lighter in weight for easier handling and installation. Porcelain-on-steel to assure lustrous, stainproof beauty. Formed steel to provide exactness in dimensions and to avoid useless dead weight. Furnished in 5 colors -as well as white-to meet modern interior decorative schemes.

If you do not have the complete AllianceWare catalog, we'll gladly mail a copy.

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FRIGIDAIRE DIVISION OF GENERAL MOTORS

by



Have you this FRIGIDAIRE Fact Packet?



This Architect and Builder's Portfolio of Products is filled with complete data on the eleven different Frigidaire conditioning units for both warm weather and all-year use. Places every useful fact at your finger tips. Write or wire for your packet today.

* And all of this is equally true of the complete line of FRIGIDAIRE Gas and Oil Furnaces. Full-home air conditioning is no longer a novelty, and today's home owners don't have to be content with unknown or little-known names. They look for the name they know and trust—and more people know and trust the name FRIGIDAIRE than any other name in refrigeration and air conditioning.

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This water closet does not disturb your peace of mind

The famous Case time-tested Non-Overflow One-Piece* water closet with the whispering flush...produced in 32 decorator colors and sparkling black and white. Ask your Case wholesaler or write:

*PATENTED

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BULLDOG Electrostrip

puts real HOUSEPOMER

in your homes

... makes your selling job easier!

Yes, real HOUSEPOWER to assure prospective buyers they'll have electrical outlets exactly where they want them. For modern Electrostrip provides movable outlets—outlets that can be placed and spaced at any spot along the strip. Neat and attractive, Electrostrip brings wonderful new convenience to every room in the house.

PATENTED

And it's easy to install. The strip mounts on any surface, bends around corners and obstructions. For modernization, Electrostrip connects to any fixed outlet – without even breaking into plaster. It's listed by U.L., rated at 20 amps, 125 volts A.C.

So HOUSEPOWER your homes with Electrostrip and please all your clients. See your qualified electrical contractor, distributor or BullDog field engineer. Or write BullDog Electric Products Co., Detroit 32, Michigano

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> ELECTRIC PRODUCTS COMPANY A Division of I-T-E Circuit Breaker Company



Export Division: 13 East 40th Street, New York 16, N.Y. . In Canada: BullDog Electric Products Co. (Canada) Ltd., 80 Clayson Road, Toronto 15, Ont.

THE NEW BEAUTY OF CONCRETE MASONRY





Typical Western home — a tribute to the beauty and versatility of concrete masonry.

Block is Fast Becoming a Popular Building Material in California

Nowhere are the many advantages of block valued more highly than in California and other western states. In that area, a home or building must be cool during the hot days of summer . . . warm during frosty weather ... dry when the "dew" falls . . . strong and safe if the earth should shake . . . secure against insects, rodents, fire, flood and storm . . . comfortable and dependable under all conditions.

This is a large order . . . but block fills it admirably. In fact, no other building material so completely meets all of the specifications for an adequate western type home or building.

Vibrapac Block, in particular, has much to offer the architect and builder. Produced automatically with Besser Vibrapac Machines, this popular building material is highly resistant to stress, strain, weather and moisture.



Unusual interior effects obtained with concrete block.

The many patterns, textures and sizes of concrete masonry are of keen interest to creative designers. Its adaptability is a major advantage. Churches, schools, hospitals, commercial and industrial buildings as well as homes can be built of Vibrapac block. So can any part of a building, or the entire

building, from roof to basement.

For the western scene, perhaps no characteristic of con-



California residence built with 4" high block. This beautiful home provides gracious living in the most modern manner . . . with a lifetime of satisfaction and security for its owner.

A firesafe community of 475 homes, all built of 8" lightweight block, in Hyde Park section of Las Vegas

crete masonry is as appropriate as its appearance. It blends perfectly with the ruggedly beautiful scenery for which the west is noted . . . fitting in harmoniously with mountain or valley backgrounds or semi-tropic surroundings.

Noted for its beauty, uniformity and longlasting qualities, Vibrapac Block makes new friends everywhere, not only in the west but throughout the world. Complete literature on request. Write Besser Company, Box 175, Alpena, Michigan, U.S.A.



These exceptionally beautiful block walls add character to this California patio.



Note the uniform texture and straight, sharp edges of this beautiful concrete block wall.



ALL EYES ARE ON WESLOCK NEW FASTER INSTALLATION

For Sunray®, Concave or Standard Knob Designs

New Weslock engineering has produced the fastest, easiest-to-install residential lockset on the market today!



NEW....snap-on knob catch. Just slide knob on spindle, and it snaps securely in place.

NEW... bayonet slots permit instant, accurate alignment of back plate to lock casing.

NEW...factory pre-set machine screws speed up assembly time.

Faster Installation means more profit



WESTERN LOCK MFG. CO.

Manufacturers of Weslock Residential Locksets and Building Hardware

GENERAL OFFICES: 211 NORTH MADISON AVENUE, LOS ANGELES 4, CALIFORNIA . FACTORY: HUNTINGTON PARK, CALIFORNIA

ENDURANCE...proved by torture



Proved by 529,879 bangs

This pendulum banged a 35-pound weight against a Curtis New Londoner hollow-core door 38 times per minute. After 529,879 bangs, door was good as new.



Proved in chamber of horrors

Subjected to 166 cycles of temperatures ranging from 110° to 0° F., a Curtis New Londoner door showed no peeling of face panels or changes in dimensional stability.





Proved by 642,934 slams

Slammed 72 times per minute—the equivalent of a lifetime of slamming—the Curtis New Londoner door came through this tough test unscarred—unmarred.



Proved in pea soup fog

After undergoing more than 3 months of humidity changes from highs of 90%-95% to lows of 20%-30%, the New Londoner doors were still flat and aligned.

Complete data yours on request!

	Curtis Companies Service Bureau 200 Curtis Building, Clinton, Iowa
	Please send information on Curtis New Londoner Doors.
	Name
7	Address
	CityState

ATLAS MORTAR contributes to the fine modern appearance of Northside Methodist Church, Greenville, S. C. Interior view, below, shows excellent textural effect achieved by use of concrete-block masonry. Ready-mix concrete and concrete block furnished by Greenville Concrete Company, Greenville, S. C.

Get better mortar-get better masonry!

A GOOD DESIGN deserves good materials. Atlas Mortar Cement helps assure better mortar because of its consistent high quality and because it has *all* the properties most desired by masons.

BUILDERS RELY on Atlas Mortar's smooth plasticity, its water *retention* and *workability* retention, and its uniform color. The air-entraining properties of Atlas Mortar Cement make joints more resistant to the destructive action of freezing-thawing weather.

BRICK, BLOCK AND STONE all look their best in a setting of Atlas Mortar. So for lasting good looks on

your next project, specify Atlas Mortar Cement. Complies with ASTM and Federal Specifications for masonry cement, which now include requirements for soundness (low expansion) in autoclave.

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is easy to handle

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steel work as a unit is available for all types

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in 10 foot Bundles . . .

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of masonry walls

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The Backbone of Steel for Every Masonry Wall

To preserve original beauty and strength in every masonry wall you build, use only Genuine Dur-O-waL. Dur-O-waL puts more steel per linear foot into the wall and combats cracking in all type of masonry construction. Order only Genuine, Patented Dur-O-wal. for every masonry job. Accept masonry job. Accept no substitutes.

Nationwide acceptance through means customer satisfaction for you



Write now for complete information, specifications and prices to the Dur-O-waL plant nearest you, Dept. 6D.

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WOOD TO MASONRY shelves paneling partitions

WOOD TO STEEL

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STEEL TO STEEL

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Where nails fail and Ramset® is not required, SHURE-SET fills the bill. It's the in-between tool that handles countless jobs better than concrete nails or drilling.

Here's a new fastening tool, essential to everyone who works with concrete or steel! Just pick up a hammer and your SHURE-SET KIT and you can fasten into cement block, masonry, 1/4" steel, mortar joints and other hard materials.

SHURE-SET supports and guides the fastener straight and true with pin-point accuracy. No bending, buckling, bouncing-fasteners sink into hard materials as if by magic!

STEEL TO CONCRETE downspouts

Uses no outside power; just makes your hammer power more effective. It's a "must" tool for every carpenter, electrician, plumber or builder of any kind. Especially valuable where Ramset may be too powerful.

Ask your supplier. SHURE-SET gives you a real advantage over old-style methods. Get the jump on your competition. Write now for full details.

> COMPLETE KIT contains everything you need

Ramset is the original powder-actuated method for heavy-duty fastening.

Shure-Set ... BY THE MAKERS OF Ramset® RAMSET FASTENING SYSTEM-WINCHESTER-WESTERN DIVISION OLIN MATHIESON CHEMICAL CORPORATION

12161-G BEREA ROAD . CLEVELAND 11, OHIO



For <u>Genuine</u> Beauty ... specify "TERRAZZO" pattern



Bolta

There's more vinyl in every tile of *Bolta Floor*... stays beautiful longer ...with or without wax!

For samples write:

Also available in 22 marbleized and solid colors! Here is the rich, authentic beauty of old-world terrazzo—in wonderful, modern, "soft-to-the-step" Bolta-Floor vinyl tile! Bolta-Floor is a highcontent, homogeneous vinyl floor tile that assures longest wear and lowest possible maintenance costs. Bolta-Floor will keep its gleaming beauty through years of hard use!

"Terrazzo" Bolta-Floor is produced in 15 beautiful decorator colors—and in $6 \times 6, 9 \times 9, 12 \times 12$ and 18×18 tile sizes ($\frac{1}{8}$ " or .080" gauge).

Don't settle for less! Get the genuine beauty of new Bolta-Floor "Terrazzo."





THEATRES



SCHOOLS

THE GENERAL TIRE & RUBBER COMPANY FLOORING DIVISION . AKRON 9, OHIO



manufacturer

DEVELOPED the one best glass formula out of thousands tested

PRODUCED its 3,000,000th glass-lined tank on February 14, 1956

ALL OTHER MAKES COMBINED cannot equal this record

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is out for records in heating and cooling, too!



DOESN'T COST YOU



TO INCLUDE THE **MOST OVERDUE** IMPROVEMENT

The builder's world is full of things which are simply irresistible to home buyers; things like atomic shingle nails and ultrasonic basement waterproofing, which draw buyers like a magnet. You've read about them. Delco-matic is different. It won't persuade a four-

bedroom family to settle for three and it isn't an adequate substitute for an extra bathroom.

But, it IS the most overdue improvement in any fine home because it mechanizes the LARGEST PIECE OF MOVING EQUIPMENT in any home - the garage door - and that makes a lot of sense to most people.

Delco-matic will make a lot of sense to you, too, when we tell you that it is nationally advertised in magazines such as Better Homes, U. S. News, House & Garden, House Beautiful, etc. and, further, that you can include it (and that potent name G.M.-Delco) in your new homes without one red cent of cost to you.

Just call your local Crawford Door Sales Co., listed in your classified phone book under DOORS. Call now, it's worth while.



Door Co. Crawford Detroit 5, Michigan INSTALLATION . SERVICE SALES

GARAGE DOOR OPERATORS

GARAGE DOORS

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don't leave holes

in your insulation fill them with



For the same good reasons you insulate the walls of your home, you need to permanently insulate all of your windows. *Thermopane* makes your windows selfinsulating, over the years. *Thermopane* gives you:

Warmer rooms in winter .								just	like	your	other	insulation	does
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Savings in heat bills				•			•	"	"	"	"	"	"
Savings in air conditioning		•	•		•		•	"	"	"	"	"	"
Quieter rooms						•	•	"	"	"	"	"	"
And no seasonal work-it's	pe	rm	an	en	t								
insulation; it stays in all	l ye	ar					•	"	"	"	"	"	99



Whether you buy, build or remodel your home, insulate completely—use *Thermopane* in every window. *Thermopane* is sold by local L·O·F Glass Distributors and Dealers (listed under "Glass" in the yellow pages).



Shermopane INSULATING GLASS

LIBBEY . OWENS . FORD ... A GREAT NAME IN GLASS

One new Jersey builder did it for \$1.35 permonth ! Single-glazed his house cost \$18,000 Thermopane all around added \$2.50 Monthly payments on mortgage \$1.25 Sohis home-buyers had all the confort and prestige of Thermopane for about the same cost as the cheapest otom sash (and the builder projeted instead of a atom sash sales man)

P.S. call your l.O.F Distributor for the whole story! This ad raw in the POST, June 23, Watch for full-celor ads in other national magazines.

Another fine installation of

"We're happy because we have quality fixtures and appliances throughout our home."

THREE GOOD REASONS WHY BUILDERS PREFER INGERSOLL "Engineered-Economy"

The lower cost and high quality that is provided by mass production methods lets the builder put more into his houses.

2 The durability and beauty of the acid-resisting, stainproof finish coupled with an appealing design gives complete customer satisfaction.

3 The lighter weight of porcelain-on-steel saves hours of installation and handling time . . . reduces shipping costs substantially.

Others are benefiting from Ingersall "Engineered-Economy" plumbing fixtures . . . why not you? Write, now, for complete information.



INGERSOLL PRODUCTS DIVISION Borg-Warner Corporation 1000 WEST 120TH ST., CHICAGO 43

Merrick Park Estates, Merrick, Long Island

Builders: David Taub and Julian Klein Plumbing Contractor: Lakeville Plumbing Co. Wholesaler: Edw. Sherman Supply Co.

Architect: Stanley Klein



Yes, READY HUNG DOORS® will give a house that MILL MADE look! It's easy to tell that something new has been added when a house has Ready Hung Doors!

The mortises for butts and lock have that keen-cut look that only special, precision machines can give. Door edges are perfectly straight and the lock edge is uniformly beveled by methods impossible on the job. Door clearances are not only perfectly true and uniform on every door in the house, but they have the research approved clearance to insure troublefree operation indefinitely. And the trim mitres, machine made by experts, are the kind that a skilled craftsman is proud of, tight-satisfying, and held that way indefinitely by a special fastener that can't be installed on the job.

Ready Hung Doors also give you many other hidden extras such as lock nailed header joint which is nailed from two directions-Twist or Screw-Tite nails for extra holding powerround corner hardware to give sleek, modern detail-and of course they are made of the finest, select material that only mill purchasing for a special purpose can provide.

Actually, when you stop to think of it, the fact that Ready Hung Doors save money*, is incidental to the fact that they give a house so many plus extras, as well as a lift in looks and sales appeal!

* Ready Hung Doors are delivered completely assembled, with trim or casing attached on both sides. The jamb is made in two pieces that tongue and groove together under the stop. It really takes only 20 minutes to install one because there is nothing to saw, plane, bore or mortise — there is nothing to do but slip the halves together in the opening and nail it to the wall.

CALL YOUR LUMBER DEALER . READY HUNG DOORS MADE BY THESE LEADING WHOLESALERS DAYTON, OHIO Dayton Sash & Door Co.

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READY HUNG DOOR CORP., FORT WORTH 2, TEXAS

SYRACUSE, N. Y. Iroquois Door Co. TOLEDO, OHIO Allen A. Smith Co. TORONTO, CANADA C. Lloyd & Son Limited

ST. PAUL, MINNESOTA Minnesota Wood Specialties, Inc. Frank Stevens Sash & Door Co.

22



Fiberglas-reinforced paneling

It gives your homes the touch that sells!

It takes touches of color, touches of brightness to catch the buyer's eye these days. The kind you get when you spark up a home design with Fiberglas*-reinforced paneling.

This versatile, translucent material creates a colorful modern look gives you extra sales appeal at little cost! Fiberglas-reinforced paneling turns patios, carports, entranceways, room dividers, bathtub enclosures—into eye-catching, sales-making highlights!

You can include it in this year's models, because no extensive changes

in your present designs are needed. You handle it just about the way you'd handle any other building material. It's strong, weatherproof, shatterproof, easy to cut, nail, shape—available in flat or corrugated sheets, in a wide range of colors. You can select high light transmission panels for northern exposures—or low light transmission panels for sunny exposures. And it *does* add a touch that sells!

For full details, write: Owens-Corning Fiberglas Corporation, Department 67-G, 598 Madison Ave., New York 22, N.Y.

Owens-Corning Fiberglas does not manufacture this panelingit supplies the Fiberglas reinforcement to panel manufacturers.



*T. M. Reg. O-CF Corp.



The office-lobby at Travelers' Lodge is strikingly modern in every respect. Streamline copper tubes have been cleverly used as fireplace hearth supports.



This handsome heating and with



Year-around comfort is the keynote here and Streamline copper tube and fittings help maintain it.

The Travelers' Lodge, a strikingly modern motel just opened at Marysville, Michigan, lavishes every convenience on its guests. Each room has wallto-wall carpeting, television, radio, room telephone with switchboard service, tiled bath with both tub and glass enclosed shower . . . and individual room heating and air-conditioning control. To make sure that this dial-your-own-temperature heating and air-conditioning system will be dependable at all times, Mueller Brass Co. Streamline copper tube and solder type fittings have been installed throughout. The entire water supply system, too, from the street to the shower heads, is a Streamline installation . . . those modern baths will always have water at the right temperature and volume due to these smooth-flowing, corrosion-free copper and brass lines. Even the sprawling underground lawn sprinkler system employs Streamline copper tube and fittings for the mains combined with hundreds of feet of Streamline polyethylene plastic pipe for the branch lines. In all of these installations, the non-clogging properties and freedom from corrosion or leakage of Streamline products add up to a lifetime of dependable service without maintenance for the Travelers' Lodge.

The next time you are specifying or installing materials for the heating, air-conditioning, or water supply and drainage system of a building—small or large, single or multiple units—make sure it's Streamline copper tube and solder type fittings . . . you can't do better. Write today for complete information.

There'll never be any trouble with this underground lawn sprinkler installation because it's Streamline all the way. Mueller Brass Co. valves, tube and fittings can be seen at the bottom of the picture with the long, easy-to-lay runs of Streamline plastic pipe stretching up toward the motel at the top. Note the ease with which the Streamline plastic pipe has been snaked around a large boulder (near the top of picture) encountered during the trenching.

EVERYONE POINTS WITH PRIDE TO WEISER LOCKS

Ever notice how people like to boast a little and point with pride to something that is just a little better? Well, that's the way it is with Weiser Locks.

Dealers like them because of the customer satisfaction which continues after every sale. Builders like them because they know that besides being easy to install, Weiser Locks are going to deliver years of guaranteed trouble-free performance. And homeowners like them because of their beauty and rich appearance which add dollars to the value of their home.

Yes, everyone points with pride to Weiser Locks.

WEISER LOCKS

WEISER COMPANY . SOUTH GATE, CALIFORNIA

The "Key to Better Living"



C-825-G

...opens new profit possibilities for builders of



Inland Homes are of conventional type construction and appearance. There are 12 basic floor plans and 72 exterior designs.

- The Inland package offers more than you'll find in any other pre-fab package.
- An Inland Home can be erected in less time and at lower cost. You can offer a higher quality home than your competition.
- Floor plans which give a new dimension to living—beautiful exteriors and unusual roof designs—make Inland Homes easier to finance. Their quality is readily apparent to both buyer and mortgage men.

We have a story that tells you how easy it is to get started—it's one you can't afford to overlook. We suggest you visit us and see for yourself why an Inland Home dealership is the most valuable one you could have. Write us on your letterhead for appointment — or better still, 'phone 3880, Piqua, Ohio.



1 M

now in 23 striking decorator colors

MATICO sofstep

rubber tile

If you're looking for a flooring that offers outstanding beauty . . . wide color selection . . . and unmatched utility ... be sure to consider MATICO Sofstep Rubber Tile. Available in 23 rich, glowing colors Sofstep offers other advantages, too. Sofstep Rubber Tile harmonizes with every decorative scheme or style of architecture . . . the smooth surface reduces maintenance to a minimum . . . it's quiet and comfortable to walk on . . . and it's available in low cost .080 gauge as well as 1/8" and 3/16" thicknesses.

You'll find MATICO Sofstep Rubber Tile ideal for virtually every type of installation . . . homes, institutions and businesses. For complete information and free color charts on MATICO Sofstep Rubber Tile write to Dept. 14-7 today.



4 of the beautiful Sofstep[®] colors













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ROUNDUP

Housing starts drop, but dollar volume holds up

Despite falling starts, private housing is still heading for about as good a year as 1953 and '54. Starts and sales are down chiefly by comparison with the first part of last year, when easy money fueled a big early-season bulge in output. Dollarwise, home building should do very well indeed this year on fewer but bigger houses. Some experts look for the second biggest year in history—perhaps around \$15 billion. (For more details, see p. 44.)

US takes control of scandal-tinged public housing

For the first time since public housing began in 1937, the Public Housing Administration has wrested management control away from a local housing authority. The Galveston (Tex.) HA, accused by PHA of 34 irregularities in operating 1,000 subsidized units, agreed to give up control July 1 for six months. PHA had sued for control when the local authority refused to turn over the units, but the case was dragging. The government says the authority and its former executive director, L. Walter Henslee (a former president of NAHRO) failed to account properly for \$83,552. The authority says Henslee alone is to blame.

Is military housing a hidden bonanza for builders?

"I think the new Capehart Act military housing program is going to be a bigger bonanza than 608."

The author of those sentiments—one of NAHB's recent top officers—doesn't mean the burgeoning military housing setup will produce gravy-train windfalls and investigatory scandals. He does figure the program is loaded with profit-possibilities for homebuilders who are facing dwindling civilian markets.

Having local architect-engineers design each project separately mitigates against prefab bids. The cost ceiling, a service-wide average of \$14,250 per house, falls in the price bracket many builders know. And military housing involves no sales expense. In many areas, general contractors are so busy with their own kind of work, say builders, that they don't expect too much bid competition. (For more on military housing, see p. 77).

FHA eases MPRs for old houses, aids trade-ins

FHA is beginning to ease a lot of the rules that were tightened up so much after the 608 scandals that programs did not work. It is still a slow process, goes case by case. The last 30 days brought significant progress. Easing of trade-in regulations (see p. 127) will help a little to spur such deals. But a builder or realtor still must tie up about 25% equity in the traded house.

One of the biggest hurdles to rehabilitation under Sec. 220 has been removed by specific instructions from Washington to FHA field offices to "be less specific" about applying *all* the property and construction requirements for new buildings to old ones. The new rules let field directors waive some requirements if they are satisfied the old house will meet the standards of the community and neighborhood and will remain marketable for the life of the mortgage. "Obviously," says FHA's energetic deputy commissioner, Charles Sigety, "we cannot apply new construction standards to *all* old buildings." The dictum applies to all used houses, including Sec. 203 deals where no fixup is involved.

INSIDELIGHTS: The "philanthropic investor" who paid 102 for part of the first \$12.5 million mortgage for Capehart Act military family housing was the Carnegie Corp. It is the first time the corporation has bought FHA paper. Pleased FHA officials think the purchase means a big new source of mortgage money is opening up. . . . NAREB is moving its Washington office into one of the new labor union headquarters. Come August, the realtors will trade their cramped quarters in a converted house for most of a floor in the office building just completed by the International Assn. of Machinists across the street from PHA.

NAHB's annual January convention in Chicago is getting so popular that some local chapters have been considering urging NAHB to close the show to non-NAHB members. At the moment, convention leaders feel such action would be too drastic.

THIS MONTH'S NEWS

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MORTGAGE MARKET:

Money pinch should get no worse, experts say; easing foreseen in fall

The mortgage market apparently has touched bottom. It may not ease notably until September or October (or perhaps later), but mortgage men across the nation say it should get no tighter.

Discounts on VAs and FHAs actually rose a little last month in many cities. But this was chiefly the expected adjustment of the mortgage market to the new high price of money. More builders were deciding to swallow another 1/2 point or 1 point in discount rather than gamble on a low standby commitment with warehousing. "Every month there's a little more giving 'way by builders," says one West Coast lender. FNMA prices help bar any further price slide for FHA and VA paper, too. FNMA volume continues to increase.

Mutual savings banks are beginning to show more interest in buying.

This has not meant an upsurge in loan volume, just a portent of what is to come. Volume of secondary market commitments is still thin—as it has been since the mortgage market tightened abruptly in April. Drying up of the usual flow of out-of-state money from New York and New England mutual savings banks has hurt housing in areas like Florida, Texas and California which depend heavily on outside money to finance new homes for their growing populations. Now the outlook is changing. Says Pres. Stanley Earp of Detroit's Citizen's Mortgage Corp.: "Many lenders are showing more interest now that they realize the market has hit bottom and will go only up from here. They're willing to make commitments while they can still get paper at today's low prices."

Opinions differ on how soon the mortgage market will ease enough to make discounts on $41/_2$ % government-backed mortgages shrink again.

Some mortgage bankers look for first signs of easing this month, perhaps when life insurance companies set quotas for the second half of the year. Most experts think the easing will come no sooner than September, or October. But President Walter H. Dreier of the US S & L League says: "Any one planning to build a house in 1956 should do so in expectation that mortgage terms during the remainder of the year will remain essentially the same as they are now."

On the other hand, falling starts may mean many outstanding commitments will not be filled. Mortgages seeking lenders will be scarcer by fall.

Savings deposits are rising again—good news for builders if the trend continues. The drop in savings had worried administration officials. Americans saved about \$17 billions in 1955. That was less than in 1954, and 1954 savings were a little lower than 1953. It means the US is not saving enough money to finance the rapid growth of which its economy is otherwise capable.

Construction money grew even harder to get last month. Some of this was the expected June pinch on credit in general. Some of it, lenders say, is fear of unsold homes. But this should be a very temporary squeeze.

The Federal Reserve's step-up of open market buying of short-term government obligations eased short-term money (e. g. construction loans) a little, although the effect was not felt in the mortgage market.

But prices of Treasury bonds are rising again. Mortgages always lag behind when interest rates and bond yields change. One White House aide predicts the Fed's latest moves will keep starts up to the 1.1 million mark this year, and perhaps help boost them slightly higher.

The Fed hit back at critics in and out of Congress who say its policy of tightening money to avert inflation is hurting construction disproportionately. The money managers called the rise in mortgage debt during the first four months of this year "large" compared to any year but 1950 when housing set its all time record. The Fed still expects new housing, dollarwise, to equal last year's \$16 billion, despite fewer starts.

On balance, slow sales—not tight mortgage money—have been the big brake on new housing so far this year, despite cries of NAHB officials to the contrary. This is particularly true in big metropolitan areas that have seen the biggest booms on easy-money terms during the last 12 months.

MORTGAGE BRIEFS

Discounts climb 1/2 point

Discounts on FHA Sec. 203 mortgages for immediate delivery in the secondary market rose another ½ point between May 1 and June 1, according to FHA's monthly survey.

Average price nationally was 97.8 last month, compared to 98.3 in May and 98.6 in April. The range, FHA district directors reported, varied from 99-par in the Northeast to 96-99 in the West. Latest figures:

OFFERING PRI	CES, FHA	203's	
Immedia	ate delivery		
June 1	, 1956 1	May 1 1	
ZONE AVERAGE	RANGE	-AVE	
Northeast99.7	99-par	99.8	99.8
Mid-Atlantic98.5	97-par	99.1	99.2
Southeast97.6	96.5-98.5	98.2	98.4
North Central97.1	96-99	97.9	98.5
Southwest97.6	96.5-98.5	98	98.3
West	96-99	98.4	98.6
US AVERAGE	96-100	98.8	98.6

Warehousing declines

Warehousing of mortgages by commercial banks has dipped to the lowest level in the short time that records of it have been kept.

In May, reported the Federal Reserve Board, member commercial banks had only \$1.35 billion in outstanding loans to mortgage institutions — some \$77 millon less than in February and the lowest total since last August when the Fed began collecting data.

Commitments for future warehousing were down, too. As of May 16, commercial banks had agreed to extend \$1.1 billion of added credit to mortgage lenders—\$15 million less than on February 15. Last August, unused commitments amounted to nearly \$1.3 billion.

FHA rules trusts can own 207s

FHA has eased regulations on Sec. 207 and 220 rental housing. Now, an eligible mortgagor may be a trust entity.

Previously, the owner had to be either a corporation or an association. The change will be a big help to rental project promoters, say mortgage men. Most important, it will make possible a tax saving. The trust form of ownership will exempt projects from corporate income tax. While the equity investors in the trust will still have to pay their personal income tax, at least they will avoid double taxation. And depreciation will not be locked inside the corporation.

The issue was raised over a project in Chicago near Michael Reese hospital. Mortgage Banker Ferd Kramer persuaded FHA to change the rules after six months of negotiations.

Why contractors fail

Failures of contracting firms for the first four months of 1956 ran 37.7% ahead of the same period in 1955, says Dun & Bradstreet.

Failures have been on the rise since 1952

among contractors, the credit agency's figures show:

Year Failures	Year	Failure
1951 957	1954	
1952 838		
19531.024		570*
*JanApr.		

Some publications have projected these figures into percentage increases in failures. This is probably inaccurate, since the total number of contracting firms is not updated

yearly by the Commerce Dept. Last time Commerce counted, in 1951, it found 390,000 contractors. There are no federal figures on how many were home builders.

Most failures occur with general contractors (building constructors), D&B says. Strangely enough, one cause may be the boom itself. Reason: Some contractors take on too many jobs, spread themselves too thin. If anything goes awry, they crack and go under.

Fight looms on package mortgages as retailers urge Congress to ban them

A major fight is shaping up to save the package mortgage.

The outcome will affect every builder who sells built-in appliances and equipment under VA or FHA mortgages.

Retail furniture dealers and appliance men, anxious to regain the business they lost when builders began installing household equipment in new homes, attacked package mortgages as unsound in testimony before the Senate housing subcommittee earlier this year. They argued that home buyers were paying four times what they should for "fastwasting assets" when they are financed under 30-year mortgages.

Lobbyist Julian W. Caplan of the Natl. Retail Furniture Assn. testified that \$500 of carpeting financed on a three-year term at 7% involved "total interest and credit service charges of \$105," and monthly payments of \$16.80. On a 30-year mortgage at 5%, interest would reach \$618, he complained.

(He did not point out that: 1) monthly payments on the package mortgage would be only \$2.68 instead of \$16.80, 2) the average FHA and VA mortgage is paid off in 12 years instead of 20 or 30 [which would mean a total interest cost of only \$239.32 on \$500 of equipment], 3) installation charges on built-in household equipment like air condi-

tioners, refrigerators, stoves, dishwashers, disposers bought through retailers or discount houses sometimes equal the original cost of the item-thus canceling out the entire "saving," 4) neither FHA nor the building industry has any intention of including carpetingwhich does wear out rapidly-on mortgages, anyway and 5) mortgage interest rates are low enough so it is often cheaper to borrow to install, say, a new kitchen-even if you have the cash on hand. Reason: the same money can earn more invested than the interest will cost.)

Senators call for a study

At first, the building industry did not take the attack seriously. Retailers had made efforts before to legislate their competition out of business instead of trying to compete.

But the Senate banking committee, in a surprise move, went so far as to consider amending the National Housing Act to bar FHA mortgages on equipment which would not "continue to enhance the security and value of the property for the duration of the mortgage period." Opposition inside the committee beat down the move, but the senators did ask FHA to report on what such a ban might mean. Specifically, FHA was told to

list 1) what items would be barred from mortgage-insurance under the proposed amendment, 2) how this might affect "size and utility" of FHA-backed homes, 3) "advantages and disadvantages to the home owner, 4) what effect the ban would have on industries producing household equipment and 5) how the ban would affect the home building industry.

With FHA scheduled to report back to the committee by Jan. 31, appliance dealers are looking for industry support and even leadership for their fight. Their reason is obvious-it's now estimated that \$45 million a year of major appliances sold are sold through builders in new homes on a package mortgage.

Ironically, the furniture men would probably be hurt more than the appliance industry if package mortgages were killed. A new homeowner will always buy a stove and refrigerator some way. But if he has to buy this equipment with his limited amount of cash or on short term credit, he certainly would have much less to invest initially in furniture.

More built-ins

While retailers were agitating against the package mortgage-and presumably with it the entire line of built-in appliances-more manufacturers were adding built-ins to their lines. Items:

Servel Inc., biggest maker of gas refrigerators, announced that every refrigerator in its line will be designed to fit recessed, built-in installation

Norris-Thermador announced its first builtin electric refrigerator, a self-contained stainless steel unit.

And while the fight over package mortgages grew hot, Sen. John Sparkman (D, Ala.), chairman of the Senate housing subcommittee, suggested that FHA ease up on Title I improvement loans and allow homeowners to use them to buy major appliances. FHA now restricts Title I to items which are a part of the home and are not free standing.

NEWS continued on p. 44

MORTGAGE MARKET QUOTATIONS

FHA 41/2s (Sec. 203) (b)

Bank; Chicago, Maurice A. Pollak, exec. vice pres. Draper & Kramer, Inc.: Cleveland, Jay Zook, pres., and William T. Doyle, vice pres., Jay F. Zook Inc.;

Denver, C. A. Bacon, vice pres., Mortgage Investments Co.; Detroit, Stanley M. Earp, pres., Citizens Mortgage Corp.; Houston, Donald McGregor, exec. vice

pres., T. J. Bettes Co.; Jacksonville, John D. Yates, vice pres., Stockton, Whatley,

Davin & Co.: New York, John Halperin, pres., J. Halperin & Co.: Philadelphia,

W. A. Clarke, pres., W. A. Clarke Mortgage Co.; San Francisco, Raymond H. Lapin, pres., Bankers Mortgage Co. of California.

(Sale by originating mortgagee, who retains servicing.) As reported to House & Home the week ending June 10.

	Minimum 30 yr Imme- diate		Minimum 25 ye Imme- diate	ear	10% Imme-	year, down			year, 2% down	25 year, : Imme-	2% down		25 yr. n or more
	anato	, active	uiate	Future	diate	Future	City	diate	Future	diate	Future	diate	Future
Boston local Out-of-state Chicago Cleveland Denver Detroit Houston Jacksonville New York Philadelphia San Francisco °7% down on fi	96 98 98-98 ¹ / ₂ 97-98 96-97b 97-97 ¹ / ₂ 99-par 99 98-99	a 96-961/2b 971/2 971/2 971/2-98 97 96-97b 97 99-par 99 a	97 99 98-98 ¹ / ₂ 97 ¹ / ₂ -98 ¹ / ₂ 96 ¹ / ₂ -97 ¹ / ₂ a		a 971/2 a 971/2~99 98-99 98-981/2 98 99-par 99 98-99	a a 98 a 971/2-99 981/2 98-981/2 98 99-par 99 99-par 99 a	Out-of-state Chicago Cleveland Denver Detroit Houston Jacksonville New York	96 96 96 ¹ /2-98 95 ⁵ -96 95 ¹ /2-96 ¹ /2 95 ¹ /2-96 ¹ /2 99-par 97 ¹ /2bc		par-101 95-97 97 961/2b 961/2-98 96-2-971/2 95-2-961/2 95-2-961/2 99-par 971/2bc 95-951/2	a	par-101 95-97 971/2 97-99 97-99 97-98 971/2-98 97 99-par 971/2bc 97	par-101 95-97 98 97 97-99 971/2 a 96-961/2 99-par 971/2bc 96-97

very 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.

Nores: a-no activity, b-very limited market at this price, c-price to builder.

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HOUSING MARKET:

'56 housing starts stay close to '53-'54 pace

Home building is heading for about as good a year as 1953 and 1954, in spite of the fact that sales are slowing and starts have fallen 18% behind last year.

A comprehensive survey by HOUSE & HOME of the nation's top housing markets has established in fact that in at least 10 of them 1956 starts are ahead of 1954.

Disappointment over 1956 stems from comparing it with 1955. Builders were told by some of their own spokesmen and government housing leaders (but not by HOUSE & HOME) that 1956 would be as good, if not better, than 1955 with its 1,328,900 starts. Now, the most optimistic prediction for 1956 is 1.2 million starts. Starts seem certain to equal the 1.1 million of 1953 and 1954.

George Cline Smith, vice president and economist of the F. W. Dodge Corp. has predicted that despite the drop in starts, home building dollar volume in 1956 will be the second highest in the nation's history.

The HOUSE & HOME survey showed that in 14 key market areas there were 112,028 starts in the first five months of 1956, compared to 137,269 in the same period of 1955, a drop of 18%. The 1956 total was still 1% higher than the 110,316 starts reported in the first five months of 1954, however. The survey also showed:

▶ Tight money has hurt home building only a little. Reports from most cities show starts are down this year because of fewer sales, not for lack of financing.

▶ Builders in several areas, such as Los Angeles, cut heavily into their potential 1956 sales by grabbing easy financing in 1955—notably negative no-down deals for veterans.

▶ Starts have declined much less in the Middle West (they even went up in Milwaukee). This is attributed to the conservative lending policies prevailing throughout the area, even during the easy money spree of last year.

Builders are finding that buyers who put a handful of cash

down on a house are much more particular about what they buy. The salt box which would have moved quickly on a no down deal sits empty in a competitive buyer's market. On the other hand, some builders are putting up as many homes this year as they did last year. Their common denominators: good location, good design and quality.

▶ While overhangs of unsold new houses are high in a few places, they are low in most. And in those few spots where there are 2,000 to 3,000 unsold homes, the supply is gradually being reduced by greatly curtailed building.

Vacancy rates among the major market areas are low in most cities and exceptionally high in none. The rate was below 1% in several places no higher than 4% in any.

Builders owe the tight money market some credit that their sales problems are not worse.

Failing to get advance commitments and construction money earlier this year, many builders were unable to start all the houses they planned. Had they started the houses, many would undoubtedly be in inventory today, begging for buyers.

In California, where the drop in starts averages 20%, Frank S. McWilliams, chairman of the Federal Home Loan Bank of San Francisco, told his board that he welcomes the slow-down. "We have been going at high speed on the coast for several years now. This present situation is a wholesome condition."

Even HHFAdministrator Albert M. Cole was starting to back away from his prediction of 1.3 million units. Speaking to NAHB directors in Washington, Cole hedged for the first time by saying 1.3 will be reached only "if there is a significant increase in the flow of mortgage funds."

Home builders could take consolation from Harlow Curtice, president of General Motors. Curtice had predicted a record year for GM, only to have customers (though he blames the money market, too) stand him up. Despite lower sales, Curtice said 1956 will still be GM's third best year.

MIDWEST IS STRONG SPOT

Coast to coast look at housing shows builders cautious but hopeful

Metropolitan area by area, HOUSE & HOME correspondents studied US housing markets last month. This is their report:

Chicago's new home market continues strong, a fact builders attribute to the area's conservative credit policies. Starts of 17,591 for the first five months of the years are down only 7% from the 19,086 of last year. Real Estate Economist James Downs Jr. cautioned that Chicago may begin to be pinched if the mortgage market doesn't loosen up soon. Another contributor to Chicago's stable housing market is its diversified industrial base, which tends to lessen any slump.

Atlanta, with starts of 5,552 (estimated) in the first five months of the year, is down 24% from 1955's 7,339. Though sales are down, few builders regard the drop off as serious. There are no large overhangs of unsold houses.

Builders of GI housing are the only men really on edge. They fear that the end of the GI program for World War 2 vets would cut their business from 25 to 60%. Says Builder Roy D. Warren. "We're in a real buyer's market and the builder who can't give good value for the money doesn't stand a chance." **Dallas,** where the building slump is sharp, reports starts down 44% from last year. Builders unanimously put the blame on the easy terms last year. Said one: "We got a lot of our 1956 sales a year early."

The shaky market has already caused some marginal builders to go out of business. It has stiffened competition so much that buyers are getting more house for the dollar than they did a year ago, despite increasing costs.

Nearly every builder has cut back. Largest reductions have been in the \$11,000 to \$13,000 price range. Centex Construction Co., 1955's biggest US builder, is reducing its plans from 5,000 to 2,500.

Dallas also had to face an overhang from 1955—an estimated 1,000 unsold homes. Starts for the first five months of this year were approximately 5,000 compared to 9,000 for the same period in 1955.

Detroit builders, after a notably fast start in 1956, have slowed down but are still running at a pace above the national average. Starts totaled 11,297 during the first five months of the year compared to 11,989 in the same period of 1955, a drop of only 5%.

A few small builders have been pinched out of the market this year due to difficulty in getting commitments and suitable land. Other large


Jumbo billboard—symptomatic of the outsize promotion stunts Los Angeles builders are using to woo customers—stands alongside a freeway in Orange County, where sales are slumping after a fabulous three-year boom. The 50 x 200' sign dwarfs model atop stepladder at its base.

builders have left building in favor of land development-subdividing and selling improved homesites to other builders.

Despite the much-publicized unemployment in Detroit's auto industry, builders say they have seen no adverse effect on sales. Nor has unemployment caused much delinquency in mortgage payments. President Stanley Earp of Citizens Mortgage Co. says most of the unemployed are men with little seniority who have not bought a home yet and probably could not have bought one very soon.

Miami, with starts down 13% from 1956, is still characteristically optimistic. Builders contend that they will make up the deficiency before year's end and start as many units this year as they did in 1955. Judging by the number of applications for CRV's pending in the Miami VA office, the builders mean it. Loan Guaranty Officer Asa Groves says builders are either looking forward to a loosening mortgage market or are adjusting their belts to mortgages at 96.

Some observers think the market is showing a tendency to split in the middle. Says one: "Five years ago builders here were working on a cross section of the public. There were homes for \$6,000 to \$15,000 with plenty of choices. Today it's either the cheap \$9,000 model with terrazzo floor or the \$14,000 to \$17,000 house."

Los Angeles starts for the first five months of the year are down 20% from last year: 42,861 compared to 51,794. But statistics do not accurately reflect the whole picture for such a complex area. Starts are way off and the inventory of unsold houses way up in Orange County. But starts are holding up well and there is no overhang at all in other places like the San Fernando Valley.

Experts estimate the area needs from 75,000 to 90,000 units a year for new residents and to replace demolished units. For two years, builders have averaged 105,000. It is estimated there are 10,000 to 12,000 unsold completed homes in the area now. But Chief Underwriter Belden Morgan of FHA predicts: "Our absorptive rate is still so great and our demand so strong that the surpluses won't be around very long."

San Francisco's home building rate dropped by nearly 30% from 1955 but builders, cagily building only on firm sales, have no overhang. They blame the drop in starts (from 16,207 to 11,270) on tighter mortgage money and the expectation of a carpenter's strike. (Carpenters want a seven hour day. Builders say they won't give it.)

Cleveland Builder Maurice Fishman, head of Precision Housing Corp., summed up his market thus: "I've never seen the building business as bad as it is now. We're cutting our starts about 50% from last year." He and others put a lot of blame on Cleveland's notorious high costs. Says Builder Herbert Luxenburg: "Cleveland has always sold less than its potential because . . . our prices are way out of line."

Through the first four months of the year there were 3,646 starts in the Cleveland area, compared to 4,341 for 1955. Contributing reasons: bad spring weather and a three-week strike of building tradesmen.

Philadelphia's housing market, off to a slow start early in the year, has begun to pull out of its slump—primed by several important developments in the suburbs. General Electric has announced plans for a new missile plant while completion of the Delaware River bridge between the Pennsylvania Turnpike and New Jersey Turnpike has stimulated activity. Starts for the first five months were down 25%.

Louisville builders expect a substantial drop from last year's volume but at the present rate 1956 will still be the third largest year in the city-county history. Starts for the first four months of the year

were 2,011 compared to 2,532 in 1955, a drop of 20%.

Several large developments have overhangs of unsold homes. One large banker, taking note of them, is already cutting back on construction loans and warning builders to slow down. One large S&L is refusing to commit itself for any big project, taking them on piecemeal, 10 homes at a time.

Milwaukee is a bright spot. Starts for the first five months of this year were 3,028, up 15% from the 2,627 in the same period of 1955. Part of the gain is due to a boom in duplex construction by builders —accompanied by a decline in apartment house building. But builders feel their conservative approach to financing has helped.

Even so, Milwaukee builders are worried. Noting the slump everywhere else in the country, they fear the same medicine is just around the corner for them. But they have no overhang and a recent Milwaukee *Journal* consumer survey indicates there will be a continuing demand for new houses in the next year.

Oklahoma City is amid a big slump. Only 1,176 starts were reported in the first five months of this year compared to 2,418 for the first five months of 1955. That is a drop of 51%. Builders say they won't build when they have to give discounts of four to five points. Almost all builders have switched to selling from models.

While quantity is falling, quality is rising. Average residential permit in May was for \$12,280. A year ago it was for \$9,240.

Phoenix starts are off 15 to 20%. No figures have been compiled for the area as a whole. Big builders like Del Webb and Del Monte, who were completing five or six homes a week, now are building no more than two. The market for expensive homes seems better than the low priced mass market—not too unusual for a resort city. Experts think Phoenix has just passed through a five year "hectic boom" and can settle down to a steady buyer's market. Bargains are still commonplace. Del Webb is offering free air conditioning in a \$13,000 home. Builder John Long sells a three bedroom home for less than \$10,000 and every home has a 28' swimming pool.

THREE YEARS OF HOUSING STARTS

(First five months)

Area		STARTS		CHANGE
	1954 5,201	1955 6,653	1956 5,878	'55 to '56 —12%
Los Angeles 4	1,131	51,794	42,861	-20%
San Francisco 1	0,927	16,207	11,270	-30%
Cleveland*	3,618	4,341	3,646	-16%
Philadelphia	1,650	2,492	1,861	-25%
Louisville*	2,607	2,532	2,011	-20%
Milwaukee	2,614	2,627	3,028	+15%
Oklahoma City	2,024	2,418	1,176	51%
Omaha	795	791	857	+8%
Chicago 11	6,057	19,086	17,591	-7%
Atlanta	5,190	7,339	5,552	-24%
Detroit 10	0,473	11,989	11,297	- 5%
Dallas {	3,029	9,000	5,000	-44%
TOTALS		137,269	112,028	-18%
All totals cover the metrope	olitan e	area.		

*Totals are for four months only.

OPERATION DEMONSTRATE



McCall's helps



These photos show the Before and After scenes, as McCall's used the magic of modern improvements to transform the exterior and interior of its Operation Demonstrate house in Cleveland Heights.



KITCHEN-Before



BATHROOM -Before



BEDROOM -Before



KITCHEN_After



BATHROOM - After



BEDROOM_After

WHEN CLEVELAND launched its city-wide Operation Demonstrate, McCall's played a key part in the program by sponsoring the complete remodeling and redecoration of a 35-year-old, eight-room house in an average residential area of the city.

Under the direction of McCall's Houses and Home Fashions Editor, Mary Davis Gillies, the old house at 2212 Grandview Road, Cleveland Heights, took on a new look—and a new life! Result: More than 15,000 families visited McCall's House of Ideas for better living.





McCall's, through its authoritative home improvement and remodeling features and its exciting new *Remodel A Room Contest*, ties in every month with national and local home improvement programs. This is of prime importance in keeping McCall's 12,000,000 readers aware of today's trend toward better living through remodeling and redecoration.

House of Ideas sell better living!

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Because more than 70% of McCall's 12,000,000 readers are home owners, the pages of McCall's are valuable guides to home betterment.



McCall's Remodel A Room Contest

Over \$35,000 worth of prizes will be awarded to winners in McCall's new Remodel A Room Contest, in which readers are invited to plan the remodeling of any room in their own home. The Contest closes January 15, 1957. This means that for five consecutive issues McCall's will be showing its readers how to live better right where they are!

If you'd like to tie-in with McCall's Remodel A Room Contest, write now for complete details. Address: McCall's Promotion Dept., Box JB, 230 Park Avenue, New York 17, N. Y.



The editorial home improvement feature, "Old House Into New," appears in July McCall's. For a 16-page special McCall's Report containing this feature, write to McCall's, Dept. AWH, 230 Park Ave., New York 17, N.Y.

McCall's Home Ownership Story Is Tops

3,290,000 homes are owned by families in McCall's total net paid circulation of 4,641,018. This represents 70.9% home ownershipa percentage that tops each of the general mass circulation weekly magazines and all of the women's service magazines.*

*Source: 50th Starch CMR Home Ownership percentages projected to total net paid circulation, ABC Publisher's Statements for 6-month period ending 12/31/55.



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'A REALISTIC PICTURE'

Median home price rose 11.2% in year; land cost up 17%, NAHB survey shows

Home builders, who bemoan their lack of statistical data on housing, will be intrigued by this new NAHB survey. Since it covered only 100 builders, its results cannot be considered infallible. But it does point up the importance of a reliable study of housing and the mortgage market.

Home prices, rising steadily since World War 2, have jumped an amazing 11.2% in one year.

An NAHB survey of 100 top builders throughout the country shows that the median home has increased in price from \$13,-050 in 1955 to \$14,508 this year.

Number of homes being built under \$15,-000 declined 30% while the volume of homes priced at \$15,000 and over rose 71% (See chart).

This trend had been noted a year ago, but few builders—or anyone else—suspected that it had gone so far so fast. NAHB Economist Nat Rogg, who han-

dled the survey, attributes the trend to two things: 1) the desire of buyers for larger and better equipped homes and 2) the rising cost of labor, materials and land.

Rogg calls land "the largest single factor." The survey showed that average lot cost is now more than \$2,600, an

ROGG

increase of 17% in one year. In 1950 a lot was 10% of sales price. In 1955 it was 15%. Now it is 18.4%. Other findings:

Builders' plans for 1956 showed that "smaller builders"—1 to 100 units a yearplan to build more, not fewer, units this year. The biggest builders are cutting back all along the line.

▶ Reports of unsold homes are common, but the number reported in the survey is not considered alarming. Most of the unsold homes were less than 60 days old.

▶ Tight money is getting tighter—construction money as well as mortgage money. Discounts are high, up to 8 points. Half of the builders said they were starting homes without firm commitments for mortgages. Of 50 who said they did not have take-outs, 20 said they were relying on warehousing.

Credit rejections of buyers have increased, although one-third of the builders said they had had no rejections this year. (Rogg noted that he could not generalize since it was impossible to tell how well any one builder screened his applicants.)

▶ The trend toward secondary financing through second mortgages or contracts for deed is up, apparently because of the corresponding trend toward higher down payments.

▶ The extra 2% down payment requirement on VA and FHA sales is having little effect on sales of most builders. Builders reported they still have plenty of units left for sale on the easier terms prevailing before FHA and VA hiked down payments 2% last July. Where the rule is hurting, however, it is hurting badly.

Though builders agreed that prices on everything have gone up, they reported no serious materials shortages. 85% of them reported profits per house down.

A gloomy picture? "I don't think so," Rogg said in a talk to NAHB directors at their continued on p. 55



Trend toward higher priced homes is shown in results of NAHB's survey of 100 leading builders. Their 1955 median home price was \$13,050. This year it is \$14,508—a gain of 11.2%. NAHB says 42% are moving to a higher price class this year, 11% to a lower class, 8% both ways (toward the center or the extremes) while 39% are staying in the same category. Replies showed a 30% drop from last year in units priced under \$10,000 and a 40% decline in houses priced from \$10,000 to \$12,500.

PRESENT SALES MARKET

	Co	mpared with	th Changes
		year ago	past month
Same		29%	38%
Better	** * * * * * * * *	13%	33%
Worse	•••••••••••	58%	29%

More than half the builders reported sales down this year, but one in seven said they were better than last year this time.

PLANS FOR 1956

	Unit	ts built	% change
	'55		from
Total 1–100 unit	17,833	17,102	-4.1%
bldrs	2,226	2,907	+30.6%
Bigger bldrs.	15.607	14,195	-9.1%
Builders plan houses this yea the good co queried and bu	r than in mpetitive	1955, refle position	ecting both

CHANGES IN VOLUME '55 TO '56

No. re	portin	g More	Less	Same
Total	93	47%	45%	8%
1-100 house				
bldrs	45	58%	33%	9%
Bigger bldrs.	48	38%	56%	6%

Most small (less than 100-units-a-year) builders plan to build more units this year than last. Most larger builders plan cutbacks.

COMPLETED, UNSOLD HOMES

Rep	porting	builders	
	No.	%	No. Units
None	36	35%	
Some	68	65%	753
Completed less			
than 30 days	41	39%	236
Completed 30 to		10	
60 days	39	37%	198
Completed more		10	-
than 60 days	28	27%	189

Only a quarter of the builders reported unsold homes completed more than 60 days. One-third had no unsold units at all.

FINANCING

	compared year ag		Changes past month	
Same		24%	28%	
Easier		0	2%	
Tighter	7	76%	70%	
Both constructio	m money	and	nonmonont	

Both construction money and permanent take-out money are tighter than a year ago.

COSTS AND PROFITS

	Same	Up	Down
Materials	3%	97%	0
Subcontractors	11%	89%	0
All labor costs	10%	88%	0
Profits/house	14%	1%	85%

There were few materials shortages reported but most builders found all costs up and their profits reduced.

* Percentages in the tables all refer to buildors reporting in the survey.



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WHEREVER YOU GO

Place Homes,

May meeting in Washington. "I think what you have is a realistic picture. Despite all the problems there will still be good markets. The builder is just going to have to work harder than ever to find them and to sell them. I think that volume will continue high and dollarwise will amount to between \$14 and \$15 billion this year."

Transition era

Rogg, former HHFA statistical chief, thinks housing has reached a transition period, moving out of the seller's market into a highly competitive buyer's market with the individual builder's problems compounded by such things as community facilities and land costs. He says:

"It does not follow that I believe a sharp decline [in home building] is in the offing. . . There are many factors on the limiting side which indicate to me it will be difficult for the next several years at least to find a volume of money, materials, developed or developable land and buyers in the same quantity that these were available in 1955.

"It is not likely that the volume of single family homes will go as high as 1.2 million again for some years to come."

Builders, long the most optimistic of all optimists, took Rogg's words soberly. But many told him they were glad to get a realistic picture of conditions—without sugar coating.

Long-range study

One immediate result of Rogg's survey: NAHB directors approved without dissent a plan for a continuing long-range housing study. They hope it will help fill the huge statistical gap which now forces builders and government housing agencies alike to depend upon informed guesswork to guide decisions. Unfortunately for builders, the guesses have too often been bad ones.

Another encouraging note on the statistical front: Congress may give HHFA authorization (with funds to come later) to revive its research program.

Korean vets, taking over VA market, now account for third to half of sales

News

Korean war veterans, a minor factor in the GI housing market a year ago, now account for a third to a half of all VA sales.

A year ago only 5 to 10% of all VA deals involved Korean veterans; World War 2 vets still bought 90 to 95% of VA homes. Six months ago, the ratio changed to 20-80 in many areas. Today, it ranges from a low of 30-70 to highs of 45-55.

In areas like Miami and Detroit where Korean veterans now constitute 45% of the GI market, builders expect World War 2 veteran buyers to fall into the minority within four months. (If Congress does not extend the GI housing bill for World War 2 vets this summer, this trend will reverse.)

How suddenly and dramatically the big GI house market is changing— VA accounted for 30% of private new houses last year—is revealed by an exclusive HOUSE & HOME survey in 14 of the nation's biggest metropolitan areas.

It is in such areas that the bulk of VA housing has been concentrated.

HOUSE & HOME correspondents talked to builders, realtors, mortgage men and VA officials—more than 150 local experts in all—to put together this picture of the changing shape of home-selling.

The survey showed Korean veterans account for 35% of all GI sales in Los Angeles and 30% in Milwaukee, Cleveland, Atlanta, Philadelphia and Chicago.

Builders say they are surprised by how much of the market Korean vets have taken. There are 6.5 million Korean war veterans eligible to buy on GI terms and they have until 1965 to use this eligibility. There are still 11 million World War 2 vets who have not used their housing rights. NAHB estimates that only about 4.5 million of these can be considered potential home buyers.

Some experts think the market among World War 2 veterans is virtually exhausted. One is the nation's biggest mortgage banker, John F. Austin, president of T. J. Bettes Co. of Houston and vice president of MBA. "In Houston," he said recently, "about 60% of our veterans have used their eligibility. Half of the remaining 40% have bought good homes through conventional financing and the other 20% will never buy homes."

continued on p. 59



May. Moreover, neither showed significant signs of picking up. FHA applications rose to 24,278 (22,132 homes, 2,146 projects), up only slightly from April's total of 23,755. VA appraisal requests dropped a little—from 45,769 in April to 44,395 in May. The low level of applications for the first five months suggests the rate of housing starts will probably continue to fall for several months to come.



Housing starts are running about mid-way between their 1953 and 1954 level. Starts totaled 108,000 in May (107,000 private, 1,000 public), for a seasonally adjusted annual rate of 1,110,000—the same as in April. For the first five months of the year, starts reached 463,000. That is a big drop from last year's 560,900 for the first five months, but better than 1954's five-month mark of 453,000 and just under the 476,800 for the first five months of 1953.

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5200 Series (Integral fin trim) Above, single sliding vent; below, strip type.

12



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For 21 years, better value for the owner, better business for the builder

... Is the VA market for World War 2 vets near exhaustion? Korea vets buy a cheaper house

continued from p. 55

In Philadelphia, Korean vet buyers increased from 515 in January to 589 in May while World War 2 buyers dropped from 1,950 to 1,344. In Chicago, the Korean vet total went from 215 in January to 699 in May while World War 2 buyers increased from 718 to 1,855. In Milwaukee, the Korean veteran figures went from 172 to 246 while the total of World War 2 buyers dropped from 670 to 629.

Korean veterans buy a less expensive home, obviously because they have less cash on hand and smaller incomes.

Average prices of VA homes bought in Milwaukee are: \$10,331 for the Korean vet and \$11,468 for the World War 2 man; in Cleveland, \$12,875 for the Korean veteran and \$13,755 for the World War 2 veteran.

Though the VA market is undergoing a substantial shift, builders are quite concerned over the World War 2 GI housing program, due to expire July 25, 1957, unless extended by Congress. Many builders said they would like to see the program die in favor of a liberalized FHA program—proposed in a bill by Rep. Olin Teague (D, Tex.) chairman of the House veterans affairs committee. It is supported in principle by NAHB. (Little hope is held for its passage this session, however.) Across the nation, as many builders prefer a one to three year extension. Representative comment:

▶ Maurice Fishman of Precision Housing Corp., Cleveland: "I've given orders to my salesmen that no GI orders are to be sold. The VA is impossible. You can't get deals closed. Every day there's a new regulation. The red tape kills you. The death of VA would be the best thing that could happen."

▶ Joseph Meyerson, vice president of Grandview Building Co., Los Angeles: "We would prefer extension of the present program for at least two years until we had an opportunity to examine all phases of a new FHA program."

Carl Metz, big Philadelphia builder: "They (VA and FHA) have overlapping functions. If it's possible they should be brought together."

▶ E. J. Pollack of Blue Ribbon Construction Co., Miami, complained that he hasn't "made a dime in three years" due to low valuations, but added: "If they stop VA, they stop 98% of my business."

One common note in builders' comments was this: no one is very concerned about the veteran—they are just worried about the effect on the home building business.

This has prompted Rep. Olin Teague (D, Tex.), chairman of the House veterans' affairs committee, to come out flatfooted against any extension of the GI program. He may yet have his way.

The Senate has passed a housing bill which provides for one-year extension of the program but there is a possibility that the House will pass no housing bill at all—not even its own. Several extension bills have been introduced in the House but Teague has blocked all but one. It merely gives builders a year to complete deals made before the cutoff date. The Senate has not acted on this bill.

MARKET BRIEFS

Boom in used homes

The used house market looks hotter than the new house market.

A new survey by NAREB says "more and more home buyers are finding the existing house the best buy" because of rising prices on new homes, result of higher building and land costs.

_NAREB said that realtors queried in the survey reported current sales volume equal to or higher than last year.

The survey, covering 220 market areas, shows that increased interest in existing homes built since 1940 has kept prices the same or higher in a preponderance of areas, especially in the \$12,000 to \$20,000 bracket. NAREB figures on the percentage of reporting areas with post-1940 houses selling at level or higher prices:

\$20,000-up . . . 58%. Under \$12,000 . . . 65%. \$12,000 to \$20,000 . . . 70%.

(A statistical report from the Boston 5ϕ Savings Bank shows prices on existing homes sold in the Boston area have risen from 4 to 5% in a year, but unit volume has declined.)

Prices of older homes, built in 1940 or before, have dropped in most areas, indicating a demand for modern—if not necessarily new—housing.

Are autos the big enemy?

BE FAIR TO YOUR FAMILY . . . BUY YOUR HOME FIRST.

BUY THE HOUSE, THEN THE CAR

(because of credit policies)

Slogans like these are beginning to crop up in home building merchandising. They mark the start of a bare-knuckles attack on what many builders regard as their chief competitors: autos and other hard goods sold on "easy terms" that load many customers with such heavy installment payments they cannot pass credit standards to buy a house.

The first slogan was the theme of Wichita's Home & Garden Spectacular last month. Wichita builders hammered on this point: "In seven out of ten cases when a family obligates themselves for \$1,000 or more, we lose a potential customer for 36 months."

The second slogan will be the theme for Houston home builders' promotion of Natl. Home Week (Sept. 15-23). "We hope the automen will rise to the bait and give us some argument," says Conrad "Pat" Harness, executive vice president of the Houston HBA. The former NAHB public relations chief figures the more discussion, the more builders will drive their point home to the public: if you buy the car first, you probably will disqualify yourself to buy a house. The campaign will be plugged in all media newspapers, TV, radio, billboards—even on bumper placards for autos.

Swing to two-stories?

Look for a gradual swing back to more traditional two-story houses. With land as expensive as it is, and with buyers pressing for more and more space, builders will have to return to two-story construction to meet demand without pricing themselves out of the market.

More and more evidence piles up that the public wants bigger houses. Items:

When the Associated Press sends out a small house plan (900 to 1,000 sq. ft.) through its floor plan service, which is widely printed in newspaper realty pages, response is relatively light, according to AP Real Estate Editor Dave Bareuther. When AP syndicates plans for a larger house (1,500 or 1,600 sq. ft.) consumer response is far greater.

▶ Last year's birth rate, estimated at an all-time high of 4,100,000, made 1955 the fifth record-breaking year in a row. In 1950, the average size of the American family was 3.35 persons. By the end of 1954 it was up to 3.59 persons and still climbing.

\$40 billion in sewage building

It will require \$40 billion in new sewage disposal systems to serve residential areas in 13 eastern states where new state legislation makes such systems mandatory, the New York State Health Dept. estimates.

FROM UPSTAIRS BEDROOMS ... TO BASEMENT RUMPUS ROOM

Make the whole house









* **5300** Cylindrical Lockset. Handsome, functional for entrance doors. Four knob designs.

*** 5200** Tubular Locksets for bedrooms, bathrooms, closets.

YALE DOOR CLOSER Completely reliable and quiet operating for entrance doors.





YALE HOME SAFE Wall model fits between studs-9" deep, 16" high, 12³/4" wide. Floor model fits into joists.

YALE SLIDING DOOR HARDWARE Quiet nylon wheels on aluminum track.

a complete YALE job!



Do fullest justice to the fine homes you build—equip them from top to bottom with famous-for-quality YALE hardware. All YALE items are specially engineered and designed to give maximum service. Many advanced features are embodied in the YALE pin tumbler locksets. And another YALE feature, builders can offer single keying for exterior, interior, garage and auxiliary YALE locks. YALE Sliding Door Hardware and YALE Door Closers have exclusive features, too. And the brand new YALE Home Safe is the only fire-insulated safe at anywhere near its cost. So, why not make the whole house a complete YALE job! And keep in mind YALE 5300 & 5200 Series can be used in combination. The Yale & Towne Mfg. Co., Lock and Hardware Div., White Plains, N.Y.



Do your rooms look as large as they could ?

Costs you no more to offer much more usable space—with MODERNFOLD DOORS

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DOORS

First impressions influence home-buyers. They like the spaciousness of rooms with MODERNFOLD Doors. No doubt about it, you can make your homes more desirable with these space-saving doors. Their lifetime quality is pre-sold by outstanding national advertising. What about the cost? Actually it's no more in the long run. With MODERNFOLDS you save substantially on installation labor ... and there's no finishing or hardware expense. In beautiful decorator colors and wood-grain finishes, MODERNFOLD Doors are completely equipped; ready for quick, simple installation. You really should have all the details. Call a MODERNFOLD Distributor, or mail the coupon today.

AND WITH MODERNFOLD - YOUR HOUSES CAN FEATURE NATIONALLY ADVERTISED BASEMENTS!



Plenty of room for appliances, for moving around comfortably, for extra cupboard space with MODERNFOLDS.

MODERNFOLD national ads in American Home, Better Homes and Gardens, Living for Young Homemakers, House Beautiful and Sunset illustrate this basement.

New Castle Products, Inc. Dept. G20, New Castle, Indiana

Please send complete information on MODERNFOLD Doors.

100	Called Street States
	ZONE

In Canada, address New Castle Products, Ltd., Montreal 6. In Germany, New Castle Products, GMBH, Stuttgart.



Are plumbing contractors sponsoring national plumbing code to smother it?

A National Plumbing Code, the elusive goal of the building industry for many years, is apparently still a long way from homes.

Harry Stevens of Hutchinson, Kan., chairman of the code committee, National Association of Plumbing Contractors, estimates it will be a year or more before there is a final draft of a proposed code, although other experts have told HOUSE & HOME they think such redrafting as is needed could be done in a single weekend.

All this is proving rather discouraging to the building industry which thought the plumbing code problem had been licked with ASA approval of the A40.8 code last year. A40.8 is based on a 1951 report of a plumbing industry coordinating committee.

More and more study

NAPC cast the only vote against A40.8 when ASA approved it, contending it was not a workable code at all but only a set of standards. It is not in such form that it could be adopted by any city as a code, according to NAPC's Stevens.

Stevens, reporting at the NAPC convention in Milwaukee in June, said that his committee is currently studying and assembling information from A40.8 for presentation to the reactivated coordinating committee.

The reorganized committee will include representatives of NAPC, the American Society of Sanitary Engineering, the American Public Health Assn. and the Building Officials Conference of America. The US Public Health Service has agreed to sponsor the work, subject to Congressional appropriation. Among the consulting organizations: VA, NAHB, HHFA.

Stevens admits that with the help of NAPC's new technical chief, Albert Morgan, a code could be drafted in a few weeks. But he adds: "We want everyone who has any interest in the code to have a voice in its drafting. It wouldn't surprise me if this committee becomes a permanent committee to study and recommend changes from time to time. Conditions and materials change and the code will have to be kept up to date."

Minority against standards

Although Stevens and other NAPC leaders are giving vocal support to a national plumbing code, there is a strong minority among the association's 12,000 members who oppose any move to bring uniformity to plumbing. They oppose it for the same reason the building industry supports it: standard roughing dimensions and fixture sizes would mean less work for plumbers and lower costs for builders (and the public).

Typical of comments made by plumbing contractors opposed to a uniform code:

▶ "This would lead to a dull life for contractors and eliminate the need for trained men to do the work."

"It would eventually eliminate the small contractor and promote prefabricated industries and large plumbing contractors."

• "I feel standardization of this kind would produce more handymen and do-it-yourself people."

One man who still believes A40.8 is good enough as is for a code is Vincent Manas of Washington, D. C. Engineer Manas was executive secretary for the committee which wrote A40.8, claims 10 cities have adopted it outright while 1,100 others use it as a guide. Manas published an illustrated book on A40.8—at his own expense.

Dean Francis M. Dawson of the college of engineering, University of Iowa, and a nationally recognized authority on plumbing, also believes A40.8 is a good code. But he says: "It's obvious now that it needs changes because we have found it has a few faults."

LUMBER MARKET:

Plywood, lumber prices fall as starts stay down

In lumber and plywood prices, builders are getting the first dividend of lower housing production.

Plywood has plummeted to a $2\frac{1}{2}$ year low. The price of $\frac{1}{4}$ " AD index grade broke from \$88 per M in May, first to \$80 and then down to \$76. Plywood sheathing was moving slowly at around \$112-\$113. Some West Coast mills returned to a \$3 to \$4 higher price on both $\frac{1}{4}$ " AD index and sheathing but they were getting only a minor mixed-car share of the business. Even so, plywood production was still outstripping orders.

Standard & better 2x4 green fir randoms, which brought \$80 M in April, were down to \$74 and \$75, with some sales as low as \$73. Utility & better fir studs, which rise and fall with housing, were reported down to \$62.

Pine boards showed a weak undertone again. Sales of cedar siding hit a low level, though prices remained largely unchanged.

With low prices likely to bring production cutbacks for many a forest product, some experts now think the well-advertised rail car shortage may turn out to be not much of a squeeze, after all.

Court upholds ban on slow routing of rail freight

A federal court in Portland, Ore. has apparently ended free warehousing of unsold West Coast lumber in slow-moving freight cars.

The judges dissolved a temporary injunction which had stopped enforcement of an Interstate Commerce Commission ban against deliberately circuitous car routing. They ruled the court has no authority in the case. But they also criticized ICC for not notifying mill operators before forbidding the *continued on p. 67*



Building materials prices fell slightly in May (to 130.9 from April's 131.3). It was the second dip since materials prices began a long climb to their present record levels in July 1954. The May decline, said BLS, was caused chiefly by a 4% drop in softwood plywood and cast iron soil pipe and a 3% drop in prices of fabricated steel windows.



Boeckh's building cost index—for residential structures—continued its steady, two-year climb in May. Col. E. H. Boeckh said the jump from 271.1 in April to 273.0 in May was almost entirely due to soaring labor wages. Building paper took a big jump, from 133.8 to 138.1 and asphalt products zoomed from 104.9 to 111.9. Home building faces still more increases in costs, said Boeckh.

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Rocket 6000 sliding door hardware

Substantial—reliable Low installation labor costs Adaptable to all standard thickness doors

Grant Rocket 6000 Series hardware is simple and sturdy-but more important, it is designed for quick, easy installation, insuring low *installed cost*. Specialized engineering staffs and production facilities have created this new, smooth sliding hardware... have retained the durable, dependable operating qualities that distinguish all Grant products. The installed cost is the *last* cost.

a. Quiet, self-lubricating nylon wheels-durable and no metal-to-metal contact.

b. Note simple 2-plate design. Male and female grooves insure positive, non-slip engagement.

c. Carrier design allows $\frac{1}{4}^{\prime\prime}$ vertical adjustment. No loosening or re-setting of screws attaching carrier to door. Load capacity 75 lbs. Headroom as low as $1\frac{1}{8}$ ".

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e. Fascia track is also available.

Single wheel carrier available with side mount, apron attachment-2 slanting slots for adjustment. For doors up to 50 lbs.

108 Pages of Important Data The Grant catalog contains full data on oll sliding hardware needed in building construction. Use it as your handy reference book. Your request brings you a free copy.



product developments attract home buyers!



Grant 300 series

drawer slides

New, very low price. Easy installation means low labor cost. Drawers roll on nylon rollers—smooth, quiet, durable!

The 300 Series slides provide the feature of smoothly gliding drawers in all cabinetry. The low installed cost brings this luxury equipment within practical range of competitive builders and designers of moderate-cost apartment, commercial and institutional construction. Grant engineering and production are assurance of highly satisfactory long-lived operation.

Specification book containing full data and suggested applications, sent on request.



Grant 500 series packaged sliding door pocket frame

Installs in less than 20 minutes! Fits all standard 2 x 4 construction Furnished with outstanding Grant 7000 Series hardware.

Grant engineering and production know-how mean accurate, perfect-fitting parts for trouble-free installation on the job. Four simple adjustments allow for quick, true setting in the rough opening. Good design eliminates warpage; and Grant 7000 Series hardware completes a superior package.

Specification Folder ready-be sure you have it in your files.

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MODEL 17 — An all purpose saw that brings down trees up to 4 feet in diameter. Available with special brush cutting and clearing attachments for complete versatility 3.5 horsepower 22 lbs. MODEL 5-20 — All the versatility of the 17 with added power, lighter weight. 5 full horsepower — 20 lbs. Brings down trees up to 6 feet in diameter. MODEL EZ — Lightest, most powerful direct drive chain saw ever developed. Only 19 pounds, full 5 horsepower. Brings down trees up to 3 feet in diameter.

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CHOOSE from a full line of HOMELITE Carryable ' Construction Equipment



SELF-PRIMING CENTRIFUGAL AND DIAPHRAGM PUMPS Sizes: 11/2" to 3" — capacities to 15,000 g.p.h. for dewatering and water supply.



ELECTRIC GENERATOR SETS FOR TOOLS AND LIGHTS Complete range of sizes and voltages up to 5,000 watts.



LIGHTWEIGHT POWERFUL ONE-MAN CHAIN SAWS Complete line of saws with clearing and brushcutter attachments for every woodcutting job.

HOMELITE A DIVISION OF TEXTRON, INCORPORATED PORT CHESTER, N. Y. News

continued from p. 63

shipping method in April.

West Coast mill operators—plaintiffs in the suit against ICC—have for years sent carloads of lumber eastward by deliberately roundabout routes to give them more time to negotiate a sale in the Midwest or East in effect using the cars as rolling warehouses.

ICC banned the practice in hopes of easing an expected summertime freight car shortage. Ironically, the lumber market is now so weak it is doubtful whether there would have been a car shortage. But ICC fought to uphold its order, fearing an adverse decision could put all of its car service orders in legal jeopardy.

FTC rules a brick must really be a brick

A brick by any other name is not a brick, says the Federal Trade Commission.

Defining what can be legitimately sold or advertised as "brick" or "structural tile," FTC set down two new trade practice rules: It must be made primarily of clay or shale or a mixture of both.

It must be fused together as a result of the application of heat.

Manufactured products which do not meet these requirements must be called by the name of the basic ingredient, i.e., "plaster brick," "coral brick," "concrete brick," FTC says.

LABOR:

Drive on right-to-work laws would threaten building

Union labor is quietly getting ready for a 1957 drive to kill with one blow the right-to-work laws of 18 states.

The method: persuade Congress to repeal Sec. 14b of the Taft-Hartley act which allows states to prohibit union shops by state law. Taft-Hartley, itself, does not ban union shop agreements.

Home building's stake in the matter is big. Right-to-work laws have been a stumbling block to union organizing efforts in all the states which have them. Builders in these states—and 15 other states which have similar laws under consideration—fear that repeal of Sec. 14b would be the signal for an all-out drive to organize the home building industry everywhere. It is now about half open-shop.

Labor's strategy was mapped after a recent Supreme Court decision involving Nebraska's right to work constitutional amendment and statute. The decision plainly set forth the high court's feeling that federal law allowing a union shop prevails over any conflicting state law.

The case in point involved the Railway Labor Act, not Taft-Hartley. Employees of the Union Pacific, fired because they-did not join the union, filed suit claiming that the Nebraska right-to-work law gave them the right to hold their jobs without union membership despite a union shop contract. Local and state courts ruled in their favor but the US court overruled both.

Labor is now confident that if Sec. 14b can be killed in a revision of Taft-Hartley next year, union shops will be legal everywhere.

NEWS continued on p. 73

More and More... Bendix Mouldings Help Make the Sale!



The house you are building will sell quicker, when you add that extra quality touch with genuine BENDIX CARVED MOULDINGS on closet shelves, mantels, flush doors, wall panels, cornices or for crown mouldings and chair rails.

The elegance and glamour of BEN-DIX MOULDINGS have especial appeal to women, who are all important in the home buying decision.

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SAYS ARIZONA BUILDER T. D. DENNIS:

"Concrete block is the mainstay of our housing boom"

The charming house above is in Dennis Manor No. 1 in Phoenix, Ariz. It is one of 65 houses, each with 3 bedrooms and 1³/₄ baths, in the development. Project builder T. D. Dennis says:

"The influx of thousands of people brought tremendous growth to this Valley of the Sun and created a need for adequate housing. Almost to the man, Arizona builders met this challenge through the use of attractive, economical concrete block construction. The intrinsic value of concrete block construction is highly important to the home buyers in this area.

"Concrete block construction means speed in the masonry phase of building. It means high insulation qualities, plus that all-important yardstick of most home buyers: real economy. Concrete block has been and will continue to be the mainstay of our Arizona housing boom."

Such statements reflect the confidence many builders feel in the competitive advantages of concrete masonry houses. Attractive, comfortable concrete masonry houses are economical to build and to own. And most customers are impressed by the extra bonus features offered by concrete—unequalled resistance to moisture, decay, termites, fire.

You, too, will find that the extra sales appeal of concrete masonry houses can boom business for you.

PORTLAND CEMENT ASSOCIATION

33 West Grand Avenue, Chicago 10, Illinois A national organization to improve and extend the uses of portland cement and concrete . . . through scientific research and engineering field work





Durability in floor tile

If you want extra serviceability under heavy foot or industrial traffic . . . or floors designed especially to resist grease, alcohol, acids, alkalis, oils, chemicals and foodstuffs . . . Kentile, Inc. brings you the features you need, in a wide choice of decorative styles. Each of the tile types offer the added advantages of uniform thickness, accuracy of cutting, trueness and clarity of color, surface smoothness, built-in durability and dimensional stability... another reason why this is the world's most popular line of resilient tile flooring. Tile illustrated is Corktone Kentile.

KENTILE, INC. America's largest manufacturer of resilient floor tiles

KENTILE Asphalt Tile, Carnival Kentile, Corktone Kentile/KENCORK, Cork tile for Floors and Walls/KENRUBBER, Rubber Tile/KENFLEX, Vinyl Asbestos Tile, Carnival Kenflex, Corktone Kenflex/KENFLOR Vinyl Tile, also available by-the-yard/KENROYAL Vinyl Tile/SPECIAL KENTILE, Greaseproof Asphalt Tile/THEMETILE, KENSERTS, Decorative Inserts/KENCOVE, vinyl wall base/KENBASE, wall base.



Take Beautyware Sky Blue fixtures—complement them with darker shades of blue—contrast with tones of soft yellow and bright orange—and you have a professionally-styled bathroom decor that literally sparkles with natural beauty.

Compatible color is only one of the outstanding qualities of Briggs Beautyware. You will be proud of the smart fixture designs and gleaming, fade-proof finishes. And every member of the family will enjoy the built-in comfort, convenience and safety features.

In every way, your choice of Briggs Beautyware will reflect your good taste in bathroom fixtures—and will provide a real opportunity for fresh, new bathroom color-styling.







Color styling by Howard Ketcham, nationally famous color engineer

ALTERNATE DECORATING COLORS FOR USE WITH BEAUTYWARE SKY BLUE



BRIGGS BEAUTYWARE

BRIGGS MANUFACTURING COMPANY, 300 BUHL BUILDING, DETROIT 26, MICH.

This easy-to-care-for flooring saves up to 50% on maintenance costs!



Heavy traffic in this Budd Company R. D. C. dieselpowered passenger car has little effect on the durable J-M Terraflex floor. A quick damp mopping will restore it to its first-day color beauty.

Terraflex is especially serviceable in hospitals. Commonly used mild acids and disinfectants do not affect it . . . its nonporous surface assures a high degree of sanitation with a minimum of care.

Johns-Manville TERRAFLEX Vinyl Asbestos

tile flooring ... beautiful, colorful, incredibly durable!

ACTUAL ON-THE-JOB FIGURES show that Johns-Manville Terraflex[®] floor maintenance expense is reduced as much as 50%, when compared to the next most economically maintained resilient type flooring.

A quick damp mopping usually keeps Terraflex clean and bright . . . its nonporous surface requires no hard scrubbing . . . frequent waxing is eliminated. Despite heavy traffic service . . . spilled liquids and foods . . . abusive treatment, Terraflex retains its sparkling, new appearance.

J-M Terraflex vinyl asbestos tile, available in 17 attractive marbleized colors, is the ideal flooring for restaurants, public areas, schools, hospitals . . . wherever reliable floor service, long-wearing beauty and maintenance economy must be combined.

For complete information about Terraflex vinyl asbestos floor tile, write Johns-Manville, Box 158, New York 16, N. Y.

See "MEET THE PRESS" on NBC-TV, sponsored on alternate Sundays by Johns-Manville

Check these special TERRAFLEX advantages Maximum Service Terraflex defies kitchen oils Lasts Longer reater Lesilience. and greases . . . strong soaps will not dull its lustre. Terraflex is flexible. Made of vinyl and provides comfort and asbestos, Terraflex will outwear quiet underfoot any other type of resilient flooring of equal thickness. resists indentation. 4. Wide Color Range Easy to Clean Terraflex comes in 17 marbleized Dirt can't penetrate Terraflex's colors that go all the way through nonporous surface. A swish of a damp mop keeps it shining bright. the tile-won't wear off or wash out. ohns-Manville





Using L-M Permaline bitumized fibre pipe, a 3-man crew with a shovel operator completes 15 to 18 house-to-street sewer installations per 8-hour day at Levittown, Pa. The resulting time and labor saving, along with the use of other modern materials and methods, is reflected in values such as that shown in the attractive 2400square-foot de luxe Country Clubber at \$17,500, shown below.

Permaline Sewer Pipe saves Levitt installation time and handling costs

In Levittown, Pa., Levitt & Sons, Inc., has used 624,000 feet of L-M Permaline pipe for house-to-sewer installations during the past two years. Permaline is now used exclusively. These installations consist of $3'' \ge 8'$ Permaline bituminized fibre pipe, laid in a trench dropping from $2\frac{1}{2}$ feet at the house to 7 to 9 feet maximum at the property line. Lines vary from 52 to 210 feet, with an average of about 60 feet.

"Ease of handling and installation" are the primary reasons for using Permaline pipe, according to Levitt & Sons' superintendent of sewer construction. A three-man crew with a shovel operator makes 15 to 18 complete house installations a day. The result is "a considerable time and labor saving."

Levittown, at the big bend of the Delaware River just above Philadelphia, is perhaps the most significant development in the postwar building era. Now representing some 12,000 homes with a population of 46,000, Levittown eventually will include 17,000 houses with about 70,000 residents. Use of Permaline pipe and other modern materials and methods makes possible the excellent values Levitt & Sons, Inc., offers the public in Levitt homes.



COMMUNITY FACILITIES:

NBC 'Home' show boosts help for home builders

Home builders at last seem to be convincing some of influential people outside the industry that the community facilities problem is too big for builders to solve alone.

Among the most recent and important converts: NBC's daytime TV program, "Home," which has just devoted major portions of its show for 10 days to what became television's first serious look at housing problems. "Home" focused on community facilities in Dayton and Detroit.

Home builders glowed as "Home's" hostess, Arlene Francis, said what they have been saying two years without much effect: "It isn't the houses that cause the problem. It's the children. The problem is inability of small local governments to cope with urban problems while they still cling to the pattern of the rural past. Unless they come to a solution, home building will eventually have to stop."

"Home" has an audience estimated at 2 million viewers. NAHB officials were so impressed with "Home's" treatment of community facilities they are having the presentation edited down to a 30-min. film to be made available to local associations for showing in their areas.

NAHB directors, who have had trouble getting any more than two paragraphs at a time in the public press about community facilities, have decided to try offering special inducements. They are sponsoring a contest for newspapermen, with prizes of \$1,000, \$500 and \$300 for the best three published series of no less than five articles each on the community facilities problem in the writer's area.

Jersey builders win suit against punitive permit fees

New Jersey home builders won a precedent-setting court decision against excessive building permit fees.

In a test case involving the town of Point Pleasant (pop. 6,800), the New Jersey Home Builders Assn. attacked the constitutionality of an ordinance which set permit charges on this basis: 25ϕ a sq. ft. for residential building with a minimum of \$200; 10ϕ a ft. on additions to residential buildings; and 5ϕ a sq. ft. for commercial buildings.

Home builders' Counsel Alexander Feinberg told HOUSE & HOME that a superior court ruled the ordinance illegal because it discriminated against home buildings and was designed to raise revenue. (The state constitution says money can only be raised by taxation.)

Accordingly, the only legal fee the town can impose for building permits is to cover department administration costs plus a small, "reasonable" revenue. Point Pleasant's building department costs the town \$4,500 yearly; it takes in \$9,000 (which is considered reasonable). With the raised fee, the town would have taken in \$70,000.

Feinberg said that this was the first successful case of its kind in New Jersey. The ruling will apply throughout the state.

CANADA:

Bonded heating, 20% more costly, is a hit in Toronto

Toronto home builders and heating contractors are blazing a new trail in selling quality to the public.

Home buyers are being offered an industry-wide yardstick to insure they have a proper heating system—"certified bonded heating."

It is the first time in North America the plan has been tried.

The scheme is catching on fast. Some 1,600 Toronto homes under way or about to start will have bonded heat—about 10% of the new homes in the area. Says one expert: "They figured they'd do well if they got 1,200 certified jobs the first year. They got 1,200 in a month. It shows builders will pay more for quality if they're sure of getting it."

Solves a price war

The idea arose after Toronto heating contractors grew worried 'at how competition was 1) driving prices for project house heating systems down to a profitless level—as low as \$500 per house and 2) forcing heating subs to skimp on quality of materials and workmanship. This brought standards way below those laid down by Canada's Natl. Warm Air Heating & Air Conditioning Assn. manuals—the standards required by the Natl. Housing Act. But poorly trained inspectors for Canada's Central Mortgage & Housing Corp. often failed to spot the shortcomings. The result was many a dissatisfied customer.

Basically, a bonded heating installation does no more than comply with national warm air standards. But to put teeth in the plan, a specially formed local chapter of NWA hired an engineer-inspector. To display the certified seal, a dealer must first submit his plan to one of three reviewing engineers. And the engineer-inspector must approve the completed job. Each heating contractor puts up a \$1,000 bond, guaranteeing to follow NHA standards on bonded jobs. He must make good any defects found by the inspector, under pain of losing his right to stay in the plan. Participation does not prevent a contractor from installing un-bonded jobs, however.

Advertising backs it up

The customer, presold by a \$50,000 newspaper and car card advertising drive, gets a stamp of approval on his heating system.

Toronto builders figure bonded heating costs them a 20% premium—\$100 more than a \$500 minimum heating plant. But they say it is well worth it.

Officials of the US' Natl. Warm Air Heating & Air Conditioning Assn. say they hatched the idea, but Toronto is the first to apply it. *NEWS continued on p. 76*

Plastics men, convening in New York, study how to tap the big housing market

When 20,000 plastic men descended on New York June 11 for their annual conference, their thoughts were turning to the building industry as their next major outlet.

Running concurrently with the conference, the 7th National Plastics Exposition put on some 330 shiny exhibits. Over a third of them displayed materials that are or could be used in homes.

The thousands of products on display were ample proof that the plastics industry is one of the fastest growing in this country. Last year, 1,800,000 tons of raw plastic were produced as against 1,550,000 tons of aluminum. Plastics now outsell all nonferrous metals. Production jumped 30% in 1955 over the year before. Production next year is expected to reach 2 million tons representing a sales volume of \$2 billion. About 10% of plastics production now goes into construction. Industry leaders feel confident that this figure will swing up sharply in the next decade.

Plastic houses get attention

Probably the most discussed exhibit at the exhibition was a large scale model of the Monsanto-MIT plastic house of tomorrow (H&H, Dec. '55). Right in line, the Society of Plastics Industries put on display the winners of a \$3,250 house design competition held June 6 in Chicago, and sponsored by the SPI and held under AIA auspices. The design contest awarded eight prizes for houses and special room treatments. Judges Paul M. Rudolph, AIA Sarasota; John M. Highland, AIA Buffalo; and Hiram McCann, editor of *Modern Plastics* magazine, awarded the grand prize for the best house using plastics to William Goodwin of MIT.

Made up of three 34' spans of reinforced, prefabricated plastic, the house makes a definite zoning division between its living and dining room sections. A mechanical core unit lies between two of the big spans, and the standardized sections of the house could be placed on small or sloping lots. The design of Goodwin's house is practical now and its continuous structural system might get considerable public acceptance.

Second prize for the best house went to Architects Hermes and Colucci of Cincinnati for a design using standardized "umbrellas," shaped like hyperbolic parabolas, to form the roof. The judges pointed out that this structural system might be expensive, but could be easily built with today's plastic molding techniques. Its plastic roof umbrellas give considerable freedom of space in the house and provide an unusual freedom for indoor-outdoor living.

Monsanto Chemical Co.



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You buy just the Top of the range

HERE'S a brand-new Frigidaire Built-In Cooking Top that's a bonanza for builders.

It's the essential surface section of an electric range without the cost of the cabinet.

Neat as a pin, it takes but $32\%'' \ge 20\%''$ of counter space and only 7" of the storage space below.

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Otherwise, it has all the quality and every surface-cooking

facility of a full-size, top-of-the-line Frigidaire Electric Range except a deep well. That includes the Speed-Heat Unit, the miraculous Heat-Minder and all.

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LEGISLATIVE OUTLOOK

Move grows in Congress to bottle up housing bill in House rules committee

Congress may enact no housing law at all this year.

Conservative Republicans in the House are so alarmed over what they consider unsound changes written into the 1956 housing bill by the Senate (June, News) and the House banking committee that they are talking about bottling the measure up in the House rules committee.

Brainfather of the movement is Rep. Jesse Wolcott (R, Mich.), GOP leader of the House banking committee. Wolcott, who is retiring after this session after 25 years in Congress, reasons this way:

"The six members of the rules committee who bottled up the housing bill last year can be expected to do the same thing again because of their distaste for even a small dose of public housing." (Before the bill can be brought to the House floor for debate, it must have clearance from the rules committee, which acts as a legislative traffic cop. The committee has 12 members. Last year, it split 6-6 on public housing, but since one Congressman who favors public housing is ill, the committee would probably vote 6-5 against public housing this time.)

"Last year," notes Wolcott, "the rules committee was induced to let the housing bill go to the House floor only on the promise that a skeletonized measure would be introduced doing little more than continue the expiring sections of housing programs." The strategy backfired. So this year Wolcott says he will introduce no bare-bones substitute. Reason: no matter how conservative a housing bill gets through the House, the Senate could load back public housing and most other objectionable provisions in conference, as it did before.

Wolcott and a lot of other Congressmen find this year's Senate version of a housing law even more repugnant than 1955's.

Besides the big public housing program (see below), Wolcott dislikes loans for college dormitories at "practically give-away interest rates" and a "foot-inthe-door" approach to a new area of federal aid, housing for the aged. Wolcott thinks FHA could get by without more insuring authority until Congress reconvenes in January, when it would be easy to rush a measure through.

FHA Title I repair loans will expire Sept. 30 unless Congress extends the program. But Wolcott says he hopes a short resolution extending them can be put through in such a way it cannot be amended. This prospect makes retail lumbermen unhappy. It would postpone the otherwise excellent chances for upping FHA's repair loan limit from \$2,500 to \$3,500 and extending the maximum amortization from three years to five.

What's wrong with the housing bill: more federal competition with private enterprise

If Congress adopts a housing law at all this year, chances are growing better and better that it will put the federal government into a lot more competition with private housing and mortgage lending.

The Democrat-controlled Senate has passed and the Democrat-controlled House banking committee has recommended legislation moving sharply in that direction.

At the same time, the 1956 housing law is being so loaded with special help for special interests that it is becoming a "something-for-everybody" measure — politically popular, but economically unsound.

Newspapers are giving the nation little idea of what is taking place. The focus is almost exclusively on fights over public housing. Questions of bigger dollars and cents impact on the nation are largely unreported. In part, say Washington pundits, this is the housing industry's own fault for making such a fuss so many years over public housing.

Some of the worst provisions of the Senate and House legislation so far:

Public Housing

SENATE: voted, 41-38, for 135,000 units a year (with power for the President to fluctuate between 200,000 and 50,000 units according to the state of the economy) until the balance of the 810,000 units authorized by the 1949 Housing Act are built. The upper house also approved an additional 15,000 units a year for aged persons. It defeated, 44-32, an effort by Sen. Prescott Bush (R, Conn.) to restore the urban renewal's workable program as a prerequisite to new public housing units. HOUSE COMMITTEE: voted, 10-9, for 50,000 units a year for three years, plus 10,000 units a year extra for the aged.

Warns HHFAdministrator Albert M. Cole: the Senate's program is "unsound" and "would put the government into the business of building housing that can and should be built by private enterprise."

Housing for the Aged

SENATE: would create a new FHA Sec. 229 with 100%, 40 year loans up to \$8,000 (\$10,000 in high cost areas) for owneroccupants, subject to minimum \$200 down payment including closing costs. Builders could get 85% loans. Would permit cosigners on mortgages for buyers 60 or older. Rental Sec. 229 units would grant 100% loans to nonprofit groups, 90% to others. Would authorize revolving \$50 million for FNMA advance commitments.

HOUSE COMMITTEE: would also permit cosigners for persons over 60. Would authorize direct government loans— $3\frac{1}{2}\%$, 50 years to nonprofit co-ops building for the elderly from a \$250 million revolving fund.

Objects HHFA's Cole: the Senate would give elderly persons better FHA terms than young couples with children.

Fanny May

SENATE: would order FNMA to pay par for special assistance mortgeness (distressed areas, cooperatives, renewal, minitary, minority and aged housing). This would force the price higher for extra risky mortgages than it is for regular FHA and VA paper, again make Fanny May a dumping ground for unwanted investments as it was during much of the Truman administration.

HOUSE COMMITTEE: like the Senate, would make FNMA pay par for special assistance mortgages. Would give the agency power to make advance standby commitments to builders "at a price high enough to provide production support yet sufficiently below prices offered for immediate purchase to discourage excessive sales."

College Housing

SENATE: defeated, 41-40, a move by Sen. Frederick Payne (R, Me.) to raise interest rate from $2\frac{3}{4}\%$ to $3\frac{1}{8}\%$. The GOP appeared to have this one won but Senate Democratic leaders, resorting to an old parliamentary trick, stalled the roll-call by having one senator after another go to the rostrum to ask how he was recorded. Meantime, Democrats rounded up just enough votes to defeat the move.

HOUSE COMMITTEE: by not mentioning interest rates, would leave them at present belowcost-to-the-government level.

Natl. Service Life Insurance

HOUSE COMMITTEE: voted to let VA use Natl. Service Life Insurance funds to make par loans for VA mortgages in high discount areas. Earmarked \$550 million of NSLI money for this.

SENATE: took no action along these lines.

On the plus side, Congressional tinkering with urban renewal should make it work better. The House committee, for example, approved a 10% builders profit in FHA Secs. 220 and 221. It voted for 100% Sec. 220 rehabilitation loans to owner-occupants who have substantial equity in their houses. The Senate voted to authorize payments to displacees for moving expenses—\$100 for an individual or family and up to \$2,000 for a business (including cost of lost good will). It upped the limit on FHA Sec. 221 mortgages from \$7,600 to \$8,000.

Both the Senate and House committee would up the limits on FHA Title I repair loans from \$2,500 to \$3,500 and raise the maximum amortization from three years to five. The Senate would cut the discount from 5% to 4% on any amount over \$2,500. The house would make the lower limit apply above \$1,500. (Lumber retailers fear this will offset the gains.)

The House committee voted to nullify President Eisenhower's recent reorganization of the Home Loan Bank Board which separated the Federal S&L Insurance Corp. from it. Savings and loan interests have been fighting the reorganization.

by the House, but not enough to be damag-

Congress OK's \$1 million for housing census, \$350,000 for FHA research

A nationwide housing census, which should give the home builder his best data about his market since 1950, has been assured by Congress.

A \$1 million appropriation for the Commerce Dept. to make the count was approved by a joint House-Senate conference committee. The House had earlier chopped Commerce's \$1,800,000 request to \$1 million while the Senate had cut it entirely in committee, only to restore \$650,000 when the bill reached the floor.

As tentatively planned, the Census Bureau will make the census this November or early next spring. Results would not be available until late 1957 or 1958. A similar count was made in 1950.

\$350,000 for FHA research

Congress also approved a \$350,000 appropriation for FHA to undertake a technical testing program.

FHA's test program is designed to "keep up with the advancing technology in the adjustment of our construction standards." FHA officials have pointed out that it will not duplicate research being done by others, will cover only combinations of materials or special cases where the burden of test is too great for any segment of the housing industry.

FHA thinks the program will come in particularly handy in settling arguments over new MPR's and MCR's. Test work will be farmed out to testing agencies of the government such as the Bureau of Standards, the Forest Products Laboratory or to private laboratories. And no test work will be undertaken unless the industry says it is needed.

Materials study killed

One other appropriation of interest to builders was killed by a House-Senate conference committee. The Commerce Dept. sought \$600,000 for a materials study. Purpose: to find out how much material is used for a given amount of building. The House voted \$350,-000, enough for a one-shot study but the Senate refused to approve anything. The conference upheld the Senate's decision.

The Bureau of Labor Statistics asked for \$75,000 to make a labor requirements study (how many various workmen are needed to put \$1 million of building in place). The House knocked out this appropriation entirely. The Senate restored it. The matter will be resolved in conference.

FHA's overall appropriation was trimmed

ing, officials said. The nonadministrative (field) budget was cut to \$36,700,000, just \$600,000 under the request. The administrative (Washington) budget was set at \$6,900,-000, a cut of \$250,000. That is still \$207,000 over FHA's appropriation for the fiscal year that ended last month. The Senate has also voted to authorize

HHFA to renew its housing research program, killed in 1951 by lack of an appropriation, and later stricken from the law entirely. (The building industry opposed the program then.) HHFA must still get House approval plus an appropriation, but this time the industry is not fighting the idea.

Harriman would establish cabinet post for housing

Creation of a federal Department of Housing & Urban Affairs, headed by a secretary of cabinet rank, is now one of the planks in the platform of Democratic presidential hopeful Äverell Harriman.

The New York governor, speaking to the Middle Atlantic Regional Council of the Natl. Assn. of Housing

& Redevelopment Officials in Buffalo, said the new department should "view housing as

part of the larger problem of urban growth —instead of urban decay." He also called for:

1. Reorientation of the housing agencies, shifting their programs toward protection of fam-

ily, rather than the builder and the lender. "Our housing agencies should be consumeroriented," he asserted.

2. Public housing built for sale on "longterm, low-interest loans"—presumably direct from the government. "The concept of a public housing program for rent only is obsolete," said Harriman.

3. Higher cost limits for public housing, ostensibly to "allow greater freedom in planning and design."

4. "A cooperative movement similar to that in Sweden, in which federal loans would be made to encourage experienced cooperative groups that can build and later sell projects to smaller cooperative groups."

5. Drastic revision of urban renewal and redevelopment policies to de-emphasize destruction of slum buildings and stress reduction of



HARRIMAN

overcrowding. Harriman called for more building on vacant land, less displacement of population in urban renewal.

Barbs for private enterprise

The governor aimed many a shaft at private enterprise in housing. Some fell wide of the mark. Samples:

▶ "The so-called Voluntary Mortgage Credit program set up partly to make mortgage loans for Negro families [sic] has helped them little." *Fact:* over 2,500 loans to Negro families.

▶ "The [FHA Title I] modernization program under which families may borrow small amounts for home improvements, extracts an interest rate of more than 9%, although the lender is aided by government insurance." *Fact:* until FHA entered the field, most repair loans cost 12% or more; some private fix-up loans still do. At lower interest rates, repair loan money would be scarce—at least from private sources.

▶ "Since 1952, federal housing agency programs have shifted toward protection of the builder and the lender and only indirectly of the family to be housed." *Fact:* the most notable shift in emphasis for federal housing, the FHA scandals of 1954, had its origin in the administration's determination that consumers should not be fleeced under federal programs.

MILITARY HOUSING:

10,000 sale homes for civilians in new program

A new market for 5,000 to 10,000 homes is opening up as a result of Congress' decision to override FHA views on what is a sound long term mortgage.

On June 13, President Eisenhower signed into law a bill to force FHA to insure sale housing for key civilian scientific and research employes of the armed forces at remote bases.

Officials expect seven bases to be involved —Huntsville, Ala.; China Lake, Calif.; Cocoa, Fla.; (all near guided missile research centers) and Holloman AFB, N. M.; Mojave Marine Corps Sta., Calif.; Seneca Ordnance Depot, N.Y. and Edwards AFB, Calif.

The measure was sponsored by Sen. John J. Sparkman (D, Ala.) after FHA said it could not insure anything like the 1,500 or more Title II sale homes at Huntsville, Ala. the Army wanted for scientists at Redstone Arsenal.

Huntsville (pop. 25,000) is Sen. Sparkman's home town.

FHA said the Pentagon should underwrite the housing it wanted under the Capehart Act, because long-term demand for it rested almost entirely on Army arsenal operations. FHA said it could not find the "long range economic soundness" at Huntsville which the law requires for Title II homes. Commissioner Norman Mason reminded Sparkman's Senate subcommittee: "We have a record around the country [of] military installations which were permanent at the time, just as Redstone Arsenal is now permanent, where we have taken back Wherry housing and where we are in serious trouble with other

continued on p. 80

Less work, more play . . . A merchandising idea from the Armstrong Architectural-Builder Service to help you sell homes faster, more profitably.



Less work, more play make a house a good buy



Plaid is one of today's most popular decorating motifs—especially for family rooms. When you use this gay pattern in Armstrong Craftline® Linoleum, you'll be giving your prospects just what they want in their dream home—a modern floor that's both colorful and easy to care for.



When the living area has to double as an activities room, it gets extra hard use. Such an area needs a floor that complements a living room color scheme—and is also completely practical. This styling in Armstrong Excelon Tile is a good example of a floor meeting this need. If there is one single feature that today's prospective home owners want more than any other—it's space for carefree relaxation. This accounts for the great demand for family activities rooms in both new and remodeled homes. These rooms may be large or small . . . on grade level, upstairs, or in the basement. They may differ in many respects, but all family activity rooms call for one thing in common: colorful, easy-tocare-for resilient floors.

The appeal of color and design

The exceptional variety of striking designs and colors in Armstrong Floors gives you a wonderful opportunity to design informal areas that will be particularly appealing to prospects. No matter where the family room is located, there is a wide assortment of Armstrong Floors for every type of subfloor.

The appeal of easy care

Everyone knows that the floor in a family room has to take a lot of rough treatment. Such a floor gets constant usage and spilled things are inevitable. It's only natural for your prospects to want a tough, stain-resistant family room floor that can be cleaned quickly and easily. Consistent advertising in leading national magazines and on TV, as well as personal experience, has convinced housewives that Armstrong Floors minimize floor care. When you plan your next model home, call in your flooring contractor and ask him to show you samples of the many Armstrong Floors especially suited for family rooms. He can also show you stock insets and suggest unusual designs that will add the sales appeal of individuality to your homes at little or no extra cost.

Free design and decorating service available

If you wish, the Armstrong Bureau of Interior Decoration will be glad to help you or your color consultant create exclusive floor designs and color schemes for your next model home. For this service or special merchandising assistance to help sell your houses faster and more profitably, get in touch with the Architectural-Builder Consultant in the Armstrong office nearest you or write direct to Armstrong Cork Company, Floor Division, Lancaster, Pennsylvania.



Merchandising aids

To get full benefit from the general preference among homemakers for Armstrong Floors, it's a good idea to feature them in your advertising and to point them up in your model houses. Ask your flooring contractor or Armstrong Architectural-Builder Consultant for these sales aids: floor identification signs for every room, flooring literature imprinted with your name, model home floor policy, newspaper ad-mats and slugs, radio and TV commercials, and sales pointers for salesmen. Or write: Armstrong Cork Company, 1607 Sixth St., Lancaster, Pa.



FLOORS

Combining the family room and the kitchen is an economical, practical idea. Here, two colorings of Armstrong Excelon (vinyl-asbestos) Tile are used to divide the space in an open-plan house optically into separate areas.

Colorful floor insets offer you another way to increase the sales appeal of your houses. Your flooring contractor can supply a great variety of insets—including this shuffleboard design in Armstrong Asphalt Tile, which is an excellent addition to play areas. Factory-cut insets cost little more than ordinary tile, in spite of the luxurious custom-styled effect they create.



housing that was programmed under Title IX and some under Sec. 203."

The armed forces disagreed.

The new law led FHA to create a new Sec. 809 for this first sale housing under Title VIII. The terms and regulations will be about the same as for Sec. 203, except that Congress specifically ordered FHA to waive economic soundness in backing the mortgages. Thus, the Pentagon can write its own ticket on how many homes should be FHA insured.

Supreme Court upholds tax on Wherry housing

The door has been opened for local governments to levy taxes on privately operated Wherry housing projects on military basesmuch to the dismay of the Pentagon.

The US Supreme Court, in a precedent setting 5-4 decision, ruled that Sarpy County, Neb. can collect personal property taxes from the Offutt Housing Co., owner and operator of Wherry units on the Offutt Air Force Base.

Cried one flabbergasted Air Force housing man: "It is the biggest morale buster of a generation. Military families simply can't afford to pay the additional rents that would be made necessary by local taxes. The result could be that many projects will be put out of business."

(Though the Offutt case concerned only a personal property tax, the Pentagon believes the decision is so sweeping that it opens the door to a tax on the leasehold as well as the property. The exact situation would vary from state to state, depending upon state tax laws. There are 159 Wherry projects, with 53,339 units.)

Key point in the Supreme Court's opinion was failure of Congress to specify in the Wherry act whether local governments would have taxing power over the military units. "We do not hold that Congress has relinquished power over these areas," Justice Felix Frankfurter wrote. "We hold only that Congress, in the exercise of this power, has permitted such state taxation as is involved in the present case."

Centex, biggest builder, wins military housing job

Home builders-faced with dwindling sales prospects in their normal markets-are turning to military housing.

Winning bidder on a 500-unit job at Eglin Field, Fla., last month was Centex Construction Co. of Dallas. Tom Lively's firm was the biggest home builder of 1955, according to House & Home's annual survey (H&H, Feb.). Centex bid \$6,500,000-\$100,000 under FHA's estimated replacement cost. Centex President Lively said that his firmwith its civilian house production cut back 50% (see p. 44)-will bid on Capehart projects throughout the country.

Builders in other areas where Capehart projects are planned are forming syndicates to bid on jobs too big for just one.

The gilt-edged nature of the Capehart mortgages was again pointed up when the Eglin and Ft. Bragg mortgages brought premiums, reportedly 1 or 11/2 point each. (Brokers declined to give the exact price.)



looking at the windows as you point out your new home features . . . and then check those windows for ease of operation? Custom home buyers are becoming more discriminating about windows. To many such buyers, the quality and appeal of the windows are indications of home quality. YOU MAY MAKE OR LOSE A SALE AT THIS EARLY STAGE.

Peterson Windows have the looks and engineering which create customer appeal and confidence. Completely integrated units with self-storing storms and screens, they're clean-cut in line, with no frills or projections. Rigid box-type construction lends strength and durability. When double-glazed full 1" sealed unit insulation value is attained. Hi-pile weatherstripping, supplemented by vinyl, seals windows to commercial air infiltration limits. The sash rides effortlessly on ball-bearing rollers. Add modest cost, ready availability, adaptability to all types of construction, ease of installation and lack of maintenance problems.

Re-check These Features:

- / Customer-Appeal
- **Modest Cost**
- **Quick Delivery**
- Less Job-Site Problems
- No maintenance factors

Send for technical data and name of your nearest Peterson Window representative.


URBAN RENEWAL:

Future of renewal hit by court decision that may back overpricing of slums

The future of urban renewal is threatened by a federal appeals court ruling that upset a condemnation award for a mortgage-loaded house in a Washington, D. C. slum.

Urban Renewal Commissioner James W. Follin says the decision "raises a very serious question whether the country can go ahead with full-fledged urban renewal" because it may add millions of dollars to the cost of acquiring blighted property.

The appeals court partially overturned the long-established principle that the only fair payment in a property condemnation case is fair market value—whether or not the owner paid too much for it. The Justice Dept. expects to appeal, if necessary, to re-establish the old rule firmly. Otherwise, warn renewal officials, slum speculators may reap a multimillion dollar windfall as redevelopment authorities are forced to pay inflated prices for over-mortgaged property.

What slum dwellers pay

At issue is the case of Mayme J. Riley. Seeking a home for her mother, 3-year-old daughter and herself, she searched the homesfor-colored want ads in housing-short Washington in 1951 and found what she figured was "a good deal." It was a two-story, sixroom-and-bath brick semidetached house at 823 Delaware Ave., SW, built in 1901. It cost her \$9,950—\$300 down and \$72.50 a month spread among three trust-holders. She spent \$887 on improvements making the total cost \$10,837.

When the property was seized in June 1954 by the Redevelopment Land Agency as part of Southwest Area B redevelopment, Mrs. Riley refused a \$6,250 offer for the house and went to court. On March 11, 1955, a jury awarded her \$7,000. This still left her liable for payment of \$1,900 after her property was gone. And for 30 months occupancy, she had laid out nearly \$3,500 in payments and repairs. Moreover, she had quit her job as a clerk with the Civil Service Commission-had to, she says, to pay off \$421 from a balance she still owed on an \$887 FHA Title I loan to put in a new furnace. FHA took the money out of the retirement fund she built up in 11 years with the government. Now she lives in public housing.

Mrs. Riley-litigating under a pauper's oath with help from the Legal Aid Society-appealed. On June 17, the US Appeals Court, in a split 2-1 decision, sent the case back to district court for retrial with a stern warning. The appeallate majority held that the lower court "was obligated to subject to searching scrutiny an award so much less" than Mrs. Riley's purchase price. The court did not unequivocally proclaim that the government must pay the most recent sales price for a piece of condemned property. But it questioned whether Mrs. Riley had received the "just compensation" the Constitution requires when property is seized by the government. Wrote Judge E. Barrett Prettyman: "If proceedings like this are to become mere contests, a homeowner so situated [as the impoverished Mrs. Riley] is indeed at the mercy of the government. These proceedings must not be permitted to become mere contests."

Relegated to the minority opinion was the old principle: "Just compensation may be more or less than the owner's investment. He may have acquired the property for less than its worth or he may have paid a speculative and exhorbitant price."

NCHA Counsel William R. Simpson Jr. says the decision would "encourage speculation and conspiracy" by shady operators in second and third mortgages in slums. He predicted the result would be "a virtual guarantee to speculators dealing in slum properties of recovering 100 cents on the dollar for the second and third trust paper."

Case of inflated garbage

Was Mrs. Riley's house worth more than \$7,000? "It was garbage—but good garbage," say the "wholesale" realty brokers who bought it six months before Mrs. Riley did for less than half what she paid.

Morton Himmelfarb and Leo Schloss figure they turned a \$1,200 profit in the eight days they held Mayme's house, too. They bought her house, the attached house next door and one at 1008 Eighth St. NW for \$13,500 in June 1951. They put up \$3,500 cash and borrowed the rest on first trust notes—\$3,000 each from Perpetual Building Assn. on the Riley house and its neighbor and \$4,000 on the Eighth St. house from Eastern Building Assn.

Himmelfarb and Schloss sold the house to a second broker, Charles T. Martin, who gave them \$1,800 cash for the three properties and a second mortgage for \$4,000 each on the Delaware Ave. homes. Himmelfarb and Schloss sold these second trusts for \$3,800—about the usual discount. Martin eventually sold to Mayme Riley, after adding in a third mort-gage for \$2,727.

The price and terms, a government appraiser testified in court, were "almost criminal." The house next to Mayme's was bought at auction in 1954 for \$3,189 and its owner later took \$5,300 for it from the government.

As the Washington *Post* observed, the case exposes "an ugly dilemma": how to avoid hurting the hapless victims of "slum profiteering" without paying bootleg prices for blighted property. Within a fortnight after the ruling, says the National Capital Housing Authority, it lost three pending agreements to acquire property for less than face value of its mortgage debt. Up to then, unsatisfied mortgage holders had taken their paper losses as part of the game.

Only the symptoms

Such abuses, of course, are only the surface sores of the slum infection. Still to be treated are the causes: 1) failure to plan and build enough good housing and, 2) almost direct subsidization of slum owners by undertaxing their property. Tax "subsidization" was pinpointed recently as a block to effective urban renewal by Builder William M. Freeborn, of the Oakland (Calif.) Citizens Committee for Urban Renewal.

"A large percentage of the people now occupying blighted housing in Oakland are on relief," he says. "Their rents are paid with money received from the welfare program money which came originally from taxpayers."

Not only are tax-provided relief checks going to slum owners but assessments on the property are "practically nothing," says Freeborn, because of their rundown, often substandard conditions.

His remedy: "A program in which slum landlords will be forced to maintain their properties at minimum health and safety standards—or to get rid of their properties so that someone else can do the job."

OPERATION HOME IMPROVEMENT:

Campaign to continue for another year

Operation Home Improvement will continue for another year—with its budget increased 50%.

Since the big remodeling promotion campaign got under way last July it has spent some \$100,000 boosting fix-up drives in some 1,000 cities and towns (mostly the latter.) For its second and final year OHI will operate with a \$150,000 budget.

The OHI seal-the common identifying symbol for manufacturers, lumbermen and others to tie their own promotion to the over-



all effort—will continue as the campaign trademark. The slogan on it will change from "56—the year to FIX" to "Better Your Living" (see cuts).

OHI Executive Director Jack Doscher and Assistant Director Don Moore plan to start next year's drive with a three-day national conference of local OHI chairmen in late September or early October, probably in Denver or Washington. The meetings will be aimed at collecting and exchanging ideas that work to help more cities conduct home improvement promotions and lay plans for a permanent home improvement month once a year.

Doscher said use of the '57 seal in national advertising (scheduled to begin in November) will be limited to firms which contribute to OHI's support. Minimum tab for national firms will be \$1,000 this fiscal year, says Doscher. The maximum is \$10,000.

A new OHI promotional kit will go on sale for \$10 Sept. 1. This year, OHI sold some 13,000 kits, Doscher says.

Four new members have been added to OHI's board of directors: Chester Stackpole, managing director, American Gas Assn.; Donald Z. Albright, vice president, Security First National Bank, Los Angeles; George

Here's why the New Heatmaster System is the simplest...most economical way to heat and air condition a home!



- It's pre-engineered! The new C-E Heatmaster is a ready-to-install year 'round comfort system.
- It's packaged! Only standard piping and wiring materials and practices are used for installation. No special equipment is required.
- It's compact! Unit installs in 4-square feet of floor space. It provides economical air conditioning with the luxury of hot water heat; individual room control.
- It's easy to sell! It offers builders and plumbers features that simplify installation, cut costs, save time. Its benefits appeal strongly to home buyers.
- It's priced right for the market you serve.

Here's the complete, compact C-E Heatmaster Home Heating and Air Conditioning System:

Efficient, gas-fired boiler unit, completely assembled with burners, circulator, controls, relays and all operating parts in place; a matching hermetically sealed water chiller, completely assembled with compressor, evaporator, condenser and refrigeration controls in place (unit factory-charged with refrigerant); spacesaving individual room convectors for heating and air conditioning through one compact convector in each room.



Simple to lay out - easy to install.

PERFORMANCE PROOF: Here's what the owner-builder and plumber say about a typical C-E Heatmaster installation:

THE OWNER-BUILDER, ANDREW YEDYNAK, SAYS, "FAR SUPERIOR "

"We investigated about 10 different air-conditioning-heating methods before we built our 'dream home'. We finally decided on the C-E Heatmaster

forced air system

System. It's far superior to any forced air system we know of, both in cost and in efficiency of operation. I know. We've lived in four different houses since 1945. Our experience with forced air and 'heat circulating' systems convinced us the C-E Heatmaster 'wet' system was the best buy."

Mr. Yedynak's wife, Violet, had this to say: "The C-E system is so simple even our six year old daughter can operate it. And I like the installation ... no contraptions sticking out of windows, no ducts, nothing like that."

THE PLUMBER,

MARTIN MOLOTSKY, SAYS, "SIMPLE AS COULD BE."

"The C-E Heatmaster was the first 'wet' air conditioning and heating combination I've ever installed. We didn't run into any complications at all. In fact, we

used fewer man-hours (48) to install this system than we would have needed for a comparable hot water radiator installation. It adds up to quite a saving. I'm convinced that this 'wet' system is the future standby for heating and air conditioning homes."

Mr. Molotsky has been a plumber for fifteen years and heads his own business. He later commented, "I only wish I had this C-E Heatmaster combination in my own home." The C-E Heatmaster System, which Mr. Molotsky installed, is the first of its kind in the Kansas City, Missouri area.



Extremes of climate (hundred-plus in summer, ten-minus in winter) helped the owner-builder decide to equip this Hickman Mills, Missouri home with the C-E Heatmaster System.



Mr. Molotsky points out how little equipment is necessary to install a C-E system. The pre-engineered, packaged C-E system required only the simple tools shown in the picture for installation. (This picture was made before piping was insulated.) Mr. Molotsky also installed the 40-gallon Heatmaster glass-lined water heater shown in foreground.

Take advantage of the many benefits C-E Heatmaster Home Heating and Air Conditioning offers by sending for more information now. Ask about the ABC Plan for builders.



COMBUSTION ENGINEERING INC., Home Equipment Division 971 West Main Street, Chattanooga 1, Tennessee



News

continued from p. 81

Spiczak, vice president, Home Federal Savings & Loan Assn., Chicago; Reed Hartman, vice president, Cincinnati Gas & Electric Co. and chairman of the Electric Industry Coordinating Group.

GE offers to finance kitchen remodeling

General Electric, often rated as the toughest competitor in the appliance business, has introduced another "first" in a bid for a bigger cut of the market.

The idea: a kitchen remodeling finance plan. GE will finance the total cost of the remodeling if the homeowner buys two major GE appliances, one of which must be either a built-in or plumbed-in item.

Customers must pay 10% down with minimum monthly payments of \$20 and a discount of from 5.25 to 6%, varying with the size of the loan. Maximum repayment time is five years, but GE points out that most loans will be repaid much sooner because of the \$20 minimum monthly payment.

First FHA Sec. 221 project: one house in Corpus Christi

FHA and NAHB pointed proudly toward Corpus Christi, Tex. last month and announced that the first housing under Sec. 221 —homes for low-income families displaced by an urban renewal project—was underway.

The trail blazing came a year-and-a-half after the law became effective. It involved one house. Builder R. O. Woodson said he had no immediate plans for others. Nor did he have a buyer in sight for the one underway—an 816 sq. ft., \$8,000 frame model on slab. He built the house with a commitment from Fannie May.

Woodson hopes to get buyers from slum area to be razed for a \$50 million highway program and \$14 million bridge over the Corpus Christi ship channel. An estimated 100 displaced families will be eligible for Sec. 221 financing.

Housing Center seen key to housing industrialization

Is NAHB's new National Housing Center a leadership weapon which can speed the industrialization of housing?

One man who thinks it could be is Jan



van Ettinger, director of Holland's Bouwcentrum, the Rotterdam housing center from which NAHB leaders got the idea for their own building in Washington.

Mechanical Engineer van Ettinger has just made his first visit to NAHB's Housing Center. Its directors were impressed by his pene-

VAN ETTINGER

trating advice on how to use a housing center as a lever to promote progress in an industry which is still closer to the handicraft stage than most other US industries half its size.

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This is Levito wiring device

111

This is Leviton — one of the world's largest manufacturers of electrical wiring devices. BEHIND THE LEVITON NAME stand four plants, staffed by over 5,000 specialists, manufacturing a staggering total of 10,000 different items . . . 3,800 of these items mass-produced by the millions and sold at modest prices.

But you get more than big production! You choose from the world's most complete line of electrical wiring devices. Leviton assures superior quality — through precision manufacturing of each component part from raw material to finished product. And each part as well as the final assembly must pass the new Leviton Testing Laboratory's high standards.

So whatever your needs in wiring devices, you know you can specify Leviton with confidence. It's a name backed by nearly a half-century of experience in the manufacture of a complete line of wiring devices. Let us show you why so many architects, electrical contractors and builders specify Leviton. Send for our complete catalog today.





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Chicago • Los Angeles • Leviton (Canada) Limited Montreal For building wire and cable contact our subsidiary: AMERICAN INSULATED WIRE CORPORATION

Save Your Clients Root Reaming Costs





Frequently many families whose homes have non-metalic sewer lines like this have to call the root reaming service. And pay a charge each time roots are cleaned from their clogged pipe. In a few years this adds up to a big expense, even if the pipe isn't fractured in the rodding operation.

Where there are trees around a home--or even in the yards of neighbors--root penetration of sewer lines will invariably take place when the smallest opening develops in a non-metallic pipe joint or pipe fracture. Hair-like roots, growing into small crevices, soon become larger and often force the joint apart.

Why Roots Can't Clog CAST IRON SOIL PIPE



Your client relies on you for the trouble-free future of his home. Specify cast iron soil pipe and save him worry and expense with his vital sewer service as long as his home lasts. Joints of cast iron soil pipe are packed with oakum, caulked with molten lead —a combination that provides a permanently tight joint that roots cannot penetrate.

WOODWARD, ALABAMA

Our Company does not manufacture cast iron pipe but produces quality iron from which pipe is made by many of the nation's leading foundries. **NEW!** Extra large King-Tabs give this Architect Shingle richer colors...and extra strength to make a roof with

An entirely **NEW CONCEPT** in roofing design...

Instead of 3 small 12" tabs



DORSET GREEN

It's the massive new King-Tab Architect with the 18" tabs — 100% heavier than those of ordinary asphalt shingles. With these mighty tabs of strength and endurance, this shingle makes a roof worthy of a fortress.

The King-Tab's extra tab-width creates greater color richness because its jumbo granules are massed over a wider area, intensifying the jewel-like glow of the ten magnificent colors available. It gives cleaner horizontal roof lines — the long line look — adding new eye appeal to its great *unseen* benefit — 50% longer life.

National advertising is making a Bird Architect roof a quality feature your customers seek when they are shopping for homes. A Bird roof tells them you cut no corners in construction. It helps them decide to buy.

For expert suggestions on color-harmonizing side walls and trim with Architect shingle colors, see Bird's *Color-Key Guide* at your lumber dealer's or write Bird & Son, inc., Dept. HH-7, East Walpole, Mass.

Roofs & Sidings



EAST WALPOLE, MASS. . CHICAGO, ILLINOIS - SHREVEPORT, LOUISIANA - CHARLESTON, SO. CAROLINA



EXTRA NAILING STRENGTH because there are two nails to a tab and no nail is near a cut-out.



HURRICANE RESISTANCE—Each individual tab weighs 100% more than standard shingle tabs. This weight plus King-Tab's extra nailing strength resists even hurricane winds.



TRIPLE COVERAGE — King-Tab Architect shingles are 15" deep ... laid with 5" exposure, they provide 3 layers of shingles all over the roof.

50% LONGER LIFE — Bird's extra heavy, extra tough felt base is double-coated and double-surfaced... to make a total of five full layers of weather-resistant materials all fully integrated.



JUMBO GRANULES—The opaque mineral granules on King-Tab Architect shingles average three times the size of standard granules... protect underlying layers of asphalt from drying out by sun.

MASSIVE, SLATELIKE BEAUTY — King-Tab Architects average .200" thick (thicker than the standard slate butt) and 25% thicker than standard shingles.



FHA Limitation Sheet authorizes Regional Offices to accept Bird Architect shingles on roof pitches not less than 3" per foot with an underlay of #15 Asphalt Felt laid dry.



This beautiful oak floor is 29 years old!

No other floor gives such durability and lasting style

Beauty and durability . . . these are the qualities home buyers value most. Oak floors are preferred by 4 out of 5 because Oak, better than any other flooring material, combines timeless beauty with carefree ease of upkeep and high resistance to wear.

Oak Floors are preferred for all homes

- T. 3

In today's homes . . . whatever the style, whatever the price . . . you're way ahead in buyer-appeal when you use beautiful, durable Oak Floors.







National Oak Flooring Manufacturers' Association 814 Sterick Building, Memphis 3, Tenn.

Home of Kenneth Hedrich Evanston, Illinois - Strip Oak Floor laid in 1927. Interior by Harold Reynolds Furniture by Willett MATICO — the floor that helps you sell the home!



the modern look in tile flooring styled for MATICO by Margaret Lowe











NEW MATICO **Margaret Lowe Colors**

in vinyl-asbestos tile

Now choose from two ARISTOFLEX-CONFETTI patterns*

Here it is! The smartest, most colorful style in tile designed for MATICO by Margaret Lowe, famous color stylist. These gay new colors, the distinctive mottling of Margaret Lowe Colors, harmonize perfectly with the new color trend in home appliances, fit beautifully with any style of architecture. And Margaret Lowe Colors come in durable vinyl-asbestos . . . can be installed on, above or below grade ... are easy to maintain because they resist dirt, grease and most household chemicals. If you're looking for an out-of-the-ordinary flooring, a very special color, be sure to consider the new Margaret Lowe Colors in economical MATICO vinyl-asbestos tile.

*Margaret Lowe Colors and regular Aristoflex-Confetti



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Q-768

BA 337





Q-769





Q-777







Q-765



... saving construction dollars with Gold Bond Insulation Sheathing



Gold Bond Asphalt-Impregnated Insulation (left) and Asphalt-Coated and Impregnated (right). Both offer high insulation value; the Asphalt-Coated adds extra moisture resistance. Both exceed all applicable FHA requirements. You can sheathe your houses better—and save money, too—with Gold Bond Insulation Sheathing. Use either Asphalt-Impregnated or Asphalt-Coated and Impregnated. In the $25/32'' \times 4' \times 8'$ size, the big panels add so much racking strength that they eliminate the need for corner bracing entirely. That's a saving of up to \$5 on each corner of every house you build!

You save the cost of building paper too, (except under stucco exterior finish) because Gold Bond Insulation Sheathing has high moisture resistance and the V-joint is wind-tight.

Both the 2' x 8' and the 4' x 8' panels go up much faster than conventional wood sheathing — fewer pieces to handle, less nailing. Waste is cut to about 5% — compared to 20% to 25% for wood sheathing.

Best yet, there's more Gold Bond Insulation Sheathing available than ever before! Use Gold Bond Insulation Sheathing on the next house you build... compare the time and money you save against the use of wood sheathing. Call your Gold Bond representative for complete data—or write National Gypsum Company, Buffalo 2, New York.

INSULATION BOARD PRODUCTS



NATIONAL GYPSUM COMPANY



for Better Construction with True Economy

• Quality builders usually use wood sheathing for side walls, sub-flooring and roof boards. These builders, in explaining their framing methods, use such words as "strength, rigidity, tightness".

Weyerhaeuser 4-Square Wood Sheathing is stiff and strong, and because it is kiln-dried, it has remarkable dimensional stability. Wood has great nail-holding power. Accordingly wood sheathed side walls resist vibration, such as that caused by motor traffic. This nail-holding ability also permits the secure and economical application of wood sidings and shingles without furring strips.

The cell structure of wood sheathing permits a wall to breathe . . . to take on and give off excessive moisture. With vapor-proof sealing paper on the inside of the studs, or with a vapor barrier insulating blanket suspended in the stud space, and a wind-proof paper on the outside of the sheathing, a safe, dry, breathing wall is created.

Lumber is also the preferred material for sub-flooring and roof boards. It provides a strong base for applying finish materials, and, as roof boards, the strength to withstand snow and wind loads.

A broad selection of Weyerhaeuser 4-Square Lumber items is offered for use as wall and roof sheathing and sub-flooring. There are species, widths and grades to serve most building requirements.

Many builders find that it pays to remind home buyers of the advantages of lumber sheathing—and to point out that the use of Weyerhaeuser 4-Square Kiln-Dried Lumber Sheathing provides proof of better building value.

Weyerhaeuser Sales Company

ST. PAUL 1, MINNESOTA



NAHB's Housing Center, van Ettinger thinks has "taken the first step" toward realizing its potential by assembling 145 exhibits of building materials covering 243 products. He hopes the US center will delve deeper into technical research, basic studies of housing needs, teaching and wide distribution of industry knowhow that is now too often pigeonholed in separate compartments of industry.

Van Ettinger, a stocky, energetic man, feels he has achieved this goal in Holland. He helped organize the Bouwcentrum, a private, nonprofit institute, in 1946. From its two handsomely contemporary buildings - the second opened just last December-a staff of 200 aided by 450 outside experts supervises 500 exhibits of building products, conducts classes in building techniques and organization, studies better methods of building and publishes scores of periodicals and technological phamphlets including a weekly housing magazine, Bouw, which runs from 32 to 40 pages and reaches some 5,000 subscribers. The Bouwcentrum operates on an income of 3 million gilders a year (\$789,000). Some of its activities:

Thirty teams of Dutch women are analyzing family living needs.

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▶ Researchers have built seven experimental wooden houses (the typical Dutch house is brick) to find better ways to step up Holland's housing production. With a population of 11 million, the Dutch have averaged 65,-000 new housing units a year for the last two years. Van Ettinger predicts output will jump to 75,000 houses this year, but population is growing so fast Holland still suffers from a housing shortage. And there is only enough brick making capacity in the country for 55,000 houses. It would take too long to expand brick capacity to close the gap—so imported lumber is one answer.

▶ Researchers have developed an interior wall of gypsum plaster spread on bullrushes instead of wood lath. "Very cheap and very good," says van Ettinger.

World-wide chain

Van Ettinger hopes to start a world-wide chain of housing centers like his Bouwcentrum. He figures \$500 million a day is poured into building and civil engineering throughout the world—about a third of it in the US. "Yet only one person in 15 of the world's inhabitants has a decent house. If we go on at this tempo, we'll never solve the problem."

The answer, van Ettinger thinks, is for the world to shift a "much higher percentage of its productive capacity to housing" plus "much more research." He warns: "People will not stay always complacent with slums."

That is where institutes like his Bouwcentrum can help, he believes. The big roadblock to technical progress and industrialization in building and housing is the organization of the industry itself, says van Ettinger. There are too many little enterprises and too few big ones. That is because buildings and materials are too heavy to move far. Men who build must work close to the sites.

"But small people are not too smart—most of them," says van Ettinger. "So we need institutes to centralize—not to centralizing building but to centralize the thinking and then to transmit the thinking. There is so much to do we need everybody."

PEOPLE



Manny Spiegel, ex-NAHB president, dies

Emanuel M. "Manny" Spiegel, 50, NAHB president in 1953 and one of the industry's ablest spokesmen, died unexpectedly June 15 in Englewood, N.J., following a heart attack.

The attack, his third in 18 months, came in his home minutes after he and his wife had finished a bridge game with friends. One of them, a doctor, pronounced him dead there.

Spiegel suffered his first attack at a dinner party just before the NAHB convention opened in 1955. Since then he had limited his activities both in industry affairs and in his own home building business in New Jersey. Spiegel's was the first death among NAHB's 16 past presidents.

A practicing attorney before he entered the building business full time in 1941, Spiegel used his legal background along with sharp insight and a keen intellect to plead the case of the building industry many times before Congressional committees and federal housing agencies.

It was during his year at the head of NAHB that NAHB leaders joined with others in the building industry to lay the groundwork, in the President's Advisory Committee on Housing Policy, for the momentous Housing Act of 1954, which created urban renewal and, among other things, provided for a new 30-year, 5% down FHA mortgage.

Spiegel was one of NAHB's most popular and respected

presidents, a fact which reflected his engaging personality and ability to get along. This ability once prompted another former NAHB president, **Tom Coogan**, to comment: "He can be firm, but he's not too blunt and he doesn't offend people."

Spiegel was one of the first builders to recognize the civic responsibility of the home building industry and he consistently tried to persuade others to that viewpoint.

A native of New York, Spiegel was not a big builder by comparison with other past presidents. His average annual output was 100 homes a year, all in the New Brunswick, N.J. area. His total lifetime housing output: about 2,000 units plus several apartment buildings. In the past 18 months most of the responsibility for active management of his building business had been put on the shoulders of his son-in-law and partner, **Dick Geiger**. They were just completing five new model homes at Englewood in the \$35,000 price range.

Spiegel was one of the first builders to recognize the potential of housing development along a turnpike. He recently completed 80 homes at Neptune, N. J. near the Garden State Parkway.

Though not as active recently as he once had been, Spiegel was by no means retired. He still met with the NAHB past presidents' council. He was a director of Housing Securities Inc., the mortgage investment business started by Tom Coogan and other NAHB leaders. He was secretary of ACTION from its birth.

On Spiegel's death, one of his longtime friends in the industry said sadly: "Manny always kept housing in perspective with the rest of the economy. He was interested in what was good for everyone, not just our industry."

Said a leader of ACTION who had attended a daylong board meeting with Spiegel just two days before his death: "We could always count on Manny's continuous and predictable statesmanlike position on any matter."

Survivors include his wife, Fritzi, a daughter, Mrs. Judy Geiger, two grandchildren, his parents, a sister and a brother. Mrs. Spiegel is well known to builders throughout the country. She accompanied her husband on nearly all his NAHB travels. PEOPLE continued on p. 93

JULY 1956

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ALL THESE BIG NU-WOOD FEATURES PLUS MODERN SOUND CONDITIONING!

Clean, random-drilled holes! Nu-Wood random pattern tile features scien-

tifically designed "Sound traps" in the cleanly drilled tile perforations-for new sound conditioning plus beauty of appearance. Famous Sta-Lite light reflecting surface!

Pre-decorated surface in white that actually grows whiter with age as proved by Fadometer tests. Pleasing soft, matte texture of Nu-Wood helps distribute reflected light and reduces glare. Here is a truly beautiful

random acoustical tile. Finished, painted bevels!

All tile bevels are coated to match the decorative white of the matte surface...and the distinctive "shadowline" bevel of Nu-Wood® minimizes joint lines for pleasing appearance. Bevels stay cleaner longer because they resist

dust and dirt accumulation. Nu-Wood clip, staple or adhesive application!

Nu-Wood Random Tile is available in tongue and groove, and wide-flanged tile types... application technique as you choose. Take your pick of famous Nu-Wood clip method with tongue and groove tile...or stapling wide-flange tile...or using adhesive for either type of tile. Wood Conversion Company, Dept. 236-76, First National Bank Building, St. Paul 1, Minnesota. Sold only by lumber dealers!

NU-WOOD



POPULAR FLUTEX PATTERN Available in plain finish (shown 1/4 size) and in textured or Satinol® finish



FOR ENTRANCES

It brightens the interior in daytime, illuminates the exterior in nighttime.

FOR ROOM DIVIDERS It gives a feeling of spaciousness, adds the beauty of its texture to rooms. 3-2-

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DECORATIVE GLASS

(REGARDLESS OF HOUSE PRICE RANGE)

Just one panel of Blue Ridge Patterned Glass can do wonders in setting your homes apart from competition. There's something about Patterned Glass that catches the prospect's eye and says "excitingly new"... "wonderful idea." Change patterns and uses to give each of your homes a distinctive touch of its own. Its uses are as

Patterned Glass by Blue Ridge is easily installed. Entire walls can be glazed as simply as windows. Choose any of the many beautiful patterns. Most are available in sizes up to 54 x 136 inches and some up to 60 x 136 inches. Want to know more? The L·O·F Glass Distributor or Dealer in your area will be glad to advise you, or send

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HOUSE & HOME

Former city manager to head NAHB community facilities unit

After a five-month search for the right man, NAHB named Frederick E. Wagner, 43, city manager of Pleasant Ridge, Mich. (pop. 3,598) as head of its new community facilities division.

His job will be to help builders cope with increasing local requirements for items like sewer and water mains, wider streets and schools.

Wagner, who will take over July 16, holds a BS in civil engineering and law and a master's degree in public administration. He is a onetime administrative assistant in Grand Rapids, Mich. and a former city manager of Roseville, Mich.

J. F. Moore resigns as secretary of Home Loan Bank Board

While top politicos scratched around to find a successor for Walter W. McAllister, whose resignation has been accepted as chairman of the Home Loan Bank Board, J. Francis Moore resigned as board secretary. He will become vice president of the Savings & Loan Foundation, nonprofit cooperative which promotes thrift and home ownership. Moore had been with the HLBB since 1934 and secretary since 1939. Harry W. Caulsen, assistant board secretary since 1934, was named to succeed him.

As successor to McAllister, the man most prominently mentioned was John R. B. Byers, Newark, N.J. certified public accountant who has specialized in the savings and loan field. He recently served on a US Savings & Loan League advisory committee to draft a new accounting guide for the industry, has taught for the American S&L Institute. McAllister, HLBB chairman since 1953, wants to return to Texas.

Lumberman Cy Sweet named to bigger job at FHA

Cyrus B. Sweet, former president of the Natl. Retail Lumber Dealers Assn. who has been assistant FHA commissioner for Title I repair loans since August 1954, became FHA's assistant commissioner for operations. He replaced **Charles S. Mattoon**, who has been ailing for three months and whose post Sweet had been filling temporarily since March.

Sweet is a former vice president and general manager of Valley Lumber Co. of Fresno, Calif. and one time vice president of First Federal S&L Assn. in Longview, Wash., where he was also western division manager of Longbell Lumber Co.

NAMED: Clyde E. Weed, 65, vice president in charge of operations since 1952, as president of The Anaconda Co., a leading world producer of nonferrous metals and uranium, succeeding the retiring Robert E. Dwyer; exec. vice pres. R. Edwin Moore, as president of Bell & Gossett Co. of Morton Grove, Ill., makers of hot water heating equipment, succeeding Earl J. Gossett, who continues as board chairman; President Joseph Grazier of American Radiator & Standard Sanitary Corp., as a director of JohnsManville Corp.; Malcolm Meyer, president of Certain-teed Products Corp., as chairman of the Asphalt Roofing Industry Bureau.

Howard Evans, urban renewal aide, leaves housing field

S. Howard Evans, right hand man to Urban Renewal Commissioner James Follin for the last two years, quit HHFA last month to become president of a new company formed to exploit a patented device said to preserve all kinds of fluids indefinitely without refrigeration. As director of URA's



urban renewal service, Evans, 53, prepared material for a field staff of 100 persons trying to explain the complexities of renewal procedures to cities struggling to take advantage of federal renewal aid. He has also presided over URA's \$5 million Sec. 314 demonstration program — through which

the government hopes to show cities the detailed specifics of urban renewal and its benefits.

Lanky, red-haired Howard Evans was born in Rome, N.Y. and, after studying city management at Colgate and Syracuse Universities, he went into public administration. He was an instructor in municipal government at Syracuse, then secretary to the mayor of Syracuse. During World War II, as head of the War Production Board's government requirements division, Evans was one of the men responsible for putting steel in copper pennies. From 1945 to 1950 he was president of the Evans Machinery and Equipment Co. in Philadelphia, then joined HHFA. Like many another toiler in the field, Evans has chafed for months at the frustrating red tape and official timidity which has kept urban renewal to a turtle pace.

In his new job, he will be president of Industrial Processes Co. Inc. and treasurer of Daveat Milk Process Co., with offices in Washington.

Omaha urban renewal director quits, raps slow progress

Joseph F. Mangiamele director of urban renewal in Omaha, decided to quit Sept. 1 to become an assistant to Glenn Beyer, director of Cornell University's famed housing research center.

His main reason: frustration at Omaha's flabby, ineffective gestures toward housing rehabilitation.

The city has been at it three years now. Originally, at the urging of the Omaha World-Herald and the Omaha real estate board, the city conducted a pilot rehabilitation program in a two-block area. Twenty-two homes were improved. Two years ago, the office of neighborhood conservation was established to promote voluntary rehabilitation. Mangiamele, 34, who has a master's degree in economics and had spent four years in Omaha's city planning department, was named head of it.

Last December, the city council abolished the conservation office and named Mangiamele as \$4,750-a-year urban renewal director. But the office was part of the building department, its budget part of the building budget. Some building officials looked askance at urban renewal, resented its demands on their public monies. Mangiamele was able to make two surveys, and to persuade building officials to condemn a few dilapidated structures.

Last month, the city council finally got continued on p. 96



Houston makes home show entrance to parade of homes

Some home shows have been laying eggs this season. More and more have been degenerating into appliance shows where the product builders must sell—complete houses —are all but lost in a carnival of vibrator chairs, cheap china and better paring knives.

Houston home builders have just scored a solid hit by tying their home show and parade of homes together physically.

They put a 300' long arcade of 60 exhibitors' booths inside a circus tent, made it the only passageway to and from a parade of homes on adjacent lots in a subdivision being developed by Fred McManis. He donated the lots to the Houston HBA, which sold them to participating builders, used these proceeds to help swing a \$50,000 budget. A record 108,000 Houstonians paid 25ϕ apiece to see the week-long display. It took 23 cops to handle the 30,000 crowd on closing day. Closed circuit color TV, beamed to the 31

Closed circuit color TV, beamed to the 31 model houses, from 6 to 10 pm daily, helped create interest. So did a \$24,000 giveaway house—a shed-roofed, brick model (see photo) designed by Architects James Karl Dunaway and Williams Paul Jones. Before the show closed, 18 of the models were sold. Prices: \$15,000 to \$22,000.

JULY 1956

'Insulite helps us box-in

"Bildrite and Shingle-Backer saved us \$152 on this de luxe home,"

reports E. Harold Johnson, seen here at one of his company's Bildrite-sheathed homes. Johnson, board member of NAHB, is now participating in the much-publicized 190-home Forest Hills development, about halfway between Minneapolis and famed Lake Minnetonka.



INSULITE AND BILDRITE ARE REDISTERED T. M. 'S U. S. PAT. OFF.



faster...finish faster'

"We're always fighting the weather up here," says E. Harold Johnson, who built this upperbracket Minnesota home. "These long, severe winters make building especially costly. So we have to box-in our homes fast. That's one reason why our men certainly like to work with Bildrite and Shingle-Backer. The sheathing goes up fast, we get the job boxed-in quickly,

and idle time is cut to practically nothing.

"I've been a long-time user of Insulite products. They're best for the job in every case; easy to cut, easy to apply; save time, save waste."

Whether you build \$10,000 or \$100,000 homes, you can build better and save with Insulite. For detailed data on Bildrite and Shingle-Backer write Insulite, Minneapolis 2, Minnesota.

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With a flip of the switch the Electromode Wall-Type Bath-

With a flip of the switch the Electromode Wall-Type Bathroom Heater gives you an abundant blanket of clean ... odorless ... all-electric heat. Wonderful for the nursery. Bathe your pint-sized Prince in King-sized warmth. Dad will go for it in a big way too! There is no longer any need for the "Lord of the Castle" to dread shaving or bathing in a chilly bathroom. Watch Dad's disposition improve. Literally 101 other uses; drying lingerie ... hair ... for any small room ... and absolutely the answer for hard to heat areas.

Over 300,000 homes are now heated completely by electricity. For over twenty-five years Electromode has been producing all-electric heating systems and equipment to satisfy either supplemental or complete heating needs . . . FOR HOME . . . FOR FARM . . . AND FOR INDUSTRY.

Electromode Heaters are equipped with a sealed-in cast-aluminum heating element. Tops in safety . . . efficiency . . . and economy.

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COMMERCIAL CONTROLS CORPORATION

around to adopting a minimum housing ordinance based on the American Public Health Assn. model. But the ordinance permits owners of slum property to appeal directly to the council. Since the council has shown a studied disinterest in renewal, Mangiamele fears the appeals system will handcuff the fight on slums.

News

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The Omaha political atmosphere, Mangiamele charged, "is not conducive to good city planning. It will be a matter of a few years before the people become aware of the need."

Before he leaves town, Mangiamele hopes to persuade a convention rewriting Omaha's city charter to shift urban renewal to the friendlier canopy of the city-county health department. Actually, he thinks renewal will work better as a separate office reporting to the mayor (as do most experts). But he sees no chance of getting that. And several of the health department's seven-member board, including Mrs. Keeth Graham, its president, have taken active roles in promoting rehabilitation.

Chicago builders find Russian housing backward

If the 18-man NAHB delegation currently touring Russia learns anything, it may well be what not to do in home building.

The group arrived in Moscow June 15 for a 30-day housing inspection in 12 cities from Leningrad to Tashkent near the Red China border.

The itinerary is supposedly geared to include climatic conditions ranging from subarctic Siberia to semitropical Caspian sea resorts, so that the builders can learn how Russians meet a range of weather and geological conditions like those in the US.

Two months ago, six Chicago area builders visited Russia on their own hook to see how the Soviets build houses. Last month, they were back with woeful tales of slovenly work methods and substandard housing conditions.

The six—Gerald and Sinclair Hoffman, their father, Albert, Jerry Wexler, Joe Willens and Ed Schiller—said they were appalled to find 75% of building labor done by hand by unskilled women. Any one of the female crew was selected at random to do the plastering, painting or electrical work. The resulting craftsmanship is so poor they doubted anyone in the US would accept it.

Russian building standards are way behind the West, too. In Kiev, for example, the group found electrical equipment in new apartment buildings consisted of one wall plug and a ceiling cord in each room, with wires simply stapled to the plaster walls. Broken asphaltcemented waste pipes filled buildings with sewer gas, and ill-fitting gas pipes were packed with rags.

The builders said that the Soviet goal is one two-bedroom apartment for each family. At present an entire family is packed into one room.

Consensus of the six builders: "We have never seen any place as depressing as Russia. There is no joy of living."

The present NAHB trip reciprocates a visit of Russian housing experts to the US last October, with NAHB acting as host. The Russian government is paying the expenses *continued on p. 100*

REFRESH



Now you can buy a NATIONAL prestressed, precast concrete swimming pool package for as low as \$1,300.00 for a 16' by 32' pool. This includes specially designed interlocking precast units and prestressing bars for pool walls, marblite for interior finish, chrome plated fittings, complete filtration system, engineering plans and specifications.

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This window beauty helps you close sales





Residence in Pontiac, Michigan, James Camp, designer

The consumer appeal that helps sell homes is built into Andersen WINDOWALLS, made of beautiful, insulating wood. See how these Andersen Casements blend with the interior, let in sunshine, open up the view. Yet like all WINDOWALLS they close tight to form a weatherproof barrier on windy, wet or wintry days.

Look into the advantages of Andersen WINDOWALLS for homes you build. See your lumber and millwork dealer, Sweet's Light Construction Files, or write to Andersen Corporation. WINDOWALLS are quickly available anywhere including Pacific Coast states.

ANDERSEN CORPORATION . BAYPORT, MINNESOTA

News

continued from p. 96

of the American delegation-after they reach Moscow.

Ex-NAHB president Earl W. Smith of El Cerrito, Calif. is delegation chairman. Other builder-delegates:

John R. Worthman, Fort Wayne, Ind., S. N. Adams, Houston, Tex.; Thomas P. Coogan, New York City; Hans Heymann Jr., Bethesda, Md.; Arthur Oman, Norwell, Mass.; Carl T. Mitnick, Merchantville, N. J.; Harry A. Boswell Jr., Mt. Rainier, Md.; Edward W. Pratt, Royal Oak, Mich.; Martin L. Bartling Jr., Knoxville, Tenn.; August Rahlves, Oakland, Calif.; Ernest Fritsche, Columbus, Ohio; Andrew S. Place, South Bend, Ind.; and Marvin M. Helf, Cleveland.

Also on the trip are Bertran Druker, Newton, Mass.; William H. Dolben Jr., Reading, Mass., both representing the Boston Rental Housing Assn.; Robert F. Loftus, NAHB public relations director; and Vladimir Pojiadaeff, of Mount Kisco, N. Y., interpreter.

DIED: Builder Donald Lewis Metz, 37, part-owner of Aldon Construction Co. of Los Angeles, May 29, in a Ventura, Calif. motel

room he had apparently rented solely to take his own life.

Metz, whose firm ranked as the eighth largest in the nation last year in House & HOME's annual survey, left eight sealed envelopes, each bearing the name of a relative, friend or business associate. A ninth note, unsealed, read in part:



METZ

"This is a suicide. This is strictly a personal matter. . . ." His body was surrounded by several open medicine bottles, pills, capsules and sleeping powders.

Associates said Metz-a nervous and high strung millionaire-had lost some 47 pounds in the last six months on doctor's orders, and appeared on the verge of nervous exhaustion. Metz' company has built some 26,000 homes in the 11 years since it was founded. Last year, it reported 2,093 starts. Surviving Aldon partners are Ira Oberndorfer and William Woodrow.

OTHER DEATHS: Nathan Levin, 58, head of Colonial Investment Co. and builder of several large Washington, D.C. housing developments, May 12 while testifying in a land transfer suit in Upper Marlboro, Md.; Woodson D. Upshaw, 63, Phoenix, Ariz. realty developer, May 11 in Phoenix; Wilson Bingham, 59, realty broker, former FHA director in Los Angeles and onetime member of the Los Angeles city planning commission, May 14 in Los Angeles; Architect Louis Magaziner, 78, of Philadelphia, May 19 in Philadelphia; Cleveland Rodgers, 71, onetime (1931-37) editor of the Brooklyn Eagle and former member of New York City's planning commission, May 21 in New York; Stuart Duncan, 72, board chairman of Marquette Cement Manufacturing Co. and president of the La Salle State Bank, May 24 in Chicago; Carlton P. Roberts, 53, junior partner and chief engineer for the big New York architectural firm of Voorhees, Walker, Smith & Smith, May 27 in Hudson, N.Y.

NO BLISTERS with

TWO COATS

ARCO

ARCO ALKYD HOUSE PAINT ...

Test panels of Arco Alkyd House Paint and others were weathered outside for four months . . . then attached to a test house for another four months. Inside a 75 degree temperature and a 70% relative humidity were maintained at all times. Arco proved most resistant to blistering. It was also demonstrated that Arco had the best adhesion characteristics.

Why not use Arco Alkyd on your next house? It flows on easily, dries fast . . . is ready for recoating in only four hours. Its beautiful fade resistant colors defy wind, rain and snow-keep that fresh new look for years.

FREE COLOR

STYLING KIT

THE ARCO COMPANY 7301 Bessemer Avenue Cleveland 27, Ohio

Gentlemen Please send me Arco's New Color Styling Kit complete with 111 professionally styled color schemes and 56 swatches to guide me in color styling and plot development.

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Build better...sell faster... with siding of Alcoa® Aluminum

With aluminum clapboard siding, you eliminate painting and calking. You eliminate nail setting and puttying. You can be certain that the homes you build will give complete satisfaction to buyers.

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Alcoa doesn't make siding. But we do supply the long-lasting metal from which it is made. We'll be happy to give you the names of siding manufacturers who use Alcoa Aluminum. Aluminum Company of America, 1969-G Alcoa Building, Pittsburgh 19, Pa.

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Your Guide to the Best in Aluminum Value



the hand that buys the home..

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Women love Horizon views . . . the easy-to-keep-clean finish that doesn't pit, discolor or stain . . . the super-smooth "rolls-on-nylon" action and newly designed PUSH-BUTTON locks ! The ROLLS by Horizon is the favorite of builders, too, for its sales winning beauty and time and money saving installation features , including nail-on trim and built-in grounds for plaster and stucco/siding !



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MULTICOLOR PAINTS

Sirs:

The color Round Table report (Apr. H&H) was very well done. I wonder if I could receive about 125 reprints for our distributor sales force throughout the country?

As the world's largest manufacturer of multicolored paints, I was rather disappointed in finding no reference to them, since multicolor paint is one of the greatest technological contributions to paint chemistry.

Ordinary paints, producing monotones, have been known to create a subconscious restlessness in people confined to a "closedin" area. Conversely, with multicolor paints, psychologists have agreed that the "broken surface" created produces a rather quiescent effect.

It now becomes possible to introduce accent colors in the wall finish itself that were hitherto limited only to room furnishings and which frequently created a patchwork effect.

Our multicolor paint also has less affinity for dust and dirt particles, grease and oil, so surfaces stay cleaner—longer.

B. F. AMES General sales manager Maas & Waldenstein Co. Newark, N. J.

NAIL POPPING

Sirs:

In "New Tests Show Why Nails Pop" (Apr. H&H) Messrs. Suddarth and Angleton advocate dry lumber and the "shortest possible nails" as cures for nail popping.

The problem is not new and a practical solution is available to builders.

Our company has mass produced threaded nails specifically designed to eliminate nail popping for 25 years. For more than eight years our threaded nails have been used by the drywall industry, and in many thousands of houses, for the application of wallboard and underlayment.

Threaded nails have largely eliminated builders' headaches due to nail popping. We have the endorsement not only of the drywall industry, but such nails are also endorsed by the Gypsum Assn. In the case of drywall and underlayment fastenings, our nails have done a good deal more than meet laboratory conditions—since they are used in houses in every part of the country and under every condition of moisture or change in climate.

G. C. STONE President and sales manager Independent Nail & Packing Co. Bridgewater, Mass.

SOLUTION

Sirs:

Your excellent article "Why Not Use Sewage Treatment Plants?" (Mar. H&H) shows home builders the solution to a growing problem of sewage disposal.

Our office has an activated sludge plant in the ready-for-bid stage. The plant will handle the load from a shopping center and a 300-home subdivision. Please send me reprints so that I may show our clients how the disposal problem is handled elsewhere.

RICHARD R. MACKAY Thomas E. Burden & Assoc. Civil engineers and surveyors Cleveland

SEWAGE DISPOSAL PLANTS

Sirs:

The one-house sewage plant described in your March issue is of great interest.

You are so right about the need for sewage disposal plants. That is one of the reasons for much land not being developed in this part of California.

E. A. BECKMAN Beckman Construction Co. Inglewood, Calif.

CREDIT IS DUE

Sirs:

The Kronish house shown in your April issue is centered on a garden court which was designed and supervised by this office, as was the landscape development in general.

The oversight in credit was, I'm sure, accidental.

GARRETT ECKBO, A.S.L.A. Eckbo, Royston & Williams Landscape Architects, Planning Consultants Los Angeles

AN INFORMED CLERGY

Sirs:

I was much impressed with the April HOUSE & HOME.

I am conducting a class in urban sociology and social problems in our seminary. With the growing stress on urban development, I feel that including an up-to-date presentation of the technical developments in the field is a must for the future clergy, especially in the Midwest.

Though we realize that the clergy will not be the builders of housing developments, still they are looked to for opinions and in such cases, informed and intelligent opinions should form their answers.

> Rev. ALCUIN GREENBURG, O.S.B. Dept. of Social Science Conception Abbey Conception, Mo.

UPGRADING NEIGHBORHOODS

Sirs:

The excellent job you are doing to upgrade the standards of neighborhood building is sincerely appreciated.

You have been discriminating in picking a medium path between (1) high costs that builders cannot assume and (2) those bad building practices still engaged in by a few members of the industry.

> BOYD T. PRIOR The Lusk Corp. Tucson



Ever see a light switch like this?

New Tap-Lite wall switch with fashion plate that snaps on

Put the extra sell of Tap-Lite into every room for as little as ^{\$}15 more per house!

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Now—a *decorator* light switch that matches any wall in minutes! Snap-in wiring; installs easily. Line voltage. Tap—it's on! Tap—it's off! Talk it over with your electrician.





NEW ... WESTINGHOUSE ... EXCLUSIVE ...!

Complete Built-in HOME LAUNDRY IN 25 INCHES

Built-in Space-Mates install vertically

Westinghouse introduces an exciting new 25" wide Laundromat and matching 25" wide Clothes Dryer. The Dryer sits on top of the Laundromat in unique, vertical installation . . . provides a complete home laundry in minimum space.

Both models are completely automatic ... will wash and dry a full family-size load of clothes. They are also available in freestanding models and in all of the new Westinghouse Confection Colors.

Undercounter Installation-Built-in Space Mates also install under custom counter surface for side-by-side use.



Deluxe Laundry Twins-America's favorite free-standing twins, the deluxe Laundromat and Clothes Dryer are shown adjacent to the kitchen. Both models have new Color Glance Controls plus many other deluxe features.







Wash 'N Dry Laundromat-First it washes then it dries, all in a single, space-saving unit, 32" wide. Has Weigh-To-Save Door and Water Saver for economy, flexible controls and automatic operation. Can be built into closet or alcove as shown.



See your Westinghouse Distributor for complete details on Westinghouse Laundry Equipment, or write direct to our Contract Sales Department.

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Homemakers can't resist the beautiful harmony of NAIRON Standard plastic color-keyed floors and countertops. Especially when you point out the almost unlimited possibilities for custom design ... the outstanding wear ... the easy care!

Gold Seal NAIRON Standard for floors and walls, and Nairontop* for countertops make a time-saving, work-saving team! Their satin-smooth surfaces seal out dirt... make cleaning so easy. Grease, grime and spills wipe up with a damp cloth. Household acids and solvents won't harm them! Floors are quiet and comfortable, countertops muffle the clatter of kitchenware. Decoration goes through to the backing.

Color correlated Gold Seal NAIRON Standard Plastics have been seen by millions of readers of these outstanding magazines—"Better Homes and Gardens," "House Beauti-

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ful," "Living For Young Homemakers," "Life," and "Look." Cash in on your share of these pre-sold customers!

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House & Home

July 1956 Vol. X. No. I

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Ford waited until '29 to change



It's time for a new model, for

The buyers' market is here!

For 54 issues HOUSE & HOME has been trying, month in and month out, to help you get ready for tougher selling.* Now this issue will tell you:

1. What 33 leaders of our industry are doing right now to pep up the sales of their own houses (see page 116)

2. How smart builders are using the best new selling tool of all-trade-ins (see page 127)

But first let's look at our industry's two biggest reasons for confidence:

3. The houses people live in today leave so much to be desired (see page 109)

and

4. There are so many new ways to make new houses desirable . . . (see pages 110 and 111)

provided:

we get our costs in hand and don't price ourselves out of the market . . . (see page 114)

* To list just a few examples: HOUSE & HOME was first to warn its readers that too-cheap houses would soon be too hard to sell: first to point out the big new shortage of better houses; first to tell all about trade-ins; first with the package mortgage to let you sell labor-saving kitchens; first to tell you all about selling with air conditioning and how to cut its cost; first to urge the new mortgage terms that let you sell better houses FHA. The more things that are wrong with the houses people live in today, the easier it should be now to sell them something better

This 7 page editorial was written in collaboration with Home Building's No. 1 economist MILES L. COLEAN

So let's all thank our lucky stars that

yesterday's house is as obsolete as yesterday's car

Yesterday's house is either too big (if it was built before the war) or too small (if it was built right after the war). Yesterday's house has only one bath (some 7 million have none at all) Yesterday's house has too few bedrooms (median: well under two). Yesterday's house has no family room, no room for television. Yesterday's house has too small a garage. Yesterday's house wastes space (if it has any space to waste). Yesterday's house is hard to heat in winter and hard to keep cool in summer. Yesterday's house has too little insulation or none at all. Yesterday's house is too noisy. Yesterday's house is too dark. Yesterday's house has inadequate wiring. Yesterday's house never heard of orientation overhangs, open planning, multi-use of space, or indoor-outdoor living. Yesterday's house has no vapor barriers (and usually leaks air so fast it needs none). Yesterday's house makes too much work. Yesterday's house coops the housewife up in her kitchen. or too little storage (postwar) Yesterday's house has too many stairs (prewar) Yesterday's house is planned for a way of life we no longer live. Yesterday's house is planned for more maids and less children. Yesterday's house seldom had an architect. Yesterday's house is long out of style. Drawings: Fred Harsh

Long ago the auto makers and the appliance makers learned—to their surprise—that selling is actually easier and faster in a "saturated market." The man who already owns a car or a refrigerator is a better prospect for a new one provided:

1) he can trade in his old model for the down payment on a new one, and provided:

2) the new model is a lot better than the old.

For the next ten years we too must make most of our sales to second-time buyers. There are not enough new families to sustain our volume, and not enough of the new families can qualify for today's prices.

Our scarcity market is gone. In its place we must open up a great new replacement market among the millions of homeowning families who can now afford to buy a much bigger and better house.

But . . .

When selling gets tough . . .

Just think of all these new sales appeals

These past ten years have given us scores of good new ways to make old houses obsolete and new houses hard to resist. As the market gets tougher and choosier, the one best way to keep up your sales is to build into your houses as many of these ways to easier, cheaper, pleasanter home life as you can afford.

So let's take a look at a few of the many new things almost every home buyer, wants, but almost nobody gets in an old house and too few get in a new house.

Every woman wants easier housework



With the package mortgage you can offer a complete labor saving kitchen with dishwasher, disposer, refrigerator, freezer, oven, burner top, laundry and dryer for only \$350 down and less than \$8.50 a month. That's less than the monthly charge on the freezer alone on three-year consumer credit—and all this equipment costs less than half as much to install while the house is being built.

Everybody wants to enjoy some outdoor living



That's the No. 1 reason people move to the outskirts. Hundreds of builders have found a paved patio with sliding glass doors to the living room the cheapest way to step up their sales.

Everybody wants to keep cool in summer and warm in winter



That means everybody wants more insulation and wider overhangs. A great many people want air conditioning—and air conditioning costs a lot less for a new house than an old one. If you know how to do it right (H&H, Aug. '53) you may be able to offer central air conditioning for as little as \$600 extra! Some smart builders already do.

Everybody wants bigger rooms



and making rooms bigger costs less than \$4 a sq. ft. Everybody wants more storage—and storage space is the cheapest space of all.

Photos: Julius Shulman, Crown Photo Service, Myers Studios Inc., Ulrich Meisel, Marc Neuhof, Joe Paul

you can build into your houses today

Everybody wants less noise in a house . . .



loud with appliances, children, and television. Sound conditioning ranks close behind patios among the big new selling ideas of 1956.

Everybody wants to live better electrically . . .



and pretty much every home buyer counts the base plugs before he buys. Adequate wiring costs very little more to add when the house is built; it costs a lot more to add in later.

A great many people would like a little privacy . . .



from the street now that the street is mostly a raceway for cars and trucks. With a good plan it costs no more to face your house on a pleasant backyard.

Everybody wants to live in a good community



Everybody wants to bring up their children in a good community. With a good land planner's help, even a small development can have curving streets, trees, safe streets and safe places for children to play.

Everybody wants a smarter, better looking house



Everybody wants a house he can be proud of, with the eye appeal only a good architect, a good color consultant, a good landscape architect and a good decorator can assure. On a custom-built house their services cost thousands of dollars, but a merchant builder can spread their fees and so get their help at a very small fraction of the custom-house cost.

Millions of families now have more than enough money to pay for all these extra features they want. Home buyers can pay, will pay and in fact are paying quite a bit more for their homes than they could or would pay just a few years ago. The average family's income is going up so fast that each year (by the latest figures from census) America has 870,000 more families who can afford to pay at least \$15,000 for a good house!

But here's our critical problem

Home buyers can't and won't pay \$2,000 to \$3,000 extra to get these things they want on top of paying a \$2,000 to \$3,000 price increase for which they get nothing at all. Cost inflation is the biggest reason new house sales are off while used house sales are up. (For NAREB report see News index, p. 37)

In the past two years, while the cost of living has actually declined .1%...



1. Land prices have been so inflated by the sudden shortage of developed land that it often costs the 1956 builder \$1,000 a small lot *more* for land that is not a penny better.

2. Money costs more to borrow, so it often costs the 1956 builder \$1,000 a house in fees and discounts just to borrow the same amount of $4\frac{1}{2}$ % money.





3. Our wages have been boosted twice without an equal increase in productivity, so the 1956 builder must often pay \$200-\$300 more for labor to get the same house built.

4. Building material prices are up 9.2%, so once again the 1956 builder must often pay \$500 extra to get no more.



It is high time to stop worrying so much about our market ... and start worrying a lot more about our costs

That's the real problem for everyone concerned with the design, construction, financing, supplying and selling of houses. All over the country builders' profits margins are being squeezed because home buyers are refusing to pay more unless they get more.

Today the American public has the money to afford a very much higher standard of housing too, but it will continue to spend its money for television instead of bathrooms, for cars instead of houses, until we get our costs in hand.
Look at these graphs and you'll see that:

The need for more good houses is still enormous



The upper graph shows that at least 6 million families still have to live in substandard homes because there just plain are no better homes they could move to.

No one can build good new houses cheap enough for these 6 million families to buy. But our used house market will always be strong as long as we have all these millions pressing upward from bathless and often dilapidated units; and a strong market for used houses is as important to the sale of new houses as a strong used car market is to the sale of used cars.



The lower graph shows that the 15,534,000 new homes we started between 1931 and 1955 were 3,509,000 too few to provide a home for all the 18,943,000 net new nonfarm households formed in those years.

The only way we could house all these new families at all has been by carving millions of small units out of old homes.

In brief, good enough houses are still the greatest shortage of all

The American standard of housing is even further below the rest of the American standard of living than it was a generation ago. In a quarter century, while the rest of our standard of living has more than doubled, there is good reason to doubt that the average standard of housing has risen at all.

The 15,534,000 nonfarm homes we built from 1931 through 1955 average quite a bit better (even though most of them are small and most of them were built for below-middle-income families); but the nearly 30 million units now occupied in buildings erected before 1930 are 26 years older and must average quite a bit worse by now.

So it is nonsense to say the home building market is overbuilt. The simple and painful truth is rather that:

We are being outsold and undersold

And the simple and happy truth is that:

(see next page)

We all know ways to cut the cost of home building

1. We could cut our costs \$1 billion a year—\$1,000 a house—by using mechanical muscles instead of human muscles to move our heavy materials. (H&H, Jan., Feb., June 1956).

2. We could cut our costs another \$1 billion a year by ending the senseless waste of labor and materials entrenched in thousands of conflicting local building codes. (H&H, Sept. '52). But that \$1 billion saving can be realized only if builders, architects, engineers, mortgage lenders, realtors, lumber dealers and manufacturers join in a united front and enlist the support of home buyer and homeowner groups like the women's clubs, the American Legion, and the vFw.

There is no excuse for any local electrical code whose safety requirements exceed the National Electrical Code. There is no excuse for any local plumbing code whose requirements exceed the new national plumbing code. There is no excuse for any local framing code that requires studs and trusses closer than 2' on centers.

3. We could curb land price inflation by

- a. making it easier to increase the supply of developed land—partly by extending community facilities faster—partly by new legislation and/or regulations making it easier to finance land development.
- b. taking advantage of the great economy offered by today's new earthmoving giants to develop close-in sites earlier builders passed up. Earth-moving is the only cost that is still as low as in 1932.
- c. taxing land more adequately. You need not be a single-taxer disciple of Henry George to believe the speculative profits in suburban land should be taxed at least enough to pay for many of the community facilities needed to make those speculative profits possible. Every state and every community should consider a local counterpart of the Pennsylvania graded property tax, which discourages land speculation and encourages property improvement by making the tax rate on land twice as high as the tax rate on the improvement.

The US is almost the only modern country where nothing is done to discourage land price inflation. London is four times as big as Los Angeles, but builders can buy all the land they want within 30 miles of London for \$1,500 an acre.

4. We could save the big fees and discounts we pay for mortgage money by giving up the shibboleth of a $4\frac{1}{2}$ % fixed interest rate and admitting the failure of our five-year struggle to borrow at less than the market rate.



Let's use them now ... before we price ourselves right out of the market

5. We could help manufacturers cut their production, selling, and warehousing costs by getting together on a much smaller number of sizes. That in turn would help manufacturers cut their costs (and prices) again through automation.

6. We could cut our on-site labor costs by building with parts instead of pieces. We can build with larger components and subassemblies. We can save twice as much if the sizes of the components are coordinated so they will all fit together right without a lot of site cutting and patching. We can save still more if we dimension our rooms intelligently to fit the standard sizes of the components we plan to use. (H&H, June '56).

7. We could cut our costs by using scores of improved new construction methods—methods we now pass up because we hesitate to teach our subcontractors good new tricks—cost cutting methods like glued trusses, double framed wet walls, continuous double 2' x 6' headers, three-wire No. 12 electric circuits, one-big-room finishing of floors, ceilings and outside walls. We can cut our costs with prehung doors, preglazed sash, prefinished cabinets and flooring.

8. We could cut our painting costs in half by having two prime coats applied to all our components at the factory. We can cut our mechanical costs for heating and cooling by more intelligent use of insulation and overhangs. We can cut our carpenter labor costs by using power tools to precut all our lumber, and soon we may be able to cut them again with power nailers.

9. We could cut our rough plumbing costs in half with factory-assembled pipes—and the labor shortage will soon make even the plumbers welcome this labor saving. If plumbers enough to install 1,800,000 baths in 1,200,-000 new homes are hard to find today, how can we hope to find plumbers enough to install 4,000,000 baths by today's make-work methods in the 2,000,000 new homes a year we will have to build in the mid-Sixties?



WHAT ARE LEADERS DOING?

In Charlotte, George Goodyear offers this house for \$23,500



and finds "sales are excellent, better than six months ago"

The "split-level craze" has hit North Carolina, and NAHB's First Vice-President George Goodyear is rolling along with it.

The model above is one of several designs which offer 2,000 sq. ft. of floor space, or more, and sell for \$18,000 to \$23,500. All include built-in appliances and one, at \$21,750, throws in air conditioning. Splits account for nearly half of Goodyear's sales.

But you don't just roll along in a buyer's market unless you have planned well and far in advance. That's what Goodyear and his partner Charles Martin did. To wit:

All their houses are architect-designed, by Emroy R. Holroyd Jr.

They sell many houses on trade-ins.

They offer ranch houses as well as splits, and include built-in ovens and ranges, attic fans and dishwashers in almost all houses.

Their \$12,000-\$15,000 smaller models are still selling well in this toughest-of-all brackets "because we're the only people in that price class in the right part of town."

They are getting set, meanwhile, to meet the 1957 market. They have a 400-lot tract on hand for a future project, are planning to build a sewage treatment plant for it. And they already have Holroyd's designs for frontto-back and back-to-front splits which Charlotte has not yet seen.

Here's how 33 leaders are meeting the market

You can't point your finger at any one thing and say it is what the nation's leading home builders are doing to meet today's market.

Two trends do stand out: many leaders offer more built-in appliances in their new models, and most offer bigger houses than they did last year. Partly because of these changes, most leaders report their '56 sales prices are higher.

Market is mystifying

But two trends do not paint a complete picture of this summer's home building, even so far as these leaders are concerned. As Detroit's Irving Rose puts it, "the market is mystifying." Few builders agree completely on their diagnosis, let alone prescription. So they are doing many different things to meet common problems.

Yet one generalization can be made: the leaders are not taking the buyer's market lying down.

More space is one answer

Many leaders feel the best way to satisfy buyers is to give them more space, even at higher prices.

Others have moved up into higher price brackets and to bigger houses because they say they can't help it.

Dave Bohannon in San Mateo, Calif. has increased his sales prices as much as \$2,000 both because his new models are bigger and because land and building costs have soared.

Manny Spiegel in New Jersey held his small-house prices to \$13,900 despite rising costs. Yet before his death in mid-June (see NEWS) he planned to enter the quality market for the first time, chiefly because land costs are up.

Golf courses help sales

In Miami, Coogan & Beatty have opened a new tract next to a golf course where they will

build bigger houses in the \$17,-000-\$26,000 range, their first time in this bracket.

Kansas City's E. R. Elgin has revealed plans for a 500-house project of \$25,000 to \$75,000 homes. A country club will first be built to attract buyers.

Others whose higher costs and bigger models have moved them into higher price brackets include Ralph Schirmeyer in Fort Wayne (up from \$11,000 to \$14,000), Sharpstown in Houston (up from \$12,000 originally to \$15,000) and American Community Builders in Park Forest, Ill. (up from \$16,000-\$19,000 last year to \$19,500 - \$22,950). Architect Joseph Goldman of ACB puts the change in these striking

terms: "This year we're using the same work force to build 400 of the bigger split-level houses that we used last year to build about 700 smaller homes."

Some builders are moving down

But by no means all builders have gone to selling bigger and more expensive houses. In Phoenix, Ralph Staggs believes he has found a lower-price bracket worth a try. The \$10,000-\$12,-000 market is less competitive now, he believes, than the \$13,-000-plus bracket he was in.

Irving Rose, on the other hand, is moving both ways. His company will continue in the \$15,000 market as before, but

Dittrich



Four-bedroom house, by Phillips Prop- ceiling heat. House has two baths, washerties in Orlando, Fla., features electric

er, dishwasher, disposer. Price: \$16,000.



Big ranch house is Floyd Kimbrough's newest model in Jackson, Miss. It has

three bedrooms, two baths, family room and paved terrace. Priced: \$25,000 up.

for the first time it will offer Detroit buyers four-bedroom houses at \$19,000 and threebedroom slab houses as low as \$13,000.

Built-ins show a strong trend

Nearly all the leaders report great success with built-in kitchen appliances. But here the picture is vastly confusing, for almost no two builders seem to agree on what built-ins to offer or how to offer them. Some favor options, some insist builtins are necessary in big houses

Fred English



Promotion posters, striped tent lured buyers to giveaway prizes offered by David Bohannon.

but hurt small house sales, some favor one list of built-ins that others oppose, some go whole hog in a most surprising way.

In Cincinnati, Arcose Co. includes a garbage disposer in its \$19,600 houses. In Milwaukee, Charles W. George includes builtin ranges and ovens, dishwashers and disposers in \$15,000 houses—"and all the built-ins you can put in a kitchen in our new \$40,000 model."

In Memphis, William Jemison has added a brick core in his \$10,500 - \$11,700 houses and asks \$350 extra to put a built-in range and oven in it. Sixty per cent of buyers take them.

Some buyers pay outright

In Flint, Mich., Robert Gerholz is bringing out four new houses, each of which has a different make of "complete kitchen centers." In addition, he says: "We offer laundry appliances as options and 75% of the buyers have taken them. In fact, half the buyers pay for them outright even though they can be included in the package mortgage."

Fred Kemp in St. Louis has found that 75% of his buyers

take a built-in oven and range at \$270. Phillips Properties in Orlando, Fla. reports nearly all its buyers take a built-in range (\$165), refrigerator (\$225) and garbage disposer (\$65). In all Phillips houses priced at \$16,000 a washer and dishwasher are included as standard.

Two Texas leaders have gone all-out on the so-called "extras" as standard equipment. Wilson Brown's new Dallas models have about \$3,000 (retail value) of built-in appliances in a \$13,200 house. These include a wall refrigerator, freezer, washer, dryer, dishwasher and oven. And in Austin, Ned Cole will soon bring out a fully air-conditioned house at only \$10,500. Another airconditioned model will have three bedrooms, two baths, a family room and walled-in patio, all for \$15,000.

Sales methods get updated

No doubt the most significant strong trend in selling is that toward trade-ins. More leaders are trading and moving a larger percentage of their new houses on this basis (see page 127).

Otherwise, efforts to improve selling techniques take several forms. George Pardee in Los Angeles has turned to selling five out of every six homes on con-



Golf course borders new Keyes-Treuhaft tract for \$22,500-\$35,000 prefab houses near Cleveland.

tracts for sale to non-GI's, after the method of Hadley-Cherry (H&H, Feb. '55). This permits them to tap the prospect group without money for large down payments but willing and able to meet higher monthly payments than on FHA and VA mortgages.

Wallace Johnson in Memphis has stressed a "sharpened-up selling operation and more attention to closing sales." Daily sales meetings feature playbacks of sales talks caught on pocket wire recorders when salesmen talked to buyers the day before. Johnson has stopped giving "fancy

Bill Early



Free pony rides featured Russell & Proulx's opening for a group of \$12,-000 houses in Los Angeles.

names" to each new tract "because this means you lose all your advertising investment when you move on to the next tract."

In Seattle, Al Balch is building no homes himself this summer, is offering land, designs and mortgage money to small builders. Hudson Force has a similar plan in Akron. Sampson-Miller in Pittsburgh, still building, also have tracts where others can build, too.

Some change design

Some new designs this year have meant sharp breaks with the past, at least locally. Others just as important involve subtle changes like more and better closets or new exterior fixtures.

Perhaps the most newsworthy is yet to come, for Earl "Flat-Top" Smith has seven new pitched-roof models scheduled for fall. (He will also continue building the flat-roof houses for which he is famous.)

The split-level, Long Island's mainstay for the past two years, has caught on in more and more widely scattered cities. (Almost always the first to appear are side-to-side models.)

But other changes are harder to spot. A slight floor plan change, a new way of using color can mean a whole new trend in thinking. As photos on the next seven pages show, there are quite a few such significant differences this year.





Two houses above show today's varied exteriors. Bohannon is using old brick on many of this year's models.





Two hip-roof houses, both based on plan at left, demonstrate choices offered. Cedar shakes are new lure.

West Coast report:

Exteriors get a new look but floor plans stay "open"

David Bohannon's new designs in Santa Clara, Calif. meet a California trend that is hard to mistake: buyers want more choice in exteriors.

They want more individuality in their homes. No matter how well designed houses may be, buyers tend to pass them by if ther exteriors are all alike. Along with the demand for variety, many buyers are showing a preference for more romantic design and houses that make an appeal to sentiment.

But, regardless of exterior design people still want the open floor plans that California leaders have been giving them.

The Bohannon houses shown at right reflect this trend. Architect Mogens Mogensen has made only a few changes from last year's elevations, yet now the houses appeal to more varied tastes. The floor plans are virtually the same, with one main difference: the houses are bigger. Prices are higher, too.

Says Bohannon: "If we hadn't made the changes, we wouldn't be selling anything."



1956 plan (for house at lower right) is one of nine offered. They are quite like last year's plans but with some improvements. Plan shown has 1,273 sq. ft. of floor space, vs. 1,150 in corresponding plan last year.



Fully equipped kitchen center with colored cabinets is credited by Wake-Pratt for keeping sales running smoothly on their Detroit houses.



\$14,840 house by Wake-Pratt is one of relatively few in Detroit area that offer the buyer many built-ins.

All over the US, kitchen appliances spur sales of new houses

Photos (below): Guy Burgess



Kitchen appliances like these are optional equipment offered by Todd Sloan in Colorado Springs. He says 68% take oven and range at \$325.

In some cities, built-ins are "musts." In others, builders say they "can't be bothered" with appliances. The trend, however, is clearly toward the "must" point of view.

Detroit's Ted Pratt, who built the house shown above, puts the case for built-ins this way: "They protect the buyer from burdening himself with short-term credit, thus lessen the lender's risk. They also make it easier to design the kitchen efficiently."

This endorsement comes from a builder who offers built-ins as standard equipment. Leaders who disagree with Pratt do so only in degree. Nearly all say built-ins are a desirable sales feature, as options if not as standard equipment.



\$14,800 house has sold fast this year. Sloan reports many buyers take an added family room at \$500 extra.



Distinctive gates, wood fence do much to sell the neighborhood

In Detroit, Rodney Lockwood stresses the neighborhood

"I'm selling to people who want to keep up with the Joneses most of all," Rodney Lockwood explains.

He laid his plans for meeting today's market a long time ago. That's the only way to do business, he insists. "If you try to decide in 1956 to meet the buyer's market of 1956, you are far too late."

Because of foresight and planning Lockwood is sailing along in the buyer's market selling about 250 houses as scheduled. These are going up on a 1,200-lot tract which this leader assembled a long time back. The houses vary from \$17,950 to \$30,000 in price and just as much in design. But Lockwood's formula does not vary.

"We make a lot of sales to secondtime buyers today. In fact, in 1955 they took 82% of all the houses we sold," says Lockwood. "We also sell many junior executives and sons of upper-income families. They are a well-qualified type of buyer. We have the only houses which fit their desire for exclusiveness at a price they can afford to pay."

Lockwood has found it pays off to give these buyers a \$300 discount if they pay cash or arrange their own financing. This is enough to stir them "to put on the heat somewhere to get what they need, and it seems to lead to larger down payments as well."



Contemporary design offered by Lockwood is by no means common in Detroit. Buyers have a large variety in choice of exteriors.



Open living areas inside and a wide choice in plans are offered new buyers. Models are introduced at least once a year.



Carport gable is new idea in this 1956 model which has five other new features

In Baton Rouge, Frank Zuzak switches to the open plan



Present house (above) has 1,124 sq. ft., 2'-wide overhangs all around, a sliding glass door opens on rear terrace, a 6'high front window, the living room and family room merge in one 19' 8" long open area. Price: \$14,400.

> Last year's plan (at right) contained 1,007 sq. ft. of floor space. This three-bedroom, one-bath house sold for \$14,000. Overhangs were 1' wide or less, there were no large open areas inside.

In Baton Rouge, Frank Zuzak has sold 43 of his current program of 47 houses. He credits six changes he made in his 1955 model. They are: a lower roof pitch; a more open look to the exterior (as in the carport gable); floor-to-ceiling windows; more color throughout; open planning inside (with a family room); a paved terrace.

"We try to do four things to meet the market," Zuzak explains. "First is building the type of house that is in shortest supply and greatest demand. Second is offering maximum livability. Third is designing our homes about 20 months ahead of other builders' designs. Fourth, we shop the mortgage market until we obtain the best available low downpayment mortgage money for GIs."





In Rollingwood, bird-house louvers . . .



Cedar shakes, porch columns, fences



On hillsides, two-story houses (the USSR bought one)



Patios and sliding glass doors for many



Clean lines for those who don't like adornment

In the Bay Area:

Andy Oddstad offers many 'eye-appeals'

About \$400 worth of assorted "eyeappeals" have been added by Andres Oddstad this year to his smaller houses in the San Francisco area.

Except for the eye-catchers on the outside and more color throughout, the houses themselves are little different. (Floor plans "are those the buyers have proved they want over the years.")

Here are some other significant things Oddstad is doing in 1956:

He has opened seven projects, some for bigger houses selling for \$18,000-\$22,000 on higher-priced land. (His small \$13,000 houses of 1955 now sell for \$14,000 because costs have risen.)

He has gone full-tilt into trade-ins (see page 172).

He has boosted his traffic by shifting from classified ads to radio and outdoor posters.

He provides a community center of one kind or another in each project. Owner associations are set up under covenants wherever possible.

He donates church sites because "churches are a stabilizing factor that cannot be matched by any other type of organization."

He pays more than lip service to use of color. Color Consultant Richard Finegan advises on inside and outside color schemes (which tend toward subtler shades of brown, gray, pink and beige). Oddstad points out the public has become highly color-conscious in recent years, largely because of the new autos and clothes they buy.

For 1957 Oddstad plans to cut costs in order to get the price of his present \$14,000 house back to its former \$13,000 price.



This St. Louis house is a brisk seller

The handsome lines of Contemporary Home's new houses are not the only reasons why 44 units sold in the first three weeks after the opening of an 88house tract this spring.

For \$14,500-\$17,500, buyers get top color styling, patios, sliding glass doors, full air conditioning, a choice of 11 floor plans. Most take some optional extras and appliances. Three out of four pay \$150 for a brick accent wall and 90% want a fireplace at \$400 or more.



Contemporary style gains in new markets, holds its own in others



In Los Angeles, a new house and cul-de-sacs

Davies, Keusder & Brown will soon offer this new model, and several others like it.

They are confident it will be successful because:

1. Contemporary is well established in Los Angeles.

2. Their floor plans offer unusual inducements to

buy (see the dining table in the plan at right). 3. All 88 houses will be on cul-de-sacs in this entirely fenced-in tract.





This is an Atlanta builder's best-selling house



In Atlanta a 1,366 sq. ft. split-level, designed by Architect Warren F. Penney, is Fred Fett Jr.'s bestselling house. It's priced at \$16,190. One reason why it sells so well: he delayed building it until he had the right kind of rolling land.

This split will account for about half of Fett's 1956 production. He also has a 1,200 sq. ft. brick veneer ranch priced at \$14,450 without "extras." It replaces a smaller model introduced in December at \$14,600 with built-ins and patio, but less brick.

Split-levels spread to more cities and their designs improve





Here is Park Forest's newest and biggest

In Park Forest, Ill., where 8,000 houses have been built in five years, the big news is the big house and it's a split-level.

The new models sell for \$19,500 to \$22,950, against a top of \$19,000 last year and \$15,000 a few years ago. The splits have family rooms, 2 and $2\frac{1}{2}$ baths. built-in appliances. About a third of '56 buyers will be old Park Foresters,

Trade-ins can help everybody

A guest editorial by Norman Mason, commissioner, Federal Housing Administration

The No. 1 purpose for which Congress created FHA 22 years ago was "to encourage improvement in housing standards and conditions."

To us at FHA today this means a lot more than raising the standard of housing for buildings. It means raising the standard of housing for people.

It means helping people *buy* better homes, as we do with our mortgage insurance program. It means helping people *improve* old houses, as we do with our home improvement plan program. It can also mean helping people *sell* the old house and move to a better one if the old house no longer meets their needs or measures up to their wants. That is what we hope to do with our new Trade-in House financing program.

We believe this FHA Trade-in house program could be a wonderful help to the 30 million Americans who move from one house to another each year and to perhaps 60 million other Americans who would like to move if they could only sell the house they already own.

We also believe the new FHA Trade-in program could be of very great importance to builders, lenders and realtors.

It could bring into the market millions of customers for better new homes and better used homes. It would make it much easier for homeowners to convert their present equities into the down payments needed to buy better homes. In fact, we believe:

The Trade-in program may be the key to the quality market

Some people want to trade up-for larger houses.

Some people want to trade down-for smaller houses as children leave home.

Some people want to trade out-to enjoy country living.

Some people want to trade in-to live closer to where they work.

Some people want to trade for a new house; some people want to trade for a used house. Regardless of income bracket, just about as many FHA borrowers bought used houses as bought new houses last year. The median income of FHA new house buyers was \$468.92 a month; of used house buyers just a little higher—\$480.72 a month.

We believe all these homeowners should be able to change houses more easily as their economic or family conditions change.

To help make the Trade-in house market a real American institution like the Trade-in car, FHA already has the nucleus of a working plan. We issue firm commitments to builders and real estate firms who take an old house in trade if they agree to put it in good repair. We will take a look at any house—old or new—to see what its possibilities for insured mortgage financing might be in the event of a trade.

These are good techniques for individual house traders. What we have lacked is a good plan to provide builders and realtors with interim financing for an inventory of traded-in houses before they go back into the market. This is what we hope our new program (page 126) will provide. It is the result of studies we have made with the help of industry advisory groups of builders and real estate men.

In our Trade-in house program—as in all our insured mortgage programs— FHA cannot do the job alone. But through teamwork with industry we hope the Trade-in house program we have just adopted may open a great new market and bring improved living conditions to millions of American families./END



... and they are catching on big!



Map shows wide range of trade-in activity

All over the US, builders are taking used houses in trade for new ones. Each of the 36 cities marked by a circle (above) reported "yes, we're taking trades." Six other cities (square) said "not yet," but reported awakening interest in trades. HOUSE & HOME queried NAHB officials, builders, banks, realtors.

Trade-ins are booming in every section of the country. The new changes in FHA regulations on trade-ins, detailed on page 128, are sure to add to trading volume. But the rewards of trading were already well on their way to creating a new industry before the FHA regulations went into effect.

Back in November 1955 a H&H Round Table on tradeins reported:

"Again and again we hear builders say: 'As long as we can sell houses without trade-ins, we'd be crazy to take on such a headache.'"

Now the burst of trading is evidence that the time has come when many builders can't be sure of selling without trading; so they are trading in a big way.

The trade-in map shown above merely hints at the richness and scope of today's trading market. There is a richness of variety, too, for the ways of trading are endless.

Builders often work with realtors

Because trading takes know-how, most builders tie up with a realtor or use a separate real estate staff, familiar with used-house selling techniques. One big builder simply turns his trades over to several brokers, widening his trading area.

The need for specific information on trades is urgent. One manufacturer has published a series of six booklets on trading, which he plans to distribute to builders.*

Booklets explain trade plan

Prospective buyers need information on trading, too, so many builders are preparing informative and helpful booklets telling the trade-in story in simple style. One of the most clever booklets is prepared by Andres Oddstad —a portion of it is reproduced on page 172. Ads, too are plugging trades—from elaborate ads like those for Whitecliff Homes (page 129) to simply a line in a classified ad. John Clarke of Portland just adds: "Trade your home 4-1 of ours," often plugs trades on a theatre-marquee which hangs over his office door.

Almost all builders agree that the sale starts with the new house, that in order to make a sale you need a new house so good the buyer is eager to move in and the quick closer is: "I'll take your old house in trade." How the details work out is not half so important as making it easy for the buyer and making sure the buyer understands your plan.

Hughes starts inter-city trades

Dick Hughes of Pampa, Texas, carried this rule of making it easy for the buyer to its obvious conclusion when he took houses in trade in Wichita Falls and Dallas in order to sell new houses to buyers who were being relocated in Bartlesville, Okla. to work for a petroleum company. He paid fees to builder-friends in the old-house

* Minneapolis-Honeywell sells series for \$1.

cities, has the chance to do the same thing in Salt Lake City.

This inter-city deal kicked off cooperative trading for Hughes—points up an up-to-now unexplored source of trades, the relocation market.

In Louisville, the NAHB office reports approximately 5% of new house sales are trade-ins. In Long Island, where most people said: "No trades yet," one realtor has been trading since the first of the year.

Trades are big part of total sales

Several builders report their trade sales are as much as 30% of their total. And, especially in the higher-priced-house market, most traders say they make sales they would never have made without the trade-in help.

Of course there are builders who say they are trading when actually the "trade" is dubious: one big builder merely takes a deposit, offers to "help." If after three to six weeks the house is not sold, he refunds the deposit and the deal is off. In effect, he is "betting" the old-house owner that the old house will sell in order to convince him to sign up for the new house.

Some banks are cooperating

Banks are friendlier to trades than they once were. In fact, one banker, Hayden Calvert of Prudential Federal Savings in Salt Lake City, has said: "The trade-in program is one you can sell to a lender in this tight money market because it is profitable to him." (See page 130.)

The case histories in this issue are as varied as the builders and realtors who are trading. But they share one thing in common: these stories are each part of an overall trade excitement which isn't small potatoes any more. America is in the used house business.

New FHA regulations make it easier for builders, realtors and developers to trade

"It would be a great help if FHA would ... modify the now costly requirements for trade-in financing"—H&H Round Table Report, Nov. '55.

Now, new FHA rules make trading one- or two-family houses easier because:

1. Now, real estate brokers and land developers can borrow in their own names on Sec. 203 trade deals (as well as builders, who always could).

2. You don't have to make "major repairs"—or any repairs at all—to a house taken in trade to qualify for financing.

The house does have to be in "sound,

livable" condition, in accordance with minimum property requirements.

3. As previously, the builder, realtor or developer gets a commitment that lasts four months for 85% of the loan insurance that the owner could get from FHA on the house.** Biggest loan allowed is \$17,000. Realtors are asking Congress to push the amount up to 90%.

4. You can get a bigger commitment from FHA if a house taken in trade was originally built under FHA inspection.‡ FHA has told its field offices to make information readily available on whether a house qualifies for these better terms. The revisions announced by Commissioner Norman P. Mason mark the third move by FHA to help trade-ins. First two were part of the Housing Act of 1954 which: (1) reduced the difference between the down payment on a new FHA house and an old FHA house, and (2) gave builders two commitments, one for the house "as was" the other for the house "if improved".

^{\$\$\$} Owner gets \$3% of the first \$9,000 of the house's appraised value, plus 73% of value above \$9,000. \$\$ Owner gsis a loan of 93% of first \$9,000, so the trader gcts \$5% of 93%, not \$5% of \$8%.

Trade-ins are keynote of clever builder's successful sales campaign

Trade-ins account for 30 to 40% of total sales of Whitecliff Homes, a threeyear-old building firm that builds in three towns near San Francisco. They sell about 500 homes a year.

The San Francisco Real Estate Co. handles trade-ins for Whitecliff Homes.

They will actually take over the used house, if the house is not sold by the time the used house owner takes title to the new house. This means the builder doesn't tie up his capital in used houses.

The realtors feel that this system should work for most builders and realtors. The real estate office must have the personnel needed for a large-scale operation and enough money to buy the equities in the unsold houses. In smaller cities, they suggest that it might be feasible for a group of realtors to pool their resources and work on a cooperative basis. They also suggest that a group of builders might pool their new houses, to give the realtors an opportunity worth the time and effort involved.

Here's how the trade-in plan works:

Biggest selling point this plan has for used house owners, says Marshall Israel of the San Francisco Real Estate Co. is that "there is one single operation and the purchaser is relieved of all responsibility." He warns: "Keep the plan simple for the buyer." Here are the steps in the plan used by Whitecliff Homes:

1. Buyer goes to San Francisco Real Estate or subdivision.

2. He picks out a house and lot, pays an initial deposit.

3. Real estate salesman visits buyer at home; appraises old property.

4. After price for old house is agreed on, an exclusive contract is written, the contract to run as long as the construction time of the new house.

5. Buyer is given a letter of guarantee. If the property is not sold at the agreed price, the real estate company will buy it from him at a lower price.



Advertising is one of the reasons the Whitecliff-San Francisco trade-in plan is succeeding. Prepared by the builder and an ad agency, big newspaper ads reflect the over-all planning that sparks this successful trade-in operation.



6. Buyer gives real estate company permission to post "for sale" signs, key and permission to show property.

7. Real estate company keeps builder informed of sale.



Models like these (above and left) furnished by Macy's sell buyers out of their old houses.

8. When real estate company gets deposit on old house, they assign funds to new Whitecliff home escrow, to avoid question on the money belonging to the old-house seller.

"Let buyers get appraisal"

"I like to encourage owners of tradeins to have their property appraised by others also so that we may reach a satisfactory price," says Anthony Comparato of Rochester, N. Y.

He reasons that the appraisal will do more than he can to convince the oldhouse owner that his estimate may be high. This method evidently works, for says Comparato: "Homeowners like to take advantage of todays higher prices but on an average are fairly realistic." Leo Rush plays it safe with his new trade program

Portland, Ore. realtor William Rush wants to avoid actually taking a house in trade when he trades for his builder clients. He will take the prospective buyer's home as a listing and try to sell it before closing the sale on the buyer's new house.

Says Rush: "We'll sell the customer's old house for a 5% commission instead of the up-to-15% it would cost him in some of the trade-in deals that others are operating. This will make our customers happier and we'll keep better contact with our prospects, insuring more new house sales." One of Rush's clients is his brother Leo, who used to refer customers to another realtor, now feels that by losing contact, he lost some new house sales.

Rush will not advertise "trade in your equity" because he feels: "already some of them have come in with greatly ballooned equities that make a deal almost impossible". But he does have an "existing homes" department that handles trade-in deals.

TRADE-INS

Julius Shulman



"Forever Houses," designed by Jones & Emmons for Pardee Brothers of Los An-

Photos: D. P. Shelhamer



geles are chock-full of extra features that entice old-house owners. In the kitchen alone,

Buyers are eager to trade for new house with features like these

Here are some tips on trading from Pardee-Phillips of Los Angeles who have taken 20 trades, but made over 50 sales as a result of their trading system:

1. "Get a good-faith deposit (\$100) so you don't waste time with a prospect who has no real interest."

2. "Get appraisals from three different

realtors." (Company allows average of three appraisals, less 5% commission.) 3. "Give prospect 60-90 days to sell his house. He may do better, but more important, the house is more salable when it is lived in."

4. "Require the prospect to have at least a \$2,000 equity before you trade."



there are 14 built-in units. NuTone food preparation center is optional; Western-Holly built-ins are included.



Bank's trade-in plan for conventional loans fits needs of 1-20 house builders

Despite tight money, small volume builders and local lenders can swing deals with second-time buyers—on conventional loans.

The secret, says Hayden Calvert of Prudential Savings & Loan Assn. of Salt Lake City, is trade-in house financing through FNMA.

Calvert makes the deal work with 20year, 70% loans on the *new* house at an attractive $5\frac{1}{2}$ % interest. That means Prudential S&L lends \$12,500 to \$13,000 on an \$18,000 house. It means a down payment of \$1,900 *more* than FHA would require. But Calvert notes that big down payments are "no problem" to the typical buyers of houses in the \$18,000 bracket because most have big equities in first homes bought before 1950.

Ripe for trade terms

Says Calvert: "Because of the tight money market, FHA and VA financing on maximum terms are not available to help sell this first home so the owner cannot dispose of it for cash. Smart builders and lenders can help him. This buyer is ripe for a trade on favorable terms.

"We commit with a builder to finance this home on the basis of the present terms as quoted by FNMA allowing 50ϕ on the dollar for FNMA stock. The builder then trades on the basis of the vA appraisal less 5% for a sales commission and less $5\frac{1}{2}\%$ (the net FNMA discount in our area for a 2% down, 25-year vA loan). This means the builders offer the second-time buyer va appraisal less $10\frac{1}{2}$ % for his house—less any amount estimated for repairs or reconditioning. Builder can then sell this trade-in house on maximum terms to get his cash."

Extra profit possibilities

If the builder sells the house himself, he can save 5% extra.

Calvert says lenders ought to like such deals because they end up with "one good conventional loan at a rate we can live on" plus $\frac{1}{2}$ % for servicing the FNMA loan on the trade-in house.

Conventional new house financing, Calvert notes, saves Salt Lake City builders about \$500 in discounts and fees.

"Trade-ins help sell more houses and make more commissions"



Dillon paid \$26,000 for this house, got only \$18,500 for it after six months, but the owner bought four duplexes from Dillon at listed price. Construction profit partially offset loss, as did double commission.

Robert W. Dillon of Omaha, Neb. says: "Trading-in is defeated by those who try to make trades profitable in themselves. It's the new house sales they cause that make the profit."

"In over 50% of the cases the old house is sold before we close the new house deal," Dillon says. His rule:

1. He makes sure old house is in a good resale neighborhood.

 He adds 2¹/₂% to 5% commission as a guarantee against loss, depreciation.
He gets appraisal by salesmen, vA or FHA.

4. He finds out if buyer qualifies for obtainable loan.

Novel appraisal that's quick

When he's working on trade deals for the Portland builders who are his clients, John Clarke doesn't wait for FHA or VA appraisals. Instead, he takes experienced salesmen on a caravan every Wednesday morning and each salesman and Clarke write down their appraisal.

Back at the office, the consensus is agreed upon, and Clarke says: "It's been right on the nose most of the time in the past year that we've been doing it."

Builders who use Clarke: Van I. Mumma, Jay Bridges, Dick Lahti, Big-3, Dave Boland, Ray Hallbert, L. C. Gulde & Son, and Otto A. Hallenback.

This builder always takes title to the old house

But Carl Gellert of San Francisco warns: "Builders who have not tried trade-ins should tie up with a realtor.

"It is easier to finance old houses than new," says Gellert. "But you have to know values. The appraisal is most important and either my brother or I make

"No trade until a definite offer"

Thirty per cent of Harold Albert's sales involve trades. Fifteen salesmen sell for him, but they make sure the buyer really wants the new house before they get specific on the trade. His new houses cost \$35,000. He builds in Grand Rapids.

If the old house is worth \$20,000, he will guarantee taking it at about 10% less (\$18,000) less his 5% commission. off, less 5% commission. If he built old house, he takes off 5 not 10%.

it. We don't let salesmen appraise as they are too optimistic."

Gellert has traded since 1928, has been in the real estate business since 1922. About 20% of his sales involve trades; he builds about 400 houses a year.

Gellert takes title because he doesn't

want the family moving into his new house to know what their old house sells for. He does some fix-up—from \$250 to \$1,000. Gellert charges 5% commission.

Current Gellert project is a 2,000 lot tract, "Mid Terrace," at prices from \$14,000 to \$20,000.

"The new house has to be good enough to create a prospect"

Wallace E. Arters, President of Arters Brothers, Inc., Media, Pa., says: "In our area, most builders haven't been too interested in trades, because the market is good. If a builder advertises trades, other builders say: 'The job's a flop; he's got problems.' Most homeowners insist on a high price for their old house. And we have a transfer tax here of 2%, which means the builders pay that much extra to trade-in. "But some builders are considering trades.

"Builders are adding more features to their houses. They're trying to make them so attractive that prospects will take a realistic price on their old houses to get the new ones. This will make trade-ins profitable. Biggest push would come if state and local boards realized trade-ins don't really involve two transfers."

"Take these five steps before you make a trade-in sale"

In 1955, says Rodney Lockwood of Detroit: "82% of my buyers had an old house. Of all my buyers, over 50% wanted to talk trades with me."

Here is how Lockwood sells trade-ins:

1. He gets the prospect thoroughly sold on the new house.

2. He gets the prospect to choose a *particular* house in a *particular* location.

3. He gets the prospect to commit himself on color and other optional selections.

He gets a deposit of \$2,000 in cash.
Then, and only then, he agrees with the prospect that if the old house cannot

be sold, he will give back the money. During last year, he has had to give money back only twice. The time in which he sells the old house varies from 30 to 120 days. He sells 75% FHA and 25% conventional or cash. His commission is 3%.

One of the reasons Lockwood is successful at trades is that he has his own experienced real estate salesmen in his own real estate department. Of 12 salesmen, four work almost all the time on old houses.

Lockwood's current 800-acre project is called Cranbrook Village. It now has about 200 houses (page 121).

Long Island splits are trading



Split offered by Nassau Realty on trade

Nassau Homes Realty started taking trades in January 1956, has sold 75 new houses this way. "Home seekers with a house to trade-in generally want (1) larger quarters and (2) a better location."

A new firm that packages

builder services includes trades

as part of the sales program

"Merchandising the new house and operating a successful trade-in program are inextricably meshed," say Rowland F. Sweet and Charles G. Ortiz of the Subdivision Sales Co. in Sacramento. They handle planning, selling and promotion for builders.

"Sales begin on the drawing board; the most successful and profitable trade-in program also begins there," Sweet adds. "It is our opinion that a successful tradein program on houses is very much like a successful trade-in operation on automobiles. If the buyer first becomes so pleased and enamored of the new model



Firm took six-year-old house in trade

that he has to have it, then prices, delivery dates, terms and conditions of trade-in are *incidental* to the sale."

"On the other hand (still using the car analogy) if we have to 'buy' sales by making such a high trade that the buyer is induced to purchase primarily because he is getting such a long trade, we create uneconomic sales and by example we are



... to sell Arcadia Builders' split at \$16,995

inducing our competitors to likewise 'buy' sales with long trades, thereby building an unprofitable volume and creating an unhealthy competitive situation."

In addition to trading, Sweet and Ortiz buy raw land; land-plan for county and city planning commission approval; record map; design houses; handle selling; and even act as lenders.

continued on p. 172



Pool and community center in J. C. Nichols project has been expanded by 13,400 sq. ft. clubhouse and lighted tennis courts

Does a community pool make sense for you?

Builders who've tried one say the community swimming pool is a hard-hitting sales asset.

In Kansas City, the J. C. Nichols Co. (who have built over 6,000 acres of homes), put in the pool shown above, found it appealed so much to buyers that, like Topsy, it "just grew." Nichols built the 60' x 150' pool two years ago. Its popularity rocketed so fast that they added a clubhouse and recreation area when more families clamored to sign up.

Among salesmen, it is said that "the one big thing they remember will bring them back to buy." No buyer can forget a pool; the impact is terrific.

All over the US, a small but growing group of project builders are including a pool as an inducement to buyers who want a more-than-minimum house.

You can put a pool in almost anywhere

As you see from the chart on the opposite page, there are few climate restrictions for pools. The same, hot humid summers that have boomed air conditioning in the Midwest and Northeast make pools as popular there as in the South and Southwest. Families love pools because everybody—young and old—likes water fun. (Sharpstown built a golf course first, pool and clubhouse second, but would reverse this order if they had it to do over because of the whole-family appeal of the pool.)

Nichols had to bear only part of the cost of the facilities they put in. The residents were eager to take a hand. When 500 families signed up for country club membership (at a \$250 fee), Nichols donated 14 acres of choice land and \$25,000. When the membership reached 750 families, Nichols added another \$25,000 (physical assets are now held at \$430,000). After guiding the planning and construction of the club facilities, the Nichols firm gave up all control to officers elected by the members.

What's the value of the community swimming pool? President Miller Nichols sums it up this way: "We can pinpoint many sales made specifically because of these facilities. It is common to hear residents tell friends to buy their next home in our area, so they can belong to the club."

BUILDER	LOCATION	NO. OF HOUSES	SIZE	FACILITIES	COST	OPERATION
Sharpstown	Houston, Tex.	1,000	165' x 65'	Complete country club	\$2,000,000	Developer, homeowners late
Eichler Homes	Northern Calif.	230	30' x 70'	Dressing rms., park area	\$20,000	Homeowners Assn.
Sampson-Miller	Pittsburgh, Pa.	750	35' x 75'	Toilets only	\$50,000	Developer, residents later
Twin-Brook subdiv.	Rockville, Md.	600	165' x 52'	Bathhouse	\$90,000	Homeowners Assn.
Fischer & Frichtel	St. Louis, Mo.	400-500	72' x 40/60'	Dressing rms., office	\$50,000	Homeowners Assn.
Meyerland Co.	Houston, Tex.	3,000	2,500 sq. ft.	Complete clubhouse	\$75,000	Private club
Mark Bogue	Denver, Colo.	500	40' x 82'	Dressing rms., office	\$32,000°	Nonprofit Corp.
Tobin Co.'s	Beverley Hills, Calif.	600	26' x 70'	Recreation hall, play area	\$11.000*	Private ownership
F & S Construction	Phoenix, Ariz.	2,000	40' x 82'	Bathhouse	\$30,000*	Builder, future undecided
Conrich Baum apts.	San Francisco, Calif.	29 apts.	16' x 32'	None	\$7,500	Apartment owners
Adelphi Recreation Inc.	Adelphi, Md.	750†	Olympic	Bathhouse	\$150,000	Closed Corp.
Kroh Bros.	Kansas City, Mo.	700	105' x 36'	Clubhouse, play area	\$90.000	Developers
Dale Bellamah	Albuquerque, N. M.	~400	35' x 70'	Bathhouses	\$30,000	Developers
arrymore Lawns	Norfolk, Va.	300	49' x 75'	Dressing rms.	\$60,000	Nonprofit Corp., Assn. later
Phil Heraty Org.	Oakland, Calif.	500	40' x 75'	Bathhouse, dressing rms.	\$40,000	Homeowners Assn.
Bayberry	New Rochelle, N. Y.	200	Olympic	Clubhouse	\$200,000	Homeowners Assn.
Crestmore	Denver, Colo.	325	40' x 82'	Dressing rms., stor. play area	\$37,500°	Homeowners Assn.
Belmont	Pueblo, Colo.	200	40' x 80'	Clubhouse	\$30,000°	Homeowners Assn.
Danhurst Corp.	Fairless Hills, Pa.	2,000	75' x 165'	Clubhouse	\$186,000	Developer
J. C. Nichols	Kansas City, Kan.	2,500	60' x 150'	Clubhouse, tennis, sports	\$85,000*	Club membership
Place & Co.	S. Bend, Ind.	413	42' x 84'	Complete bathhouse & play area	\$68,000	Homeowners Assn.
Place & Co.	S. Bend, Ind.	264	75' x 45'	Complete bathhouse & play area	\$27,000	Homeowners Assn.
Prairie Village	Kansas City, Mo.	500	45′ x 82′	Toilets, food conc'ion fut. club	\$56,000	Nonprofit Corp.

Popularity of idea and wide variety of swimming pool facilities is shown in chart form

Here's how 23 builders use pools to boost sales

Paul Fifield



Social life in J. C. Nichols subdivisions centers around the club; dances and parties, as well as sports, encourage participation. Many prospects decided to buy homes in the subdivision after first seeing the pool as guests of earlier residents.



Variety of fun (swimming, sunning, sports) is offered by Dale Bellamah in Albuquerque. Pool is oasis in desert surroundings. Large grass areas enable pool to accommodate above capacity crowds by providing space for non-swimmers.

Amos Studio courtesy "Swimming Pool Age"



2. Build the right shape

Because more people wade than swim, the shallow end of the pool gets the heaviest play. Fan- or wedge-shaped pools are the most economical way to get the right balance, since you can widen the shallow end without increasing the expensive deep area. Oval or free-form pools are not considered satisfactory as community pools; they cannot be used for swimming meets, water polo, etc. In addition, complex formwork needed for unusual pool shapes sends up your construction costs. "L"and "T"-shapes give safe diving areas.

How to plan the right pool for your community



1. Build the right size

Here's how to figure the size pool you need: in a small subdivision, up to 15% of the homeowners may use the pool on any one day. In larger areas, this figure will drop as low as 10%. Two-thirds will sun and wade only, not swim, and each of them will need 10 sq. ft. of water area. Active swimmers require 27 sq. ft. per person. On an average 15-17 sq. ft.

On an average 15-17 sq. ft. per potential user will do. Don't count diving areas in this total and before you put up a diving tower, remember that only 1% use them and they add as much as 25% to your costs.



3. Take care of crowds in non-pool areas

Don't size your pool for the peak days. If you do, it will look deserted with a normal attendance. The pool can be overcrowded on a few occasions without arousing anyone's resentment.

Oddly enough, only about a third of your crowd will be in the water at any one time, so large concrete aprons and lawn areas for sunning are as important as the pool itself. Aprons should exceed water area by at least 50%, and remember to include facilities for both shade and seating in these nonactive areas around the pool.



4. Include plenty of game space

Playgrounds, tennis courts, baseball diamonds and picnicking facilities are part of many projects. This makes the pool appeal to the whole family. One project even floods the tennis courts in winter to make an ice-skating rink.

These play areas should be

fenced off from the pool. Grassy spaces should be made of hardy grasses, able to withstand tough abuse, with each activity well separated from the others. For sanitary reasons, install a foot-bath and shower for people going back and forth between pool and play areas.

Cloetingh & Deman Studio

Whitestone Photo



← ₩ 5. Locate pools for

economy and comfort

Use dressing rooms or bathhouse to shelter pool from prevailing winds, and place these buildings close to pool, but don't block out the sun. Parking areas should be ample, with a buffer between them and adjoining houses.

Avoid locations where excavation is difficult and those not convenient to utility connections.



7. Don't forget the toddlers

Separate wading pools are almost unanimously recommended by pool operators. Provide plenty of nearby benches for mothers to sit and sun while supervising their young.



8. Shop for the set-up and financing plan that suits you best

Here are four basic plans for including a pool in your project:

6. Leave room for a community building

Because the pool will be a center for community activity, either you or the homeowners

may want to add a multipurpose building. You can start on a small scale by building mini-

mum bathhouse facilities first to keep the original cost low.

You can plan them for later,

gradual expansion.

• Build and pay for it yourself, then turn it over to the community. This is what Levitt, Sampson-Miller, and Frank Sharp did. The cost is included in general development expense. • Build and pay for it yourself, then regain your cost by selling it to the homeowners. This method, used by Bayberry-New-Rochelle and Larrymore Lawns, involves tying up considerable capital until the buyers sign up.

Encourage homeowners to

organize the pool. You can donate the site, or subsidize part of the cost. This is the most common and fastest growing method.

Homeowners often need the builder's help in organizing the project and contracting the construction. To insure wide participation, and financial success, one new idea is to hire professional fund raisers to put over the initial drive.

• Build and operate the pool for profit, just as you would a shopping center, with residents, non-residents eligible to join. Three basic methods are used to build big pools





1. Poured concrete requires careful placement of reinforcing rods and concrete mix. Construction should always be under the direction of an experienced pool architect or engineer. New flexible steel forms that can be bent around any radius may reduce cost of formwork for complex free-form pools. Another construction method (Gunite), hoses the concrete into a monolithic reinforced shell, using the ground itself as a form.

2. Welded steel pools are shop fabricated of steel plate ($\frac{1}{4}$ "), then welded into place on the site. There are no practical limitations on size or shape and plates as large as $43' \times 8'$ are lifted into place by cranes. Each section is numbered and coded at the factory and is assembled just like the framework of a building. Openings for lights, inlets and outlets are cut into the proper plates before shipping and accessories like ladders and gutters are welded on after the pool is completed. Finally, the steel is primed and painted to protect it against the water. On large community pools, costs will range from \$11-\$11.50 psf. of water area, installed and ready for use.



3. Precast concrete slabs form the basis for a fast-growing pool building method. Factory cast, with reinforcing embedded, the 15' or 20' slabs are set into a keyway in the poured concrete floor perimeter, dovetailing into adjacent panels. Pools can be any multiple of 5' (except 25') in length or width.



High strength (5,000 psi.) of the panels and buttresses is achieved by the factory casting, finishing and curing. This density is above that obtained in the field and gives the concrete a high resistance to flaking, spalling, or honeycombing. Slabs are trucked from factory to site, put into position by a crane.



Concrete buttresses support the panels at each joint, and are bolted to both walls and footings. Synthetic rubber gaskets in each joint are squeezed by the bolting into watertight seams. No finishing of the smooth concrete is needed beyond rubber base paint. Fittings are cast right into the panels.



Closely laid stone wall and raised hearth frame this attractive fireplace. Contrast between smooth steel hood and natural texture of stones is effective.

Who wouldn't want a fireplace like this?

The 14 fireplaces shown here and on the next six pages share one thing in common: each is sure to get attention.

Their design is the kind of luxury extra that warms prospects into buyers. In today's tougher market, it takes "something extra" to sell a prospect out of his old house. And just as it makes sense to add built-ins to the bath and storage-walls to a bedroom, it helps to put a fireplace in the houses you build. For when a fireplace creates drama, warmth and excitement, it creates sales, too.

Designed by Dan Kiley. Photo: Lionel Freedman > Designed by Palmer & Krisel for Midwood Construction Co. Photo: Douglas M. Simmonds



Now the fireplace serves the family room, the new center of activity (above). Right: The fireplace is almost like a storage wall, its design simplified, direct.

Today's fireplace fits in many kinds of rooms . . .



Dual-purpose fireplace extends its hearth to form a serving counter in this fresh example of the new fireplace that does several jobs

Designed by Architects Collaborative. Photo: Ezra Stoller ➤ Designed by Mogens Mogenson for David D. Bohannon Organization. Photo: Fred English



Fireplace acts as a divider, separates living area from hall (above) Right: Pass-through fireplace forms a semi-open "wall" between two rooms.



and takes on lots of double-duty jobs



As these drawings show, hearth can also be used for extra seating or as a base for built-ins. Often, it has "wings" that hold plant boxes



This side of triple-duty fireplace faces family-dining area

Kitchen barbecue has hood, woodbox

Three-way fireplace serves kitchen, family- and living-rooms



In living-room, big expanse of old brick provides rough texture to contrast with wood walls and ceiling. Sketch shows double chamber



Outdoor-indoor fireplace wall extends through glass (barbecue at far left). TV-storage-wall flanks the indoor hearth (at right)



Here, indoor hearth and outdoor barbecue are one



Today's fireplace looks different because it must be integrated with today's open plan and modern materials, construction

The fireplace is part of a wall. Often, it becomes the whole wall . . .





... or concrete, with applied pattern



... or concrete block

. . . whether wood

New ideas and new materials add to fireplace appeal

Designed by Herman O. Ruhnau for Harry C. Marsh. Photo: Jackson Ingham, Jr.



Over-size hood is one good way to give the fireplace more visual importance. Construction is simple (right)





Exposed flue simply cuts through overhang

Here's a practical solution to the night-time problem of what to do about big glass areas: set a fireplace right into the glass wall. With-out changing room elements, there's interest night and day.

Now fireplaces have new functions

A fireplace is no longer needed for heat-ing; it is valued for its "social" attributes far more than for its warmth.

This requires the designer to justify the extra expense of the fireplace with extra beauty and utility, while it frees him to place the fireplace where it will be most dramatic.

The new ways of using the fireplace give builders new selling features and buyers new enjoyment./END



Contemporary house in Greensboro, N.C., by architects Hayes & Marshall, contrasts sharply with its traditional neighbor.

For better family living for better use of land and for greater privacy

This house has 3 zones indoors and 3 zones out

Flanked by streets on two sides, neighbors on a third, this site made privacy difficult. The architect solved his problem by applying the principle of zone planning to the outside areas as well as the inside of the house. As shown in the plan below, interior and exterior zones were carefully related to make sure they work well together.



Three indoor zones make the plan work

1. For formal living

This zone is designed for adult living, a place for the parents and their guests. The brick fireplace wall shuts out noise from the play court which lies behind it. (A heater room further separates the formal zone from family living.) At opposite end of the room (not shown in photo) is space for formal dining; a free-standing buffet marks the division between living and dining areas. Fluorescent lights (used also in kitchen and baths) provide general lighting.





2. For family activities

Casual living centers on this part of the house. Besides the family room and kitchen, this zone has ample space for a second and informal dining area. Not shown is a built-in desk, with surrounding shelves and file space, which provides the work space needed in running today's home. By using an open work counter as a room divider, the architects make the room look just that much wider; in addition, occupants of kitchen and family room can have a companionable part in each other's activities. Terrazzo floors make cleaning-up a simple job.



Securely hidden on the interior of the lot is the zone designed for greatest privacy; it includes 3 bedrooms, guest room, 2½ baths. The half bath also includes a washer and dryer (most soiled laundry accumulates in bedrooms and baths, making this location logical for laundry appliances). Storage units serve as a sound buffer between the bedroom wing and the family zone. Built-ins for the bedrooms include wardrobe, drawers, hat and shoe compartments.



Three outdoor zones make full use of the lot



A. Entrance court

Sheltered by the same overhang, guest and family entrances take opposite sides of the same entrance court. Guest entrance (at right in photo) leads to formal zone (where a strategically-placed closet prevents a direct view into livingdining area). Family entrance opens directly into the family room, is convenient to the bedroom wing. High windows on the entrance court give light, air to family room, protect against view from outside.

B. Formal terrace

A terrace for outdoor entertaining lies right outside the formal area. To take advantage of a view overlooking the lake, architects Hayes and Marshall opened up the wall of the living and dining areas by using post-and-beam construction, floor-to-ceiling glass. The fence extends partly around end of terrace outside of dining room, giving some privacy without cutting off the view. Some of the concrete squares that make up the terrace were omitted to bring in planting space and soften the effect of the long stretch of concrete.





C. Protected play court

Outdoor space for casual living is located right outside the family room, easily accessible from the kitchen for quick serving of snacks or drinks. The living room wing helps shield the play court from the street. The fence gives additional privacy to family life and means better control of children's outdoor play.

Details like these assure privacy and control



Louvers for indoor privacy

With vertical louvers in the west wall, bedrooms have maximum ventilation; are still protected against the view from neighbor's front yard. Doors can stand open all night; screened louvers prevent entry to bedrooms from outdoors.

Fences for outdoor privacy

-2"X 4"

2'X2

A'XA"

4"X 4"

Wil.

14

: Wh

Wood fences wrap up the terrace and play court, give them shelter from the street. They are designed to suggest openness at close hand, appear more solid from a distance.

Open kitchen controls plan

Midway location of kitchen gives it easy access to the entrances, makes it the center of living and dining areas. Openness also simplifies control of the children's play.





Model of thin shell concrete house, to be built without formwork, is the concept of architect John Johansen. Each room in the house will have its own thin shell to form roof and walls all in one piece (see photo on opposite page).

Is thin shell concrete practical for houses?

Even though thin shell concrete construction means big savings in materials, in the US it has been held back by the high cost of formwork.

Yet from an engineering point of view, building a thin shell concrete house *without* formwork is entirely feasible. But still to be tested: (1) the relative cost of thin shells without formwork vs. conventional construction and (2) the public's acceptance of thin shell design.

These pictures of an experimental model show how Architect John Johansen applied the thin shell principle to house design.

According to Johansen and his consulting engineer Mario Salvadori, 2" thick shells of concrete built with spray guns could easily make one-piece roof and walls for a curved house. An actual house, based on model, will be built this summer.

Johansen eliminated formwork from his thin shell—a notable first. The basic structure can be put up by lathers and Gunite-ing crews, who spray concrete on in the same way they would put a concrete surface on a flat masonry wall.

Steel pipes, from 1" to 2" in diameter, will be bent into position to make the skeleton of the shell. Wire mesh, thin reinforcing rods and a paper-backed steel lath go over the pipe frame. When concrete is sprayed on, the shell is formed. Roofing and insulation will also be sprayed on.

Window walls are to be plastic, the chimney, masonry. The concrete floor slab will be radiant heated. The house uses no lumber or glass. Shells can expand and contract freely, the window walls riding in slots under their edges.

Cost of the two bedroom house is expected to run about \$15,000. Johansen and Salvadori believe that a standardized design and volume production might bring the cost of thin shell houses down as low as \$6,000 to \$8,000.
Thin shells use less material than any other structure





A thin shell is the strongest and most economical structure known to man. It is always curved, and like sea shells and egg shells, its curves give it strength.

In the classic example, an egg shell can support 150 lbs. evenly applied over the whole surface. But egg shells are weaklings compared to thin shells of concrete. Buildings have been built with thin shell roofs only 2½" thick spanning distances up to 100".

As shown at the left, the curved thin shell works somewhat like the Roman arch, translates the stress imposed by the load directly to its supports, creating only two reactions, shown by red arrows. When a beam is used to span the same area, as in the lower left drawing, the stress imposed by the load creates six reactions, as shown by the red arrows. To meet the greater number of reactions, the beam requires greater depth, hence more material, than the shell.

Professor Salvadori (right) likes to illustrate this principle with a piece of paper. If held flat (upper photo) the paper can't support its own weight. But if it's bent, as in the lower photo, it supports itself.

In practice, thin shell construction usually involves curving the shell in two directions to give it more strength, like adding a second curve at the end of the paper. Shells in the experimental house (below) will use this principle, be curved upward at their edges.







This month, thousands of American families are settling down in

Summer Houses

-which they have rented, bought, built or improved. Many more thousands are dreaming about buying or building.

How many summer houses were built in the US last year is anybody's guess (p. 157), but the number is in the tens of thousands and likely to increase. Reason: new sites have been opened up within week-end radius of most big cities opened up by big new highways, by cheaper air-travel, by more leisure time.



Armonk, N. Y. house. David Henken, Designer. The most important fact about summer houses is that they are or should be—very different from year-round houses.

They are different in their heating and cooling needs, in their ventilating needs, in their storage needs, in their planning needs, in their over-all design needs. They have different construction and financing problems.

A second reason for presenting summer houses now is that they tend to show a much more experimental design approach.

People have fewer preconceived ideas about the way a summer house should look and so they are willing to accept shapes, forms, structures, colors that they might resist in their year-round homes. That—plus the fact that summer houses don't have the usual winter problems—makes the summer house a small and lively design laboratory for home building. Guerrero



... on the ocean

Carmel, Calif., house is perched on Pacific cliffs. Anshen & Allen, architects.



House at Hunter, N.Y., has a central, glass-walled living room oriented toward a view of the distant Catskill Mountains. Bartos & Klein, architects.







Fire Island, N.Y., house is built on short posts driven into the sand dune. Deck has canvas panels for shading and privacy. Peter Copeland, designer.

Frank Lotz Miller



... and in the woods

Waveland, Miss., vacation house is a long and narrow screened porch. Lawrence, Saunders & Colongne, architects.



Old summer house, Cape May, N.J.

Photo: George Jenkins

Summer houses . . .

Yesterday's summer house was a year-round house with heating and insulation left out.

Today's summer house is as different from a year-round house as a tent is from an igloo. For today's summer house recognizes that people want four things from a summer house:

They want a view of the country or the sea . . . they want the breeze to keep them cool . . . they want screening to keep out the bugs . . . and they want a pleasant place in the sun. For some good solutions, see the facing page.

... have changed a lot

New summer house, Watermill, L. I.

Nina Leen-LIFE



Vacationists want a handsome view

Diamond-shaped house at Carmel, Calif. is pointed straight at its dramatic view of the Pacific. Anshen & Allen, architects.



... a cool breeze

Sliding wall house, Watermill, L.I., N.Y. All four walls slide open to catch the sun or breeze. (See also opposite page.) Peter Blake, designer.

Frank Lotz Miller



... screening against bugs

Screened porch house in Mississippi delta is a complete breezeway, with all rooms facing on the 60' long screened porch. Lawrence, Saunders & Colongne, architects.

... and a nice place in the sun

Southern California beach house has a sunbathing deck facing the ocean, with benches part of the railing, open slat floor to let sand trickle through, free-standing end-panel for privacy and wind protection. George Vernon Russell, architect.





George de Gen

Summer living calls for summer plans . . .

... plans with compact utilities

This California vacation house has two full baths, two spacious dressing rooms, a big utility room and a bigger kitchen all in a 500 sq. ft. core. Anshen & Allen, architects.



... plans with breezeway living rooms

A living room that is also a screened breezeway will help keep a summer house cool. Best location: right in the center of the house, as in this dune cottage designed by Peter Copeland.







... plans with bunk instead of bedrooms

This Long Island vacation house has four bunk rooms that can sleep eight, plus four closets all in 280 sq. ft. of compact floor space. Robert H. Rosenberg & George S. Lewis, architects

... plans with special storage

Summer clothes don't take up much space, but outdoor gadgets (like gardening tools, fishing rods, deck chairs etc.) do. Result: you don't need big inside closets, but you do need at least one big outdoor storage bin with every summer house. Bartos & Klein, architects.

Summer houses need protection

... from the cold

in the spring and in the fall, and on chilly nights. Prefabricated metal stoves like the one at right are a good solution for occasional heating. Architects: Campbell & Wong.







... from the sun

which can become a serious menace to vacationists. Here designer Peter Copeland used canvas panels in different bright colors to serve as sun shades for his porch.

Photos: Morley Baer





... from hurricanes

which have inflicted major damage to summer colonies on the East Coast in recent years. Triangular structures like this little beach house are almost indestructible in heavy storms. Designer: Andrew Geller.

... and from the winter

locking up a summer house for the winter is a major problem, because summer houses tend to have large openings that need to be covered. This cottage, by Architects Campbell & Wong, shows one neat solution: plywood doors that slide across the glass and protect it through the winter months.

In designing a summer house, remember these six points:

1. Food Storage

provide plenty of it. Vacationists don't want to go shopping more than once or twice a week. A big deep freeze can be very useful.





2. Built-ins

especially benches that can be converted to sleep week end guests. Put storage units underneath for extra sheets and blankets.

3. Garbage pails

should be kept far away from the house, and screened in if possible. They attract bugs, stray dogs and cats. Put in an incinerator if local ordinances permit it.





4. Outdoor lighting

is another way of drawing bugs away from a summer house. Most gnats can get through any screening, so the way to get rid of them is to lure them away.

5. Outdoor showers

are essential, especially near the water. People want to wash off sand and mud before coming inside. Design a simple shower enclosure and provide a dry well nearby.





6. Easy maintenance

is of paramount importance. Nobody wants to spend his summer vacation sprucing up his cottage. Use materials and finishes that weather well, require no upkeep, will resist rot, termites, mildew and other summer house disasters.

Summer house construction is booming

The US is in the grip of a summer house boom so big its proportions are only dimly understood.

The rise in consumer incomes is for the first time making it possible for America's great middle class to buy a lot in the country—and to put up a house in which to enjoy the new leisure.

State-financed highways and bridges are opening up hundreds of miles of new vacation territories to easy auto access—notably the reef islands off the Gulf Coast.

Summer house financing is easing

VA has just ruled that veterans may use their GI house entitlement to buy a summer house even if they already own a house (non-VA, of course), provided the summer residence is built to VA's year-round living standards.

Here is some of the evidence to show how summer construction is booming throughout the US:

• Houston realty developer John B. Cassidy last fall began to trans-

LIFE: Walter Sanders

form his 10-mile-long holdings on San Luis Island (50 mi. south of Houston) into a community to rival Florida and California resorts. His project was made possible by a new \$2.5 million bridge from the mainland.

• On Padre Island, a 110-mi. long sandpit off the southernmost tip of Texas, ex-home-builder Jonathan Conrow (whose great uncle, John Collins, developed Miami Beach) is offering tracts from 35 acres up to builder-developers. Conrow thinks Padre Island may some day rival Miami.

• In Otsego, Mich., the president of the Chamber of Commerce has announced his area doesn't have enough builders to keep up with demand for vacation homes.

• In Cleveland, the Chamber of Commerce reports there are 20 inquiries for every summer cottage available around Lake Erie. Result: the Chamber is sending people to Canada. • Around Chicago and Milwaukee so many middle-income families have bought or built summer cottages that the old resort hotels and motels are facing hard times.

Developers are getting busy

Promoters everywhere agree that the big money is in land turnover, not building. Land is bought cheaply, improved, then re-sold. Ponds are widened, swamps deepened and tagged "lakes." One enterprising developer spotted a depression ^{1/2} mile from Fox Lake, Wis., dug a channel to the water and had himself a "lakefront development."

Biggest danger is shanties springing up in these areas and destroying the very values that first created the vacation spot. But as land prices begin to rise in vacation areas, the "\$2,195-plus site" variety of shack (a shell without plumbing, wiring or heating) is starting to disappear. Smart developers now know that their long-range interests lie in keeping densities down and quality up./END



JALONACK PLAYS IT BIG AND HANDSOME

Levitt's former chief engineer, now on his own, shows how a smart builder relies on good community planning even when industry hands him a ready-made housing market

Here is a project set right in the middle of a booming seller's market. But it's designed for long range payoff as well as for today's shortage. In his 4,000-house Whittier development, outside Kingston, N.Y., Irwin Jalonack will give buyers everything from underground electricity to a library. Here's the story of how Whittier came about and why Jalonack chose to play it the way he did:

"Wherever I put in a golf course, houses pop up all around it," countryclub architect Robert T. Jones remarked casually.

His listener pricked up his ears. Irwin Jalonack, fresh from 14 years as a Levitt engineer, listened carefully as Jones told him about 300 acres of choice Hudson River land he was turning into a golf-course for IBM employees. The club was to serve the company's big, new plant at Kingston, N.Y.

That was news enough to start Jalonack. With the help of Long Island realtor Howard Kreitsek he began picking up options on 1,500 acres of land around IBM's proposed golf course.

Planned around golf course

Jalonack's plan: to surround the 300-acre club with a 4,000-house development that would take full advantage of the crying need for houses created by IBM's move to a new community.

He visualized a miniature packaged town with community centers, schools, churches and houses that would tempt the more than 6,000 executives and salaried technicians to be employed by the new plant. Jalonack's action was based on a series of studied moves. He considered the area carefully, found that for years Kingston was rated one of the lowest income communities in New York State. But with the arrival of IBM and its thousands of new workers, Kingston suddenly boomed and was acutely short of houses.



This IBM plant created a market

Jalonack picked up his land quickly to keep knowledge of his plan from shooting up prices. He optioned, rather than bought outright, to make sure that he had enough land to build the kind of long-range development he had in mind.

Market survey helped

From IBM, Jalonack got estimates of the amount of money employees thought they could spend for housing, then planned his proposed houses realistically for the market. With land planner Leo Novick, he worked out a schematic map of the development (see opposite) which he called Whittier.

Armed with his estimates, land

parcels and the plan, Jalonack went to work, looking for the extras that would turn his idea from a paper town into a live development.

Wiring goes underground

He contacted local utilities, ironed out service problems so that he could bury all wiring and cables underground (see page 160). Jalonock plans two community centers for Whittier—one soon to go up—the other, when enough people move in to need it. He has set aside choice pieces of land for schools and churches, plans to donate a library and a firehouse later.

Houses include complete kitchens

With architect Herman York who drew up the designs, Jalonack settled on three types of houses—a twostory model, two ranch houses, and two $1\frac{1}{2}$ story Cape Cods (see page 162). He included complete, packaged kitchens, lots of storage space in his plans, found these two good selling techniques more than overcame local resistance to his basementless houses (see page 164). Based on previous experience, Jalonack decided to subcontract everything himself, work on a fast-moving production line set-up (see page 161).

By mid-June, as graders smoothed out roads and subcontractors moved into town, Whittier got underway. The first family in the initial 500house group will probably move in early this fall.

At the rate Jalonack builds, by spring a buyer will be able to order a house, move into it two months later. Jalonack believes in keeping ahead of his customers.



BUILDER: Irwin Jalonack CO-REALTOR: Howard Kreitsek ARCHITECT: Herman H. York LAND PLANNER: Leo Novick LOCATION: Ulster & Saugerties Townships, N. Y.

Handsome is as handsome does

Stretching out along the Hudson River near Kingston, N.Y., Jalonack's Whittier project surrounds the green links of IBM's big new golf course, sprinkles churches, schools, shopping and community centers liberally through its 1,500 acres. Even a fire house and library are planned.

No forest of telephone poles or TV antennas will mar the project. Electrical, telephone and sewage lines will run in trenches along the rear property line. Water mains and TV aerials will go in along the front and one central TV antenna can serve the whole project. (For more about this, see page 160.)

The development will eventually hold 4,000 houses set on lots ranging from 65' x 100' to 110' x 125'.

The project follows the lay of the land

Streets will curve along the contours of the site. (Yellow lines are existing roads.) Builder Jalonack plans to keep through streets to a minimum, will save all trees except where it is necessary to put in a road or a house slab.

Jalonack will sell reserved land parcels to the community at cost for schools and churches, intends to donate the fire house and library later. This fall ground will be broken for a \$10,000,000 shopping center, the first of two. It is likely to draw people from as far as 20 miles away.

In a growing industrial area, as this one is, the builders could have rushed in and put down houses helter-skelter. The fact that they didn't is made evident by this plan.



Jalonack's market was ready-made and waiting

This trailer camp dramatizes the housing shortage that brought Jalonack —and other builders—to Kingston.

Even though the shortage reached the trailer stage, it wasn't unexpected or unplanned for.

Last winter, IBM assigned a top personnel officer as company housing administrator, learned from an employee survey that 1,000 of their new people would need houses by early summer.

Kingston's housing shortage was already a problem. New York State Housing division surveys showed that 1,400 new units were needed as early as the last half of '55. An additional 1,900 units were necessary to bring substandard shelter up to the mark.

Market will keep growing

IBM's two-year old plant currently employs 3,500; by the fall of 1957 the company expects to have almost 6,000 on the payroll, over half of them coming from outside areas.

On the basis of these facts and fig-

ures Jalonack laid his plans for a 4,000-house project at Whittier.



Kingston is getting new industry and new industry booms the house market.

When IBM's survey showed that most of their people felt they could pay about \$15,000 for a house, Jalonack priced Whittier's houses from \$13,480 to \$26,900. (A number of small projects in the area are offering houses in the \$7,000-\$12,000 range.)

Jalonack estimated that 80% of his buyers would be IBM personnel. To date, with almost 500 houses sold, over three-fourths have gone to IBM employees.

Other factors besides IBM's arrival are booming the Kingston area and helping create a demand for housing.

Lots of things are happening

Kingston's location is becoming strategic. The city is now on the big new N.Y. thruway and a new high-level bridge spanning the Hudson from Kingston to Rhinebeck will be opened next year. In addition there's a big New York Central (West Shore) marshalling yard that gives the area fast freight handling and the Hudson river is handy for low-cost oil shipments.

Final factor affecting Jalonack's Kingston market is this: until IBM moved into town, the whole area had lagged in industrial employment and population growth. Not only does the community now have new reasons to grow, it also has plenty of room—a combination that almost always makes a housing boom.

LIFE



You'll see nothing like this at Whittier where all wires go underground

To get rid of TV antennas and telephone poles Jalonack plans on a dual system of utility trenches: one set along the rear property line of his houses, the other on the street front.

In a 10' easement at the rear he'll use separate trenches for main telephone and electric cables, since the telephone company doesn't want its lines near a high voltage electric line. The two services will, however, run in the same trench coming in to houses from the main cable.

To avoid tearing up streets when repairs are necessary, trunk sewers will go in a third trench at the rear of houses. Water mains will run on the street side to serve fire hydrants. TV aerials from the project's central antenna will be laid in the same trench with the water mains. Jalonack estimates this aerial system will cost about \$75 per house.

How much does it cost to bury cable?

Jalonack figures his costs for underground electric service at about \$275 per house. This is over and above a \$106 "pole" allowance he'll get from the utility for each house.

About 70% of the cost will go into buying special cable. Unlike overhead wires, underground electric cable must be specially and strongly insulated. Labor and trenching with a rotary trencher will take up another 20% of the cost. Jalonack figures this would run higher, if soft soil at Whittier did not keep down trenching costs.

The balance of the cost for under-

ground electricity will go for equipment like the small concrete housings placed every four to six houses for transformers the utility will install.

Four deep wells will supply the water for the first 500 houses. These wells, plus storage tank and pumping stations will cost \$150,000. Ultimately a water treatment plant, costing about \$1 million will handle water taken from the Hudson. The water distribution system for the whole project will eventually cost \$1 million.

Initial sewage costs will be high

Jalonack estimates his first 500house sewage plant will cost \$150,000 including trunk lines. As Whittier grows he'll add other plants, says the larger they are, the cheaper they'll be.



Irwin Jalonack, Master of Whittier

20-20 foresight misses no tricks

By both training and temperament Irwin Jalonack is well prepared to handle a development of 4,000 houses.

In the spring of '55 he wound up 14 years as chief engineer, technical and purchasing director for big builder Bill Levitt and set out on his own.

Trouble is his business

Ex-Long Islander Jalonack is a frank and smiling man who delights in making light of crises that would floor many other builders.

In his years with Levitt, Jalonack tried dozens of new ideas under all kinds of conditions. Whittier represents his best ideas all put together for the first time in one project. It's also his first experience as undisputed top man of a big project and it tests the full range of his talents as planner, builder and businessman.

Born in Syracuse, N. Y., in 1906, Jalonack graduated in 1932 from Carnegie Tech., in Pittsburgh.

First job was as supplier

His first post-graduate step was to take his mechanical engineering background to a large heating-ventilating distributorship on Long Island. For nine years he worked there as chief engineer and became thoroughly familiar with the supplier's end of the building business.

Aside from his 14 years with Levitt, he has served as a consulting engineer for both large and small builders on Long Island.

At home he serves as straight man for punch lines his 8-year old son and 12-year old daughter throw at him with surprising ease.

His latest project fills him with anything but awe. Says he: "if it buys the meat and potatoes, we'll let the baked alaska take care of itself."

Assembly line building, volume buying, subcontracts will help Jalonack keep Whittier costs down

A three-point formula—complete subcontracting, central purchasing and a limited number of models—is the crux of Jalonack's plan for actual operations at Whittier.

A limit of five models for buyers to choose from is intended to hold crew slow-downs to a minimum. The crews won't have to stop for changes on every house. The only option Jalonack offers is paint.

Subsidiary will do alterations

A subsidiary corporation has been set up to handle alterations and changes. Jalonack thinks this setup will give his buyers the lowest possible price for such changes as they want to make.

He counts on volume buying

By buying all materials himself, instead of spreading his purchases through subcontractors, Jalonack is sure he can get lower unit costs. He points out, "to do this, it doesn't pay to handle anything less than 500 houses per job."

The only thing he won't buy is electrical supplies.

He'll work with old subs

Jalonack will let contracts for everything. He expects to confine most of his subcontracts to firms he's worked with before on Long Island. Although he may use some local firms, he feels that the local contractors are unaccustomed to his production line methods, more used to doing a whole house at a time, using the same crew for all the work.

A Long Island type of job is one where a crew does just one thing and goes through the project like a whirlwind. From his past experience, Jalonack knows that this way of working is cheaper, faster and more efficient for any big operation.



Whittier owes much to IBM's golf club policy

There might never have been a Whittier—at least Jalonack's Whittier, —if it were not for IBM's practice of building golf courses for employees.

Plans for the country club even influenced the styling of Jalonack's houses. IBM's golf course architect, Robert T. Jones, Jalonack's original centact in Kingston, told him that a California type of house, coupled with an attractive land plan, would pay big dividends.

Club draws buyers

It was the country club, too (and the fact that Whittier surrounds it) that led Jalonack to aim directly at IBM'ers as his market.

With almost the first 500 houses sold, some 80% of Whittier's buyers are IBM people who wanted, among other advantages, to live near their club. For these buyers, Jalonack saw to it that Whittier will fully reflect the park-like character of IBM's new recreational center.

Like IBM country clubs at Sands Point, Poughkeepsie and Endicott, N.Y. (photo, above), the Kingston club will have a golf course, gymnasium, stage, ball diamond, restaurant, bowling alleys, club rooms and perhaps swimming and tennis in the future.



Two-story model is Jalonack's best seller. For \$16,900, or \$7.50 per sq. ft., it provides 2½ baths, 4 bedrooms and an "emergency" first floor bedroom-family room. Says Jalonack: "two-stories are always cheapest to build: same slab and roof as ranch cuts upstairs cost."

These houses, priced from \$7.50 per sq. ft. will fit most pocketbooks





Cape Cod model, priced at \$20,900, has 1,613 sq. ft. on first floor, not including two-car garage with storage. Expansion attic, 508 sq. ft., has finished windows and access to risers for upstairs bath. Exterior, like two big models, is stone and asbestos shingle.



Big ranch, selling for \$26,900, totals 2,241 sq. ft. of living space, garage storage, has automatic sprinkler under lawn. House has three big window walls, interior brick, abounds in closet space. Every bedroom in Jalonack's houses is big enough for twin beds.



One-and-a-half story ranch for \$23,900 features a 1,813 sq. ft. first floor and an expansion attic with space for three bedrooms, bath and a storage wall. Dormers are finished and risers accessible for upstairs bath. All houses have mesh-reinforced slabs on ground.



Smallest house, priced at \$13,480, has an 873 sq. ft. first floor with two bedrooms. Finished attic provides another bedroom, bath and game room. Four models combine radiant heat with perimeter radiators, using copper tubing, for upper stories.



Package kitchens, like this one in \$26,900 model, offset any buyer's doubts about lack of cellars, Jalonack says. Heating unit, right center with louvred front is in kitchen of three models, serves as countertop, eliminates utility room.

Kitchens and lots of storage space overcome resistance to no cellars



Entrance foyer (left) in three models has handsome flagstone floor. Interior brick wall in the \$26,900 model is painted white. It also forms kitchen wall (above) and fireplace wall in living room (right). Interior paint has contrasting stipple applied by spray gun.

Living room (right) with big fireplace wall reflects the California-like interiors Jalonack chose for his houses. Although the Kingston market up to now has been strictly traditional, buyers like Jalonack's styles and drywall construction.



Family room, (left) off kitchen, opens to the garage, living-dining room and terrace in \$23,900 model. It works as a center for informal family activity. All floors are asphalt tile, with the exception of flagstone foyers.

Plastic-topped vanities (right) in all baths give broad counter space, are post-formed into free shapes in manufacture. Mirrored, sliding cabinet doors conceal shelf storage. Wall tiles are plastic.





Expansion attics, (left) in two models, are finished structurally: all that need be applied is roof insulation, flooring and drywall. Ceiling below is insulated; dormer windows are glazed and finished.

Closet space (right) is generous in all models. Big closets all have built-in shelving, plastic accordion-fold doors. This bedroom closet takes up all of one wall to meet today's demand for ample storage.





4 MORE WAYS TO BUILD BETTER FOR LESS



63 Fresh air scoop cuts humidity in warm air heating systems

Here's a good way to cut down excess winter humidity. South Bend's Andy Place adds a 6" fresh air pipe on the cold air side of his counter-flow forced warm air furnace, extends it into the attic space. The pipe is topped with a 90° elbow and a barometric damper. The damper opens when the furnace fan is operating, closes when the fan is shut off, so cold air is kept out during the off cycle.

The damper must be adjustable if used with summer cooling so as not to draw hot attic air into the house. Place's summary of results: "Since we added this air scoop, we have had almost no cases of excess humidity. Also, the added fresh air helps hold down odors."

64 Insulated foundation walls keep crawl space warm and dry

Insulating the underside of a floor is slow and expensive. But control of moisture and reduction of perimeter heat losses is vital in any type of basementless house.

For crawl space houses John A. Wendell, Downers Grove, Ill., moves his insulation to the foundation rim wall to save time and money. He nails the $2' \times 8'$ sheets of rigid insulation to the concrete wall before the floor joists are placed. When the house is nearly complete, blanket insulation is put between the joist ends and polyethylene film is spread over the ground as a moisture barrier. Result: "A clean crawl space, a warm floor, and no moisture problems."







65 Truck cranes cut down framing and sheathing costs

In Illinois and on Long Island two contractors independently hit on a solution to on-site hoisting problems: a homemade truck crane.

In Springfield, lumber dealer Adolph Lubin built a telescoping boom of I-beams and mounted it on a flat-bed truck (above, left). The crane is powered by a winch in the truck bed and is controlled from the cab. Lubin uses it to set entire prefab walls in place, to position the entire roof structure at one time (preassembled on 2' centers) and to put palleted material on the roof for the carpenters. The machine can be used in the yard, over the road and at the site. Lubin estimated the cost of fabrication at \$200.

Long Island contractor Murray Gorelick specializes in framing and sheathing houses for Long Island builders and needed an inexpensive elevator for ceiling joists, roof framing and sheathing. He welded a crane to the front of a war surplus "command car" (above, right) and now raises sling loads of material to the top plate level, instead of the conventional wrestling of a few pieces at a time by teams of expensive workmen. Both machines are operated by truck drivers.

66 Temporary bracing and homemade gin pole speed on-site assembly

Lu-Re-Co panels cut waste so drastically that Dean Evans, Champaign builder, couldn't find scrap lumber on the job to use for temporary bracing. He made panel braces from angle iron, with the ends drilled to take nails. The braces are nailed to wall and floor decking to hold the sections.

To hoist preassembled gable ends into place, Evans made a simple gin pole. The pole is a length of steel pipe, with angle iron welded to the bottom to act as a base. A hand winch and a pulley at the upper end complete the assembly, which can be moved about by one man. Evans says that not a single gable end has ever been damaged in lifting.



New Products

For other new products, see p. 178

Two new units speed up construction





A. Prefab window goes up like a wall panel

You could repeat this window for the entire length of a building.

Designed on a 4' module the window is load-bearing, needs no additional structural supports. Four panels can be interchanged with glass or siding so you can get light high or low. You can also turn the unit on its side, making it into four casement windows. If the unit is used throughout, manufacturer says, a tilt-up house with sheathing on studs could be enclosed in a day.

Window is 4' from out-to-out (sides are $2 \ge 6$'s), and 7'-57's" from bottom of sill to top of head (see diagram at left). It is built into the framing and a double $2 \ge 6$ header with $2 \ge 4$ top plate brings it up to 8' room height from finished floor to finished ceiling. Used side by side, the windows are suited for post and beam construction; the two side members form a $4 \ge 6$ post.

Redwood is used throughout the unit. It requires no maintenance, stands up well to weathering. Complete frame with one operating sash (position opitional) costs about \$62.75 F.O.B. Glazing and screens are extra. Fabricators, Inc., Norwalk, Conn.

B. Unit walls put more freedom into design

There is no end to design possibilities with modular components like the ones you see above.

These lightweight aluminum components are part of an integrated group of framing members, wall and door units, insulated panels and sash that go to make up a complete curtain wall.

The maker gives you a choice of wall units with operable sash (that projects in or out); units with fixed glass set from the inside and weather sealed by continuous extruded vinyl gaskets; units with insulated panels of pressure-laminated sandwich construction (in porcelain enamel colors guaranteed to stay fast); and standard door units (factory assembled and shipped with doors prehung) that are an integral part of the wall system.

The unit wall goes up with precision. Sill, jamb and head framing members are attached, level and plumb to the periphery of the structural opening. Wall units are attached through top and bottom rail to the frame. No fastening is needed through mullion. Units are glazed, installation is complete. Kawneer, Niles, Mich.



Two men position 85-lb. panel between top and bottom rails. Finished construction indicates variety of designs possible.





drin



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Backed by the name *Pittsburgh*—which has meant quality, integrity and dependability to America's home owners for more than seventy years—TWINDOW has enjoyed a truly phenomenal demand. Now *Pittsburgh* increases its impact upon the home-owning and home-buying public by launching a large-scale program of advertising in the Saturday Evening Post and Home Service Magazines.*

This will add tremendous selling power to the large-scale national advertising which *Pittsburgh* has consistently carried on for many decades.

Beginning in May, hard-hitting, effective "salesmen"-such as the double-spread advertisement reproduced here – literally bring prospective home buyers, and owners interested in remodeling, to your door. These striking, fullcolor advertisements will be telling the story of "the world's finest insulating glass" to many hundreds of people in your own locality . . . people who will turn to you for advice and guidance regarding their *insulating glass* requirements.

You will want to be ready to assist them, of course, and that is why we are giving you this "look" into *Pittsburgh's* plans on TWINDOW. We are confident that this advertising effort will help you and us . . . that it will, in fact, help the whole building industry.

*Better Homes and Gardens · American Home · Sunset House and Garden · House Beautiful · Living for Young Homemakers





Showmanship in selling ease of trade-ins booms new house sales

Clever artwork sparks ads and promotion folders that plug trade-in sales for Andres Oddstad's seven tracts near Redwood City. Oddstad says: "These ads have produced genuine prospects for our houses who would never have come out to see them until they became convinced they could trade their present home."

Oddstad actually buys old houses; or, if buyer won't take the trade-in offer, Oddstad lists the property, tries to make sale at buyer's price.



On this house McPherson allowed \$10,500 less 10 % so buyer could buy this house at \$15,750

"Learn from insurance and car people", says Seattle realtor

W. R. McPherson of Seattle has been advertising trade-ins for several years. Most of the time he has the trade-in house sold before the deal is closed.

McPherson sells about 200 houses a month, half of which are new. Many are sold on a trade-in or contingent sale basis, especially in the \$14,000 up range. Says McPherson: "We must begin to call on potential prospects, rather than wait for them to come in. We can learn from the insurance and automobile people how to create prospects—classified advertising, mailing and soliciting from door to door if necessary."

In working with builders, McPherson's chief concern is in not taking an overpriced house in on trade. Old houses traded for new Oddstad models



Cleveland builder likes trades

Alex Treuhaft of Cleveland sells about half of his \$25,000 to \$60,000 houses by trades. He says: "We love trades. We get an exclusive on the house we like. We would almost rather have trades than to sell a house without a trade. With a trade our sales department earns double."

Novice trader gets fast results

"In 30 days", says Marshall Secrest of Whittier, Calif., "I took deposits from eight people who would not have considered purchasing a new home without first disposing of their old house."

Secrest sells air-conditioned homes at from \$20,750 to \$22,250, builds from 100 to 150 houses a year.

Continued on page 176

ageless!

Smooth, easy-cleaning, decorative --- uses for melamine laminate panels are multiplying fast!

Among the most decorative and durable of all plastic materials are the laminates made by fusing resin-impregnated paper into solid panels under high heat and pressure.

For many years these melamine laminates * have been a preferred surfacing for counters and work areas, as well as for fine furniture. Now their functional and ornamental qualities are being utilized for wainscoting, wall paneling, toilet partitions, doors, shower stalls, elevator cabs, push and kick plates, store and bank fixtures.

Easy-to-care-for melamine laminates require a minimum of maintenance – never need painting or finishing. The smooth surface washes clean with a damp cloth, and resists scratching, denting, chipping, cracking, burns and stains. It withstands heat up to 275° F. It is unharmed by alcohol, most acids and alkalis or boiling water.

Building suppliers stock melamine laminates in a wide range of deeptones, pastels, mosaics, marbleized effects, wood grains and all-over designs. The panels are available in two thicknesses (1/10 inches and 1/16 inches), in widths from 30 inches to 48 inches, and in lengths up to 16 feet.

These sheets cut neatly with a saw, and cement permanently to smooth plaster walls (cured), gypsum lath, sheathing grade plywood and building blocks. Properly installed, melamine laminates do not swell or warp.

* Monsanto supplies melamine resins for decorative laminates sold under these trade names: Consoweld, Corlex, Decarlite, Farlite, Fiberesin, Lamin-Art, Micarta, Nevamar, Panelyte, Pionite, Plastilight, Railite, Resilyte, Richelain, Textolite.

Present and future applications of plastics in construction are under constant study by Monsanto's structural Plastics Engineering Grovo. You are invited to check them for expert technical counsel. Monsanto Chemical Company, Room 506, Springfield 2, Mass.





Facts You Should Know About Masonry Reinforcement

By Edwin L. Saxer: Professor and Chairman, Civil Engineering Department, University of Toledo

For some time, there has been a growing tendency to rely on steel reinforcing in mortar joints to improve the capacity of masonry walls to resist the stresses which develop.

The usage of joint reinforcement has often proven unsuccessful in the past. The chief reason for this has been the failure to use reinforcement in more than every third or fourth joint—a practice which provides little or no benefit to the intermediate joints.

A contributing factor in many cases has been the inability of some forms of reinforcing to develop adequate bond strength.

As a result of research at the University

of Toledo, and at other laboratories, the principles of effective joint reinforcement are now well understood. All indications point to the fact that reinforcement should be used in every joint, or at least in every other joint, to insure reasonable effectiveness.

Our research on the effectiveness of Key-Wall leads us to the following conclusions: (1) The design of Key-Wall results in a highly efficient distribution of steel. (2) The use of Key-Wall can reduce significantly the cracks resulting from shrinkage of the masonry; and (3) Key-Wall is effective in improving the lateral strength characteristics of masonry walls.



the <u>new</u> type of masonry reinforcement that. gives greater value at lower cost

The effectiveness of Key-Wall has been clearly demonstrated by tests at the Research Foundation, University of Toledo.

It's being specified and used by leading architects and builders today. It will offer you advantages on any jobs you build.

Key-Wall is made for the following wall thicknesses: 4", 6",

8", 10" and 12".

- Reduces shrinkage cracks
- Adds effective lateral strength
- It's galvanized to prevent rusting
 ... assures maximum bond
- Lap joints give continuous reinforcement
- Does not interfere with bedding of units
- Improves mortar joint because multi-directional reinforcement holds mortar in place; gives better bond
- Masons welcome it, because it's easy to handle; easy to cut and fit; doesn't interfere with joint thickness
- You save on material cost, as well as labor cost



FREE-SAMPLE AND TEST REPORT KEYSTONE STEEL & WIRE COMPANY PEORIA 7, ILL.

Please send me free sample and copy of Key-Wall masonry report made by the Research Foundation, University of Toledo.

Firm	
Street	
City	ZoneState

Mac Miller



Roomy contemporary houses like Severin's start old-house owners thinking about trades

Sell him on the new house, then trade, says NAHB officer

"Prospective buyers often hesitate to accept a realistic appraisal because of the sentimental value they attach to their homes," says Nels G. Severin of La Mesa, Calif., NAHB second vice president.

"It's most important to sell the customer on the merits of the new home. That way he will be ready to accept a realistic appraisal of the old one. The more a customer knows about the details of the trade-in plan, the easier it becomes to get him to accept a realistic

"Trades really move fast"

R. O. Woodson of Corpus Christi, Texas, surveyed 2,500 families. Seventy per cent said they would trade for a new house, providing they could get their money out of the old house.

Woodson offers a \$500 discount for cash on his \$12,000-\$14,000 houses to encourage old-house owners to sell their house to buy one of his.

He had traded about 50 times in the past six months, has taken title on some houses and fixed up some: painting, refinishing floors, repairing roof. appraisal." Severin is so sold on trading, he has set up a separate realty company to handle that end of the business.

Severin's company has taken 92 trades in the last six months. They get a 5% commission plus a \$750 capital risk fee. They also require a deposit of \$100; \$20 is used for appraisal, is not refunded. Severin uses an outside appraiser. He paints and spruces up the old houses, up to about \$275 worth, doesn't remodel.

"We sell 75% through trades"

Wayne Guthrie of Spokane builds houses in the \$12,000 to \$20,000 price range. Of 200 houses he will build this year, he says 75% will be sold on trades.

In cases where the owner of the old house accuses him of setting the price too low, Guthrie suggests that the owner list the house with other realtors to get an idea of the market value.

About one fifth of the houses need fixing, but Guthrie spends a maximum of \$500 or \$600. He paints, but doesn't try to do structural remodeling.



This is typical of houses Mullendore takes in his trade-in deals.



Two-car garage model shows type of house Mullendore sells by trading.

"Occasional trade-in profits offset any loss"-Knoxville builder

William Mullendore of Knoxville, Tennessee has Don Simpson of Simpson Realty handle his trade-ins. Mullendore says: "Trade-ins won't make the builder money. But it's like the used car market: it lets the builder or realtor sell his *new* house."

He also says: "When a good, sound

house is taken on trade in a good location, the selling price can be raised a few hundred dollars to offset any losses

taken on other trade-ins." "We do very little remodeling and repainting since the trade-in value is so close it prohibits very much work being done."

"Paint covers multitude of sin

Phil Herriges of Milwaukee trades on 15 out of his 50 new house sales per year. He tries to sell the old house before the new house is ready. "When I take title", says Herriges: "I

"When I take title", says Herriges: "I camouflage the old house. Paint covers a lot of faults. I fix up the stoops. I tear out an old fashioned pantry, fix up kitchen cabinets, fix up bathrooms."

Trade-ins have publicity value

In Tucson, Ariz., J. H. Watson, secretary of the L & W Construction Co. says: "We used the Trade-Ure-Home Plan on the initial opening of a new tract of 270 units . . . had a very excellent response to our advertising. It wasn't a profitable venture (in terms of money made on old houses). But from a publicity standpoint, we were able to create a tremendous amount of interest and to get a new area under way.

This house cost Helf \$15,500 He'll get about \$16,900 for it



To get a better price for this trade-in house, Helf has made the following repairs: 1) checked and adjusted the heating and plumbing systems; 2) repainted the interior; 3) replaced kitchen cabinets, doubling cupboard space; 4) replaced kitchen linoleum; 5) installed new kitchen sink.

"We know from experience. Used houses are more salable when renovated, even though the cost of the renovation must be added to the price of the house," says Marvin Helf of Cleveland.

Even so, Helf tries to keep repairs to a minimum. But he knows chances for a sale are better when a house looks attractive and in good repair.

Helf has been taking trades for two years. Old homes are sold by the brokerage department of Helf's realty organization, which is separate from the sales department which handles his new house sales.

In two years, Helf has had to take title to only six houses. Usually, the deals have been made before the completion of construction of the new house./END



Use the magic of LUXTROL Light Control to help sell your homes!

Install a LUXTROL Light Control in one of your model homes ... and see what happens.

Just watch the expressions of delight on faces of prospects as you turn the LUXTROL dial. As you vary the lighting from dark to bright. From bright to dark.

Listen to the "Ohs" and "Ahs" as a room comes to life with different gradations of light. Demonstrate to your prospects how easy it is to dial any level of light. The perfect level of light for any occasion, activity, or mood. For dining . . . reading . . . for TV ... for the nursery.

You'll see the kind of enthusiasm that



A product of The Superior Electric Company

helps a lot in selling homes.

Yes, you'll find LUXTROL Light Control well worth its cost. It is a soundly engineered, precision-made autotransformer . . . not a rheostat. Installation is simple. LUXTROL gives cool, silent, efficient operation.

Double protection! Both fuse and thermaloverload protection are provided. Approved by Underwriters' Laboratories. LUXTROL controls incandescent, fluorescent or coldcathode lighting.

Your local distributor will gladly give you a demonstration. Send the coupon for his name and complete information.

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SO HALSTEAD & MITCHELL ENGINEERS SAID... 'WE CAN CUT 95%, OFF THE COST OF AR CONDITIONING COOLING WATER'

Halstead & Mitchell Residential Cooling Towers are engineered to cut 95% from the cost of air conditioning cooling water. This they do by re-using the precious—and expensive—water which without cooling towers would be wasted to the sewer.

So efficient are they that in a recent research project *in Texas* water costs with cooling towers for the five-month summer season were as low as \$2.00 *for the entire summer*. That low cost opens the doors wide to water-cooled air conditioning, still the lowest cost system devised. It also means compliance with municipal ordinances aimed at avoiding waste of water.

There's nothing experimental about these units. You are protected by Halstead & Mitchell's exclusive 20-Year Guarantee on the wetted deck surface against rotting or fungus attack . . . and you gain by the many other features which have made Halstead & Mitchell industrial and commercial cooling towers nationally known and respected.

Small in size, and thus easy to hide by proper landscaping, H & M Residential Cooling Towers are built in a complete size range from 2 through 7½ tons. Extra-quiet centrifugal fan units are available for inside installation. You will find them at your nearest leading refrigeration or heating wholesaler.

Write for Bulletin RE-1





BESSEMER BUILDING, PITTSBURGH 22, PA.



Since people have diversified tastes, home design takes many directions. That calls for many window variations, and that's why Ceco offers you more steel and aluminum windows to choose from than any other manufacturer. Here's a line of windows to fit any

type of wall construction...a line of windows engineered for easy installation...with proved performance ...yes, a window line designed with you in mind. So for better home building, choose Ceco. You can be sure you'll get the right window to solve your problems.



Windows, Screens and Doors / Metal Lath / Metal Roofing Products / Steel Joists / Concrete Reinforcing

New Products

for further details check numbered coupon, p. 220



IN THIS CORNER...



Gold Bond Corner Bead protects wallboard corners from knockout blows

You save time and money—and you get sturdier wallboard construction when you protect your corners against accidental abuse by reinforcing with Gold Bond's NEW *Steel* Wallboard Corner Bead. This corner protection is also a selling feature that is of considerable importance to home buyers.

Styled after Gold Bond's well-known plaster corner bead, the new Wallboard



Corner Bead utilizes an exclusive triangular design that gives maximum bonding of joint cement and assures firm, lasting reinforcement. Deep knurled flanges prevent joint cement slippage during application and give better adhesion afterwards. Use it for straight corners — or just snip flanges for arched corners. Ask for complete facts today. Write National Gypsum Company, Buffalo 2, New York.

WALLBOARD CORNER BEAD

NATIONAL GYPSUM COMPANY



a. Vinyl fortified liquid plastic puts a glowing finish on all woods, adds a toughness that resists almost any household onslaught. "todo," the result of experiments with catalyzed phenolics and ureaalkyds, contains the equivalent of Fenolic 101—the fast-drying film that's 3/5's as hard as glass and resists heat, water, solvent and acid. Tests with "todo" indicate it's easy to brush out, doesn't leave marks, won't crack or break under impacts up to 10" lbs. \$2.95 pint; \$3.75 qt. Fenolic Internatl, New York City.



b. Pronto P.V.A. vinyl interior flat paint makes it easy to select room colors. A metal flap on the outside of the can shows paint color and name, so customers can select colors right off the shelf. New selection method does away with the need for elaborate props to show paint colors, ought to speed up time consumed in making paint choices. Pronto P.V.A. sells for \$5.89 per gal.; deep colors slightly higher in price. 20th Century Paint & Varnish Corp., Brooklyn, N. Y.



c. Tex-ture tone is Martin Senour's new two-purpose finish that lets you paint and plaster at the same time. You get the color you want by adding Kem Tinting colors to Martin Senour's No. 2614 texture paint—white—and you can use the mixture on plaster, wallboard, masonry, dry-wall construction and painted surfaces. One coat is claimed to hide taped wallboard seams, small plaster cracks, etc. Paint dries in 30 min., needs no primer. Mixing formulas don't need more than two tinting colors or more than 2 oz. to the gallon of base white. Martin-Senour, Chicago.



d. Amtico vinyl flooring has 27 colors in a new line. Recent winner of a National Home Fashions League award, the new tiles let you create patterns unlimited. Plain tiles can combine with terrazzo and marble tiles of the same color for soft, muted effects or you can develop other patterns with tiles of contrasting colors. Shown above: Amtico plain, terrazzo and marble color-matched tiles, $\frac{1}{8}$ " thick in three sizes, 6", 9", 12" sq. From about 90ϕ -\$1.20 per sq. ft. installed. American Biltrite Rubber Co., Trenton, N. J.



e. Wood tiles, shown here in knotty pine, set off a family room, put warmth and good looks in a den or kitchen. Tiles are beveled, come in two sizes: 16" sq. and 16" x 32". ¾" thickness permits generous beveling for handsome light-andshadow effects. To install, nail tiles to furring strips, studs or joists on 16" centers. Interlocking edges hide nails, give perfect alignment. You can get tiles in knotty pine, clear pine, cherry or African mahogany. Approximate price to cover wall 8' h., 12" w. \$75. F.O.B. Athol. Mohawk Craftsmen, Athol, Mass.



f. Kilnoise acoustical tile blankets ceilings to reduce sound, cut down eye strain. White, incombustible tile reflects without glare up to 88% of the light that strikes it. Tests showed tile remained dimensionally stable after 17 days of 100% humidity at 110°F. You can get it with beveled edge or square for flush joints. $12'' \times 12'' \times 13/16''$, tile weight is 1.3 lbs. per sq. ft. Acoustical Tile Div., New England Lime Co., Adams, Mass.

AND IN THIS CORNER





Gold Bond Casing Bead protects wallboard ... yet costs less than wood trim

Wallboard openings around doors and windows are protected from damage when you use Gold Bond Wallboard Steel Casings. These low-cost casings are less expensive than wood trim and are selffinishing...no joint treatment is required. The need for wood trim is eliminated. Painting also becomes a lot easier and faster because there are no trim edges that require extra painting care. Gold Bond Wallboard Casing Beads fit snugly—each unit has a ridge design that locks in wallboard. Another time-saving feature is the mitered end. These are precision mitered at the plant and available to you at no extra charge. You'll make a better and faster sale when the house you sell has this built-in protection. Ask for complete facts today. Write National Gypsum Company, Buffalo 2, New York.



NATIONAL GYPSUM COMPANY

Gold Bond BUILDING PRODUCTS

continued on p. 184

New process puts good surface on poor lumber

Weatherproof overlay covers up defects of low grade wood, gives it a perfectly smooth, clear finish

You may soon see a new kind of lumber on the market.

At a glance you won't be able to tell it from high grade select lumber and you'll be able to use it almost exactly as you would good lumber.

What you'll be seeing, however, is low grade wood. Wood with defects like knots, pitch pockets and splits that has been changed into virtually prime board for uses like painted house siding.



Overlay paper is applied with phenolic-resin glue. Board shown here is made of three pieces of edge-glued wood. Panels have been made this way at FPL in sizes up to 30" wide.

What turns a pumpkin into a coach? As shown above, a new weatherproof overlay of resin-treated paper is permanently glued over low grade lumber by means of a special process. Odd, narrow widths of low quality wood can be edge-glued together, then overlaid to give a clear, smooth surface.

The process neatly masks defects in the wood, gives an excellent base for paint and cuts wood shrinkage and swelling by 25-40%.

This new development, just announced by Forest Products Laboratory scientists, may be the answer to the increasing scarcity of high quality forest timber, since thousands of acres of second and later growths —where trees are smaller than virgin timber—can become a ready source of high grade lumber.

In line with FPL's standard procedure, the new overlay process is unpatented. Like other major FPL* developments, the invention is available to any US wood producer who wants to make the overlays commercially. Several big firms are reported already interested so the first overlays may be on the market in the near future. Potential uses are wide, varied. FPL's experts think the biggest potential for overlays will be as house siding, since "they could be made in a variety of patterns. using species not normally good for siding because of dimensional instability or poor paintability." Exposure tests in Wisconsin



show that overlaid boards stand up against the punishing effects of northern winters as well as high grade lumbers do.

Other uses may include overlays for exterior trim and for interior finishing like painted cabinet partitions, shelving and paneling.

Only drawback, FPL claims, is that you cannot see hidden knots or other defects and this may cause occasional nailing problems. For the same reason the overlaid board cannot be surface-planed. But this limitation can be minimized by using standard thicknesses.



Siding is perhaps biggest potential use of overlaid board. Resin-treated paper provides smooth, weatherproof covering which is an excellent base for paint.

Overlays are not new. Special paper overlays for plywood have been in use since World War II. The first ones were developed by FPL scientists in 1942. But the process described here is the first that can be used for lumber.

New laminating method develops high grade 2 x 4's

A laminated 2 x 4 may be the first of a number of high-quality glued lumber products soon to reach the building market.

The laminating process is fast, low in cost and almost automatic. Its developers, Potlatch Forests Inc. of Lewiston, Ida., claim that the method may soon make possible "such products as laminated beams for home building, with a marked reduction in costs...."

The process results from joint research started in August '54 by Potlatch and the Washington State Institute of Technology. H. B. McKean, Potlatch's research chief, emphasizes that the process is still being perfected and "only extremely limited quantities of laminated 2 x 4's are available."

Boilproof bond needed. Potlatch conceived the idea of laminating 1×4 stock (which is hard to sell) to produce the muchneeded 2×4 's. The firm figured it could mismatch defects in the 1×4 stock to make strong, high quality 2×4 's. But they needed a boilproof bond between the pieces and a fast gluing operation that would permit holding costs under \$20 per M bd. ft.

"A fantastic suggestion" from a Potlatch employee was the turning point in the research. The suggestion: to preheat both $1 \ge 4$ surfaces before gluing them together under pressure. This idea was contrary to accepted theories of adhesive action, which held that one surface should be preheated and the other glue-covered.

The double preheating worked. A pilot plant is now operating at Lewiston, turning out from 6,000 to 8,000 bd. ft. of 2×4 's daily. The plant produces the 2×4 's from rough 1×4 stock preheated to 350° F., pressed under 200 lbs. per sq. in. for 60 sec., all of which takes about 7 min. per board and is a continuous process.

Once the 2 x 4's are pressed they are dressed and corners relieved, then trimmed, end-treated and marked on each end.

One lumberyard reports the pieces in a shipment of laminated 2×4 's were so straight, it could get up to \$8 per M bd. ft. more than for comparable grade solid 2×4 's.

High strength glue used. The glue is stronger than the wood, although salesmen often have to prove it by driving 16 and 20-penny spikes through the 2×4 's at the glue line. The wood will break before the glue gives way.

Laminated 2 x 4's are straighter because the warp of one laminated half works to straighten the other half. The material is often drier, since 1 x 4 stock can be dried faster and more thoroughly than 2 x 4. *continued on p. 182*

^{*} Other recent developments by FPL include two new kinds of low-cost wood flooring (Technical News, May '56 issue). FPL is a US Government research organization which operates under the Department of Agriculture's Forest Service.



Pane -0



A **Panelfold Door** is a welcome utility wherever an opening requires a closure . . . wherever a movable partition is desired — in any location where space is a factor! They provide the one practical answer to the demand for freedom and flexibility in modern doorway design.

The smooth, clean lines and strength of construction of the **Panelfold COMMERCIAL** solves any space control problem! A fresh, new architectural treatment is provided for the most unusual sized opening plus maximum use of floor space and operational efficiency. A choice of 64 color combinations is available; or, if you prefer, we'll match any tint, color, or stain you so specify.

The solution to space control in the home is provided by the **Panelfold RESIDENTIAL;** the finest quality door even designed for an interior closure! These beautiful real-wood folding doors blend with any decor—allow more freedom of movement; eliminate the restrictions of swinging doors.

And a brand NEW **Panelfold Door** now in production will allow more usable space for the most modest of budgets! Incorporating all the warmth of genuine wood with all the built-in beauty and quality of **Panelfold** this new series will be the lowest priced real-wood folding door for standard sized openings.

Panelfold Doors are engineered for a lifetime of dependable, maintenance-free service; are built of the finest materials obtainable; are the simplest of all doors to install.



For complete details on all Panelfold Doors and other Panelfold products, see our full-color catalog in Sweets File — 16e/Pa.

DISTRIBUTORS: There are still a few Panelfold Distributor Franchises available. For full particulars write or wire Dept. HH 76

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What do buyers want from air conditioning?

Cooler temperatures, a constant flow of air and they don't mind a lot of noise, says final A-C Village report

People who live in air-conditioned houses talk about cooling from experience, rather than theory.

What some of them have to say forms the basis of the latest and final report from NAHB'S Air-Conditioned Village in Austin, Tex., and flatly contradicts three wide-spread theories about home air conditioning:

• "Houses need be only 10°-15° cooler inside than out." Not so says the report: buyers want houses that are several degrees cooler in summer than the 80° temperatures builders commonly guarantee, regardless of what the outside temperature is.

• "Keep the humidity as low as possible." Good, but not essential. Relative humidity is not as important as continuous air circulation.

• "People demand almost silent equipment." No they don't. Noisy units almost never seem bothersome.

Here are the details from the NAHB report:

How cool should a house be? The occupants of the 22 test houses in Austin rebelled against an 80° indoor summer temporture. They wanted their houses at least as cool as 77° . Some owners wanted a 70° temperature before they were satisfied.

This new temperature specification on the part of homeowners just confirms other research which shows that home cooling systems should be designed to maintain 75° indoors.

At the Austin houses tests were made when outside temperatures stood at 95° and again at a torrid 105° . It is a popular belief than an air-conditioned house need be only "10° to 15° cooler inside than out" but Austin researchers found: "no difference in indoor comfort under these conditions," which confirms the fact that temperature difference between inside and outside has little bearing on human comfort.

How important is humidity control? The report suggests that humidity, per se, is not so important as it was thought to be. Under various conditions, the test house occupants accepted a wide range in relative humidity—from 30% to 70% RH. There were no discomfort complaints, provided the temperature at the same time did not exceed 77° and also provided there was a constant flow of air inside the house.

Keeping the house air moving is seemingly more important than maintaining low humidity, the tests show. When the indoor air was in motion no families reported discomfort. But when the blower was shut off, stopping air circulation, complaints began to spiral, even though the indoor temperature and humidity were exactly the same as before.

This clearly indicates that home coolers should be adjusted for continuous air circulation. Many systems today are hooked up so that the air blower automatically shuts off when the thermostat is satisfied. The report advises builders not to set their systems up this way.

What about noise? The tests do not clearly define the level of equipment noise that owners will accept before complaining, but evidently they can stand more noise than the commonly accepted 40 decibel limit. (FHA's current MPR sets a 45 decibel limit.)

"Only two of the 22 families reported discomfort due to noise," the report says, "even though equipment noise in most houses exceeded 40 decibels." The report did find that "the reduction of sound from outdoors due to closed windows made a significant contribution to indoor comfort."

The report also says that:

• Final cost figures show the test houses were heated and cooled last year at an average total cost of \$116 per house, or less than \$10 per month. This figure is based on Austin utility rates, breaks down to \$90 for annual electricity (including winter fan operation), \$23 for gas heat, \$3 for summer cooling water.

• Biggest service problem was dirty air filters. The owners habitually forget to clean or change the filters periodically.

• Lack of adequate space for the air conditioner "can increase a builder's installation cost far more than the cost of space needed." Builders are cautioned to allow enough space around the unit for side and back connections, makers are also urged to turn out units that can be fully hooked up from the front.

• Location of air outlets has a sharp effect on cooling comfort. Best results were in houses with perimeter floor outlets (unobstructed by furniture) and ceiling diffusers. Worst results occurred when perimeter outlets were obstructed. Intermediate results were recorded, in order of decreasing efficiency, for outlets located low in outside walls, high on inside walls and in baseboards.

The report also includes information on equipment sizing and house design. Copies are available at \$2 apiece from NAHB Research Institute, 1625 L St., N.W., Washington 25, D.C.

What's new in research?

Top housing research organizations

announce some recent developments

Building Research Advisory Board (BRAB) last month finished a report on "The Anchorage of Exterior Frame Walls to Various Types of Foundations." It contains a simplified formula to guide builders and architects in determining if exterior wall anchorage is needed in a particular house.

Made at FHA's request, the study costs \$1.50 from BRAB, 2101 Constitution Ave., Washington 25, D.C.

National Bureau of Standards. Here, an exhaustive study of asphalt roof shingles is in process. An interim report: "Durability of Asphalts Containing Mineral Additives," was released last month. It says that "additives such as mica, blue-black slate and oyster shell can significantly prolong the service life of roofing grade asphalt."

BMS report 147 is available from Superintendent of Documents, Government Printing Office, Washington 25, D.C.

Lumber Dealers Research Council (Lu-Re-Co) reports on a new Lu-Re-Co floor panel developed by the Small Homes Council. Panels are made on the same jig used for Lu-Re-Co wall panels and can be easily varied in size to fit flooring requirements.

Detailed booklet costs \$1 from Lumber Dealrs Research Council, Suite 302, Ring Bldg., 18th & M Sts., Washington 6, D.C.

National Sanitation Foundation study shows that you can use plastic pipe with perfect safety to transmit drinking water underground.

Results of a four-year investigation indicate that plastic pipe has no effect on the purity, taste or odor of the water, nor is there any difficulty in maintaining chlorine residuals.

Based on the study, plastic pipe makers have created a hallmark to identify the plastic pipes that are suitable for transmitting drinking water, so that you can identify on sight the kind of pipe you want.

The study was carried out at the School of Public Health, University of Michigan, and was financed largely by a grant from the Society of the Plastics Industry (SPI).




front view

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control

exclusive



"PUSH-A-MATIC" ventilating range hoods

Built-in 3-speed fan control. Graceful, extra depth design fits all cabinet depths, choice of beautiful ''Kitchen Matching'' finishes. of light and fan



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INSIST ON DFPA GRADEMARKS!

DFPA grademarks assure quality. Standard grades for interior finish are A-A, A-B and A-D (PlyPanel®). Special panels include overlaid plywood . . . "relief grain" (brushed, embossed and striated panels) . . . and Texture One-Eleven® "grooved."

Plywood of other western softwoods available; look for this DFPA grademark.



g. Fiberglas panels, shown here in a ceiling, have a glassy surface on one side, a texture surface of Fiberglas on the other to shower light softly through a room. Three types of panels hold leaves and butterflies; leaves and plant life; custom order designs. You can put them up as room dividers, screens, shower enclosures, partitions, shoji screens. Pagoda line (leaves and butterflies) comes in panels 12" x 36", 18" x 48", 24" x 60", 36" x 72", 44" x 96". Prices from \$2.40 per sq. ft. up to \$12.50 per sq. ft. Glass Laminators, Inc., Seattle, Wash.



h. Prefinished hardwood paneling, in V-grooved, random widths, give a lustre to interiors. Birch and red gum wood panels come ready to install. Panels are back-sealed for stability, come packed 10 to a carton. You can have them in 4' x 8' and 4' x 7' sizes at a cost comparable to that of plaster walls. Birch paneling is about 53¢ per sq. ft.; red gum paneling costs about 49¢ per sq. ft. Georgia-Pacific Plywood Co., Olympia, Wash.



i. Azrock tile puts four new colors on floors. Two of them in 3/32" cork terrazzo look like natural cork, come in 9" x 9" size. Two new asphalt tile colors in terrazzo tone patterns are a) a reddish-brown background with multicolored chips, and b) a white background with gray and black chips. Tiles are smooth-surfaced to give the kind of easy cleaning housewives want. Both in 1/8" thickness, 9" x 9" size. Uvalde Rock Asphalt Co., Azrock Products Div., San Antonio, Texas.

continued on p. 190

FREE PORTFOLIO

2, Washington.

OF



A basement phone is a real convenience, too-saves going up and down steps.

Today's home buyers want convenient telephones around the house -with thoughtfully placed outlets and concealed telephone wiring. Architects with an eye for modern trends put telephone convenience in a class with adequate electrical wiring.

BELL TELEPHONE SYSTEM



Your nearest Bell Business Office will help you with concealed wiring plans. Just ask for "Architects and Builders Service." For details on home telephone wiring, see Sweet's Light Construction File, 8i/Be. For commercial installations, Sweet's Architectural File, 32a/Be.

SH RE 因 5 FD RUC RUCTUR TUR TUR F H H 0 CH ST S Good ideas build better houses . . . and bigger sales

r **HAUTURE** -5 CD SH 5 9 0 1 H -builders/prefabricators/residential architects/sub-contractors/suppliers/decorators/realty executives /appraisers/FHA-VA and mortgage loan officials.

"The materials of action are variable but the use we make of them should be constant." Epictetus

Today's constant in home building is the quest for the "irresistible house." The industry is wide open to new ideas, designs and products which contribute to better living . . . and which offer the sales appeal needed in a competitive market. One source of such ideas is in current structural materials. Now out in the open for all to see, they are dressed with bright new finishes, textures and colors. Out of sight, they have introduced speedier, simpler means of construction. In wood, concrete brick, stone, steel, concrete block, aluminum and plastics, they are putting more good house ideas for more sales into practice.

The smart professionals in home building — as in every industry — know that good ideas will always be their main product . . . their means of keeping ahead of the competition. That is why these men* read House & Home. The men who keep ahead in home building, look ahead in

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The greatest influence in home building design construction finance sales modernization

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Use it to your advantage... THE TREND TO ELECTRIC

Here's the reason why so many builders make *Electric* Ranges standard equipment: These ranges definitely help in selling homes. Proof of that is the chart. It shows that there are *three times* as many *Electric* Ranges in American homes now as there were ten years ago. Every day, more than 4,000 of these ranges are being installed. Are you cashing in on this demand?



More and more, the kitchen is being used as a selling feature in new homes. Its character has changed, so that it is again a room where the whole family gathers. This means that the modern kitchen must have what the automatic *Electric* Range provides—cooking without drudgery cooking that's clean, that saves time and effort. That's why, to help sell your homes with less trouble and in less time, you should install *Electric* Ranges!

A

ELECTRIC RANGES help sell houses

BE MODERN Cook Electrically!





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Reflection of Good Taste

brings beauty to your kitchen



STAINLESS STEEL SINKS

Your home reflects your taste in its appointments and design ...so show yourself at your best by choosing an ELKAY Stainless Steel Sink for your kitchen. Its glamorous, silver-like beauty sets the pace for lovely kitchen life . . blends perfectly with any decorating scheme ...softly reflects surrounding color hues. Gives you more time for hostessing ...stays so beautifully clean with a swish of a damp cloth . . no more scouring ... no more bleaching. Find out how little this lifetime sink does cost ... no more than many ordinary sinks ... never needs replacement. Write for literature and prices today.

ELKAY MANUFACTURING COMPANY 1874 South 54th Avenue, Chicago 50, Illinois

The World's Oldest and Largest Manufacturer of Stainless Steel Sinks . . . Since 1920



j. Gysling Swiss air-cleaner is a new immigrant which, it is claimed, purifies the air and destroys all odors. It is small $(11" \times 7" \times 4")$, so it can hang on the wall, and it weighs 8 lbs. Twelve dial settings allow unit to be regulated according to the density of smoke, odors, etc. in a room. Fresh air generator runs on electric current; there is nothing to refill and you don't have parts to replace. About \$50. Excell-Air Div., Gubelin International Corp., Mt. Kisco, N. Y.



k. Win-Sum-Matic gas-fired heating and air-cooled summer conditioner has a Season Selector which lets you switch back and forth from heating to cooling in changeable weather, permits immediate, automatic seasonal changeover. Unit is operated in conjunction with Janitrol's Pride o' Yard compressor-condenser, works with outside temperatures up to 125° F. It comes assembled and internally wired. Cooling capacities of 2, 3, and 5 hp. Janitrol, Columbus, Ohio.



I. Airtemp 1118 is a 2-ton waterless central air conditioner. The system itself was especially engineered for attic installation. Parts include conditioner; automatic thermostat with on-off switch for system and a fan switch to select either continuous or automatic blower operation; outside grille; Fiberglas ductwork; five room diffusers. You get everything for installation at one price, probably less than \$750 installed. System can be put into basement or crawl space, can be tied into existing warm air heating. Airtemp Div., Chrysler Corp., Dayton, Ohio.

continued on p. 194



The extra features sell homes in today's market. And, the first place the home-buyer expects "extras" is in the kitchen. After all, Mrs. Home-Buyer spends much of her time there . . . and she's often the final word in a home purchase.

SELL THE LADIES WITH Long-Bell Natural Wood Kitchen Cabinets

Whether it's a thousand-unit project, a single-unit job or a remodeling contract, builders, contractors and architects rely on the sales-appeal of Long-Bell Natural Wood Kitchen Cabinets. The great variety of finishing and decorating effects possible and their easy operation are sure-fire features housewives want. Here's *custom beauty* that costs no more than less attractive cabinets — and the women love it.

Long-Bell has always been first to introduce such exclusive features as the full-depth sliding shelves that come to you for storage— and adjustable shelves for perfect adaptability to each housewife's storage setup.

It's easy to plan with Long-Bell Kitchen Cabinets because they're engineered on a 3" module for accurate fit.

Long-Bell maintains big inventories of completed cabinets of beautiful rift grain fir and mellow birch in a full range of sizes — ready for *imme-diate shipment*. That's why there are satisfied Long-Bell customers all over the United States. They know that Long-Bell gets the order to the job on time, ready for placement.

Ask your Long-Bell representative to show you the many cabinets, including special-purpose cabinets and accessories that are available.

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This Bedtime Story Sells Houses For You!



When baby cries at night, Dad needn't stumble in the dark ... REMCON bedside switches light up hall and nursery, let baby know he's coming



With lights on, Dad finds his way to baby's room safely... Back in bed, he switches off lights left on behind him.

MASTER SWITCHING in the bedroom to control nursery, hall and other lights is only one of the ways REMCON adds exciting sales-appeal to your houses. For as little as \$50, your home can have many important REMCON switching conveniences. • When alone at night REMCON makes it possible to instantly flood the house and grounds with light from convenient bedside switches. And in the kitchen REMCON Master Control switches can save hundreds of steps a day. • Whether a living room has 2, 3, 4 or more entrance points, there should be a switch at each of them. With REMCON you can control the light in a room-economicallyfrom as many switching points as you wish. • Never before has it been possible to add so much to your houses for so little. • For more information about REMCON simplified remote control switching, speak to your electrical contractor or write to Dept. RB-51, Pyramid Instrument Corporation, 630 Merrick Road, Lynbrook, New York.

REMCON low-voltage convenience switching sells houses.

National still a favorite among builders

because of its moderness in style and design
as well as "built-in" strength and stamina

Actual service records attest to these claims for the wearing qualities of National Builders' Hardware.

FIRST the basic materials are chosen for their known strength and adaptability to the service the hardware is to perform.

SECOND the style and design must be mechanically correct to minimize friction and resultant wear.

THIRD the importance of simplifying installation is an important factor as a means of curtailing excessive labor costs.

FOURTH the general attractiveness of the hardware is essential for eye appeal and the protective finishes to guard against rust and deterioration—all these features help make National Builders' Hardware today's best buy!





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Mr. Builder:

Here's why Chromalox Electric Heat means more modernization money for you!

NEW SALES APPEAL

There's nothing like clean, healthful electric heat. No soot, smoke, fumes, or ashes. And it's safe heat. No flame, no burning fuel, no pilot lights, no wasted heat up the chimney. Compact, quiet electric heat gives your customers true heating comfort without air blasts; freedom of furniture arrangement, individual room temperature control. And in properly insulated homes, the cost is surprisingly low.

NO CONSTRUCTION HEADACHES

When you install electric heat in added-on rooms, finished attics, game rooms, closed-in porches or breezeways, you have absolutely no bother with connecting to an existing central system. All you do is wire in the units... a few screws hold them ... two wires connect them. That's why we say Chromalox electric heat has the lowest installed cost of any heating system.

PUT CHROMALOX ELECTRIC HEAT TO WORK!

Edwin L. Wiegand Company, world's largest manufacturer of electric heat for home and industry, offers you a complete line of electric home heating equipment. Your Chromalox Distributor can help you with the ideas, applications and service. See him today. Get the full story and ask to see the complete, packaged promotion material available to help you exploit Chromalox Electric home heating in your market.

Edwin L. Wiegand Company 7770 Thomas Boulevard, Pittsburgh 8, Pa.





m. Kresky Even-Heater is an oil burning unit that sends out automatic, thermostatic, forced air to rooms. Cool air is drawn into top-rear of heater, "Snorkel-Flo" feature blows air down through heat exchanger and out bottom front, giving forced air circulation automatically controlled for constant comfort through all rooms. Heater is 22" x 341/4" x 32" so it fits in a small space, delivers 61,150 Btu output. Model SH-62 about \$125. Kresky Mfg. Co., Petaluma, Calif.



n. Weather-Chron regulator out guesses the weather by means of a built-in outdoor thermostat. It measures outdoor temperature as it occurs, automatically changes start-up time with every weather change. Other features include stopping heating when outdoor temperatures rise above a preselected high limit and automatically eliminating night setback when outdoor temperatures drop below preselected low level. Model 1-2S with 24 volt, 115 volt or 220 volt electric clock motor, \$66.50. Automatic Devices Co., Western Springs, Ill.



o. Frigid window fan has a 3-speed intake, 3-speed exhaust, all operated by push buttons. Thermo-control is the kind you set and forget. Finger-tight guard is designed for safety, fan is of polished aluminum with 20" 4-bladed propellers. You can use the Frigid anywhere since its shell-white enamel finish won't fight room colors. 1/12 hp motor wound for 3 speeds 1,000, 800, 600 rpm, 3,520 cfm. Price is approximately \$89.95. Frigid, Inc., Brooklyn 32, N. Y.

continued on p. 198

B-822

GLASS-FIBERED PLASTER

Only Certain-teed gives you when the standard with Bestindered with tibered with

WORKS CLEANER ... FASTER ... EASIER!

Now Certain-teed gives plasterers an entirely new kind of fibered gypsum plaster that helps them give you better plastering jobs at no extra cost!

Bestwall glass-fibered plaster is a new patented formulation employing textile glass filaments cut to a carefully controlled length best suited for plastering. Plasterers who have fieldtested it report new, higher standards of performance and on-the-job workability. In down-to-earth plasterer's language, this means:

TIME SAVED

... the glass fibers do not foul up mixer blades—or build up on the box, hoe or hod.

FASTER, EASIER PLASTERING

. . . no "balling" of fibers with



Quality made Certain ... Satisfaction Guaranteed

consequent grooving of plaster; less backtracking and smoothing are required.

MORE UNIFORM SURFACE
 . . . better base for finish coat.

BETTER KEYING

... uniform distribution of individual filaments of carefully controlled lengths, with 30 to 40 times as many fibers as any other fibered plaster produces better keying on metal and perforated lath ... fewer plaster droppings.

Try the new Bestwall Gypsum Plaster for yourself. See if it isn't the bestperforming fibered plaster you have used. Write us today or call your Certain-teed salesman or dealer for more information.



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Millions of prospective home buyers watch famous TV personalities demonstrate American-Standard products on network television. Millions more see colorful American-Standard bathrooms and heating installations in the nation's leading magazines. To them American-Standard quality products mean ... smart, modern styling
 ease of operation

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EMPIRE-made of durable cast iron, this compact gas boiler will **EMPIRE**—made of durable cast iron, this compact gas bolier will fit in utility room or basement. Cast iron sections, controls and control piping are factory-assembled to cut installation time and costs. Ready to operate quickly. Requires little maintenance, A.G.A. approved for all types of gas; I=B=R rated. ARCOLINER—packaged oil-fired heating unit permits fast, economical installations. Rugged cast iron sections are built to last. Wet-base construction permits first-floor and base-mentless installation. Heavy 20-gauge steel jacket is bond-erized and has a baked-on Forge Red finish.





WLAT I SAW INSILF BLO CIIIIA .

Beautiful American-Standard bathroom fixtures appear in striking full-color ads in leading national magazines—The Saturday Evening Post—Better Homes and Gardens—The American Home, with a circulation of more than 11,000,000. New home buyers by the millions see these products want them—expect to see them in the homes they visit.

The best friend a builder ever had! This unique kit shows you how to plan a complete sales program with...

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ADVERTISING GUIDE

-material for radio and newspaper advertising.

DISPLAY MATERIAL

--sales-building handout and direct mail pieces--exterior and interior signs for model homes.

PLANNING PACKAGE

-guides on bathroom, kitchen and heating layouts-color schemes and decorating ideas.

FREE — your local American-Standard office has this promotion package for you.



American-Standard

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REMINGTON *MIGHTY MITE* STUD DRIVER sets a stud a minute in steel or concrete!

Here's the "MIGHTY MITE"—small but powerful partner of the full-size Remington Stud Driver—the answer to any job requiring a ¼" diameter stud. It's the perfect tool for builders, light contractors and the "do-it-yourself" market . . . can be

rented or purchased. You can buy it for only \$34.75! The "MIGHTY MITE" has only

The "MIGHTY MITE" has only three parts to handle . . . easy to load and operate. The upper assembly is unscrewed, the 22 caliber cartridge with the desired 1⁄4" stud is inserted, and it's ready to go. One rap of the hammer on the firing pin, and "MIGHTY MITE" rigidly anchors wood sections or steel fixtures to concrete or steel! No pre-drilling required.

Safe, too. It's non-tilt—cannot be fired at an angle; cocks only when held in the proper firing position; must be pushed firmly in position to expose the firing pin. A four-inchsquare guard provides full protection to the operator.

Send for the facts about the REMINGTON "MIGHTY MITE" -small, powerful and ideal for your construction job—at the lowest possible price—

Another great <u>NEW</u> cartridgepowered industrial tool by



Industrial Sales Division, Dept.HH7 Remington Arms Company, Inc. Bridgeport 2, Conn.

ONLY

Please send me your free booklet which shows how I can speed the job and save with the new Remington "Mighty Mite" Stud Driver.

Name	Position
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p. Radiantrim panels are handsomely styled with a horizontal line above the center of the panel and beveled edges that accentuate panel joints. Hold-down retaining clip of 18-ga. steel is attached to wall, holds center baseboard panel securely. Panels come in 12", 18", 24" lengths, have inverted corner covers or projecting covers to protect and conceal fittings at end of assembly. Finishing panels, 2 13/16" h., enclose pipes, finish installations, etc. American-Standard, Pittsburgh 30, Pa.



q. Dorphone answers the door electronically. With it, you have instant two-way communication between any central point in the house and the front and back doors. Outside units are weatherproofed, master unit is in chrome. Electronic tube heats within 2 sec. of the time the unit is turned on. Dorphone is claimed to have extreme sensitivity so that it records sounds faithfully. It has particular use when a housewife is at work in the kitchen and the children are playing nearby outdoors. Cost: \$65. Republic Electronic Industries Corp., New York City.



r. Built-in radio system can include extension speakers, intercommunication controls, phonograph jacks. Patented hangers with each unit forego use of nails or screws to mount the radio and extension speakers. You can get just about any combination of units you want, including an automatic baby-sitter. Master radio with speaker and four additional room speakers fitted with individual volume controls cost about \$99.95. Front panels are chrome, copper or gold finish. Phillips Radio Corp., Temperance, Mich.

continued on p. 200

GIVE HER THE WARDROBE SPACE SHE WANTS



GLIDE-ALL doors installed in Parkwood Vista, La Mirada, Calif. Builder: Devon Construction Co., Los Angeles Architect: Herman Charles Light, A. I. A.

In designing and building homes to sell you certainly try to meet the customer's demands—to give them major features they want. The most house for the money is the important thing. More easy-to-use wardrobe and storage space has a most important "buy appeal" today, and the simple, low-cost way to give "Mrs. Home Buyer" the space she wants is with GLIDE-ALL Sliding Doors.

GLIDE-ALL Doors make floor-to-ceiling, wall-to-wall expansive wardrobes, huge closets in corners of small rooms, full-length, full-height hallway storage space, entrance-way guest closets, and in many other waste-space areas. GLIDE-ALL Doors save construction time and dollars too . . . they're installed quickly, adjusted easily to fit the opening, decorate with the wall, and give a life-time of trouble-free performance. They are available in standard 8' and 6'8" heights, flush or recessed panel models, overhead or bottom roller types . . . and in special sizes for unusual jobs. Write for complete details, specifications and prices.

GLIDE-ALL Doors are available from distributors throughout the United States and Canada. For information write Plant nearest you.



CHICAGO, 3510 Oakton St., Skokie, III. EL MONTE, Calif., 801 W. Valley Blvd. FRANKLIN, Ohio, P.O. Box 290 LAUREL, Mississippi, P.O. Box 673 NEW YORK, Glen Cove Rd., Mineola, N.Y. SAN FRANCISCO, 1970 Carroll Ave.

WHAT'S BEHIND GLIDE-ALL DOORS

GLIDE-ALL Doors are the result of extensive research by Woodall design and production engineers to provide modern, versatile "package" sliding doors at low cost to the Building Industry. They are unique in their design, Woodall-Quality built and guaranteed. Six modern Woodall plants, coast-to-coast, produce GLIDE-ALL Doors and distribute them through a broad national network of sales and service organizations backed by the reputation of Woodall Industries, Inc.

New Products

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METALBESTOS-

the prefab gas vent ...

What's "job-site blacksmithing"? It's the time and labor wasted in making gas vent pipe on the job... the cutting, crimping, soldering, or cementing that drain away costly man-hours — and increase your building expenses! When you specify Metalbestos, the ready-to-use gas venting, there's no work slow-down to cut needed sizes or trim bulky fittings... no unusable, waste material when the job is done.

To meet every venting requirement, there are versatile, light-weight Metalbestos lengths and fittings that install in seconds with a quick turn of the gas-tight couplers. For pennies more in material, your net building cost will be dollars less when you choose Metalbestos. And you're assured of a correct, complaint-free vent — with double-wall protection for years of safe, dependable performance.

Metalbestos cuts costs without cutting corners

For the latest facts about scientific gas venting, write Dept. D-7



Stacked by principal jobbers in major cities. Factory warehouses in Atlanta, Akron, Dallas, Newark, Des Moines, Chicago, Los Angeles, New Orleans.



s. Wheel-it totes lumber, other materials around yards and plants. Model 24, shown above, is a four-wheel trailer-type unit of welded steel construction. It weighs 700 lbs., but it can hold a load of 6,000 lbs. Front axle tilts slightly, but nontipping front pivot keeps model stable. Two tapered roller bearings let trailer maneuver completely around in slightly more than its own length. Telescoping tongue takes loads up to 24' in length, fits a standard one-bar trailer hitch. 12' 1., 49" w. between stakes, 37" h. \$329 less tires F.O.B. Hawkeye Ind., Longmont, Colo.



t. Electric Lime-Master turns out readyto-spread plaster when and where you need it in 5 min. You mix only amount needed, so waste is reduced. A gear reduction box allows full power at correct mixing speed. Frame is welded tubular steel, rolls on solid rubber wheels. ¹/₃ hp motor is mounted in the clear for easy access. Machine operates on 110-220 volt, 60 cycle circuit. To clean, remove blade and shaft from arbor by single turn. \$195. F.O.B. A. & G. Limemaster Co., Stratford, Conn.



u. Handy Mixer has a portable electric mixing unit in a large metal tub, operates in much the same way as a portable kitchen mixer. Tub has a capacity of five bags of premixed aggregate. If you use more than one tub, you can mix several colors or types of mixes on the spot by moving mixing unit from tub to tub. Mixing unit slides into receptacle in tub and entire mixer can be assembled in 30 sec. Unit is powered by 1 hp motor, operates on 115 v. outlet. About \$360. Master Vibrator Co., Dayton, Ohio.

continued on p. 202

TWO PATTERNS of exposed concrete masonry blend to finish this unusual room. Left wall-symmetrical stacking of 8" x 8" face block. Back wall - horizontal stacking creates striking hood above firescreen.

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Scored split block gives distinction and rugged beauty.

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Concrete roman brick in 2" x 16" face size for the modern touch.



Alternate 8" and 4" running bond is a popular choice for interiors,

Your building dollar goes farther—you build better with

Versatile Concrete Masonry

More and more builders are choosing the wide range of wall pat-terns for both exteriors and exposed masonry interiors—proving again that no other building material offers the flexibility of concrete masonry at such a low in-the-wall cost.

And concrete masonry is available locally coast-to-coast. There are no costly waits when you choose block.

For all the facts about the wide new range of shapes, textures and sizes—see your local NCMA member.

"Ideas for Wall Patterns with Concrete Masonry": Ask your local NCMA member for a copy of this book, giving the complete story on wall patterns.





CONCRETE

MASONRY ASSOCIATION

38 South Dearborn-Chicago

New Products

Combining beauty and functional appeal, the new one-handle mixing faucet by MOEN is becoming more popular than ever with modern home makers.

The MOEN mixing faucet is a precision valve ...manufactured by master craftsmen... and it guarantees years of dependable trouble-free service. For convenience, it can't be matched. A single lever controls rate of flow as well as water temperature. In appearance, it is unequaled. The gleaming durable finish is easily cleaned and it blends with all types of architecture.

There is a MOEN faucet for every water outlet in the home...kitchen...shower...lavatory. See your plumbing contractor for immediate information, or write today for descriptive brochure.



for eye appeal

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the original one handle mixing faucet!



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v. Fasco ventilator is held in a modern adjustable hood. Powerhood has snap-in ventilator attached to underside of hood, so there is no loss of cabinet space due to ventilator or duct installation. Impeller wheel, push-button controls and underhood light comes already installed with working parts concealed. Metal hood adjusts to fit underside of any cabinet or row of cabinets from 30"-42" 1. Removable, adjustable grease tray lifts out easily for cleaning. From \$62.50-\$95.80 in white, copper or stainless steel. Fasco Ind., Rochester, N. Y.



w. Handy Horse now comes in a new 30" size, table-height model, augmenting the company's 24" unit. The high model you can use for outdoor scaffolding for painting, masonry work, carpentry and repair. Folding metal horse can hold weights up to 500 lbs., is a handy accessory for many kinds of builder jobs. HH-530 costs \$7.45, is from Federal Hardware Products, Inc., Minneapolis 12.



x. Deluxe Waste King dishwasher is completely automatic, features individual control over any part of a 5-phase 37¹/₂ min. washing-drying cycle. Centrifugal pump circulates water at a rate of 60 gal. per minute. Machine's "brain" is a control panel with 5 lights indicating each phase of the cycle. You can set machine at any operation just by turning control knob and pushing in. Power pre-rinse flushes away loose food particles before detergent washing begins. A "hold-over" second rinse holds water in cabinet until it reaches 160°F. before beginning last rinse. Given Mfg., Los Angeles, Calif.

continued on p. 204

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New Products

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y. New structural panel acts as subfloor and underlayment all-in-one. The panel called 2.4.1—is engineered to function as a solid one-piece base over supports on 48" centers and you could lay wall-to-wall carpets, tile or strip flooring directly on it.

Product is unsanded $1\frac{1}{6}$ " seven-ply panel with Interior type mold-resistant glue line, conforming to US Commercial Standard. The face, made of C-repaired veneer, has no open defects larger than $\frac{1}{4}$ " x $\frac{1}{2}$ ".

Douglas Fir Plywood, describing the panel, says that one contractor using a framing system designed to get the maximum from this method estimates he's saved over \$500 a unit. They recommend a framing scheme devised by Kenneth Larsen, president of Continental Homes, Inc.



Main girders are 4×6 set on posts with 2×4 blocking at panel edges.

Here's how the system works. Larsen's system calls for $4" \times 4"$ posts placed inside the footings on 4' centers with $2" \times 4"$ blocking under panel edges on the same spacing. Girders can be tied to concrete or masonry foundations several ways: they can be set into pockets in the foundations flush with top of the sill, or supported on posts adjacent to foundation.



2.4.1. goes down on floor framing fast, gives tight, solid base for flooring.

The 2.4.1 panels are nailed with face grain running across main girders so edges are supported by the 2" x 4"'s. Panels can be brought out flush with outside edge of sill so plate is nailed over plywood or can be placed directly on the sill. Plywood should be nailed with rink shank or helically threaded nails spaced 6" on all bearings. If foundation is planned to a 4' module, as Larsen's is, only starter panels need one straight cut across center.

At present, 17 West Coast mills are planning volume production for distribution through building supply dealers. For more information, write Douglas Fir Plywood Assn., Tacoma, Wash.

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which all fixtures harmonize per-

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fixtures delivered direct to your

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z. Door-Lift electronic garage door operator opens and closes garage door at a touch of button on car dash. It automatically turns on garage light as door opens, turns it off as door closes, automatically locks door. You need only 2" of head room to put in unit. Enclosed power case keeps out dust, does away with belts and pulleys. Miniature radio transmitter is installed under car hood, operated by push button on dash. Operator with electronic control and push button for 8'h. door, about \$189.95 F.O.B. Door-Lift Co., Dayton, Ohio.

aa. Two-sided bathtub has a completely finished apron on each side. It could serve two bathrooms—each joined together by the bathtub. After installation, tub has a sliding opaque shower door riding a track on each rim, enclosing tub from one side or both. Regular 5' size. Alliance Ware, Alliance, Ohio.



bb. Homeguard stationary vacuum cleaning system is installed here in a basement, can be put in garage, utility room or attic and is connected to cleaning inlets in rooms through lightweight steel tubing. Two types of inlet connection are available—one for wall or baseboard mounting and one with flush cover for floor use. An impressive amount of cleaning tools do almost every kind of job from vacuuming floors to picking up soapy water from a kitchen or bathroom. Spencer Turbine Co., Hartford, Conn.



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Technical Publications

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EQUIPMENT

471. Tool up with Tape. Johns-Manville, Dutch Brand Div., Dept. HH, 7800 Woodlawn Ave., Chicago 19, Ill. 12 pp.

How to choose the right type of electrical tape for insulating and protecting application in electrical construction, maintenance, manufacturing. Performance specifications.



472. Fermont Bulletin No. 955. International Fermont Machinery Co., Dept. HH, Ramapo, N. Y. 8 pp.

Excellent reference material, forms, and check lists about electric plants powered by internal combustion engines ranging in capacity from 5 KW to 250 KW, designed for automatic or manual starting.

473. CEFCO Sewer Pipe and Perforated Pipe. Central Foundry Co., Dept. HH, Foot of Pacific St., Newark 5, N. J. 8 pp.

Bituminized fiber pipe and couplings. How to use them in house-to-sewer, septic tank, foundation drainage, etc.



474. Booklet 1231. The C. A. Dunham Co., Dept. HH, 400 W. Madison St., Chicago. 16 pp.

Dunham BE-10 Baseboard for residential building and BE-12 for commercial, etc. Roughing-in data, design and details, capacities and procedures.

475. The Crawler . . . Backbone of Construction. American Tractor Corp., Dept. HH, Churubusco, Ind. 12 pp.

According to the figures here, \$44 billion will be spent for US construction this year. With that in mind, consider the Terra-Trac tractor, its uses and applications in the job to be done. Charts, photos of the tractors are included.

476. Corrulux. AIA 26-A-9. L-O-F Glass Fibers Co., Dept. HH, P. O. Box 20026, Houston, Texas. 4 pp.

How, where and why you ought to install Corrulux translucent structural panels.

continued on p. 210



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Technical Publications

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477. Lascolite flat fiber glass panes. Lynch Asbestos Co., Dept. HH, 2939 So. Sunol Drive, Los Angeles 23, Calif. 1 p. Lascolite for windows. Bulletin describes the qualities. Among them, note that the panes are unbreakable, come in 15 colors.



478. The Short Billed Workin' Bird. The F. E. Myers & Bro. Co., Dept. HH, 949 So. Orange St., Ashland, Ohio. 12 pp. A bird that goes to work in every battle against hard water—is Myers water softener equipment. Folder describes the units, proves the host of advantages of soft water, gives advice on what unit to buy.

DOORS, WINDOWS

479. Sliding Aluminum Doors. Weather Wizard Aluminum Mfg. Corp., Dept. HH, Garden City Pk., N. Y. 4 pp.

Alpride sliding glass doors in a wide range of stock sizes and types. Diagrams and installation details.



480. Catalogue No. 303. Frantz Mfg. Co., Dept. HH, Sterling, Ill.

Shows 66 sizes, designs and models of rigid and sectional garage doors. Door Selector lists sizes from $8' \times 6'6''$ to $16' \times 7'$ in single and double widths to fit almost any size opening. Electric door operators illustrated and described.

481. Bilco basement door. The Bilco Co., Dept. HH, New Haven 5, Conn. 4 pp. Photos of a modern all steel unit that seals off weather, is built to last a lifetime, installs quickly and easily.

KITCHENS, BATHS

482. Plan for Kitchen Living. St. Charles Mfg. Co., Dept. HH, St. Charles, Ill. 24 pp. How to build-in convenience and good looks in a kitchen. Plans, cabinets, special purpose units, accessory ideas, all included.

483. Moen AIA file No. 29-H-5. Moen Valve Co., Dept. HH, 6518 Ravenna Ave., Seattle 15, Wash. 4 pp.

The single handle mixing faucet in a variety of sparkling designs for kitchens, bathrooms. Special spouts available.

continued on p. 212

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484. GE AIA File 30-F-6. General Electric, Dept. HH, Household Refrigerator Dept., Louisville 1, Ky. 4 pp. The wall refrigerator-freezer combination with new magnetic doors comes in five GE mix-or-match colors plus white, is handsomely sectioned into an 8.7 cu. ft. automatic defrosting refrigerator plus a 2 cu.

Technical Publications

485. Limited Space Bathroom Blueprint Folder. Alliance Ware, Inc., Dept. HH, Alliance, Ohio.

A complete bathroom that sits down into a space 51/2' x 63/4'. How? By using Alliance Ware's Junior size tub and 21" x 17" vanity lavatory. Blueprint shows placement, roughing-in diagrams.

486. Catalogue No. 3000. Winton Mfg. Co., Dept. HH, 5001 N. Wolcott Ave., Chicago 40, Ill. 12 pp. See the latest designs in Packard bathroom cabinets-winged mirrors, handsome fix-

tures, roomy storage-and Winfield lighting fixtures-the Angle Lite, Lustre Lite and Beauty-Lite.

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487. Optional Kolor Plan. Creo-Dipt Co., Inc., Dept. HH, North Tonawanda, N. Y. 44 pp. plus inserts.

The wonderful world of color in red cedar shingles and shakes. Data sheets, charts and application instructions for eight styles of shingles and shakes in 22 colors.

487-A. Onan Electric Plants. D. W. Onan & Sons Inc., Dept. HH, Minneapolis 14, Minn., 8 pp.

The complete line of Onan generating plants in a technical book designed to make selection of the proper type of equipment as easy as possible. Photos of engines, generators, accessories with specifications.

488. For the Home . . . Marble Institute of America, Inc., Dept. HH, 108 Forster Ave., Mount Vernon, N. Y. 24 pp. The wonderful world of marble in a color booklet of rather breath-taking room settings that do full justice to colors, textures.

489. Lamin-Art, AIA File No. 35-C-12, Fabricon Products, Dept. HH, 6430 E. Slauson Ave., Los Angeles. 4 pp. Pattern illustrations, installation data for Lamin-Art plastic surfacings.



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JULY 1956

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Two heights: 3½" and 2-2/3". (All dimensions include 3%"

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Technical Publications

490. Catalogue 56. The A&A Register Co., Dept. HH, 8327 Clinton Road, Cleveland 9, Ohio. 8 pp.

Booklet features the P-56 economy model baseboard diffuser, specifically designed for low cost installations. Also featuredair conditioning registers, intakes, perimeter type registers, gravity and floor registers and intakes.

491. Standard Bathroom and Shower Cabinets. Standard Steel Cabinet Co., Dept. HH, 3701-15 Milwaukee Ave., Chicago 41. 24 pp.

Full line of shower doors, bathroom accessories, ventilators, shower stalls.

*National Construction Estimator. Edited by Cal Pacific Estimators. Craftsman Book Company, Dept. HH, 326 South LaBrea Ave., Los Angeles 36. 152 pp. \$3. per issue.

1956 edition is about 60% larger in the estimating section than its predecessor. Cost Section tabulates construction items with unit labor, material costs.

493. Catalogue No. 506. Modern Swimming Pool Co., Inc., Dept. HH, 1 Holland Ave., White Plains, N.Y. 52 pp. A reference book of pools divided into the kind of index that helps you find at a glance whatever you need.

TECHNICAL PUBLICATIONS

Johns-Manville electrical tape..... Fermont bulletin CEFCO pipe Dunham baseboard American Tractor book L-O-F Corrulux Lynch Lascolite Myers water softener. Weather Wizard doors. Frantz catalogue Bilco basement door. St. Charles kitchen. Moen faucet

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 483. Moen faucet

 484. GE refrigerator-freezer

 485. Alliance Ware bathroom

 486. Winton catalogue

 487. Creo-Dipt catalogue

 487. A Onan generating plants

 488. Marble Institute book

 489. Lamin-Art booklet

 490. A&A Register catalogue.

 491. Standard Bathroom book.

 493. Modern Swimming Pool equipment.

* For information about unlisted Technical Publications see below.

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