Flat tops: when do they make sense? above and page 106

Round table: too many window sizes waste $100 a house page 124

Small builders: how to make money on odd lots page 160

Nine more ways to build better for less page 144

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Here's why more and more home buyers are sold on GOLD SEAL VINYL'S

• easy to clean  • color-rich  • wear extra-long  • look beautiful


GOLD SEAL VINYLTOP is a versatile, easy-to-clean material for counters and cabinets, shelves and tabletops—even doors. (See it in every room shown here.) It's flexible, easy to cut and cove. VinylTop makes a perfect one-piece counter and splash board. 17 colors that match VinylFlor and VinylTile exactly. 30", 36" or 42" wide.

GOLD SEAL VinylFLOR has all the virtues of VinylFlor and can go over ground-level concrete with or without radiant heat, as well as over suspended subfloors, wood or concrete. It's the only vinyl with colors as right for walls as they are for floors. 11 softly striated "Bermuda Hues"; 21 marbleized patterns (9" x 9") Standard gauge.

GOLD SEAL VINYLTOP has all the virtues of VinylFlor and can go over ground-level concrete with or without radiant heat, as well as over suspended subfloors, wood or concrete. It's the only vinyl with colors as right for walls as they are for floors. 11 softly striated "Bermuda Hues"; 21 marbleized patterns (9" x 9") Standard gauge.

GOLD SEAL VINYLBEST TILE can be laid over any floor with or without radiant heat—it even goes in the basement. Household soils clean easily. It is highly resistant to grease and resists alkaline moisture present in basements. In 17 of the clearest, truest colors ever. 9" x 9" tile in 1/16" gauge and 1/8" gauge.

All these vinyls carry the GOLD SEAL guarantee of satisfaction—or your money back.

For home or business... you get the finest choice of all in...

INLAID LINOLEUM • RANCHTILE® LINOLEUM • VINYLFLOR • VINYLTOP • LINOLEUM, VINYL, VINYLBEST, RUBBER, CORK AND ASPHALT TILES • CONGOLEUM® AND CONGOWALL® ENAMEL-SURFACE FLOOR AND WALL COVERINGS

GOLD SEAL FLOORS AND WALLS
CONGOLEUM-NAIRN INC., KEARNEY, N. J.
When you install a Nutone Heater and Fan...

The Bathroom SELLS the House!

'Toasty Warm'

No Odors or Steam

Model 901
$49.95 list.

Model 881
$24.95 list.

HOME BUYERS ARE "SOLD" on the idea of draft-free ventilation in the bathroom to avoid lingering odors or damaging steam. Nutone's 881 Fan is designed for "inside plan" or "outside wall" bathrooms.

SAFETY IS A BIG SALES FEATURE... especially in bathrooms, and Nutone Ceiling Heaters prevent danger of burns or shocks because they are built into the CEILING... not in dangerous wall location.

Exclusive NUTONE HEAT-A-LITE... (U.S. Patents 2,689,906 & 2,697,163) keeps bathrooms "toasty warm" by forcing air around into every corner of the room. Provides balanced heat all around body.

NUTONE HEAT-A-LITE offers these exclusive features. All three in one:
1. Air circulating fan.
2. Armored heating element.
3. Prismatic ceiling light.

Also available—Nutone RADIANT CEILING HEATERS... with exclusive safety cooling system. 2 Models, $24.95 list. U.S. & For. Pats. Pend.

HOME BUYERS ARE "SOLD" on the idea of draft-free ventilation in the bathroom to avoid lingering odors or damaging steam. Nutone's 881 Fan is designed for "inside plan" or "outside wall" bathrooms.

1. ADJUSTABLE BRACKET... Prevents sagging. No blocking needed.
2. REMOVABLE FLANGE... Allows smaller opening in ceiling. Draft-free damper.
3. SNAP-IN MOUNTING... No loose parts, screws, or wing nuts. No rattles.
4. WATERPROOF MOTOR... Resists constant bathroom moisture. U.L. listed.
5. CONVENIENT HANDLE... For easier "Snap-In" installation. Tension Mounting.
6. LOUVRE GRILLE... Permits free flow of air, yet hides inside. Center thumb screw.

Send for Nutone's complete catalogs
NUTONE, INC., Dept. HH-6, Cincinnati 27, Ohio
If your business is building and selling homes, here is a fact worth considering: a home is easier to sell if it is framed and sheathed with Weyerhaeuser 4-Square Kiln-dried Lumber. There are several reasons for this increased salability.

For example, Kiln-dried Framing is an important sales feature because the public has learned that seasoned lumber is strong ... that it has dimensional stability ... that it contributes to sound, reliable construction.

Kiln-dried Lumber Sheathing on a new home is a feature that helps close many sales. Lumber is strong ... it holds nails firmly. Also, lumber sheathing permits the use of shingles, vertical siding, and other special coverings without furring strips. These are a few of the reasons why lumber sheathing has been the accepted standard for generations ... and is still a mark of high quality construction in homes, farm buildings and commercial structures.

The Weyerhaeuser 4-Square brand name, nationally advertised, is well-known to the public ... a mark of quality that helps builders close sales.

All lumber bearing the brand name Weyerhaeuser 4-Square is scientifically kiln-dried, precision-manufactured, properly graded and carefully loaded for shipment. It is available in a wide range of species and grades, in commons and clears. There are Weyerhaeuser 4-Square Lumber products, from dimension to moldings, to meet every need in light construction.

Weyerhaeuser

ST. PAUL 1,
WEYERHAEUSER 4-SQUARE
PRODUCTS AND SERVICES THAT HELP BUILDERS

PLYWOOD—The Weyerhaeuser 4-Square plywood line now includes beautiful new Knotty Cedar and Knotty Pine, as well as Douglas Fir plywood.

TREATED LUMBER—Pressure-treating with Wolman salts* extends the service life of lumber that is exposed to insects and decay. *T.M. REG.

SHINGLES—The Weyerhaeuser 4-Square Kolorite line includes top quality Western Red Cedar shingles, shakes, and aristocratic hand-split shakes . . . natural finish or stained in 16 colors by the exclusive Kolorite process.

SIDINGS—All the basic patterns, in many Western species, including style leaders such as bevel and bungalow, the new Rustic Red Cedar, and special vertical patterns.

PANELINGS—Standard patterns and special patterns, in a wide choice of species and grades . . . plus the plywoods listed above.

UPPERS—The Weyerhaeuser 4-Square line includes softwood floorings, moldings, stepping, finish items, etc., in Western species.

GLUED-UP LUMBER—Edge-glued lumber now includes sidings, stepping, and finish up to 30" wide, in various Western species.

WEYERHAEUSER 4-SQUARE HOME BUILDING SERVICE — Complete plans and material lists for 148 beautiful modern homes—all designed by experts, engineered by Weyerhaeuser.

WEYERHAEUSER 4-SQUARE FARM BUILDING SERVICE — Blueprints, working drawings and material lists for 278 farm service buildings and equipment items, including 22 fresh, appealing farm homes . . . all illustrated in the big 4-Square Farm Building Portfolio.

Lumber

This is one of the popular home designs from the 4-Square Home Building Service . . . featured in a recent full-page, 4-color advertisement in the Saturday Evening Post. Ask your Weyerhaeuser 4-Square Lumber Dealer to show you all the designs in this modern Service.

Sales Company
MINNESOTA
At last, for the first time, magnificent marble, with all its lustrous beauty and vibrant color, is now available in lightweight, half-inch thickness for wall or floor covering.

Here are the facts:

MARKWA marble wall tile is a true quarried marble, produced exclusively by America's foremost marble producer and fabricator, the Vermont Marble Company.

MARKWA marble wall tile is half the thickness and half the weight of conventional marble slabs—1/2 inch thick, 7.1 lbs. per square foot. It is cut to three sizes: 8" x 8", 8" x 12", and 12" x 12". It is absolutely flat, uniform in size and thickness to a close tolerance.

Modular sizes (3/32" less each dimension) are also available at no extra cost. It is set by tile layers in exactly the same manner as clay tile, either with mortar or by adhesion.

MARKWA marble wall tile costs as little as $2.85 per square foot set in the wall depending on variety of marble and type of installation. It is stocked in a wide variety and color range.

MARKWA marble wall tile is ideal for wall or floor, in bathroom, kitchen, living room or foyer, for countertops or fireplace facings, in residential or commercial buildings, for interior or exterior. It comes polished with cushion edges; matte finish available for floors.

SEE MARKWA NOW! Specify it for your next job.

More information and complete specification data are available by writing the Vermont Marble Company, Proctor, Vermont, or any of its branch offices.

MARKWA marble wall tile is the only quarried marble that is lightweight because it is thin.
NEW \textit{kwikset} SECURE-ALL SAFE

\textit{safety-deposit box security for the home}

Newest addition to the built-in trend is the KWISET SECURE-ALL residential wall safe. Built to fit conveniently in any standard 4” wall, between 16” studs, the KWISET SECURE-ALL SAFE offers builders an outstanding low-cost safety feature for protecting important papers and valuables against fire, water and theft.

The KWISET SECURE-ALL SAFE is made from heavy gauge steel, with thick high-temperature thermal insulation on all sides. It locks securely with a flush pin tumbler locking mechanism and can be easily installed in closets, behind pictures or drapes.

For further information, write
KWISET SALES AND SERVICE CO.
Anaheim, California.

\textbf{EASY TO INSTALL \quad EASY TO CONCEAL \quad FIRE RESISTANT \quad WATER RESISTANT \quad THEFT RESISTANT}

\textbf{manufactured by \textit{kwikset} \textit{locks, inc} \textit{anaheim, california}}
Buyers are more "at home" with

INSIDE...

The traditional charm of MALT-A-MATIC wood window units side by side. There's convenience, too... sash is removed quickly for easier painting or cleaning. Lets your customer wash the outside, inside.

OUTSIDE...

MALT-A-MATICS may be unusually framed for striking window effects. Builders know of the unlimited design possibilities with quality-built Malta wood windows.
ALL AROUND THE HOME...

Malta wood windows add value in quality, design and construction that catches the home buyer's eye. As a builder ... you, too, can appreciate the greater value when you select Malta units. There's economy in construction and wide flexibility in home design. Use popular MALT-A-MATICS, ideal for traditional architecture ... MALT-A-VENTS, the multi-purpose wood window for stacking, grouping, for casement or awning type windows ... or MALT-A-GLIDES, the horizontal sliding wood window for ribbon windows or large glass areas.

You'll save on installation costs because all Malta units are precision milled and feature easy-to-remove jamb liners to reduce the jamb width for variations in wall thickness.

Yes, use Malta in your next homes. Your buyers will be more "at home" when you choose and use Malta wood windows.

See your nearest Malta dealer or write for literature ...
NO OTHER FIXTURE GIVES YOU 73% USEFUL LIGHT

**Kirlin System**

**BUILT-IN Lighting**

**WONDERFUL!... HOW DO THEY GET SO MUCH LIGHT?**

You work for more than just the money you make on the job—there is a lot of satisfaction from that pleasant surprise of the owner when you turn on KIRLIN built-in lighting.

Your customers are getting adequate, diffused light from above. They are satisfied, and so are you, for the Kirlin installation method costs less!... The frame is always flush with ceiling even though the box is not level or flush.

**NO LIGHT-LEAKS**

**Why You Profit with Kirlin**

**INSTALLATION COSTS ARE LESS**

REGULAR BUILDING WIRE RUNS DIRECT TO HEAT-INSULATED JUNCTION BOX

NO CARPENTER WORK IS NEEDED

* Made in all sizes—square or rectangular—and in fluorescent
* Alzak GlassSurfaced Aluminum reflectors
* Hinged Rust-resisting Doors in Die-cast Frames
* UL and IBEW labels

**IN STOCK AT LEADING WHOLESALERS EVERYWHERE**

LARGEST SELLING RECESSED LINE—MILLIONS IN USE EVERYWHERE

**The KIRLIN CO.**

3435 E. JEFFERSON AVE.
DETROIT 7, MICHIGAN
YEAR 'ROUND air conditioning will soon be a must for successful selling. Satisfy that need, even in smallest homes, with compact, low-cost WILLIAMSON Yearround Air Conditioning. For basement-less homes, simply install ASSEMBLED Counter-Flow Furnace plus exclusive Waterless Counter-Flow Air refrigeration. Use only 2 FEET SQUARE of floor space for heating and cooling. Install cooling coil enclosure and conduit line now... complete the system anytime. For basement homes, install ASSEMBLED Lo-Boy or Hi-Boy with Duct Type Air refrigeration. Let WILLIAMSON Yearround Air Conditioning boost the selling power of your homes!

ASSEMBLED WARM AIR FURNACES
- Units occupying less than 2 feet square
- Hi-Boy, Lo-Boy, Counter-Flow and Horizontal Units
- Pre-wired and pre-assembled...10-minute installation
- 20 gas models, 12 oil models...60,000 to 145,000 BTU
- Famous Williamson symbol on all units for extra merchandising value

WILLIAMSON Yearround Air Conditioning assures you more profit with less cost, less space and less labor. Write for full details TODAY!
the tightest, fastest-working joint ever developed for bell-and-spigot Clay Pipe!

New
Wedge-Lock*
by ROBINSON

PERMANENTLY BONDED DOUBLE-BALL JOINTS ON BELL AND SPIGOT "SNAP" TOGETHER FOR A PERMANENT, LEAK-PROOF SEAL!

Soon anyone will be able to make perfect Clay Pipe joints — easier and faster than ever before! Installing Wedge-Lock is simply a matter of lubricating the plastic joints with water, graphite solution, or Robinson's special adhesive sealant — and pushing them together. The "double-ball" type joint locks pipe in place ... and is permanently root-proof and infiltration-proof.

This new pipe can be installed not only in regular house-to-sewer lines, but inside plastered walls and under basement floors. For inside-the-house installations, where "head" pressures are encountered, Robinson's special adhesive sealant is recommended. It softens the two jointing surfaces, welding them into a single, solid ring.

This new polyvinyl plastic joint, combined with never-wear-out vitrified clay, will form the perfect team . . . pipe that can be installed in seconds to last for generations!

A complete line of matching Wedge-Lock Fittings is available.

* T.M. Registration Applied For. Patents Pending.

WRITE FOR the new Wedge-Lock Clay Pipe Bulletin, a four-page file-sized brochure with complete, advance information on this new product. Address: The Robinson Clay Product Company, 65 W. State St., Akron 9, Ohio.
What are you building? SPL ' LEVEL? RANCH? CAPE C ?

Worthington air conditioning fits them all!

NEW HOME—YEAR-ROUND AIR CONDITIONER. That's good sense—especially when the air conditioner is a Worthington unit. This good-looking package sends cool, dry, clean air to every room in summer... humidified, balanced heat in winter. Takes up less than 8% square feet!

Big thing to remember is this: Worthington makes an air conditioning unit for every home. And every pocketbook. Write today for the whole story on how Worthington helps you sell homes. You'll see why Worthington air conditioning is called "the builder's line". Worthington Corporation, Air Conditioning and Refrigeration Division, Section A.3.44-H, Harrison, N. J.

Worthington equipment is ideally suited for any of the Golden Dozen Homes.

WORTHINGTON

Climate Engineers to Industry, Business and the Home

JUNE 1955
Here's the seal that IDENTIFIES wood window quality

This little seal has a mighty meaning. Attached to a double-hung wood window unit, it identifies quality at a glance. It is the fabricator's certification that the unit meets the quality specifications of U.S. Commercial Standard 190-53, which means:

The unit is made of carefully selected wood free from defects, properly dried and preservative treated. It is effectively weather-stripped, and top and bottom sash are properly balanced for ease of operation.

Known quality like this benefits architect, builder and home owner alike. That's why it's worth while to look for the AWWI seal of approval. Get full information from your supplier or write Ponderosa Pine Woodwork, 105 West Monroe Street, Chicago 3, Illinois.

The use of this seal is not limited to members of Ponderosa Pine Woodwork. Any manufacturer or fabricator whose unit meets specifications can offer the quality seal under a licensing agreement.

Ponderosa Pine WOODWORK
NOW IT'S HERE

a gas vent as finely engineered as the latest gas equipment for today's modern homes

RV METALBESTOS
ROUND GAS VENT

companion product to new WV Metalbestos oval vent. Now a complete venting line — correctly designed, thoroughly tested to provide a new standard in scientifically correct venting.

NEW EASE OF INSTALLATION
Rota-Lock Coupler joins pipe easily without forcing — locks permanently, yet is easy to unlock. Not a friction or snap lock — no cement or mastic, no screws needed.

NEW SAFETY
fire-resistant steel outer pipe; permanently tight joints; improved double-wall, air-insulated design.

NEW STRENGTH
rugged steel jacket protects inner pipe, resists damage in handling; won't crack, break or collapse.

NEW FREEDOM OF DESIGN
a complete venting system backed by engineering knowledge to solve any installation problem. Requires about 15% less space than any other gas vent. Full line of pipe and fittings, 3" to 6" diameter.

THE ROTA-LOCK COUPLER*
an exclusive METALBESTOS feature
- a slight turn and it locks — permanently
- another easy turn and it unlocks (saves fitting time during installation)

UNLOCKED
TONGUE RELEASED — PIPES EASILY COUPLED AND UNCOUPLED

LOCKED
TURN OF COUPLER BAND ENGAGES TONGUE IN GROOVE — PIPES SECURELY LOCKED TOGETHER

WILLIAM WALLACE COMPANY • BELMONT, CALIF

Stocked by principal jobbers in major cities. Factory warehouses in Atlanta, Dallas, Philadelphia, Des Moines, Chicago, New Orleans.

* Patent Pending
Quality details help close sales

...And nothing says “quality construction” faster than a Yale 5300 series cylindrical lockset on the front door of a home! These locks come in an extremely wide range of patterns, in three different metals. This enables you to give individuality to every home you build.

Customers know and want Yale locksets, because of their good looks, their functional engineering, their reputation for security. Their moderate cost enables you to standardize on these sales-promoting locksets.

Get the full story—send for free full color booklet on the 5300 series today, Yale & Towne Manufacturing Co., Lock & Hardware Div., Stamford, Conn.

Yale 5300 series of cylindrical locksets

Look! It's Richmond's Magic Circle Home, latest of the great Richmond Line which is now making thousands of dollars of additional profits for builder-dealers all over the country! Here's a complete package, with open-area planning and circular traffic flow around an island of storage space—features usually found only in much more expensive homes. Prospects flock to see and BUY this home, for it has all the conventional features, yet sells for a LOW price!

How do you cash in on the extra profits? By building this home with less site labor, overhead, capital—and NO inventory. If you're a qualified builder or dealer—a "go-getter" looking for a home with peak public acceptance, write us on your letterhead. We'll send information on Magic Circle and the complete, hard-hitting Richmond Line!

WRITE FOR RICHMOND'S CONFIDENTIAL BUILDING COSTS!

Richmond's Magic Circle Home
NOW! LOW COST

...MADE POSSIBLE ONLY BY EXCLUSIVE

GENERAL MOTORS

ASSEMBLY LINE PRODUCTION

New! Compact!

GAS-FIRED CONDITIONAIRS

70,000 BTU INPUT...Designed for Quick, Easy Installation in Small Space Areas

The new Delco-Heat GBC70-H Gas-fired Conditionair requires a space only 21” wide by 23” deep for installation. Its companion model GBC70-HR, reverse flow unit for perimeter heating systems, requires installation space only 21” wide by 32” deep. Here are truly economical furnaces with low installation costs and low operating costs. The natural gas solenoid unit is completely factory-assembled for economical installation. These new GBC Gas-fired Conditionairs are designed for small space requirements in today's modern homes. With these new furnaces you have three big profit advantages: the finest in modern, advance-styled automatic heating . . . a name with immediate buyer acceptance . . . and low cost. These new Conditionairs are the latest additions to the expanding line of Delco-Heat gas-fired and oil-fired heating equipment.

Quality-designed, Quality-produced to give you all these advanced heating features:

1. MULTI-FIN HEAT EXCHANGER—Exclusive GM Delco design multi-fin heat exchanger quadruples the heating surface area ... resulting in high rate of heat pickup and transfer for maximum economy and efficiency of operation in minimum of space.

2. EXCLUSIVE AIR CONTROL—Exclusive GM Delco design AIR CONTROL permits delivery of warm air to meet individual home requirements. Assures comfortable, even warmth throughout the home.

3. EASILY ACCESSIBLE BLOWER ASSEMBLY—Mounted on a sliding panel, blower is easily accessible for cleaning and adjustment. Direct drive type, powered by a quiet operating, sturdy, lifetime-lubricated 1/2 H.P. Delco Motor.

4. STAINLESS STEEL HEAT BAFFLES—Exclusive stainless steel heat baffles retard flow of hot gases, assuring maximum amount of heat to air stream for greater fuel economy. Less waste heat up chimney.

5. FULLY INSULATED—All panels insulated with aluminum foil-faced, fiberglas insulation. Retains heat within unit and keeps outer surfaces cool.

6. ENCLOSED CONTROLS—All controls, as well as draft hood, are completely enclosed within the handsome two-tone 20 gauge steel jacket.

7. COMPLETELY ASSEMBLED—The natural gas solenoid unit shipped completely factory-assembled for economical installation.

8. A.G.A. APPROVED—For use with natural, manufactured, mixed, or propane gases.
HOME HEATING!

DEICO-HEAT

CUT COSTS!... increase profits from easier-to-sell Delco quality-heated homes!

The perfect heating buy for home builders is here! A product of the greatest advancement in furnace manufacturing in 20 years... the miracle General Motors Delco-Heat assembly lines... which complete a furnace every two minutes!

Now you have all three big profit advantages... the finest in modern automatic heating... a name with real sales power... and low cost. Delco advanced heating features give your home buyers the last word in comfort, cleanliness and convenience. And, “built and backed by General Motors” means immediate buyer acceptance with pride and assurance. Delco's high production efficiency... exclusive assembly line methods... SAVES YOU UP TO 25% ON YOUR FURNACE COSTS!

In today’s competitive home market... when making a profit calls for selling more house for the money... you’re way ahead with the low cost and high quality of Delco-Heat.

CASH IN! Exclusive GM Delco-Heat “Assembly-Line Profit Program” for builders

Another Delco first in '55... the heating industry’s most dynamic, complete advertising and promotion program. Plan now to tie in with the all-new Delco plan to help you sell more homes... sell them easier... at more profit. This new Delco-Heat “SMASH-IMPACT” Package Promotion sells your home prospects at the national level in LIFE and BETTER HOMES AND GARDENS... in your own local market... and in your own homes. Introduces exciting new promotion ideas for model home merchandising... new tie-in advertising.

Delco’s “Assembly-Line Profit Program for Builders” explains how you can cash in by tying in... details the program, outlines what you can do, when, how, and shows you the sales tools you have to use!

SEE AND HEAR THE FULL STORY... WRITE OR WIRE TODAY

... Your Delco-Heat representative will show you how you can profit more with Delco-Heat. Delco Appliance Division, General Motors Corporation, Dept. HH, Rochester 1, N. Y. In Canada, Delco-Heat, Toronto 13, Ontario, Canada.
From the time of its introduction seven years ago, the Allis-Chalmers HD-5G Tractor Shovel has been tops in popularity. Many thousands are daily proving their ability and versatility on all kinds of excavating, material handling and other jobs.

Now, design refinements make the HD-5G a three-way better value than ever before:

1. Has Bigger Rated Capacity
New bucket handles a big 1 1/4-cu yd load — streamlined design now helps roll in large loads with less tractor effort. The back of the bucket has been brought forward and the sides extended to cut spillage, put more pay-load where it's wanted.

2. Helps the Operator Do More
Cleaner dumping with the new bucket saves the operator time and effort shaking out loads.

For added versatility, there is a two-position bucket available with both standard automatic return to digging position and operator-controlled tip-back. If the operator chooses to use the controlled tip-back, he can load the bucket, then tip it back approximately 25° before raising, assuring maximum output under special conditions such as downhill loading or loading loose materials.

The HD-5G helps the operator do more in other ways, too — giving him full vision, fast and easy control, cleaner platform and more comfortable seat from which to work, and more working time with truck wheels, support rollers and idlers that need greasing only once every 1,000 hours.

3. Works at Lower Cost
The HD-5G now works at even lower cost than ever before — not just because it does more, but because it has features that mean less maintenance, longer life. For instance, new type tubular bracing on the bucket booms provides added strength and support, keeps the bucket in line. The floor at the rear of the new bucket has been raised seven degrees to reduce wear on the bottom sheet. Heavy-duty truck wheels and idlers are available for particularly tough working conditions. One-piece, full-length main frame permits unit construction so that major assemblies can be removed without disturbing adjacent units, putting tractor back on the job in hours rather than days.

Ten Quick-Change Attachments
Add to HD-5G Versatility

<table>
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<th>Bulldozer</th>
<th>Crane Hook</th>
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<td>Angledozer</td>
<td>Light Material Bucket</td>
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<td>Narrow Bucket</td>
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<tr>
<td>Rock Bucket</td>
<td>Lift Fork</td>
<td>mounted Ripper</td>
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See your Allis-Chalmers dealer for more about these and other production-boosting features of the popular HD-5G Tractor Shovel.
Practically every prospect asks if the floors are vinyl. KenFlex was a wise selection.

You bet! It's nationally advertised, people recognize it and it's perfect for units like this.

KENFLEX—the low-cost vinyl tile that can be installed on grade

KenFlex is ideal for installation on grade—its initial cost is low...and it goes down faster, more economically, to trim your costs even more.

KenFlex advantages don't stop with keeping costs down. Look at the quality side of the KenFlex picture! You can give any smooth, firm interior surface an exclusive custom flooring with ThemeTile and Feature Strip. Prospects prefer this modern, "mine only" appeal...and they know that beautiful KenFlex—famous for its sparkling, longer-lasting colors—resists dirt, grease and hardest usage...stays fresh and attractive with only mild soap and water, an occasional no-rub waxing.

For full information, contact your local Kentile Flooring Contractor...or any of the offices listed below.

Colorful KENFLEX defies dirt, grease and wear...offers exclusive ThemeTile and Feature Strip for custom flooring in any home.

JUNE 1955
For Beauty and Lasting Satisfaction

1. **ALUMINUM STORE FRONTS** and door frames made with Kaiser Aluminum give lasting beauty, and maintenance problems are practically eliminated. Aluminum is ideal for colorful porcelain enamel finishes.

2. **ALUMINUM AWNINGS** made with Kaiser Aluminum add beauty to any building and keep interiors cooler by reflecting hot sun rays. Strong enough to withstand rough weather without damage. Need little upkeep.

3. **ALUMINUM AIR CONDITIONING** and heating systems made with Kaiser Aluminum will not rust with moisture. Durable, easy to fabricate and install, economical. Aluminum's low emissivity assures minimum heat loss.

4. **ALUMINUM HARDWARE** made with Kaiser Aluminum adds an extra touch of beauty. It's strong, and durable, won't ever streak with rust. For modernizing as well as for new building, specify aluminum for greater value!
3. ALUMINUM PARTITIONS made with Kaiser Aluminum give a smart, modern appearance. Lightweight, easy to handle—thus, partitions can be changed overnight to create new divisions of space.

4. ALUMINUM GRID CEILINGS made with Kaiser Aluminum boast lasting good looks, long life without maintenance. Their bright, modern appearance helps attract customers, brightens a store's reputation.

The beauty of aluminum—which pleases and attracts customers—is reason enough to use it widely in your commercial buildings.

But more than that, aluminum offers a combination of advantages that no other material can match. Among these advantages are light weight, strength, corrosion resistance, long life, economy.

As a basic producer of aluminum, we do not make any of the products shown here. Instead, our efforts are put behind the job of serving manufacturers—to help improve their products and reduce costs.

Engineering assistance is available from our qualified aluminum engineers. Or for names of building products manufacturers who will gladly work with you, contact any Kaiser Aluminum office listed in your telephone directory. Kaiser Aluminum & Chemical Sales, Inc. General Sales Office, Palmolive Building, Chicago 11, Illinois; Executive Office, Kaiser Building, Oakland 12, California.
Steel doors mean a good house to home buyers. And Amweld means good construction especially to the "particular" buyer looking for lasting quality.

You can offer doors, frames and sliding closet units that will never stick, warp, split or chip at no extra cost. Installed, Amweld® Building Products actually cost less than hand-fitted types. On your next house, apartment, dormitory, motel or other building job, save money and give your customers the best—specify Amweld.

Send for "Cut Construction Costs" Folder. Complete information about Amweld Building Products—fully illustrated.

NO STICKING, WARPING OR SPLITTING
Sturdy steel construction guarantees doors that will last for years—never any maintenance required.

NO DRILLING—MORTISING OR FITTING
With Amweld Inter-Lok Frames and Flush Steel Doors one man can finish a door opening in 10 minutes. Hammer and screwdriver are only tools needed.

EASY TO HANDLE ON JOB
Amweld "KD" sliding closets come knocked down. All hardware furnished—shipped complete in single carton.
That's the number of times the famous L·O·F shield will be printed in 1955 advertising. And every time it appears, it builds the already-strong preference for top-quality L·O·F products. Take advantage of this preference by using the window glass that bears this famous label! Libbey·Owens·Ford Glass Company, 608 Madison Ave., Toledo 3, Ohio.

LIBBEY·OWENS·FORD a Great Name in Glass
There is a difference in fabric-covered folding doors! Only Foldoor offers Multi-V construction which provides easier operation, smarter appearance, longer life.

In direct contrast to “accordion” type doors, Foldoor is constructed in continuous volutes. The fabric coverings are back to back. There are no “pockets” to trap large volumes of air which sets up resistance, retards ease of operation.

In addition, Foldoor’s simplified construction has 61 per cent less hinge friction. Yet it provides more working metal per foot of opening with less dead weight. What’s more, the same 16-gauge hinge is standard on all Foldoors regardless of size. Foldoor has the narrowest profile, too—a stack width of 8¼". Streamlined pantograph action lets it stack into just 1¾" per foot of opening.

And only Foldoor offers a track truly concealed, plus an attractive cornice when desired.

There’s a big difference in fabric-covered folding doors. You get more with Foldoor everytime. So specify Foldoor.

For further information see: Sweet’s Catalog; Foldoor installing distributors in every principal city; or Holcomb & Hoke Mfg. Co., Inc., 1545 Van Buren St., Indianapolis 7, Indiana.

Revolutionary... New...

TRADE-WIND

VENTILATOR/LIGHT COMBINATION UNIT

for Bathrooms

Model 1701

HANDSOME
CHROME
AND
GLASS
DESIGN...

MOUNTS
FLUSH IN CEILING

OFFERS UNUSUAL APPEAL TO HOME BUYERS

Another outstanding first from Trade-Wind! A combination bathroom ventilator and illuminator beautifully designed in a flush-type ceiling unit. Two 75-watt bulbs provide brilliant illumination. And the time-tested Trade-Wind 100 CFM blower unit assures complete ventilation—for both inside and outside baths—eliminating steam, lingering dampness and odors.

Easiest to install...

Trade-Wind Model 1701 installs between joists and the single installation gives you both light and ventilation, thus cutting installation expense. The unit is pre-wired, further eliminating extra work in running asbestos leads. It can be wired to a single switch or 3 wires run to a double switch. The Trade-Wind Time-Delay Switch also can be used.

The PRICE will surprise you!

Trade-Wind has priced the Model 1701 at a rock bottom figure, making this new light/ventilator combination an outstanding "buy" for every type of home.

Trade-Wind Motorfans, Inc.

7755 PARAMOUNT BLVD., DEPT. HH, RIVERA, CALIFORNIA
Insulite Roof Deck cuts on this 2500

They cut exposed beam ceiling costs 19¢ per sq. ft. Arthur Pomponio, president (right) and Victor Marianni, supt., of M. Pomponio and Sons, Arlington, Va., were quick to recognize the growing appeal of exposed beam ceilings. Here’s how Insulite’s new 3-in-1 product—roof deck, roof insulation and finished ceiling—helped them capitalize on this trend by offering exposed beam ceilings at less cost.

1. It’s roof deck... Two by eight foot units cut application time as much as 45%. On Pomponio’s first job, six workmen started laying 2500 sq. ft. of Roof Deck at 7 a.m. At 3:30 p.m. they had a watertight roof—a complete built-up roof with the exception of final mopping and spreading of granules—and the ceiling was done, too! Roof Deck also reduces waste—only 1½% remained after this first job.
costs $475 sq. ft. job

The Trendsetter Home, Lake Barcroft Estates, Fairfax County, Va.

2. It's insulation with vapor barrier...
No need for other insulation. Roof Deck meets heat loss requirements for roof and ceiling construction. Exclusive vapor barrier protects against condensation within the unit. Absorbs sound better than wood or plaster. And it's tough. Pomponio's Victor Marianni reports no noticeable deflection or surface impressions even after heavy wheelbarrow traffic.

3. And finished ceiling...
The underside of Insulite Roof Deck is finished with a white flame-resistant surface at the factory. Lay Roof Deck over pre-finished beams and ceiling is done. No need to plaster, paint, stain or wax. First Pomponio job required no clean-up or touch-up after deck was down. New Insulite Roof Deck is available in 2'x8' units, 1½", 2" and 3" thick, with or without exclusive vapor barrier.

save with INSULITE
Made of hardy Northern wood

JUNE 1955
How to get "Sunday sight-seers" off the street and into your model home... permanently!

You know the way to take "Sunday sight-seers" out of circulation—permanently! Give 'em more home for their money... and more than the fellow on the next lot is offering.

A Dunham Automatic Warm Water Baseboard Heating System installed in your model home means more home for the money. For example, it keeps any family "chill-free" at all times because inside temperatures go up the instant outside temperatures go down... automatically.

Dunham's Vari-Flow® temperature control is outside where it gets the jump on weather changes and counteracts them... before anyone inside is even aware of a change.

Dunham Vari-Flow is simple to install on new construction or on remodeling jobs. With Dunham... and only with Dunham... you get everything for the job in one package: all controls, all specialties, all radiation. Clip and mail coupon for full information.

Dunham Vari-Flow Outdoor Control. Supersensitive fluid-filled bulb under inconspicuous shield instantly and continuously "senses" weather changes... passes information along to central control box.

Dunham Vari-Flow Control Box. Co-ordinates temperature information from fluid-filled bulbs—one located outdoors... one located in the warm water supply line—to keep heating system perfectly balanced at all times.

Dunham Warm Water Baseboard. Provides sheathing of warmed air over cold walls and windows to assure constant, even inside comfort... in every corner, at every level. Flush and semi-recessed types available. New design means easy installation.

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...acclaimed as "just the ticket" to

SELL HOMES QUICKER!

save money with new builder plan

The new Whirlpool builder purchasing plan makes it easy and very economical to put tremendous Whirlpool sales appeal in all your new houses ... large or small. Whirlpool has three models of washers with matching dryers ... literally a model for every price-bracket home. And, remember, Whirlpool home laundry appliances can be included in the PACKAGE MORTGAGE.

More and more merchandising-wise builders are using Whirlpool to gain a big sales advantage. They know if you give a woman what she wants ... complete freedom from time-wasting, back-breaking washdays with Whirlpool ... houses sell quicker, easier and more profitably!

And, the new Whirlpool Deluxe fully-automatic washer with matching dryer is "just the ticket." It has famous Whirlpool quality at low price ... Agiflow washing action for cleanest clothes ever ... Seven Rinses ... Therma-Flow action for drying all fabrics gently ... space-saving design, each unit is only 24 3/4" wide ... and many other leadership features proven "Most Wanted by Most Women"!

Add the prestige of Whirlpool, the greatest name in home laundering, to your new homes.

BUilder DIVISION

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The World's Largest Manufacturer of Washers, Dryers and Ironers

IT'S EASIER TO SELL WHIRLPOOL-EQUIPPED HOMES
When you build Harnischfeger's P&H Homes, your costs—and overhead—are about as low as they can be in the building business. Practically all the materials you need for a home can be ordered with one draw, one check. And they all arrive at the site on one truck. You do less supervision, less paperwork, have less overhead, lower costs.

Builders Acceptance Co., a P&H subsidiary, helps with interim loans and mortgages where needed. Lenders know Harnischfeger, favor P&H design. Loan processing is standardized, fast.

Using P&H construction equipment and know-how, P&H builders find many ways to cut development costs. For instance, the P&H Single Pass Soil Stabilizer (above) makes street building really efficient. Or, the P&H Miti-Mite, a 7-ton truck crane, can dig pipe trenches, basements, back-fill—do anything.

Men who are building P&H Homes often tell us that they wonder how they ever made a profit building the conventional way. They get so much help on so much of their building job from Harnischfeger Corporation experts that it's hard for them to understand why anyone would want to do the whole job alone.

Make your own home building job easier and more profitable—and offer a better home value to boot. Build P&H Homes this spring. Write for plans and details today.
P&H builders get

ON-SITE SAVINGS

A 6 man crew can have a P&H Home up and enclosed in 6 hours. Sections are unloaded from the truck in order; there's no wasted motion or material. Subs go in and out on schedule. There are no delays. P&H Homes are usually finished 30 days after financing approval.

SELLING

Selling is easier with P&H Homes because they offer so much more—in construction, materials, space and design—than others in the $6,650 to $20,000 class. P&H helps you with advertising, sales planning and promotion, too.

LAND

If you're having land troubles—finding it or using it wisely—Harnischfeger's P&H Homes experts may well have your answer. When you build P&H Homes, you can get help in land procurement, planning, zoning and development. Or, if you have land now, they'll advise you on the best use of it.

HARNISCHFEGER

56 Spring St., Port Washington, Wis., Phone 611

JUNE 1955
STRIP OAK FLOORS OVER CONCRETE  
Low-cost installation method  
proven successful in thousands of homes

FREE MANUAL GIVES
SIMPLE STEP-BY-STEP
INSTRUCTIONS

If you're building homes on concrete slab foundations, send for this free Oak Flooring installation manual. It shows you how to use the "screeds-in-mastic" method for laying strip Oak Flooring over concrete without the expense of a wood subfloor.

Builders throughout the country are using this fully-approved, economical method to give even lowest-cost homes the unequaled sales appeal of Oak Flooring. It may be used with any approved type of slab construction. No special tools are necessary. Carpenters or floor layers can do the job quickly, easily and successfully . . . without any previous experience.

No other floor gives you ALL these advantages

More than 8 out of 10 home buyers, builders and architects prefer Oak Floors for their unmatched beauty, lifetime durability and easy maintenance. For slab foundation homes Oak Floors have these additional advantages that increase salability:

- Oak Floors have high insulating value . . . prevent costly heat loss through the concrete slab.
- Oak Floors have natural resilience that counteracts the uncomfortable hardness of concrete.

You know you're right when you specify Oak Floors for slab-on-ground construction.

MAIL COUPON FOR FREE MANUAL
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Please send a copy of "How To Install Hardwood Strip Floors Over Concrete Slabs"  
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NORGE BUILT-IN ELECTRIC RANGES HELP HOUSES SELL FASTER

Young couples planning to buy a home dream about a built-in range. Modern design and functional planning among home builders requires a built-in range. Even kitchen remodeling today automatically includes a built-in range. And here it is—by NORGE—the freshest, newest of designs to make the kitchen a major selling feature in every home you build.

more—much more—from NORGE
NORGE BUILT-IN RANGES
Completely versatile...entirely flexible...styled for lasting satisfaction

In the new Norge Built-In Ranges, oven doors and cooking tops are styled in exciting decorator colors and finishes to match or mix with a wide variety of settings.

Smart combinations are available with oven doors in white porcelain, anodized copper, anodized silver or anodized Norge gold, with cooking tops in smart stainless steel, white or gray porcelain.

Surface cooking units can be massed and centered or separated and conveniently located at points of greatest utility. Lightning-fast cooking units all feature 7 separate cooking heats for perfect control from the slowest simmer to the fastest boil.

Easy-to-grip controls with click positions assure uniform heat every time. Easier to see and use, all dials are conveniently placed on custom control panels. Automatic signal light tells when any surface unit is on.

Oversize Blended-Heat Oven can be placed high or low—according to your planned design. Oven is completely automatic, easy to set. Includes exclusive Norge “Char-Coil” broiler.
Except for exterior trim, all 4 Built-In Oven models have identical specifications. Oven requires 24" of wall space, simple electrical connections. Mounting in any type cabinet or built or bricked into wall at any height desired.

Oven elements: Quick-heating, open coil, skeleton type construction insulated by porcelain bushings.

Control panel: Contains electrical timer, minute minder, single temperature control for bake and broil elements, pilot light for each element. Interior oven light.

Wattage: Upper element (Broil) 3000 Watts; lower element (Bake) 2400 Watts. Maximum connected wattage 5.5 kW.

Electrical connections: All ovens with 36" greenfield cable, wiring and 4" octagon conduit box.

"Custom" Cooking Top and "Four Element" Cooking Top: May be mounted on any type cabinet, table or bar, etc., or bricked in at any height desired. Units available in 30", 36" or 42" width, over-all depth 25"; back-splash 4" high, 1" thick; tops 11/4" thick. Tops 1-piece stainless steel construction.

Elements: two 6" (1250 Watts); one 8" (2100 Watts).

Switches: 7-heat position switches, signal light for each pair.

FOR COMPLETE SPECIFICATIONS FOR YOUR FILES, WRITE TO: NORGE SALES CORPORATION, SUBSIDIARY OF BORG-WARNER CORPORATION, MERCHANDISE MART, CHICAGO 54, ILLINOIS
The name "NORGE" is your strongest plus—when you install and sell new 1955 NORGE HOME APPLIANCES

NORGE "Time-Line" Automatic Washer & Dryer Combination
THE NORGE LAUNDRY MAIDS
America's top-rated Automatic Washer and Dryer!

**WASHER FEATURES:**
- Time-Line Control
- 4-Way Wave-Action Agitator
- 5-Way Rinsing
- Safety Spin
- Suds Return
- Water Temperature Selector

**DRYER FEATURES:**
- 4-Way Selective Drying
- Time-Line Control
- Heat-Air Selector Switch
- Stationary Drying Rack
- Super-Volume Blower Fan (Available in Gas & Electric models)

PLUS MANY MORE SELLING FEATURES!

NORGE Two-Door Customotic Refrigerator-Freezer
13 cu. ft. capacity! 124 lb. capacity separate freezer compartment!
- NORGE Weath-R-Gard gives exclusive "Customotic Cold." Completely automatic.
- Moist-Cold Compartment
- Double-Deep Mandidor Storage

Plus Many More Selling Features!

NORGE "30" Automatic Electric Range
- Mammoth 24½" wide fully automatic oven assures uniform heat at all times.
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- Hi-Speed "Micro-Tube" Surface Units
- "Visu-Matic" Electric Clock-Timer
- "Char-Coil" Speed Broiler
- Range Lamp, Storage Drawer

Plus Many More Selling Features!
(Automatic Gas Model also available)

NORGE Space-Saving 20" Gas Range
- Large "Balanced Heat" Oven
- Non-Clog Burners
- Slide-Out Broiler
- Extra-Convenient Control Panel
- Stain-Resistant Titanium Porcelain Finish

Plus Many More Selling Features!
(Electric model also available)

more much more from NORGE

NORGE SALES CORPORATION, SUBSIDIARY OF BORG-WARNER CORPORATION, MERCHANDISE MART PLAZA, CHICAGO 54, ILL. • CANADA: ADDISON'S LTD., TORONTO
Chicago apartment building installs

dual-vectors to "beat the heat"

The people who live in this apartment will enjoy year-round UNARCO weather conditioning. In winter, clean, even, hot water heating; and in summer, cool, filtered and dehumidified air—ALL FROM ONE SYSTEM.

That's because new UNARCO dual-vectors, each with its own control knob, allow you to select the exact temperature desired for each individual room. The UNARCO "hydro-pac" water chiller supplies the cooled water and your boiler provides heated water for the system.

Truly revolutionary, this new development offers the luxury and comfort of weather tailored to the needs of each member of the family. Most surprising! This combination heating and cooling is available at little more than the cost of a hot water heating system alone.

Builders! Contractors! Architects! The UNARCO dual-vector offers you a fine opportunity to broaden your markets by offering the finest in heating and cooling facilities available today. Write NOW for detailed information! Address: Dept. 101, HEATING & COOLING DIVISION;

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UNARCO dual-vectors provide year 'round weather conditioning
ANNOUNCING NEW HONEYWELL

This New Electronic Thermostat outside your house tells

New Outside "Weathercaster" Thermostat
Designed by Henry Dreyfuss in a new all-weather material—this tiny thermostat is mounted outside your house where the weather is. Eight times more sensitive than ordinary thermostats, it contains a supersensitive electronic element that is constantly in tune with the outside weather.

Control center
of the electronic comfort home

New Electronic Control Center
Receives signals from the inside thermostat and tells the heating or cooling plant what temperature is required for ideal comfort. And with its gleaming appliance-white finish, it makes a handsome clock that matches in beauty the refrigerator in your kitchen or the washer in your utility room. In winter, the Control Center automatically lowers the temperature at night to save fuel, and automatically picks it up again in the morning.

30,000,000 LIFE Magazine readers will see this colorful advertisement
ELECTRONIC MODUFLOW

this new inside thermostat when the weather changes

New Inside "Golden Circle" Thermostat
This beautiful electronic thermostat is scientifically designed for modern living—by noted industrial designer Henry Dreyfuss. You simply dial the daytime and nighttime temperatures you want. Just set them once. Thereafter, the outside thermostat raises or lowers settings automatically.

Why you need a thermostat outside and inside your house!

The last word in healthful home comfort can be secured only by varying the indoor temperature in relation to outside temperature.

For example, as the temperature outside goes down, the walls of your house naturally become colder. Thus, you need a rise in temperature inside your home, to offset this cold wall chill.

To provide this temperature variation, you need two thermostats, one outside and one inside. Electronic Moduflow, with two thermostats, gives you all-electronic, automatic, temperature control.

In winter—this new system, accurate to within ¼ of one degree, varies the indoor temperature as the weather changes. This keeps you bathed in constant comfort. Your house is never too hot, never chilly. You say good-bye to drafty floors. And because your heating plant is neither over- nor under-heating, you get the most out of every fuel dollar.

In summer—you have central air-conditioning, new Electronic Moduflow regulates your cooling plant—to give you controlled cooling.

It's easy to get Electronic Moduflow for your home
See your builder, heating dealer, or architect. Average price installed, $199.40. Works with any adequate central heating or cooling. For a new home—can be included in the financing. For your present home—buy it on an improvement loan.

Builders!
See your Honeywell salesman or heating dealer for costs and availability. Act quickly to add new heating plant glamour and luxurious comfort to your model homes.

announcing new Honeywell Electronic Moduflow early in September.
when you crown your homes with genuine red cedar
... consequentially, more houses

for roofs and walls — merit your careful site, design or budget.

Because they are naturally beautiful and possess time-honored character, shingles and shakes create architectural accomplishments, not compromises. Because they are quality through and through, they establish you as a builder who does not cut corners. Because they are the genuine — the real article — shingles and shakes make the all-important first impression a favorable impression, put profit into building by helping sell homes faster.

It's your move now! Simply remember... to move houses, you must first move people... and to do it,

YOUR BEST "OUTSIDE SALESMAN" IS CEDAR.
ALL Homes Deserve...

Air and a View—Full Protection, too.

Preferred for America’s Golden Dozen Homes. The Right Windows for All Homes.
Beautifully Practical

R.O.W Windows lift out entirely—from inside the house—for easy cleaning or painting

WOOD WINDOWS blend with fine residential furnishings and provide year-around natural insulation. DOUBLE-HUNG WOOD WINDOWS are the easiest to drape or curtain—the most practical and trouble-free. R·O·W DOUBLE-HUNG WOOD WINDOWS, with the patented R·O·W construction, are completely removable from inside the house. They insure pressure-fit weather protection—are built better from toxic treated wood to look better—last longer.

LIF-T-LOX®
THE MOST IMPORTANT WINDOW IMPROVEMENT IN 50 YEARS

- Finger pressure raises or lowers sash!
- Sash lift out entirely! No tapes to unhook! Nothing to adjust!
- Self-contained LIF-LOX Window balance "locks" automatically when sash is removed!

FIRST CHOICE FOR AMERICA'S FAVORITE HOMES
Windows in modern homes provide light, ventilation and weather protection. The most practical and beautiful modern windows are R·O·W Removable Double-Hung Windows

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All Three of the Most Popular Types are Available in R·O·W Windows

**DOUBLE HUNG**

This window has long been the American favorite. Cleaning and painting windows is easier in millions of homes equipped with removable R·O·W windows.

**GLIDING**

R·O·W HIGH-LITE gliders, like the R·O·W double-hung windows are made in sizes and styles—ranging from "high-wall" to operating "picture windows."

**AWNING**

For a view, plus full ventilation, there is no finer awning window than the R·O·W SURE-LOK. All R·O·W windows are designed in harmonizing styles.

R·O·W is the Registered TRADE-MARK of R·O·W SALES CO. • 1348 ACADEMY AVENUE • FERNDALE 20, MICHIGAN
split-second fastenings to steel or concrete with Creary Drive-It Pins

**PATENTED SELF-CENTERING PINS**
Patented ribbed guide sleeve holds Creary Pins in center of barrel for true, accurate fastening.

**HEADED PINS**
For permanent anchorage in concrete or steel.

**50 TYPES OF PINS**
There are over 50 Drive pins to do your particular job. For applications where standard pins are not suited, special pins will be custom made.

**UNDERWRITER APPROVED**
Creary pins have passed all the rigid requirements of strength and pullout tests and are approved by the Underwriters' Laboratory.

**THREADED PINS**
Available threaded internally or externally for easy fastening and removal, when necessary, of anchored object.

**EYE PINS**
Use where required to suspend ductwork, ceilings and pipes.

Creary Drive-it pins give you greater penetration, greater holding power and greater operating speed. They are made of high quality alloy steel and are specially heat treated to give greatest strength and toughness. It is only because of this super strength and extreme hardness that they are able to perform the seemingly impossible . . . to penetrate up to 1' of steel for example.

Drive-it and pins have been used by leaders in the field since 1946, when the "Drive-it" revolutionized the construction industry. Today Creary pins and "Drive-its" are speeding up construction and reducing on-the-job costs throughout the world.

Be safe, be sure—use Creary Drive Pins.

Send coupon below for sample of pin and name of nearest dealer.

SEND FOR FREE SAMPLE CREARY DRIVE PIN
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7528 S. W. Macadam Ave., Portland, Oregon
(Please Print)

Name
Address
City Zone State
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“May I express my complete satisfaction with your Kelvinator appliances...the percentage of sales per-homes-sold is unprecendented!”

— says MORTON ADLER
prominent Miami Builder

Take the word of a man who knows all about the extra allure Kelvinator appliances add to new homes. Mr. Adler is president of Kenad Construction Company, builders of the new 350-home Westhaven Park in Hialeah, Fla. Mr. Adler is offering a Kelvinator KP-110 Space-Saver Refrigerator in these new medium priced homes, with Kelvinator Laundry Equipment as an option. He reports that the public response is terrific. Judging from the success of Kenad Construction Company, here’s sound advice for the progressive builder: “For more sales-appeal specify Kelvinator—the appliances most people want most!” Write Dept. HH-6, Kelvinator Division, American Motors Corp., Detroit 32, Michigan, for complete information. There’s no obligation.

Kelvinator KP-110 Refrigerator, the model featured in Kenad Homes. This 10 1/2 cu. ft., automatic defrosting Kelvinator is only 28" wide, has roll-out shelf, door shelves, built-in cheese and butter chests, has a full-width freezer with a total frozen food capacity of 70 lbs. This and other Kelvinator models are available in white or 8 Decorator Colors; matching electric ranges are available.

Go Kelvinator and be years ahead!
Outlook for Housing Act changes

Closest fight in Congress will be over public housing.
Wherry Act, defense housing will lapse. S & Ls will try
to cut Home Loan Bank Board away from HHFA

The administration’s housing amendments bill contains no major changes, no
tremendous upheavals.

It would make minor modifications in the Housing Act of 1954 and extend
key FHA programs that are expiring or running out of authorization. Changes
are good that Congress will enact most of it into law.

There will be a few fights, however, notably over public housing (see
p. 40). And Democrats, with an eye on the coming 1956 campaign, will be
looking for ways to twist the bill into a Democratic law or make political capital
out of Republican bungling in housing.

Principally, HHFA Administrator Albert M. Cole is looking for enough gas to carry his
basic activities through another fiscal year. The main items are a $4-million hike in FHA
underwriting authority, $500 million more capital grant authority for urban renewal, and
$48 million for planning of nonhousing public works. Other provisions would:
Extend FHA Title I repair loan program for five years, to July 1, 1960.
Increase FHA maximum mortgage from $5 to
$12.5 million for Sec. 207 rental and Sec. 213
co-op projects. The ceiling has been in effect
since 1938. Construction costs have gone up
some 150% since then. The change would re-
lieve sponsors of the compliance by subter-
fuge of chopping big projects into segments.
Increase the mortgage limit from $5 to $50
million for FHA Sec. 220 urban renewal
housing. Both this and the proposed new lim-
its on 207 and 213 would apply to any one
mortgage or total of outstanding commit-
ments in the same housing market region.
Kill Title IX defense housing at once.
Kill FHA Title VIII, the Wherry Act, after
June 30.
Eliminate cost certification for FHA Sec. 221
single-family homes. This is an obvious effort
by the administration to give the lagging 221 program a shot in the arm. (Democrats may
well attack both 220 and 221 as “deception
devices,” pointing out that not a single proj-
ect under either section is yet under way.)
On FHA farm housing, end the $100 million
insurance authorization limit.
Eliminate a $2,500 limit on FHA and VA im-
provement loans by federal savings and loan
associations. The $2,500 limit on repair loans
not backed by the government would stand.
Orphan parentage. The Republican hous-
ing bill was actually introduced in Congress
by two leading Democrats, Chairman Brent
Spence of the House banking committee and
Chairman John Sparkman of the Senate hous-
ing subcommittee. They noted their action
was “by request”—legislative jargon which
means they regard the measure as an orphan,
will not feel obliged to defend it. Chances
are good, however, that neither party will
seek a major showdown on housing this year.
The real battle should come in 1956, with
elections closer.

Here is what Capitol Hill housing experts foresee for this session:
1. Most of the administration’s proposals
will get through without hitting serious snags.
Sen. Sparkman is just launching a Demo-
cracic investigation of housing; this will take
the rest of the year and he will be in a better
spot to offer suggestions afterwards. The
House banking committee is also on the verge
of starting an investigation of housing.
2. Congress may balk at extending FHA
Title I repair loans five years. But a renewal
of at least a year appears certain.
3. There will be some oratorical objections
to giving FHA any increase in insurance au-
sority for Secs. 203, 207 and 220, but no con-
certed attack. A few economists like Sen.
Harry Byrd (D, Va.) and Rep. Howard Smith
(D, Va.) are expected to sound off about the
huge contingent government liability in FHA.
4. Byrd, spurred by the cave-in of New York’s
Coliseum redevelopment project at mid-
month*, demanded a full-fledged congres-
sional investigation of urban redevelopment
and urban renewal to uncover how widely the
law “is being exploited by localities and in-
dividuals” and how widely it is “being used
toward objectives which have no connection
with low-cost housing.” Byrd charged New
York City with violating its contract with
HHFA by adding a skyscraper office tower to
the plans without telling HHFA. He com-
plained that HHFA, instead of stopping the
project, renegotiated it and reduced the fed-
eral subsidy for land write-down by $133,000.
5. Bugs in FHA’s stalled Sec. 220 urban
program will get committee scrutiny, espe-
cially cost certification and over-cautious FHA

* One workman was killed and 51 hurt when a
vast section of the reinforced-concrete floor of
the Coliseum’s convention floor collapsed May 9.
22” to the street. The $35 million structure, on
which federal land subsidy may reach $3 million,
has been under frequent legal attack as a per-
version of the 1949 slum clearance law.

(continued on p. 40)
appraisals. Administrator Cole is expected to plead for more time to make the idea work. Democrats will probably agree on the theory that the longer 220 is tied in knots (not a single commitment had been issued by mid-May), the more promising the eventual rescue job. Besides, it would take more study to find a politically acceptable alternative to cost-certification. (One alternative urged by some mortgage men: tighten up rental housing charters to give FHA a constructive role in trying to set into the management if it thinks a project is being milked.)

6. Democrats will try to write in a few extras like HHFA loans to finance local public works, a stepped-up college housing loan program, federal aid against air pollution. There will be attempts to add housing for the aged, give cooperative housing a big boost and separate the Home Loan Bank Board from HHFA. Some of these amendments have a reasonable chance—especially the ones giving more federal help to localities.

7. The US Savings & Loan League will try to get permission for federal savings and loan associations to make loans for land purchase and development—up to 5% of their assets. President J. Howard Edgerston said too much land has been badly subdivided since World War II at a cost of $7 million a decade. State savings and loans in California, Missouri and Michigan already have authority to make development loans, but this is the first time the plan has been broached on a national scale. Chances: fair.

8. Sen. Homer Capehart (R, Ind.) will make an unsuccessful bid to include a new scheme for insuring mortgages on family housing in military posts. Industry men see in Capehart’s plan a plan of windfalls that would make those Capehart sought so shocking seem mere bagatelles. The senator’s proposed FHA Title X would permit the military to build up to 100,000 units of family housing. FHA would be “required” to insure the loans if the Pentagon merely certified to the need. FNMA would have to buy them if private money was not forthcoming. Most industry men agree the plan is an evasion of sound mortgage insurance.

Administration moves to limit ties between public housing, renewal; loud fight ahead

The biggest legislative ruckus as Congress comes to grips with 1955 housing amendment will be over public housing. The situation is complex and disturbing to many free enterprises. Besides asking congressional approval of 35,000 more public housing units in each of the next two fiscal years, the administration is proposing to extend the June 30 deadline for putting this year’s batch of 35,000 units under contract. Only a piddling 142 units were under contract by early May. The reason: hurdles had been deliberately written into the law by Congressmen who wanted to keep the program smaller than its theoretical ceiling.

In details, new directions. But it is not so much the 35,000 units a year as the technical amendments proposed by HHFA Administrator Cole that promise a good scrap. Under present law, new public housing can be built only when needed by low-income families displaced by governmental action. Under the proposed language, the HHFA administrator would have to find only that the number of new public housing units going up in a city does not exceed the number of families of low income eligible for admission to public housing which he thinks will be displaced by governmental action.

This would make it clear that HHFA need not wait for new families in existing public housing. Actually, the agency has already decided it will not do so, but even such opposite-minded experts as Rep. Jesse Wolcott (R, Mich.), last year’s chairman of the House banking committee, and Lee Johnson, executive vice president of the pro-public housing National Housing Conference, have told House & Home they think the intent of Congress was that HHFA must consider vacancies in existing public housing.

The question, though technical, is crucial. If vacancies in existing public housing must be offset against future displacements from slum clearance and freeway building, big cities like New York and Chicago will have trouble winning approval for any more federally-aided public housing.

Other technical proposals would slice some of the tight ties between public housing and urban renewal, with the net effect of making it easier to build public housing in cities that are not doing much else to cope with their slum problem. Items:

1. Under existing law, local governing bodies must certify that new public housing units are needed for displacements. The proposed amendment would water this down to a simple resolution approving the project.

2. Under present law, new public housing can be allocated to a city unless it has HHFA approval of a “workable program” against slums and blight, plus a redevelopment or renewal project with federal aid. This would be watered down so that preliminary loan contracts would be signed without further development. Cities clearing slums without federal aid would also be made eligible for public housing. Cities carrying out redevelopment under the old provisions of Title I of the Housing Act of 1949 would not even have to develop “workable programs” to cope with their total slum problems to get more public housing.

Racial complications. What will Congress do with this package? One thing that makes the outcome more unpredictable than ever is injection of the race issue on one side and quiet White House pressure on the other. Conservative southern Democrats, already repelled by the socialistic aspects of public housing, are even more disturbed by the loud insistence of NAACP and other Negro groups on open occupancy in all government-aided housing. Some Capitol Hill experts estimate that successful Negro insistence on open occupancy in public housing (which the Supreme Court upheld by refusing to grant a writ of review) has cost public housing 19 votes. On the other hand, Republican legislators from sections with a big Negro vote may find themselves on the spot. If they continue to vote their convictions against public housing, will they be accused of race bias?

Not all Southerners are ready to halt public housing over the integration issue. Some reasons: the South will have an accommodation, anyway. More Dixie legislators, however, figure the South will not have to worry about mixing up the races in public housing for a long time because of its frozen neighborhood patterns.

Shuttle pressure by Ike and the anti-public housing views of GOP stalwarts in Northern and Midwestern states was also having some effect. Only 50 Republicans in the House voted for public housing last year, despite White House pleading. This year there may be more. And it is in the House that the battle is always closest. One Republican from Pennsylvania who recently switched to support of public housing, offered this revealing explanation: “I’m still against public housing. But President Eisenhower received 55,000 more votes in my district last election than I did. As long as he takes the stand he does, I am going to be for it.”

One strategem hinted by its opponents is to suggest a cheaper way of financing public housing, if they cannot lick it completely. This would press for one-shot capital grants in place of present annual assistance contracts which keep the government on the hook for 40 years. As James Downs Jr., Chicago housing and redevelopment coordinator (and no foe of public housing), observed last month “It would be cheaper for the government if we gave every one of these public housing families a $12,000 house and $1,000 to run it the first year” than to put them up in fancy new beehives subsidized by the government.

Best bet on the outcome: compromise after a loud fight which will be grossly misreported in almost all the press—not as many units as the 35,000 Eisenhower asked and not as much watering down of the rules as Housing Boss Cole wants.

House committee attacks illegal sale of GI rights

The House veterans affairs committee, when it was not chinning with VA officials over the end of the prairie storm (see p. 40), had an ear to the ground for corruption.

Chairman Olin Teague (D, Tex.) reported that prosecution was under way against persons suspected of buying GI home loan rights in Atlanta, Houston, El Paso, Oklahoma City and Midland and Abilene, Tex. Teague called the practice “vicious” and “widespread.” He seemed anxious to cover the waterfront on the VA program, examining everything from VA’s foreclosure losses—$23 million to date—to such blatant (and presumably isolated) infringements of justice as one operator’s practice of approaching jailed ex-GIs in hope of obtaining their rights.

To the argument that it takes two to pull a buyer-seller fraud, investigators replied that most veterans did not know they were violating the law when they sold their GI rights. They are, to the tune of a possible $5,000 fine and five years in prison. One of the most disagreeable features of the racket under investigation was that the veteran remains responsible for amortization of his loan even after he sells the house, may end up in debt to VA for the unpaid portion.

(continued from p. 39)
Voluntary loan plan gaining, mortgage men told

Mortgage banking’s last-chance scheme to avert more and more direct government lending—the Voluntary Home Mortgage Credit Program—has resulted in only 85 loans since its creation last August.

Despite these “seemingly poor results,” VHMC Executive Secretary Arthur W. Viner was displaying a cool confidence about the program’s chance of success last month. The reason: since January he has been digging bugs out of VHMC’s operating methods. As a result, the plan did more business in the first two weeks of April than it had all the rest of its life. And business was soaring.

“You have said the government does not believe mortgage bankers if they are interested. Thus the broker “will know from the outset that it is worth his while to look into each application.” Local lenders will still get first crack at VHMC applications.

Better VA screening. The gaps in lending are small and remote communities and minorities. Accordingly, VA is referring applications for direct government loans to VHMC first. That, said Viner, is the major source of his outfit’s 4,278 loan requests. But until VA started “better screening,” the quality of applications was “quite poor.” Viner said many “would never have qualified for VA direct loans or guaranteed loans.” Upshot: many rejections. Since VA began getting more complete data on properties, including a photo, application quality has shot up. Moreover, applications did not start to reach VHMC in volume until February, and it takes about two months to process them. In mid-April, when Viner asked the 16 VHMC regional offices to check, he got this good news: nearly half the applications were being considered by lenders who thought they would probably make a loan.

VA screening was not the only bug. Originally, applications destined for life insurance companies went to their correspondents. But Viner said “many companies” did not tell their correspondents to support VHMC (although it was a life insurance company idea to start with). Besides, lending practices often need to be different in small towns. So VHMC is going to send applications to life insurance home offices, let them relay the paper to mortgage bankers if they are interested. Thus the broker “will know from the outset that it is worth his while to look into each application.” Local lenders will still get first crack at VHMC applications.

The program’s “greatest problem” left, said Viner, is fuller coverage of the most remote parts of the nation, “such as Montana and eastern Kentucky,” where few investors allocate funds and mortgage correspondents do not cover. “In areas where FHA and VA money has been scarce, the building boom is years behind that of the cities, and there are many highly qualified borrowers.”

Overhaul state laws? Concern over 20 years of government intrusions into mortgage lending also was reflected at a panel on the conventional loan. Several speakers agreed with MBA President Wallace Moir, who called for an overhaul of state laws to increase loan to value ratios above the generally prevailing 66%. (Such a ratio, declared Lindell Peterson, MBA vice president, is now “entirely obsolete” for housing.) Moir urged insurance firms to show “more confidence” in their correspondents, even to the extent of letting them commit for loans “on the spot.” Savings and loan lenders “are assuming the risks these days,” he declared, “and goading us into making changes in our procedure.”

Mortgage men at the sessions and elsewhere across the nation last month reported money was continuing to tighten, as anticipated. Said one: “The symptoms of weakness of two or three months ago are now realities.” In Detroit, 30-year no-downs were reported “practically dead.” Metropolitan Life Insurance Co. was in the market with 1957 quotas.

NEW COMMITMENTS “are going to be difficult to obtain in the next few months,” predicted George T. Conklin Jr., financial vice president of Guardian Life Insurance Co. (r) at MBA conference. He forecast that availability of funds will govern 1955 housing starts, but expected no mortgage crisis like June 1953’s. Key to the outlook is employment, he said. If unemployment shoots up, easy money will follow; if prices and employment rise, money will be scarce. Seated: VHMC’s Arthur Viner, MBA Vice Presidential nominee John Austin.

S. M. CASSIDY, board chairman of Johns-Manville Corp., disputed the argument that new homes are being overbuilt. Instead, he said, “we are merely satisfying an enormously increased demand” as a result of “a revolution in income, a revolution in where people want to live and . . . easy credit.” He forecast rebuilding the nation will be the “dynamizer” of the economy.

L. M. NEEL, general counsel, called FHA “the source of most of our troubles,” but said the agency was finally “returning to orderly processes” after a scandals-caused year of confusion. He also complained that FNMA now forces mortgage bankers to advance it (temporarily) escrow funds for local taxes, etc. on FNMA-held mortgages. FNMA thus cuts Treasury borrowing $400,000 a year. Cried Neel: “if any private insurance company used somebody else’s money held in trust to pay its own bills, it would be hauled before a federal court in a hurry.”

(NEWS continued on p. 43)
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Unhappy with slow start of urban renewal, HHFA Chief Al Cole tells NAHB directors

HHFA Administrator Albert M. Cole is worried over the snail-paced progress of urban renewal.

He confessed his concern in a talk to NAHB directors last month at their annual spring meeting in Washington's Mayflower Hotel. Said the housing chief: "I am not satisfied with progress to date . . . we have problems in getting our organization moving as fast as I'd like it to move."

Cole conceded that one of the "roadblocks" to translating the administration's new approach for fighting slums into action was "planning" inside his own agency. But he defended the record to date (not a spadeful of dirt moved) by noting: "I'd rather have progress a bit slower and have the job well done than to move too fast" and make mistakes.

Public housing next? Concern over administrative hurdles being thrown in front of urban renewal—many of them by HHFA's urban renewal administration—has been a growing topic of discussion in recent weeks, not only among builders, but also among local housing and redevelopment officials.

Some have even gone so far as to wonder aloud if public houses inside the agency will stall renewal so long that Congress will decide it does not work and vote for a vastly expanded public housing program.

Cole reported that NAHB's 375-man board of directors that the delay in launching one part of the renewal program, FHA's Sec. 221 for low cost housing for slum clearance displaces, was attributable among other things to lack of applications. "We must do something about this, gentlemen," he begged. "It's very close to my heart." Cole said that if private lenders shy away from making mortgage loans under Sec. 221, the Federal Natl. Mortgage Assn. has money to back them. FHA is also prepared to relax its ordinarily rigid minimum property requirements "in some cases" for houses built in renewal areas under Sec. 220. Mason noted that existing lot patterns in some old neighborhoods do not permit lots wide enough to meet FHA's specifications.

Some builders attacked the urban renewal administration's insistence that a city have the right of eminent domain to seize property for resale to private builders in order to qualify for a "workable program," which is a prerequisite to the liberal terms afforded by Secs. 220 and 221. Renewal Commissioner James Vollin said 18 states, including Florida and Texas, lack laws giving communities such power. Said one Texas builder: "We say we can clear slums without it." Replied Vollin: "That still has to be proved." Vollin offered, however, to accept a community's promise to try to obtain eminent domain power if it does not already have it.

Long-range studies? This session was one of the calmest NAHB has held in recent years. Conspicuously missing was the sense of crisis which has dominated so many NAHB gatherings. Said one builder: "All the boys are so busy building houses they haven't time or interest for much else."

Some directors were critical of President Smith for not making a sharper fight against administration proposals to step up public housing and reduce its ties to urban renewal (see p. 40). Smith's reply: NAHB was still fighting public housing "in our own way." The association had decided not to testify on the housing amendments bill before the Senate banking committee, where public housing supporters dominate. NAHB planned to testify instead in the House banking committee, however, where support for public housing is not so strong. Some builders urged a major study of public housing operations by hired experts, costing perhaps $75,000 and perhaps undertaken jointly with realtors and mortgage bankers. But it was uncertain whether NAHB would decide to do so.

Another long-range proposal, studied without action, was one for a major nationwide inquiry into problems of suburban development, perhaps by a Congressionally-created commission. Backers of the plan hoped it would focus public interest on the community-wide aspects of land and subdivision development troubles which plague builders.

The directors also:

- Tour their $2.5 million National Housing Center, an eight-story brick and glass office and exhibit building nearing completion in downtown Washington. Although the center is not scheduled to open until August or September, enough materials makers already have signed up for exhibit space to assure that the center will operate at the break-even point, NAHB officials said.
- Heard FHA Commissioner Norman Mason report that FHA's backlog of unprocessed applications (March, News) had shrunk to the point where "work is current, or nearly so, in 80% of the offices."
- Accepted major responsibility for raising $2 million in cash and building materials for a Homes for Korea program (see p. 67). Gen. James A. Van Fleet, retired former 8th Army commander, told NAHB that the sponsoring American Korean Foundations hopes to build 1,000 single and multi-family homes in Seoul.

LABOR NOTES

Bill to control wages on homes looks stalled

Labor has apparently lost its attempt to apply the prevailing wage act to FHA and VA one to one.

Even advocates of the bill sponsored by Rep. John E. Fogarty (D, R.I.), a former president of Rhode Island AFL bricklayers, concede there is virtually no chance of action at this session of Congress.

The housing industry has been waging a quietly intense campaign to pigeonhole the legislation. The big arguments: it would drive up the cost of homes and enmesh homebuilding in what NAHB has called "unbelievable red tape" (see below). Moreover, Rep. Graham Barden (D, N.C.), chairman of the House labor committee, has taken an unsympathetic attitude toward the measure. Trade unions have not been potent in his district and he has been something less than a zealot for labor legislation. On top of that, construction men from his district have warned him that the proposed across-the-board application of the Davis-Bacon wage act to all government-aided building would boost the cost of road building by 25%.

At midmonth, the Capitol Hill consensus was that even if Barden's committee gets around to holding hearings, the measure will get no further this year. Fogarty himself has hinted he would be willing to compromise on amendments excluding houses built to order for specific buyers. There has been a talk of exempting builders who erect less than 50 houses a year. Fogarty has not committed himself on this point, but has urged that all large builders be covered.

Homebuilder objections to the bill center on these things it would force builders to do:

- Get a preconstruction determination of prevailing wages and have it reviewed by FHA.
- Make a special request for apprentice rates

(continued on p. 45)
with evidence of a bona fide apprentice program registered with the appropriate state or federal agency.
> Hire only job classifications listed by the Labor Dept.
> Pay any employee doing a job other than his own (except apprentices) the journeyman's rate, whether or not he is qualified.
> Submit to Labor Dept. control of proportions of laborers, helpers and apprentices.
> Keep payroll records for three years.
> Submit weekly copies of payrolls with 10 or 12 columns of information.

**Lumbermen fight plan to boost minimum wage**

Lumber manufacturers were among the most vociferous opponents of proposals to boost the minimum wage from 75c. Uppling the national wage—it might go up to $1 an hour—could create widespread unemployment and drive many sawmills out of business, asserted the National Lumber Manufacturers Assn. The administration has come out for an increase to 90c. Labor groups have called this "grossly inadequate" and plumped for $1.25. About 25% of employees in the lumber and furniture industry, combined, earn less than 90c an hour—the highest proportion in any industry in the nation. The serious part of the proposal, thought the New Jersey Lumbermen's Assn., was not the immediate impact it would have on dealers, but the threat it would pose of further rises in years ahead.

**Painters lose attempt to curb use of rollers**

The US Supreme Court refused to review a Michigan Supreme Court decision that a union's attempts to restrict the use of paint rollers was "an unlawful labor objective."

The decision applied to painters in the Detroit and Pontiac areas. The original ruling had been appealed by the AFL Painters, Decorators and Paperhangers on the grounds that the Natl. Labor Relations Board had exclusive jurisdiction over such a controversy. The Michigan decision upheld findings of a lower court that the use of rollers was not injurious to the health or safety of painters.

**Six homes, apartments cited in annual AIA contest for 'outstanding architecture'**

AIA's seventh annual competition for outstanding American architecture gave five first honor awards to schools, commercial buildings and an embassy. The six homes and apartments shown here were among 22 award-of-merit winners (others were not housing). The jury: Thomas H. Locraft, Ludwig Mies van der Rohe, Eugene J. Kennedy Jr., J. Byers Hays, Ernest Born. All 27 winners will be displayed at the AIA convention in Minneapolis June 20-24.

Roger Lee of Berkeley, Calif., won one of four awards given for dwellings with the George Channing house in Sausalito.

Ansheh & Allen of San Francisco did a winning beach house for Ernest Moore of Carmel.

One of two winning apartments was a development by Keyes, Smith, Satterlee & Lethbridge in Fairfax County, Va.

George Fred Keck and William Keck of Chicago won a merit award for the Sigmund Kunstadter house in Highland Park.

Architect Charles Goodman took one of the 22 merit awards for his own home in Alexandria, Va.

Carl Maston of Los Angeles, acting as architect-builder-owner, came up with an award-winning five-unit apartment building.

(CLEVELAND BUILDERS WIN DEAL WITH CARPENTERS)

The Home Builders Assn. of Greater Cleveland won a case for independent bargaining with the 2,500 carpenters it employs. The Association petitioned the National Labor Relations Board for a representation election. When the hearing was recessed at the request of the AFL carpenters union, the latter agreed in writing to bargain separately with the home builders and to urge other AFL building crafts to do likewise.

Last year the Cleveland Association ran into a week-long strike when it held off from signing wage rises agreed upon by the union and the Building Trades Employers Assn. Members felt they wanted more representation, since they claim they employ some 65% of the area's carpenters, and were not fond of BTEA's "autonomy clause," under which local workmen can refuse to install items like pre-hung doors and kitchen cabinets.

Meantime, painters in the Cleveland area were threatening a strike to back up a request for a 25c an hour wage increase.

(NEWS continued on p. 47)
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SIDELIGHTS

Washington inside

Washington's Normandy building, head-quarters of HHFA, is fairly bulging with gunshoed men poring over seized FHA records and files. Administrator Cole last month asked Congress for a $350,000 supplemental appropriation for "compliance" work—i.e., gunshoed operations.

HHFA announced that the New York management consultant firm of Cresap, McCormick & Paget has been hired (for $49,350) to do an over-all study of HHFA. One aim: to simplify redevelopment red tape. At FHA, the New York management firm of Woodward & Fondiller was probing into Title I repair loan accounting and control techniques to see if the agency's system can be improved. Both studies reflect the administration's penchant for management engineering. Another firm is working on how to enlarge the working area of the White House; the Pentagon is full of study teams.

Television interests are trying to persuade FHA to put TV on package mortgages. They even have a plan to hook TV up to an intercom to play music in the bathroom.

Justice Dept. was still pondering, at midmonth, whether to appeal the Cross-Morton tax case—the test suit on whether 608 mortgage-out profits can be treated as capital gains (the US Tax Court said they can). Internal Revenue Service gave Justice its recommendations back in March, but officials refused to say what they were.

Ribbons windows banned

Metropolitan Life Insurance Co., the nation's biggest, has begun refusing to make mortgage loans on homes where bedrooms have nothing but high ribbon windows. Danger in case of fire is the chief reason why Met now insists every bedroom have at least one conventional window—i.e., not above a specified height from the floor.

How to sell plumbing

The plumbing supply industry should separate its business with home builders from its replacement and modernization business.

President John L. Holloway of Crane Co., who made that recommendation in a recent talk, thinks the plumbing industry is saddled with outdated methods of distribution and merchandising. Said he: "Manufacturers have fallen down badly in failing to establish stable, generally accepted practices in the sale of their product. The wholesalers, in turn, are so lacking in any sound continuity of sales practices that it is only in exceptional instances that their salesmen, let alone the dealers, know from day to day what their price or other distribution procedure is."

Holloway urged plumbing wholesalers to aim at the replacement market—"a potential of 1.8 million new bathrooms a year."

Needle for bad design

Neil A. Connor, FHA's chief architect, summed up his efforts to get the agency to give higher valuations for top design in a talk to Detroit mortgage bankers: "... Well-designed houses will not only sell for more than those poorly designed, but will retain their value longer, which is of interest to you mortgagees. Such good design must receive full valuation. Poor design must be penalized or not be accepted at all. There is no other choice for mortgagees or the FHA."

FHA wins windfall round

FHA won the first round in its major test case to recapture 608 windfall profits. Federal Judge Thomas F. Meaney ruled in Newark, N. J. that Linwood Park, Inc. (Sidney Sarner and Ralph J. Solow, original partners) had violated its corporate charter from FHA. FHA had set out to call a preferred stockholders' meeting, planning to gain control of the corporation and then act to obtain return of the mortgage profits. But Sarner obtained an injunction to block FHA from convening the meeting. Carl Ertle of the Justice Dept. then moved for a summary judgment based on violation of the charter.

Judge Meaney ruled the corporation guilty of these violations:

• Paving $1,318,000 to Solow without approval of FHA.
• Lending $1,270,000 to two other corporations owned by Sarner that operate business and recreation enterprises in Linwood Park.
• Refusing to answer FHA's questionnaire on building and operating costs.

The government has asserted that Sarner and Solow made a profit of $2.4 million on an FHA-insured loan of $8.9 million for development of the 1,200-unit project.

In Washington, FHA Counsel Frank Meisrell announced that ten windfall cases have been sent to the Justice Dept. for action and 60 others are almost ready.

BOCA makes 40 changes in its two codes; plywood, chimneys, wallboard affected

Some 40 revisions in the basic and abridged codes of the Building Officials Conference of America were approved at the group's 40th annual conference in Milwaukee.

Most of the changes were minor, involving word changes or rearrangement of existing sections, but a few showed considerable updating. Examples:

• A series of orders affecting the use of plywood: new specifications for minimum thicknesses in subflooring, maximum spans for roof sheathing, nailing requisites, etc.
• Revision of requirements for public parking decks, clarifying height and area requirements.
• Acceptance of packaged chimneys, with less stringent requirements for clearance to combustible materials.

Up with the times.

This year marked the tenth anniversary of the start of BOCA's efforts to get a building code into shape. The first abridged version was printed early in 1950 (Paul E. Baseler, present executive secretary and code correlator, moved for its adoption at the 1949 convention when he was working as a building official in Jennings, Mo.) and the basic code followed a few months later. The second edition of both the abridged and basic codes appeared this year.

Main purpose behind the revisions, which appear annually in supplement form, is to keep abreast of technical developments in the construction and building products industries. New rulings, for example, on the use of gypsum wallboard and other interior sheathings were included in this year's changes. BOCA says about 180 communities have adopted one or both of the codes.

New officers. Arthur N. Rutherford, inspector of buildings in West Hartford, Conn., moved up to the presidency of BOCA (see photo). Other officers moved up a notch, except for Treasurer Norman G. Fricke, also of West Hartford, who was re-elected, and S. Logan McConnell of New Orleans, who was elected secretary.

2 New Ideas by NuTone

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PEOPLE: Lindell Peterson, John Austin to head Mortgage
Bankers' Assn.; Dutch Architect Dudok wins AIA gold medal

John F. Austin Jr., president of T. J. Bettes Co. of Houston, was nominated for vice president of the Mortgage Bankers Assn. by MBA's nominating committee in New York. Vice President Lindell Peterson was nominated for the presidency. Both men are to be elected at MBA's 42nd convention in Los Angeles Oct. 31-Nov. 3.

Austin heads the biggest mortgage banking firm in the Southwest (it serviced $650 million worth of loans last year), worked up to the position after experience as senior bank examiner for the Federal Reserve Bank in Dallas and then as vice president of the South Texas National Bank. He is president of the Texas Mortgage Bankers Assn. and on MBA's board of governors.

Peterson, president of the Chicago Mortgage Investment Co., has been on the governing board for some years. He was elected vice president last year at least partially in recognition of his extensive work as head of MBA's educational program.

AIA's Gold Medal, the highest professional honor given by the organization, will be awarded to Dutch Architect Willem Dudok at its convention in Minneapolis June 20. Dudok, who in the words of Historian Talbot Hamlin has "for nearly 40 years . . . been working devotedly for the humanization and enrichment of the modern world," will be the 21st architect to receive the medal. Other awards: to the Kohler Foundation, Inc. for restoration of Wade House in Greenbush Village, Wis.; to Turpin C. Bennister, FAIA, for final editing of "The Architect at Mid-Century," Danish Architect Kay Fisker will be made an honorary fellow. Honorary memberships: Poet Hugo Weber will be made an honorary fellow, and Architect Minoru Yamasaki of Detroit received honorable mention; Frank Lloyd Wright was scheduled to receive an honorary doctor of fine arts degree (his first of the season) from the University of Wisconsin; Developer Arthur Rubloff of Chicago was named Man of the Year by the city's North Side Civic Committee, a short while afterwards received one of ten Horatio Alger awards from the American Schools and Colleges Assn.

Former NAHB President Manny Spiegel, who collapsed while toasting the Chicago homebuilders' dinner just before January's NAHB convention, left Manhattan's Doctors Hospital last month, moved to a Spiegel-built house in Englewood, N. J. for an outdoor summer. Chicago Builder Nathan Monllow, who withdrew from the race for NAHB president this year after undergoing surgery, was back in Chicago after several months of recuperation in Florida.

AWARDS AND PRIZES: Architect Gordon Bunshaft, chief of design for Skidmore, Owings & Merrill, won the architecture prize of the National Institute of Arts and Letters; Architect Minoru Yamashaki of Detroit received honorable mention; Frank Lloyd Wright was scheduled to receive an honorary doctor of fine arts degree (his first of the season) from the University of Wisconsin; Developer Arthur Rubloff of Chicago was named Man of the Year by the city's North Side Civic Committee, a short while afterwards received one of ten Horatio Alger awards from the American Schools and Colleges Assn.

Charles R. Diebold, president of The Western Savings Bank of Buffalo, was elected president of the Natl. Assn. of Mutual Savings Banks last month. Lawyer Diebold is a director and vice president of New Dickerson Mines Ltd., in Canada, and treasurer of the Buffalo Chamber of Commerce. President Crawford H. Stocker Jr. of the Lynn (Mass.) Five Cents Savings Bank was named vice president.

In a talk to the association convention in Atlantic City, Diebold put himself on the side of those who debunk family formations as the big influence on housing demand. These three things bulk larger, he said: 1) migration, 2) rising birth rates which cause growing demand for three- and four-bedroom homes, 3) soaring family income. President J. Howard Edgar of the US Savings & Loan League urged an end to "bickering and dissension" between commercial banks and savings institutions. His theory: "When we take $1,000 from a local citizen, it immediately finds its way into our commercial checking account. Then when we take it out of that checking account to pay on the purchase price of a new home or write checks to a contractor or subcontractor, the money still goes directly back into commercial banking."

William J. Hallahan, a member of the House banking committee staff since 1946 (he is now chairman of the general committee), was nominated as the third member of the House Loan Bank Board, to join Walter McAllister (chairman) and Ira Dixon. Hallahan is a graduate of Syracuse University, served in the Army and later finished his law courses at Georgetown University.

Chester Stackpole, general sales manager of the heating and cooling division of Union Asbestos & Rubber Co. in Chicago, will become managing director of the American Gas Assn. this month. Stackpole graduated from Brown University in 1922, has spent 26 years in the utilities business.

Harry J. Long, the new president of the Natl. House Builders Assn. of Canada (NAHB's counterpart), is a snow-topped Toronto builder whose 85 houses a year put him among the 15 biggest home producers in the country. He recently succeeded Gordon Shipps, who is also one of Canada's biggest builders. Long, now 62, began his lifelong building career as a carpenter for his father, who began his career as a carpenter and worked up to become a housebuilder. Long has been running his own enterprises since 1918. Currently, he is concentrating on two models of a 1,200 sq. ft. bungalow for $14,000. He sells under terms of Canada's National Housing Act, which was remodeled just over: a year ago into something resembling the FHA (March '54, News).

One thing the Canadian law lacks is mortgage insurance for used houses. But Stewart Bates, president of the government's Central Mortgage & Housing Corp. (equivalent of HHFA), told the housebuilders' convention that elected Long that he thought it was about time the government considered adding existing housing to its program. Among other things, high down payments under all-conventional financing made the Canadian used house market sticky.


(NEWS continued on p. 51)
Install genuine masonry chimney in 3 hrs. with pre-engineered Van-Packer units

**Saves 20-40% on cost of time and material over brick.**

The Van-Packer Packaged Masonry Safety Chimney goes up in 3 man hours with 2 ft., factory-engineered masonry sections; no special skills or tools required. Completely packaged chimney, including flashing, delivered to job when needed. Cuts job delays, high labor costs.

**UL tested and listed** for coal, oil or gas for all home heating plants and incinerators; approved by major building codes. Sections are made of 2000°F, ¾" fire clay tile lining, 3" vermiculite concrete insulating wall, and cement-asbestos jacket, have insulating value of 2 ft. brick wall—100% fire safe. Acid-proof cement seals joints permanently. Develops 34% better draft than an 8"x12" brick chimney.

**Saves floor space.** Ceiling or floor suspended Van-Packers allow floor plan flexibility. Furnace can be centrally-located for balanced heat runs. Chimney installs easily even after house is completed. 14" OD flue sections install between joists on 16" centers without joist cutting.

**Attractive Brick-Panel housing** and de luxe housing cap assembly provide buyer acceptance of conventional masonry, blend with all exteriors. Brick-red cement-asbestos panels, 16" wide by 24" deep, will not dent, rust, corrode . . . have the permanence of stone.

**Immediate delivery** through a nation-wide chain of heating and building material jobbers and dealers. See "Chimney" listing in your classified directory for your nearest jobber, or write Van-Packer Corp.

EASILY INSTALLED BY ONE MAN IN 3 HOURS OR LESS

Saw holes in floor, ceiling and roof. No clearance to wood members necessary. Place chimney support in position. Wall iron supporting straps to floor joists. Set masonry sections in place up to desired height, using joint cement provided. Assemble leak-proof flashing around flue. Housing then installs over completed flue. Housing panels slide together with Quick-Lock corners. Fasten housing cap assembly onto housing to complete Van-Packer installation.

For detailed information and installation data send for Bulletin AF28-19

Van-Packer Jobbers are located in the cities listed at left

If there is no jobber conveniently located to you, write Van-Packer Corp. for Bulletin 19-RS-1.
**Housing Statistics**

**Huge construction outlays put squeeze on cement and gypsum**

Record-breaking outlays for new construction (see table) were pushing the materials manufacturers to the limit. Cement supplies, perennially inadequate at the start of the building season, were critically short in some areas. The gypsum manufacturers still could not meet demand, even on three-shift production. The glass business, to use one executive’s description, was “hopping.”

Expenditures for new construction reached new highs for April and for the first four months of the year. The April total of $3.2 billion was some $400 million over what it was a year ago; the four-month total of $11.6 billion topped 1954’s corresponding total by $1.4 million. The upshot was that the seasonally-adjusted rate for outlays was an unprecedented $14.6 billion. Last year’s outlays were $37.2 billion.

The greatest dollar gains over '54 in the four-months’ figure was in private residential building. It was running at an adjusted annual rate of $16 billion. (Last year’s expenditures: $13.5 billion.) Private expenditures of all kinds were 21% higher from January through April than last year.

**Allocations and gray markets.** Cement was so short in parts of Texas—notably Houston, Ft. Worth and Dallas—that gray market operation had doubled the price of a sack. Some builders had tried importing the stuff from Mexico and Belgium, but transportation costs brought the price up close to the inflated price of domestic supplies. Chicago was facing up to a shortage; supplies in Los Angeles were none too plentiful, but had not reached the critical stage.

The situation on the gypsum front was summed up by Chairman Melvin H. Baker of National Gypsum Co., commenting on the fact that one of the company’s plants in Mobile broke down recently from inadequate at the start of the building season, were critically short in some areas. The gypsum manufacturers still could not meet demand, even on three-shift production. The glass business, to use one executive’s description, was “hopping.”

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**Expansion plans by National and other leaders in the field would ease the situation. Until then: allocations.**

**Mortgage Market Quotations**

(Originaisons quoted at net cost, secondary market sales quoted with servicing by seller) As reported by House & Home the week ending May 13th

<table>
<thead>
<tr>
<th>City</th>
<th>FHA 4½’s</th>
<th>VA 4½’s</th>
<th>FHA 4½’s</th>
<th>VA 4½’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston local</td>
<td>par-101 a</td>
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<td>par-101 a</td>
<td>par-101 a</td>
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<tr>
<td>Chicago</td>
<td>97-99</td>
<td>96-par</td>
<td>96-par</td>
<td>97½-99</td>
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<tr>
<td>Detroit</td>
<td>97½-99</td>
<td>96-98</td>
<td>96-98</td>
<td>97-98</td>
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<tr>
<td>Houston</td>
<td>99-par</td>
<td>99-par</td>
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<td>97½-98</td>
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<tr>
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<tr>
<td>Philadelphia</td>
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<td>par</td>
<td>98-99</td>
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<tr>
<td>Portland, Ore.</td>
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</tr>
<tr>
<td>San Francisco</td>
<td>99-par</td>
<td>99-par</td>
<td>97-98</td>
<td>94-96</td>
</tr>
<tr>
<td>Washington D.C.</td>
<td>par</td>
<td>par</td>
<td>98-par</td>
<td>97-98</td>
</tr>
</tbody>
</table>

* No market.
* Extremely limited volume.
* Typical range; bottom prices—lightly lower.

**Sources:** Boston, Robert M. Meegan, vice pres., Boston Five Cent Savings Bank; Chicago, Maurice A. Polshek, vice pres., & ven.; Draper & Kramer Inc.; Denver, C. A. Boren, vice pres., Mortgage Investments Co.; Detroit, Robert H. Pease, pres., Detroit Mortgage & Realty Co.; Houston, John F. Ameln Jr., pres., T. J. Betts Co.; Jacksonville, John

**NEW CONSTRUCTION EXPENDITURES**

(Continued from p. 49)

<table>
<thead>
<tr>
<th>Type of construction</th>
<th>民航</th>
<th>1st four months</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATIVE</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential building</td>
<td>880</td>
<td>3,417</td>
</tr>
<tr>
<td>Nonresidential</td>
<td>860</td>
<td>3,055</td>
</tr>
<tr>
<td>Additions and alterations</td>
<td>96</td>
<td>291</td>
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<tr>
<td>Nonhousekeeping</td>
<td>23</td>
<td>91</td>
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<tr>
<td>Nonresidential</td>
<td>464</td>
<td>1,883</td>
</tr>
<tr>
<td>Commercial</td>
<td>151</td>
<td>626</td>
</tr>
<tr>
<td>Religious</td>
<td>40</td>
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<tr>
<td>Educational</td>
<td>39</td>
<td>154</td>
</tr>
<tr>
<td>Social and recreational</td>
<td>16</td>
<td>64</td>
</tr>
<tr>
<td>Hospital and institutional</td>
<td>27</td>
<td>106</td>
</tr>
<tr>
<td><strong>PUBLIC TOTAL</strong></td>
<td>1,927</td>
<td>7,063</td>
</tr>
</tbody>
</table>

**PUBLIC**

Residential building 34 21—38 139 86—38
Nonresidential building 377 363—44 1,441 1,337—7
Military facilities 79 87 10 296 330 11
Highways 230 245 7 645 680 8
Sewer and water 78 88 13 290 317 9
**PUBLIC TOTAL** 886 886 0 3,171 3,031—3

**GAND TOTAL** 2,813 3,225 15 10,170 11,590 14

* Some components not shown, so total exceeds sum of parts. Dept. of Commerce & Labor

(NEWS continued on p. 54)
Two bathrooms make homes more saleable because they make them more livable. Your business benefits accordingly. Briggs pioneered the two bathroom idea—and has done more than any other manufacturer to make two bathrooms practical and economical for more and more American home owners. There is a new prestige and profit in specifying two bathrooms with Briggs Beautyware—America’s smartest plumbing fixtures.

Refer to Sweet’s Catalog—Architectural File 24A, Light Construction File 9B, or A.I.A. File 29H

BRIGGS MANUFACTURING COMPANY • 300 Buhl Building • Detroit 26, Michigan

**Advanced Design**—All Briggs Beautyware is functional—distinctive in styling, exact in dimensions, formidable in construction, unequalled in utility features.

**Engineered Installation**—Specific time and labor saving features include free standing tubs with square straight ends—two bolt closets—jiffy assembly fittings.

**Maximum Value**—In precision manufacture, in quality reputation, in important selling features—the intrinsic value of Briggs Beautyware is truly outstanding.
for YOU

20 Grand Prizes to builders of 100 homes or less!

5 Grand Prizes to larger builders and trade-in reconditioning winners!

more than 150 Special Awards to Local Association Winners!

1955 NAHB

bigger, newer, more exciting

ACAPULCO DERBY

A National Home Week Contest

and your WIFE

10 glorious tropical days in Acapulco!

far more time to prepare your Derby entry kit!

Sponsored by Minneapolis-Honeywell Regulator Company in cooperation with the NAHB Board of Directors and Public Relations Committee.
A home to sell ... a plan to sell it

Honeywell
in Acapulco

For you and your wife

Barbecue tantalizing delicacies on the white sands of Acapulco.

ACAPULCO DERBY GRAND PRIZE WINNERS will enjoy 10 carefree days with other nationally recognized builders

Relive history while browsing and shopping in the shadow of untouched old-world splendor.

Enjoy your favorite sports or relax in luxurious leisure on sun-drenched tropical beaches.
Luxuriate in the cabana atmosphere and swimming pool of Acapulco's distinctive Los Flamingos Hotel.

A NATIONAL HOME WEEK CONTEST FOR NAHB MEMBERS*

IF YOU BUILD 100 HOMES OR LESS

20 Grand Prize Winners!
Builders of 100 homes or less in 1955 are featured in this main event of the Acapulco Derby. Local winners will be selected on the excellence of their merchandising and the liveability of their exhibit home. 20 grand prize winners will be selected . . . one from each NAHB region.

IF YOU BUILD MORE THAN 100 HOMES

2 More Grand Prize Winners!
Builders of more than 100 homes in 1955 can compete in the Acapulco Derby this year on the same basis as smaller builders, but in a separate class. Two national Grand Prize Winners will be chosen . . . one east and one west of the Mississippi River.

IF YOU HAVE A HOME TRADE-IN PLAN

3 More Grand Prize Winners!
This special feature of the 1955 Acapulco Derby recognizes outstanding achievements in developing and merchandising a home trade-in and new-conditioning program. Three national Grand Prize Winners will be chosen.

FAME AND GOOD FORTUNE CAN BE YOURS!
In addition to the fabulous Honeywell Holiday in Acapulco, Grand Prize Winners and their exhibit homes will receive greater prestige and national recognition in leading newspapers and trade publications. Winners will be announced at the NAHB Exposition in Chicago, January 22-26, 1956.

*Except all master merchandisers who have previously won grand prize Honeywell Holidays

For dates to remember and further details... see the back page

Fly directly to Mexico City to join the other Derby winners and their wives. Tour the famous sights and gay spots of exciting Mexico City in private cars.

Swim in a brisk morning surf . . . bask in the shade with an exotic coconut drink . . . capture the romance of a moonlight sail.

Delight in the mountainous countryside of Cuernavaca and Taxco on the two-day drive to Acapulco.

Thrill to the finest fishing in the Americas . . . and the unforgettable challenge of a giant sailfish striking your line.
WIN WITH AGGRESSIVE MERCHANDISING AND A MORE LIVEABLE HOME

To compete in the 1955 Acapulco Derby, you simply develop an aggressive promotional and publicity campaign to encourage prospects to visit your exhibit home during National Home Week. The liveability of your exhibit home will be an important factor in the judging.

REGISTER NOW AND START PLANNING TO WIN!

Registration reply cards for the 1955 Acapulco Derby will be sent to all NAHB builder-members. When you register by mailing in your card, you will receive your Official Entry Kit. Your local association will also have entry cards and entry kits.

NEW! LOTS OF TIME TO ASSEMBLE YOUR ENTRY!

After National Home Week, you will have six weeks to assemble the material for your Official Entry Kit. Your kit, with descriptions and samples of your merchandising methods, must be in the hands of your Local Association Executive Officer by midnight, November 1, 1955.

CONSULT OFFICIAL RULES FOR COMPLETE DETAILS

DATES TO REMEMBER!

Your entry card must be mailed by . . . . . . . . . . September 1, 1955
National Home Week . . . . . . . . . . September 10-18, 1955
Your entry kit must be in by . . . . . . . . . . November 1, 1955
Local Association Winners announced . . . . . December 1, 1955
National Winners announced at NAHB Exposition January 22-26, 1956
Honeywell Holiday in Acapulco Begins . . . . . . February 27, 1956

WHY THE ACAPULCO DERBY?

Honeywell has a vital interest in the continuing prosperity of the home building industry. Honeywell home products—such as Electronic Moduflow, Zone Control, and the new Fire Belle detection-alarm system and Tap-Lite decorator wall switches—maintain Honeywell’s 70-year leadership in the field of automatic home controls. The ACAPULCO DERBY aids the prosperity of home builders by encouraging outstanding contributions in home design, better home-merchandising methods, and the interchange of ideas which builders find successful.
...and the right man is an old friend of yours!

* You know him well. He's your lumber dealer. And today, millions of prospective home owners are getting to know him—and YOU—through the pages of their favorite magazines.

In big national publications such as The Saturday Evening Post—Better Homes & Gardens—American Home—House Beautiful—House & Garden—Living—they are learning why you and your lumber dealer are the ideal source for quality workmanship and quality building materials.

Get this BALANCED INSULATION sales help! Today your lumber dealer can help you capitalize on a brand-new trend that is sweeping the country—and is making a powerful appeal to prospective home owners everywhere. It is balanced insulation—the right combination of Balsam-Wool® Sealed Insulation and Nu-Wood® Insulating Sheathing, storm sash and weather-stripping to provide maximum fuel savings and greater summer comfort, too, in any home in any climate.

Waiting for you at your lumber dealer's is a complete balanced insulation kit. Here is everything you need to give your sales of quality homes an extra push. Ride the balanced insulation trend to more profit in 1955! Wood Conversion Company, Dept. 2, First National Bank Building, St. Paul 1, Minnesota.

“Thank goodness, we found the right man, Sonny!”

“See that guarantee, Sonny? It means this house has balanced insulation—the kind that keeps us comfortable all year around and saves your dad plenty of money on fuel bills. But we'd never have a guarantee like that if we hadn't found the only man who could offer it.”

Who is the man that can offer YOU such lasting assurance of home comfort and fuel savings? He lives right in your community: your lumber dealer. He alone gives you a money-back guarantee of satisfaction when you insulate your attic with Balsam-Wool® Sealed Insulation. He alone, working with your builder, can provide the right combination of Balsam-Wool Insulation and Nu-Wood® Insulating Sheathing for balanced insulation benefits—for these products are sold by lumber dealers only.

Whether you build or remodel, remember, your lumber dealer knows and sells quality building materials. He knows quality builders, too—and can help you select the right one for your job. Wood Conversion Company, 236-65, First National Bank Building, St. Paul 1, Minnesota.

Send for Copy, “Facts About Insulation For Your Home”
**FHA bars cheap homes in swank neighborhoods**

FHA has warned its 75 field offices against insuring mortgages on new houses which would affect adjoining property adversely.

Officials explained they were re-emphasizing the point (always a cardinal basis of FHA underwriting) because of the increasing numbers of new homes going on scattered vacant lots in older subdivisions. FHA thinks some new $9,000 models have depreciated the older, $25,000 homes in the neighborhoods.

This revision of paragraph 318 of its underwriting manual, FHA noted, does not include "social or economic factors" as adverse.

**Warm-air heat industry warned on gyp installers**

The warm-air heating industry is going to have to offer home owners more protection against gyp installers to keep from "floundering in a morass of public suspicion and discontent."

This is the view of the American Institute of Management, a nonprofit foundation in New York devoted to analyzing and rating managements. An eight-page examination of the warm-air heating industry was published by the Institute last month.

**Installation troubles.** The greatest deficiencies in the industry, says the report, are found in the area of public policy. The industry is unavoidably dependent upon the retail dealer for the performance of its product; he can make or break both the furnace and public opinion about the individual company. The industry’s research organization tries to keep dealers up to date on developments, but the facts remain that “unethical practices, chiefly by retail furnace installers and repairmen, are widespread.”

The Institute was also critical of sale of furnaces by manufacturers directly to builders, bypassing company retail distributors. It complained: “Installation is left to the builder, who is probably inexperienced in installation practices, and responsibility for the performance of the installation is borne by neither the manufacturer nor by his franchised dealer.” (If the association was aware of it, it gave no evidence of knowing that direct sales help cut the cost of heating installations by eliminating middleman profit, and thus help hold down the cost of housing to the public.)

**Needed: diversification.** The Institute also reported: “There is adequate evidence that the financial health of the industry is poor despite the continued growth in warm-air furnace sales during the past decade.” Approximately 400 companies market warm-air heating equipment today; about 142 companies have entered the field—to manufacture or market units—since 1942. There have been many mergers, liquidations and strong competition. Net incomes have largely remained static or declined since the end of the war.

The industry does not need to establish new technical standards, thinks the Institute, but to enforce the ones it has. A great contribution would be the designation of a high-level heating industry advisory council. Such a group could work with municipal and state agencies on codes, establish sound standards and arbitrate grievances from dealers.
Everyone saves with new Anaconda Pre-Formed Panel Grids

New radiant panel heating coils made of Type L Copper Tube save contractors installation time and money ... save engineers time and effort in planning and designing radiant panel heating installations.

NEW ANACONDA GRIDS* (PG*’s) contain 50 linear feet of Type L Copper Tube and come in two tube sizes—left, \( \frac{3}{8} '' (1\frac{1}{8}'' \text{ O.D.}) \) for ceilings; right, \( \frac{5}{32} '' (9\frac{5}{32}'' \text{ O.D.}) \) for floors.

DESIGN AND LAYOUT is simplified by Anaconda’s free layout kit of printed, gummed PG scale drawings, which show precise layout of heating panels on blueprints.

MACHINE-FORMED PG’s are compactly packaged 4 to a carton. One tube end of each PG is expanded so that it can be solder-connected in series without requiring fittings.

CEILING INSTALLATION ready for plastering. Note tube spacing narrows to 4\( \frac{1}{2} '' \) c-c nearest the outside walls, and supply lines to panel circuits run next to outside wall.

NO SAGS OR DIPS in the tube lines permits a uniform plaster thickness, which means savings in time and materials.

A HOOK TYPE FASTENER offers another easy, quick installation method. Fasteners are partially set in joists, PG’s are positioned, and fasteners driven home.

HEAT FOR THIS basement game room will be provided by \( \frac{3}{8} '' \) PG’s embedded in concrete. For floor or ceiling installations the pre-formed Anaconda Panel Grid offers many economies.

SNOW MELTING SYSTEMS are installed easier and quicker with \( \frac{5}{32} '' \) PG’s embedded in concrete.

FREE BOOKLET! Send me free booklet C-6 which tells how to design, lay out and install radiant panel heating systems with PG’s.

The American Brass Company, Waterbury 20, Conn.
(In Canada: Anaconda American Brass Ltd., New Toronto, Ont.)

FREE BOOKLET! Send me free booklet C-6 which tells how to design, lay out and install radiant panel heating systems with PG’s.

NAME ____________________________  COMPANY ____________________________

STREET __________________________  CITY __________________________

ZONE ________ STATE ____________

The American Brass Company, Waterbury 20, Conn.
(In Canada: Anaconda American Brass Ltd., New Toronto, Ont.)
You can add floor space and subtract costs with

**UTILITY’S COMBO-365 AIR CONDITIONER**

**Versatile**

COMBINATION HEATING-COOLING UNIT
Compact design saves floor space. "Floating Chassis" eliminates transmission of vibration to cabinet; permits addition of refrigeration unit subsequent to furnace installation.

Let us send you full information on the complete Utility heating and air conditioning line.

**UTILITY TRADE MARK**

**GAPFERS & SATTLER**

And OCCIDENTAL

Automatic Gas Ranges

UTILITY

Furnaces • Air Coolers

Air Conditioners

Water Heaters

**UTILITY APPLIANCE CORP., Dept. HH 6**

4851 S. Alameda St. • Los Angeles 58, Calif.

Please send me full information on:

- [ ] Utility Automatic Heating and Air Conditioning Equipment
- [ ] Utility Cooling Equipment
- [ ] Utility Automatic Gas Water Heaters

**NAME**

**ADDRESS**

**CITY**

**ZONE**

**STATE**
Rusco Prime Windows—an entirely new concept in window engineering—were developed to make it practical for Architects and Builders to plan and construct better buildings while working with complete, finish-painted, ready-to-install window units.

Rusco hot-dipped galvanized steel Prime Windows are made in Horizontal Slide, Vertical Slide and Fulvue Vertical Slide models in all standard sizes and shapes. When you specify Rusco—you eliminate costly, time-consuming on-the-job painting, glazing, refitting and adjusting! And there are no sash cords, weights or balances to get out of order. They're complete the minute they go into the window opening!

Check these RUSCO advantages!

Made of Hot-Dipped Galvanized Steel for strength, long life and minimum maintenance. Zinc-treated, Bonderized and finished with baked outdoor-type enamel for protection against weathering.

- AVAILABLE WITH INSULATING SASH and Fiberglas screen, as an integral part of the unit. Insulating sash gives Rusco's exclusive MagicPanel® year 'round, rain-proof, draft-free, ventilation.
- BUILT-IN WATERPROOFED FELT WEATHERSTRIPPING... Makes Rusco Windows completely weathertight, eliminates metal-to-metal contact, noise and rattling.
- POSITIVE AUTOMATIC LOCKING of vertical slide units in all open and closed positions. Springbolt action.
- SMOOTH, EFFORTLESS OPERATION Rusco sash sections slide in a felt cushion—easily, quietly, without effort.
- SLIDING GLASS PANELS REMOVABLE FROM INSIDE FOR EASY CLEANING Sliding glass inserts slip out in an instant for safe, convenient, inside cleaning.

"Hello there! I'm Sally Steele from the Rusco Service Department. We have your free copies of literature, describing these fine Rusco products, ready to mail as soon as you write to me at the address below."

THE F. C. RUSSELL COMPANY
World's Largest Manufacturer of Windows, Doors and Home Comforting Products.
DEPT. 7-MB 65 • CLEVELAND 1, OHIO
In Canada: TORONTO 13, ONTARIO
Looking for something different—some extra appeal for today's "harder-to-sell" home buyer—a way to add more variety to a subdivision or street of homes? The new line of Thyer Homes featuring attached garages or carports are just the answer. Factory-assembled and conventionally built, they are erected as a single unit with the house. The cost of this additional space is low—yet receives liberal valuations from lenders.

If you would like more information about Thyer Homes, with or without garages or carports, write today. We will be glad to send literature or have a representative call.

**THYER'S**

**"SILVER PLATTER" PROFIT SYSTEM**

- **FINANCING SERVICE**
  Your local Thyer Factory Representative will be glad to help you arrange construction and permanent financing for FHA, VA or conventional loans.

- **LOCAL FIELD SERVICE**
  Thyer factory representatives located in 28 states are ready to assist you in erecting, land development, arranging financing, and planning local advertising and model home showings.

- **TURN-KEY CONTRACTING SERVICE**
  For developers who wish to build 100 or more houses at a time, Thyer can provide a turn-key building service that delivers houses at a bonded contract price. (At present this service is available in all Southern and in most Northern states.)

- **NATIONAL ADVERTISING SUPPORT**
  A hard hitting program in national consumer magazines pre-sells your prospects—helps create buyer interest in Thyer Homes.

- **PARENTS' SEAL**
  Thyer fabricated units have been awarded Parents' Magazine Commendation Seal.

---

**New!**

**Deluxe Models**

Available with

Garage

or Carport

---

**Model 2289-B with Garage**

One of several (3 bedroom) Thyer Homes available in Northern States only, featuring garage or carport. For information about Thyer Homes designed for Southern and Gulf coast states, write to Jackson, Mississippi.
Prefabbers tell materials men what they want in new products

All-purpose stress-grade lumber, wider wall board, new adhesives asked at Research Institute meeting

Prefabbers handed manufacturers a list of most-wanted new products at the 4th annual meeting of the Building Research Institute in Princeton, N.J.

Willard J. Worth, head of research and development for National Homes Corp., put in one of the biggest orders:

«An all-purpose stress-grade lumber. Present standard grades of Douglas fir and hemlock are based on use of the lumber, he pointed out, preventing interchangeability of pieces and promoting waste. “This served a purpose in heavy timber construction, but it is archaic in light wood framing. The universally used 2 x 4 in No. 1 and No. 2 grades theoretically cannot be used as a tension member in bending... Our testing on 2 x 4’s indicates they are strong enough to qualify for a higher stress grade.”

«New size of gypsum wall board. Standard widths are now 1/4”, 2” and 4”. “We would like to see the same material available in 8” widths,” said Worth. “The obvious advantage would be the elimination of all joint taping.”

«Interior trim and finish. How about moldings, bases, casings, etc. formed from metal or plastic and applied through a clip-on system to serve as raceways for wiring? On the question of sandwich and honeycomb panels—which could lead eventually to “revolutionary changes in building methods”—Worth said he did not expect a run on these products “until such time as the necessary resins, which occur in large concentrations in many of these products, have reached the point of development that will allow radical reductions in price.”

Floors and roofing. Robert Lytle, president of Modern Homes Corp., told manufacturers that too few of them realized the tremendous advantage to be gained in the future in using prefinished products. Lytle’s specific suggestions on what is needed:

«Interior wall finish material. Something comparable in cost and better in utility than either gypsum or fiber board.” It should be lightweight, prefinished, easily cleanable and resistant to abrasion.

«A metal roofing system. One that combines roof, structure, insulation, ceiling finish and sound conditioning.

«Built-in equipment. As applied either to appliances or furniture.

«Electrical heating methods.

«Roofing materials. Products that could be put on roof panels in the prefabber’s plant.

«Flooring finish. A substance that could be applied in the plant, so that unsatisfactory joints would be eliminated in the completed house.

«Lighter-weight products. In order to cut down on trucking costs.

What about lumber? Roger Thyer, vice president of fast-growing Inland Homes, pleaded with the lumber industry to start improving its products as soon as possible. Lumber is the biggest single item in the packaged house, he noted, but because it “seems to be getting more expensive every year the door is wide open for more and more wood substitutes.” (For examples, see p. 136.)

“Our company is constantly considering substitutes for wood,” said Thyer, “but these substitutes must give us better functional properties, or be less expensive and more stable. The aluminum people are doing more with the extrusions used to make windows and moldings. The panel-board manufacturers have developed many new and beautiful interior finishes, acoustical tile, etc. But in my estimation many of these materials are too expensive... The reason the public is buying more and more of these new materials is because the old materials have not kept pace with the demands of the discriminating buyer,” Thyer asked for:

Model rejected a year ago as ‘too advanced’ becomes focus of home show

Contemporary design made such advances on the home-buying front in Indianapolis last year that it won a place of honor at the home show there in April.

Not only was this year’s modern first-prize winner scheduled to be built at the 1956 show; in addition, last year’s modern first-prize winner, refused at the time by the builder segment of the home show organization as “too modern, too advanced,” was used as the central attraction of this year’s show.

This year’s winning architect: Earl R. Dunlop of Boston, for a two-bedroom home (above, left) which the judges selected for its “intelligent use of the site, its open planning and its judicious segregation of uses...”

Last year’s winner, restored to builder popularity this year, was Jaime Saenz, a Notre Dame student, whose split-level (above, right) was chosen for its “simplicity and directness and its fresh approach in the matter of design...”

“Tremendous interest. The home buying public has shown this past year in homes of contemporary design in Indianapolis has forced builders to change their thinking on design. For the first time in the 30-year history of the show we had a local builder come in and ask if he could build the model home because it was of contemporary design.”

continued from p. 54

continued on p. 62

JUNE 1955
No Sooner Built

SARGENT'S
Certificate of Guarantee

ALIGNALOCKS
...help sell the house
...than Sold!

...when you use ALIGNALOCKS
and ALIGNALOCK Sales Aids

Judge a book by its cover? Course not.
But your customers can judge... do judge a house by the brand name products they see in it. Particularly the locks!

New houses built with AlignaLocks change hands fast. From builder to buyer. From you... to your customers. That's because AlignaLocks are made by SARGENT... a name that's known and respected by everyone. And because AlignaLocks are recognized in their own right as "the Sign of a Well Built House."

So use AlignaLocks, like thousands of other smart builders. Use them throughout the house. Let your prospects see the Sargent name in every room... as a reminder of quality.

Every AlignaLock you install is guaranteed for the life of the house!

Does this lifetime guarantee impress home buyers? Sure does! Customer comments... and actual home sales... prove it.

You get maximum mileage... top benefits... from this Sargent AlignaLock Guarantee by using these free home-selling aids all around the house.

(A) Hang copies of the Guarantee itself on the most used locks. (B) On windows and other convenient spots, put the AlignaLock signs saying, "AlignaLock—the Sign of a Well Built House. Guaranteed by Sargent of New Haven." (C) Wherever they can be picked up in the house, leave the colorful AlignaLock folders. In addition to selling the Guarantee, these folders point out the AlignaLock features.

Help your new houses change hands fast and profitably... with AlignaLocks and AlignaLock Sales Aids. Get in touch with your supplier today.

Put more SELL in Every Room with ALIGNALOCK

AlignaLock... the quality lock in the low priced field... is available for every household function. In four beautiful finishes! Perfectly balanced! One-piece knob... big and graceful! Self-aligning assembly! Five pin tumbler protection! All interior parts machined or wrought steel. No other locks can be installed faster! Order AlignaLocks today from your supplier. Or write direct to Sargent & Co., New Haven 9, Conn. Dept. 11-F.

SARGENT LOCKS
...the Sign of a Well Built House
For Greater Strength
Uniform Thickness and Color

FILON
The First Fiberglas and Nylon Reinforced
Plastic Panel Ever Produced

For Greater Strength
Uniform Thickness and Color

FILON
The First Fiberglas and Nylon Reinforced
Plastic Panel Ever Produced

FILON
Gives You Greater Strength

After many months of research, FILON is now produced with Fiberglas and Nylon strands for greater strength and uniformity. Actual tests show that an 8 oz. per sq. ft. FILON panel can support over 200 lb. load per sq. ft. on a 4 ft. unsupported span. (U. S. Navy standards are only 100 lbs. per sq. ft.)

FILON
is Produced by a Unique Method

FILON is produced by a fully automatic, electronically controlled process, in the world's largest and most modern plant in its field. This method makes possible continuous lengths as well as all standard sizes of panels. Lengths are limited only by convenience in handling.

FILON
is Uniform in Thickness and Color

Better impregnation and dispersion of pigments make FILON more uniform in thickness and color. Every FILON panel bears a label stating type, grade, and color - your assurance of getting the quality you specify.

Write for our New A.I.A. Folder containing detailed drawings and technical data. Distributors and Dealers coast to coast, Canada, and other foreign countries.

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NEWS
(continued from p. 39)

A better additive for concrete. "Give us a concrete that can be poured at lower temperatures without danger of freezing."
A new wall material. It must be impervious to shrinkage, swelling and warpage. "The place to start," said Thyer, "would be with a non-load-bearing, soundproof interior partition about 2" thick. These partitions would save floor space, be light to handle and easy to erect. I will say, at the risk of sticking my neck out, that the raw material would appear to be limestone gypsum."

Prefabbers turn to stock market for expansion cash

One prefabber after another is going to the market for money. Recent public stock flotations have been oversubscribed. Says one prefab company president: "The hottest items on the stock market are uranium, automation and prefabrication." His chief concern: "If the public is burned by any fly-by-night firms offering stock for sale, the more reliable firms may not find it so easy to get money when they go to the market."

One of the latest established concerns planning to seek more capital via stock is Scholz Homes Inc. The Toledo firm hopes to float a $900,000 issue, as soon as it wins SEC approval. The money will finance a tri-pronged expansion program.

President Don Scholz plans to establish or license plants in the Philadelphia area, Denver, Norfolk, and near Chicago "to be able literally to blanket the nation from all these points." He also plans to set up an acceptance corporation to provide builder dealers with smoother mortgage financing. This year Scholz expects to triple 1954's thousand-house volume.

Add Pease Woodwork Co., Cincinnati, to the growing list of prefabbers building a line of more expensive quality houses. Pease's new flat-roofed, four-bedroom contemporary model, the Shorewood, was to open May 8 in one of Cincinnati's finest suburbs, Indian Hill. Builders: Kopf & Kopf, who have built only in the high-priced range. Features: a strip of clerestory windows over an inside kitchen and bath, 1,450 sq. ft. of roomy living space.

Inland Homes Corp., which has grown into a sprawling giant in less than three years, will introduce its first L- and T-shaped models next month. Inland, which stuck faithfully to rectangular houses in all its plans before, will increase house sizes in these models to 1,150 sq. ft. That is a sizable jump from its 1,000 sq. ft. rectangular models. First of the new series will be designed for partial occupancy. Later this year the Piqua, Ohio prefabber will introduce the same elevations in nonbasement designs.

Like Toledo Builder Don Scholz (see above), the H. C. Huber Construction Co. has found that local success leads to eventual national sales of its building package. Huber Homes, Dayton, Ohio, which built almost 500 houses last year (all FHA or conventionally financed with as much as $1,800 down) and expects to build 1,500 this year, plans to offer a 1,060 sq. ft. package (three bedrooms, one bath, attached garage) on a national basis later this year. Huber has sold a brick-veneer model in Dayton for as low as $11,950.
America's foremost builders know the sales value of G-E Light Conditioning

"General Electric Light Conditioning helped jump my sales from one a week to one a day"

... says W. A. Simms, builder of 978-home "Eastview" project

AFTER a highly successful sales test with a light conditioned model home, builder W. A. Simms is light-conditioning all 978 three and four-bedroom homes in his Dayton, Ohio development.

The lighting was planned with the help of The Dayton Power and Light Company. It includes lighted valances in living and dining rooms, special ceiling fixtures in all bedrooms and halls, vapor-proof shower tub fixtures, fluorescent vanity light, fixtures over sink and range and under kitchen cabinets, three exterior entrance lights and twin reflector flood lights for the patio.

Mr. Simms says, "These Light Conditioning features are outstanding helps in winning prospects' approval for my $15,000 to $15,000 homes".

Biggest hit with the ladies, according to Mr. Simms, is this 19-foot lighted valance running the full length of the living room. Well worth its $24 cost, he says, as a visible sales feature that sells the quality of his homes.

The adjustable-height ceiling fixture shown above can be lowered for dining, or raised out of the way when the room is used for other purposes.

Kitchen lighting includes not only an unusually attractive ceiling fixture, but also hidden G-E fluorescent lamps above the sink and below cabinets.

SELL YOUR HOMES FASTER, TOO with G-E Light Conditioning. For information, call your local electric power company or write: General Electric, Dept. 482-HH-6, Nela Park, Cleveland 12, Ohio.
Tough and durable . . . withstands heavy roof traffic. Temlok® Roof Deck assures an extra strong, extra rigid roof that needs no “babying” on the job. Back-and-forth movements of a crew of husky carpenters, with their materials and equipment, won’t harm it. You can use roof deck’s strength to sell prospects, too. Show them a sample and point out the multiple layers of tough pine fiberboard. Explain how the boards are permanently laminated under great pressure with a superstrong adhesive that resists heat and moisture.

BUILD STRONGER

Eliminates corner bracing. Temlok Sheathing has triangular bracing built right into it. Because of its large size and exceptional strength, corner bracing can be completely eliminated when you build with 4' x 8' x 5/8“ Temlok Sheathing. This size board provides over four times the building strength of horizontal wood sheathing. When you build with Armstrong Temlok, you know you’re using a material that exceeds all Federal Specification strength standards for insulating fiberboard.

Rain-Shield® finish guards against moisture damage. Even several days of rain can’t damage Temlok Sheathing exposed on the studs. The Rain-Shield finish waterproofs every square inch of Temlok’s surface, while asphalt impregnation of each fiber insures moisture protection clear through the board. Carpenters can resume work almost immediately after rain has stopped.

You never stop saving with
Gives weather-tight construction  Roof deck is solid insulation clear through—complete insulation for even sub-zero climates. Asphalt impregnation makes each layer waterproof. Built-in vapor barriers eliminate condensation. Tongue-and-groove joints on all 4 sides assure the tightest possible fit and provide complete weather protection.

Holds heavy snows, supports 300 lbs. per sq. ft.  Northern snows can pile up on roof deck all winter long without doing the slightest damage. It can't warp or sag. A special chemical makes Temlok Roof Deck resistant to mold, rot, and termites, too. Features like these add strength to your sales story.

with TEMLOK

Turnbuckle tests prove extra strength  Tightening the turnbuckle between these two wall sections causes the wall covered with wood sheathing to pull out of line. The section sheathed with Armstrong Temlok Sheathing stayed firmly in place. The big reason for Temlok's strength is the powerful binder that not only coats the individual fibers but also bonds them tightly together.

Has high nail holding power  To pull a piece of Temlok Sheathing sideways from a nail driven 1/8" in from the edge takes a force of 187 pounds. Most other insulating sheathings give way at about 120 pounds. This extra strength is one of the big reasons for the growing popularity of Armstrong Temlok Sheathing with builders and home buyers in all parts of the country.

For full details on how to build a stronger house with Armstrong Temlok building materials, see your Armstrong lumber dealer or write Armstrong Cork Company, 3706 Sixth Street, Lancaster, Pa.

Armstrong TEMLOK . . . house . . . after house

SHEATHING • ROOF DECK • INTERIOR FINISH

JUNE 1955
The New Regal

By Dexter

The Regal Line by Dexter includes this Colonial Design Tie Bolt Key-in-Knob Set with 6” dia. rose outside, 2¾” dia. rose inside and 5” backset. Available with pin or disc tumbler cylinder, deadlocking or spring latch. This new Dexter Lifetime Lock has solid brass exterior, cold-rolled steel interior parts. In standard or two-tone finishes.

Knobs armored brass, steel reinforced. Lock reversible for any hand of door without disassembly. Requires only 1½” dia. hole through door.

Attractive mounted displays available in Decorator Colors: red, blue, green or ivory.

No lock installs faster than a Dexter

Dexter Lock Division Grand Rapids, Mich.
Dexter Industries, Inc.

In Canada: Dexter Lock Canada Ltd., Guelph, Ontario

In Mexico: Dexter Locks, Plata Elegante, S.A. de C.V., Mexico City
BAT-WING HOUSE by George Ely (above) is one of the most unique homes ever offered by a speculative builder in the wilds of Florida or anywhere else. Ely has put up three bat-wings in a 14-home project close to the Gulf Coast north of St. Petersburg, will add others this year. Another of his models—a tri-level—rises like a huge aviary among the palms (right), comes complete with landscaped pathway to a concrete boat mooring. Ely put in sanitary sewers (almost unknown for 50 mi. around) and streamlined driveways, but left plenty of jungle charm.

BUILDERS AT WORK:

Bat-wings and tri-levels
Designer-builder George Ely of St. Petersburg is building some of the year's most advanced merchant designs in a remote part of Florida called Village of Picardy, 8.5 mi. north of St. Petersburg.

In partnership with Samuel Pickard, retired co-founder of the Columbia Broadcasting System, Ely is offering two-story models, tri-levels (cut, above right) and the interesting bat-wing house (cut, left, above)—a two-level, triangular house with deep, screened patio. The remarkable project, which is close to the Paradise Point hotel-villa section in the lush growth of the Crystal River, includes 14 homes built and sold and orders for ten more on hand.

Ely sells the homes for between $20,000 and $40,000, includes freezer-refrigerator, landscaping, driveways and boat shelters in some cases. The houses are natural—no paint, plaster or wallpaper—built of cypress or redwood, plastic laminates, etc. All but the raised-grade model have a light-aggregate concrete deck to which a steel frame is bolted, supporting (in most cases) an I-beam which holds the tongue-and-groove white cedar roof. In all designs, every area of the house is open to the screened patio section, avoiding costly in-line construction.

Giant subdivisions
Carl R. Sams, 37-year-old Detroit developer, said his proposed 10,000-home community in Sterling township was "progressing nicely." But other reality men there wondered if the big deal, announced in a huge story in the Detroit News in January, was not being held up by refusal of a few strategically-placed farmers to sell land in the center of the eight-square-mile tract. Sams admitted he was having trouble "with a couple of farmers," but nothing that could not be ironed out. "There should be no doubt about the new development," he said. "When we get the drainage plans, we will be ready to move." Other plans from big developers:

Trousdale Construction Co. of Los Angeles said ground would be broken early this summer for 2,500 low-to-medium-priced houses on 2,200 acres in Ignacio.

Four big developers executed one of the biggest property transactions in California history: purchase of the 97-acre Platt ranch in the San Fernando Valley for $6,120,000. The buyers: Richard Diller, Irving L. Kolman, Louis Boyer and Ben Weingart. They plan a $150-million community including 6,000 homes, a shopping center and recreation areas.

Parkway Housing, Inc. of Annapolis, Md. asked zoning authorities for approval of plans for a $25 million project on 165 acres in Anne Arundel County near Ft. Meade.

BUILDERS back Homes for Korea
NAHB and building materials manufacturers are laying ambitious plans to become godfathers to hundreds of South Korean families.

By supplying cash, materials and technical skills, builders and producers will help build a pilot project of 100 housing units, first of what the sponsoring American Korean Foundation hopes may grow to 1,000 or 2,000 US-financed homes.

The first houses are intended not only to demonstrate new designs, but also to teach mass-production methods in a country where builders have never put up more than one house at a time.

The new program is expected to be the chief stimulus in providing new housing for the million Koreans now living in caves, packing boxes, tin-shacks or with no place to live at all. Since Korea is widely considered the US showcase in Asia, the housing program is to become a vital anti-Communist demonstration.

Co-chairmen of Homes for Korea are NAHB President Earl W. Smith and New York Realtor William Zeckendorf. More than a dozen building industry associations are backing the program. Their representatives met recently in New York to hear Zeckendorf, NAHB First Vice Pres. Joseph Haverstick and retired Gen. James Van Fleet, honorary chairman of Homes for Korea outline the program and show models of it (photo, below). Model houses to arouse public interest and help get financial backing will be built by NAHB (continued on p. 70)
HOMES SELL FASTER WITH

Caloric

BUILT-IN UNITS
Prospects Know the Name

That's Why I Install Them

Builders all over the country are saying it! Caloric built-in units are terrifically successful silent salesmen. They really make prospects reach for their pocketbooks and buy houses.

Caloric built-ins are brilliantly styled and available in a wide variety of colors and finishes to harmonize with any decorating scheme. Install top burners in island, straight line or peninsula. Install oven-broiler unit wherever convenient. Let the housewife see for herself how she'll save miles of steps.

Oven-broiler controls are at eye-level... easy to see and easy to use without stooping. Other great features include smokeless broiling, seamless porcelain enamel oven and broiler, instant lighting top-burners, fully automatic oven and broiler lighting, exclusive Bevelock sealing device eliminating rubber gaskets. These are great built-in units. They sell and sell and sell for you.

They're advertised in Better Homes & Gardens, Small Homes Guide and Home Modernizing. Send coupon today and get full information on the most sales-provoking line of automatic built-in gas ranges ever built.

Caloric Appliance Corporation
Dept. HH
Topton, Pa.

Please send me full details on Caloric Built-In Units. No obligation, of course.

Name ___________________________
Company _________________________
Address __________________________
City __________________ Zone ______ State ________
get more value...give more value with

ALFOL ALUMINUM FOIL HOUSE INSULATION BLANKET

**best winter-summer insulation** Alfol reflective insulation is unsurpassed for all-year efficiency. Stops 95% of radiation and checks the other forms of heat transfer. Has a proved record of cutting winter heating costs 30% or more, keeping rooms 15° cooler in summer. Millions of feet time-tested in FHA-approved buildings.

**ideal protection from moisture damage** Alfol is the best vapor barrier. Its continuous length and stud to stud coverage bar water vapor from cold wall areas, prevents harmful condensation.

**easy, fast application** Alfol is the easiest full-protection reflective insulation to apply—goes up without special care to prevent tearing. Alfol has every application advantage over bulk-type insulations—no muss or irritating dust: "takes the itch out of insulation."

**low applied cost** A 500-foot roll of Alfol takes 1/20 as much storage space and weighs 1/12 as much as its bulk-type equivalent. Add this to the ease and speed of application, and you slash handling and installation costs!

**Write for details!** Write today for this illustrated bulletin giving advantages, full description, efficiency data, and application details of Alfol reflective insulation—the product of progress, in temperature and moisture control.

---

members in several parts of the country, the first in suburban Westchester County outside New York City and probably another in Washington, D.C.

The first group in Korea will include self-help shell houses, row houses and some three-story walk-ups. They were designed by six Korean architects working in New York with Architect I. M. Pei of Webb & Knapp.

Architecture of the houses will be in the Korean style (see p. 67) and site planning, according to the foundation, will show "oriental symmetry without monotony." The homes will be fireproof, rat-proof and flakproof. The ondol heating system is definitely Korean—a small fire not only cooks food but also warms the sleeping floor. (No furniture is used.)

After the first 100 units are finished it is hoped that enough money and materials can be secured in this country to build many more. Materials needed include wood and wood products, masonry, paper, plastics, hardware, nails, glass, asphalt products, paints, plumbing supplies, trucks and many other items. Donations (both cash and materials) are tax deductible. Checks should go to American Korean Foundation, 270 Park Ave., New York 17.

**Land for $100 down**

Walter T. Shirley, a breezy Chamber of Commerce man billed by his New York publicity men as "the nation's leading land developer," has teamed up with National Homes Corp. to push plans for embryonic Shirley, Long Island. Shirley's private, 10,000-acre town, about 75 highway mi. from midtown Manhattan on the Island's flat South Shore, already has a scattering of population. Of some 12,000 persons who have purchased plots of land there in the past ten years, about 3,000—including summer residents—have built houses.

Landman Shirley, who now has a franchise from National Homes, hopes to inspire other owners (and future buyers) to add hundreds of prefab homes to the development in the next five years.

Shirley is 29, has enjoyed a gamut of experience from song-and-dance work in vaudeville to golf with the Duke of Windsor. (He still plays golf with the Duke, as a matter of fact.) He went into land-buying in Long Island in 1938 with purchase of 1,000 acres of the William K. Vanderbilt estate, including the last mile of the millionaire's private speedway. He passed the $1-million mark in land sales in 1943 and has been growing ever since.

Terms to buy a piece of Shirley land are easy. A 5-acre plot costs $450; the purchaser pays $100 down and $3 a week. The over-all look of the place depends, of course, on what sort of houses customers contract for. (Shirley, incidentally, has provided 100 mi. of roads, a post office building and a 20-acre site for a school.) To date new construction in Shirley, what with the summer lodgings and all, has been mediocre. If National homes go up in volume (only 103 of the 9,000 property owners had bought one by late in April) Shirley should take a turn for the better.

A big prefab project was also under way in the Chicago area. Leonard W. Besinger, a conventional builder before he started work on his 2,700-acre Meadowbrook project near Elgin, plans to
Styrene wall tile suggests new treatments for an entrance hall

A unique combination of qualities has long made styrene plastic tile a preferred surfacing material for bathroom and kitchen walls.

Today these same characteristics—low water absorption, durability and lightweight—natural luster, wide color range and low cost—are extending the application of styrene wall tile into other parts of the house.

Suggestive of its new decorative and functional possibilities are these sketches for two entrance halls.

In the traditional foyer (left), styrene tile creates a dado and door frame that will not be damaged by rain-soaked coats and umbrellas. Its rich coloring can be harmonized or contrasted with wall paper, floor and appointments.

In the contemporary entrance hall (right), styrene tile faces an entire wall without reinforcement. This material needs no special care or attention. Damp-cloth cleaning will preserve its lustrous beauty year after year.

Wall tile made of Lustrex styrene plastic is carried by most tile contractors in solid pastel colors, deep tones and marbleized effects. Standard tiles are 4 3/4" x 4 3/4" and 8" x 8". Special molded pieces are also available for corners.

Permanent installation is quick and easy over wood, plaster or wallboard, and similar wall surfaces.

Monsanto Chemical Company, Plastics Division, Dept. HH-6, Springfield 2, Mass.

For lasting satisfaction, specify wall tile made of Lustrex Styrene Plastic
now... better than ever

NEW...
stronger, heavier galvanized nose

NEW...
extra reinforcing wires

NEW...
KEYZBEAD—with solid zinc nose, also available.
Ask for it by name—KEYZBEAD!
Beats problems of outside exposure and corrosive atmospheric conditions inside.

1. Keybead is easy to cut and splice with Wiss M-3 or similar snips.
2. Keybead is easy to apply... so easy on the hands, too.

KEYSTONE STEEL & WIRE COMPANY
Peoria 7, Illinois

Keymesh • Keybead • Keycorner • Keystone Nails
Keystone Tie Wire • Non-Climbable and Ornamental Fence
KEYBEAD
you get more
for your money

Figure it any way you want—new Keybead is by far your best value in corner bead.

New Keybead nose is 23-gauge steel. No other standard corner bead provides such protection against shock. The reinforcing mesh flanges are tough and strong, make new Keybead very rigid, easy to true up. New Keybead is straight end to end—no waste. And the nose is double electro-galvanized against rust, including all edges.

With Keybead you get a solid corner! A corner completely filled with plaster. The plaster flows through the open mesh flanges easily, completely embeds every wire . . . does not break the bond of plaster with the gyspsum lath. Corner has reinforcement of heavy gauge steel wires running in every direction.

KEYBEAD IS FAR LOWER IN COST THAN ANY OTHER BEAD OF EQUAL WEIGHT!

Only Keybead is available in your choice of Galvanized or solid zinc nose. Use zinc outside, even in salty atmosphere. Use it inside where corrosion is a problem. For zinc nose—ask for "KEYZBEAD."

You do get more for your money with new Keybead. Ask for it by name!

better yet... use all 3 keys to stronger plaster

1. Keymesh: woven wire galvanized reinforcing lath—applied over the gypsum or insulating lath on the entire ceiling for highest quality, over all walls, too. This network of multidirectional reinforcing increases strength, increases fire safety 50%. Keymesh ensures a uniform thickness of plaster, and guards against cracks.

2. Keybead: woven wire galvanized reinforcing lath with the precision-formed bead—applied at all outside corners or zinc nose for inside applications. Open mesh of Keybead wings permits plaster to completely embed steel wires. Full, solid corners result. Available in standard lengths, easy to splice.

3. Keycorner: preformed for corners, convenient width, woven wire galvanized reinforcing lath applied at corners, joints and ceiling-wall junctures. Fits snugly in corners when you flex it. Lies flat, too, for stripping wherever required. Some multidirectional reinforcing as Keymesh for maximum crack resistance.
HOLY SMOKE!
what a wonderful new idea

ELIMINATES OLD-FASHIONED DOOR KNOBS

REVOLUTIONARY NEW CONCEPT IN DOOR HARDWARE
Opens doors with the flick of a finger
- Available with or without locking mechanism for all interior doors

NEW MODERN DESIGN
Now! For the very first time, here's a door latch with flush, smooth streamlined surfaces that are in keeping with modern architecture. It has no knobs to damage walls . . . eliminating the need for door stops.

NEW EASE OF INSTALLATION
To install a Soss Lev-R-Latch all that is necessary is to bore 2 holes and insert 4 screws. This can be done so easily and so quickly that labor costs are cut as much as 1/3.

NEW LOW COST, NEW HIGH QUALITY
This Soss Lev-R-Latch has fewer parts than any other latch set. Consequently, many of the operations that are necessary to produce ordinary latch sets have been eliminated. This is why the high quality Soss Lev-R-Latch is so low in cost.

SOSS Manufacturing Company
P.O. Box 38, Harper Station, Dept. 22
Detroit 13, Michigan

Please rush me complete information and prices on:
☐ The startling new Soss Lev-R-Latch
☐ The world-famous Soss Invisible Hinge

I am a dealer_________________________jobber_________________________

NAME_______________________________

FIRM NAME_________________________

ADDRESS__________________________

CITY____________________ZONE____STATE_____________________

(MECHANICAL AND DESIGN PATENTS PENDING)

How to make ads pay

Unusual use of newspaper space and radio time has paid off handsomely for two builders.

Jack Brightwell, president of Brightwell Construction Co. of Danville, Va. spent $92,72 for radio advertising and sold 24 homes. The campaign was beamed at Sunday drivers. It consisted of three transcribed "tours" of Brightwell's model house plus nine spot announcements. As soon as the first program was on the air, says Brightwell, cars began arriving at the model.

In New Haven, Conn., Lomas & Nettleton Co. sold 50 houses on opening day and $2-million-worth of homes in ten days after a concentrated spurge of promotion. The firm bought six 1/3 page ads on six different pages of a local Sunday newspaper—in the main news, sports, society and real estate sections to assure readership by all types of readers. Designer-builder F. J. Linehan Jr. called results "fantastic": 5,000 people inspected the models on opening day. The follow-up was a week of four radio spots daily adjacent to weather or news programs. House price bracket: $10,500 to $13,500.

Staten Island faces a boom

Building activity on Staten Island (which is still full of farms and woods although it is part of New York City) was likely to speed up with construction of the projected Narrows Bridge connecting the island to the Borough of Brooklyn. Chances for the increase in deed and mortgage recordings—up 15% the first quarter of '55 over last year—were simply part of the general housing boom. But recent land sales showed what news of an expected increase in population could do. At a recent foreclosure sale by the city, acreage was selling for three times the minimum upset price. Other land was at least a third up.

About 295,000 people live on Staten Island, a half hour's ferry trip from the lower tip of Manhattan. The population is expected to more than triple in the next 20 years. Meantime, homebuilders have been meeting a demand for about 600 new homes a year. They now plan much more than this; project announcements are 50% above what they were last year. Improvement of raw land is a more-than-average problem on Staten Island, which comes under New York City's stiff building code and is often composed of clay soil that makes septic tank installation difficult. How expensive a house to build was another question in builders' minds. To date the average Staten Islander's income has kept him in about the $13,500 bracket as far as new homes went. Informed real estate circles think it would be hard to build for much less than this on the island.

Kenbo on the move

Kenbo Corp. has done so well with a contemporary development in Monterey Park, Calif. (a total of 654 homes expected within the next few months) that it planned to push into two other communities. More than 200 homes are planned for East Whittier—10 mi. east of industrial Los Angeles, among the orange trees—offering a choice of designs by Architects Surje & Roach, who did the Monterey Park job. The company also will start homes in La Cañada in the $18,000–25,000 bracket (between 1,300 and 1,600 sq. ft.) designed by Victor Gruen & Associates.
20,000,000 prospects will see this SHOW-HOUSE

SHOW-HOUSE — A sleek California rancher with big living room, dining area, kitchen full of built-ins, three bedrooms, two baths, two-car garage... by William M. Bray, A.I.A., of Los Angeles.

MAKE THEM YOUR PROSPECTS! SEND FOR FREE "SHOW-HOUSE" SKETCH PLANS!

Now, you can cash in on the smartest-looking, best-promoted home in history—a home with thousands of pre-sold prospects right in your local area!

It's the newest model home as presented by the Editors of SHOW-HOUSE in full color double page spreads in the June 11, 1955 SATURDAY EVENING POST and July, 1955 LIVING FOR YOUNG HOMEMAKERS—a vast 20,000,000 audience!

Room-by-room, prospects will study this striking new SHOW-HOUSE! They'll read about the top nationally-advertised products our home-planning experts recommend... rubberoid roofing and sidewalls, "Overhead Door," Alumaroll awnings, Bermico pipe, Filter Queen sanitizing system, Bilt-Well kitchen cabinets, Revco built-in refrigerator and freezer, Preway built-in range, Stanthony ventilating hood, Janitrol air conditioning.

What's more, prospects will hear about SHOW-HOUSE again and again! It will be aggressively advertised and promoted by these 10 manufacturers and their thousands of dealers—many of them in your area!

So hitch your wagon to a sales-star! Feature SHOW-HOUSE products in your new homes! Send for the FREE plans of this exciting "SHOW-HOUSE"—yours for the building! But, write today—our supply is limited!

FREE TO BUILDERS! Accuratelyscaled Sketch Plan of this SHOW-HOUSE. Contains principal elevations and floor plan. Quantity limited so...

MAIL COUPON TODAY!

Jule R. von Sternberg, A.I.A., Executive Editor
SHOW-HOUSE, 501 Fifth Ave., New York 17, N.Y.
Rush me FREE sketch plans of your SHOW-HOUSE.

I am interested in: □ constructing such a house □ using it for ideas

NAME: ____________________________ TITLE: ____________________________
COMPANY: ____________________________
ADDRESS: ____________________________
CITY: ____________ ZONE: ____________ STATE: ____________

SHOW-HOUSE, 501 Fifth Avenue, New York 17, N.Y.
More often than not, the difference between this sign [MODEL HOME] and this [SOLD] is the sales appeal of the building materials used in the house. Builders with sales on their minds specify Ruberoid's revolutionary new Lok-Tab asphalt shingles for the roofs of better new homes everywhere.

Lok-Tabs' features add important extra sales value to new homes. First, they offer a whole new conception in roof beauty: New decorator colors, modern, random-spaced, straight-line texture and built-in shadowlines. Second, there's the locking tab at the center of each butt to make them wind-safe. Lok-Tabs' exciting new beauty plus their exclusive wind safety is a combination that can't be beat for sales value.

See your Ruberoid dealer today and prove to yourself why a Lok-Tab roof is an important sign of a better new home.
"Janitrol conditioning is the finest comfort insurance a builder can buy"

W. S. BECKHAM
The Glenbrook Co., Builders, Birmingham, Alabama

As a builder of fine quality houses in suburban Mountain Brook, Mr. Beckham has insisted on construction and equipment features that will assure buyers every possible comfort.

Because Janitrol meets every high standard comfort with dependable and economical performance, Janitrol heating or year-round conditioning is used in all his homes completed or to be built.

It's just plain good business sense for architects and builders to plan and install heating systems with the utmost care. A house is only as good as the comfort that's built into it.

To protect yourself, your reputation and your customers' satisfaction, you can't afford the gamble of buying heating on price alone.

Remember your customer is paying for assured comfort and he depends on your sound judgment to provide it. You can with Janitrol!

Homes in the Glenbrook development range from $28,000 to $40,000.


SAME TYPE INSTALLATION RECOMMENDED FOR JUNE BRIDE'S SHOW HOUSE

WRITE FOR SPECIFICATIONS ON THE COMPLETE JANITROL LINE
SHOW-HOUSE®
in the house that’s built around the kitchen
SHOWS PREWAY

Because a built-in range makes a home more saleable, because PREWAY emphasizes quality and accents low price, “Show-House” chose Wallchef and Counterchef Bilt-Ins to headline their home built around the kitchen. The more you know about these gas and electric units that are so simple to install, the more you’ll realize that these fully automatic, feature-packed beauties are for you, too.

Investigate the colors, the models available from the distributor in your area; then have him use his pencil to show you how you can put a better kitchen in the homes you are planning at a cost that will surprise you. And back of these advantages is the merchandising punch of “Show-House” — in the POST, in LIVING, in BRIDE-TO-BE — yours to use as a great selling tool.

Strategically located distributor inventories from coast-to-coast assure deliveries to meet your working schedules. Write today for full information and the name of the distributor nearest you.

Acceptable to:
F.H.A. - V.A.

PREWAY Inc.
2655 Second Street North, Wisconsin Rapids, Wisconsin
The Stanthony "Hospitality House," now under construction on the grounds of the world famous Shadow Mountain Club at Palm Desert, California, is a refreshingly new approach in home design. California Kitchens, Inc., designers of custom kitchens, collaborated with William M. Bray, AIA, outstanding West Coast Architect, in creating a house designed around the kitchen.

We are proud that the plan and design of the Stanthony "Hospitality House" was selected by the Editors of "Show-House" for "Show-House" Number 12.

Compare these outstanding features and you’ll agree
Stanthony is "the best way to ventilate a kitchen"

- **SAVES CABINET SPACE.** Center discharge through standard 10 x 3½ inch vent at rear of cabinet saves valuable shelf space, and eliminates rights and lefts when reversing plans.
- **EASIER TO INSTALL.** Self-contained, completely assembled, with lights, switches, and blower housed within the hood, all pre-wired to one pull box. No wall switches required.
- **EASIER TO CLEAN.** Washable filters of aluminum foil prevent grease accumulations in blower and housing. All welded construction, smooth baked enamel finish, and flush light lens make Stanthony the easiest to clean.

Call your nearest Stanthony stocking point or write direct to factory

STANTHONY CORPORATION, 5341 SAN FERNANDO ROAD WEST, LOS ANGELES 39, CALIFORNIA

JUNE 1955
BEFORE: BUILD UP LIVING FOR YOUNG HOMEMAKERS with a 33 page advertising increase...

Sales-minded advertisers in this important classification, built for LIVING a 33.68 page advertising gain, in 1954. And they are maintaining the trend.

Why this industry backing? It is recognition of the reality of LIVING, of the powerful part LIVING plays in reporting editorially, realistically, what's new, what's right, what's available — in homes, in building materials, in equipment.

It is industry recognition of the fact that LIVING leads all home magazines with the greatest number of pages and the highest percentage of total editorial content in "Building" classifications for the year 1954.

2,800,000 readers look to LIVING because of its editorial reality. Thousands of builders and retailers hook up with LIVING because of its realistic promotion themes ideas that pay off. Scores of advertisers lead with LIVING because of its demonstrated selling vitality at point-of-purchase.

LIVING's young readers will buy more of your product if you cultivate them in the only magazine edited exclusively for Young Homemakers — your largest buying market.

Build your advertising house around LIVING ... and build more sales.

6 Reasons why Show-House picked LIVING exclusively in the home field:

1. Young Homemakers buy 73.4% of the nation's homes — 70.1% of all furniture and household appliances . . .

2. Young Homemakers are in the "Age of Acquisition." They buy because they must buy. Older homemakers must be sold . . .

3. LIVING'S Young Homemakers have unusually high incomes — far above the national average . . .

4. 85% of LIVING'S readers have been married less than 10 years. 92% of the children in LIVING'S families are under 10 years of age . . . and the families are expanding in numbers . . .

5. Today's Young Homemakers are realistic. They don't indulge in the fantasy of houses and furnishings 'way beyond their reach . . . they regularly respond to the realistic, helpful, do-able pages of LIVING . . .

6. More and more, realistic advertisers are selling through LIVING. Because they know there is only one magazine that tailors its every editorial page to accommodate the needs, desires, aspirations of America's Young Homemakers — (the nation's largest market) at realistic price levels.

That's LIVING for Young Homemakers!
What a lot to build a *SHOW-HOUSE*® on!

On June 11, 1955, the twelfth two-page spread by SHOW-HOUSE will run in The Saturday Evening Post... and only in the Post, among all weekly magazines. There's never been any question about which weekly was the right place for SHOW-HOUSE. For the Post reaches the top best-customer families in America. And builders know it. (Last year, the Post carried $6,421,746 of building-products advertising—more than any other magazine and over twice as much as the next leading weekly!) What's more, week after week, half a million more people put down their money for the Post than for the next general weekly. It's a great place for any advertiser to build more sales!

1. P. I. B. figures—H 500.  2. A. B. C.
BILT-WELL CABINETS and WINDOWS

...selected for use throughout the glamorous California "SHOW-HOUSE" No. 12!

See it in the June 11 issue of Saturday Evening Post... and the July issue of Living for Young Homemakers

SHOW-HOUSE says, "How do you like our 'Living Kitchen'?"... with its banks of BILT-WELL Cabinets, of Ponderosa Pine with furniture finishes. These are among the finest cabinets made. So sturdy... and so attractive they make our kitchen into one of the most inviting rooms in the house.

Illustrations of SHOW-HOUSE #12 courtesy of SHOW-HOUSE

Smart, modern BILT-WELL cabinets for the kitchen and all other storage needs in the home come completely machined and pre-fitted, ready for quick, easy, economical assembly and installation. A hammer and screw-driver are all the tools required and a complete kitchen installation can be made in a matter of a few hours.

See other new, practical applications of BILT-WELL Awning Windows and Multiple-Use Cabinets on the other pages of this special SHOW-HOUSE Section.
When **SHOW-HOUSE** decided to feature a modern, California “outdoor-indoor living” home in their series of contemporary American dwellings, they had little difficulty in choosing the windows and cabinets that best suited their plan. **BILT-WELL** Awning Windows and **BILT-WELL** Wood Cabinets have long been favorites with builders in California. The clean, horizontal lines of **BILT-WELL** Awning Windows plus their “arrangement flexibility” make them the perfect window for that “low, long look” so popular in the California Ranch-type home. And **BILT-WELL** Multiple-Use Cabinets, with their warm, natural furniture finishes, fit in beautifully with the **SHOW-HOUSE** outdoor-indoor living theme. The same cabinet design and the same soft, natural Ponderosa Pine finish could be carried throughout the house . . . from the “living kitchen” to the living room . . . from the family play room to the utility room. Adding a continuity of design and tone that lends an individual personality to this modern “dream home.”

**BILT-WELL** Awning Windows and **BILT-WELL** Multiple-Use Cabinets are as much “at home” in the $8,000 house as they are in the $80,000 model. Their simple assembly and time-saving installation features make them the first choice of home-builders, whether they build 1 or 1,000.

Ask your millwork supplier for full information on **BILT-WELL** Products for the home, or write for catalog.


Ask your millwork supplier for full information on **BILT-WELL** Products for the home, or write for catalog.

**BILT-WELL** Woodwork
Box 658—Dubuque, Iowa
Manufactured by CARR, ADAMS & COLLIER COMPANY
Established 1866

**Calling all Builders!**

Enter the big 1955 **BILT-WELL BUILDERS’ CONTEST.** Win a free trip to Europe, Bermuda, Mexico or Hawaii. Every builder who enters will win a prize. Ask your dealer about it or write Carr, Adams & Collier for complete Contest Kit.
Freezer and Refrigerator

Add CHARM and SALES-APPEAL to the homes you design and sell!

Functional beauty sells on sight. This marvelous space-saving idea includes an 8.4 cu. ft. refrigerator and a 6.3 cu. ft. separate freezer. Two appliances for little more than the price of one.

No installation problems! Revco Bilt-Ins tuck away into any kitchen. Only Revco gives you complete flexibility of arrangement. The automatic defrosting refrigerator—shelves in the door—provides space for tallest bottles or smallest packages. The freezer, with handy roll-out drawer, has open style shelves and famous Revco faster-freezing action.

Choice of Baize, stainless steel, antique copper or color. Choose ANY arrangement to make your kitchen distinctive in design. Revco quality protects your reputation, produces builder profits!

Send for "Contemporary Kitchens in Charming Homes" showing built-in installations from coast to coast.

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A new kind of selling

People no longer build homes, they buy.

As a result, producers of building products assume the additional role of merchandisers. They accept their products among the professionals, who are merchandising them in the advertising pages of house and home magazines.

This merchandising role of house and home has also been recognized by an increasing number of national consumer magazines that promote their consumer influence.

Homebuilding, like every other industry, is mastering the available sales tool to meet the competition for the consumer dollar. Producers, their agencies, and national consumer magazines have found their most powerful ally for this increasing selling job in . . .

Homebuilding’s great new merchandising medium

---

Published by TIME Inc.,
9 Rockefeller Plaza • New York 20, N. Y.
Here's that **extra space** home buyers are demanding...

...at garage construction cost

made possible by the weathertight construction and easy operation of

THE

```
OVERHEAD DOOR
```

Workshop, playroom, laundry space, storage area—plus complete car protection—at half the cost of a family room in the home! With The "Overhead Door," you can give buyers more for the money, keep homes priced for the market. This “extra room” will be only as weathertight as the garage door you choose, only as convenient as the garage door is to open and close. So buy the best door, famous for 34 years! Expertly installed, promptly serviced, relieving the builder of all responsibility!

For Utmost Convenience—the ULTRONIC Door Opener!

A button on the car dash unlocks and opens door, turns on lights, closes—or stops—the door, turns off lights. Priced less than many other household appliances. A terrific selling feature!

**OVERHEAD DOOR CORPORATION, Hartford City, Ind.**

Manufacturing Divisions:

HILSBIDE, N. J. • NASHUA, N. H. • CORTLAND, N. Y.

LEWISTOWN, PA. • OKLAHOMA CITY • DALLAS, TEX. • PORTLAND, ORE.

A COMPLETE LINE OF DOORS—A COMPLETE PRICE RANGE!

Distributors in All Principal Cities—See Your Classified Directory

Special trim for standard doors gives a deluxe look at small extra cost! Easy to paint before applying!
National Home Week visitors will demand color!

STEAL THE SHOW WITH COLORFUL, NEW YOUNGSTOWN KITCHENS

Whatever the size of your kitchen, you'll be able to offer more features—more beauty—with flexible Youngstown Kitchens. You choose from the industry's widest range of units—choose your colors at no extra cost. Star White, Dawn Yellow, Meridian Blue, and Sunset Copper—they'll put extra sales appeal into every kitchen you build!

Beat your competition to the punch. Feature America's most wanted kitchen. Preferred 5 to 1—gorgeous colors at no extra cost!

No doubt about it—National Home Week prospects will be looking for color. That's the trend! And in all-steel Youngstown Kitchens you'll find the perfect way to get the jump on your competition with gorgeous, harmonizing colors at no extra cost! But that's just one advantage you enjoy with Youngstown Kitchens. There are many more . . .

* Complete planning flexibility with industry's widest selection of units!
* All-steel construction—won't warp or rot ever!
* Baked-on finishes last indefinitely!
* Job-timed delivery—from the nearest of 87 completely stocked warehouses!
* Fast, money-saving installation!
* Mass-production savings!

Order Youngstown Kitchens for your model homes now. Prospects will remember them long after they've forgotten your competitors' models!

SEE OUR COMPLETE-LINE KITCHEN DISPLAYS!
In Chicago—Room 1119, Merchandise Mart; in San Francisco—Suite 180, Merchandise Mart.

MULLINS MANUFACTURING CORPORATION • WARREN, OHIO
World's Largest Makers of Steel Kitchens
A modern bath like this simplifies sales because the benefits are so apparent. Soft colors refresh the eye... clever layout adds convenience... polished beauty minimizes upkeep. Tile made of BAKELITE Brand Styrene Plastics makes it easy to achieve, actually inspires design. And these tiles are so easy to install, add so much luxury for so little. You'll find it profitable to include them in your plans.

BAKELITE Styrene Plastics give tile all these features: Front-to-back depth of color, clear and uniform. Easy cleaning, safe with soaps and detergents. Resistance to acids, alkalis, and many other chemicals. Resistance to denting, chipping and crazing.

Ask your dealer for wall tile made of BAKELITE Styrene Plastics which meet the industry's standards. It's eligible for FHA loans.

BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y.

In Canada: Bakelite Company, Division of Union Carbide Canada Limited, Belleville, Ontario

The term BAKELITE and the Trefoil Symbol are registered trade-marks of UCC.
Life-time Economy PLUS Tenant Appeal

DWYER KITCHENS

Four sizes... 39 to 69 inches wide. Gas or electric.

Enduring Quality Throughout... Refrigerator interiors are genuine vitreous porcelain on steel, never rust out and easy to keep fresh and clean. Work tops and fronts are porcelain. Never require repainting, dirt and grease wash off easily. From hinge to tiny switch, every part of a Dwyer Kitchen has been designed and made for long, tough service. For rarely needed service, every mechanical part is accessible from the front... no need to disturb the kitchen assembly.

Made by Specialists... Dwyer Kitchens are engineered, manufactured in their entirety and guaranteed by an organization which has specialized in compact kitchens for over a quarter century. They are easy to install... simple to service... last indefinitely.

Write for complete bulletins.

DWYER PRODUCTS CORPORATION
Michigan City, Indiana

Mail coupon for bulletin and complete information

Send Illustrated Bulletin and Complete Information

Name:
Address:
Town:
State:

The new and beautiful DWYER "100"

The buffet kitchen or bar that graces a room as a piece of smart furniture.

Cooking top, porcelain sink and counter top and storage space. Easy to install without costly remodeling. May be had without sink. Rich mahogany or blonde color. Ask for bulletin.

EVENTS

National Housing Conference, annual meeting, June 8-10, Hotel Statler, Washington, D.C.

North Carolina Savings & Loan League, annual convention, June 9-12, Hotel Roanoke, Roanoke, Va.


Forest Products Research Society, national meeting, June 20-23, Olympic Hotel, Seattle.

American Institute of Architects, annual convention, June 21-24, Radisson Hotel, Minneapolis.

National Conference on Instruction in Landscape Architecture, June 22-25, Allerton Park, Monticello, Ill.

American Society of Landscape Architects, annual conference, June 26-29, Sheraton Cadillac Hotel, Detroit.

American Society for Testing Materials, annual meeting, June 26-July 1, Chalfonte-Haddon Hall, Atlantic City.

Plastics in the Design of Building Products, two-week special summer program, June 14-24, Massachusetts Institute of Technology, Cambridge, Mass.


Short Course in Home Planning and Construction (for mortgage lenders), July 11-20, University of Illinois Small Homes Council, Urbana campus. Registration fee: $75. Further details available from supervisor of engineering extension, room 116, Illini Hall, 725 S. Wright St., Champaign, Ill.


AIA, northwest regional conference, Sept. 9-11, Many Glacier Hotel, Glacier Park, Mont.

National Home Week, sponsored by NAHB, Sept. 10-18, programs and exhibits in more than 150 cities.

Wisconsin Savings & Loan League, annual convention, Sept. 19-21, Madison, Wis.

NAHB, full directors meeting, Sept. 23-26, Denver, Colo.


Vina-Lux matches carefree living with carefree floors—floors that catch the eye, cushion the feet, and generally add to the rich comfort of good living.

No waxing chore for this floor—it was born with its glamorous beauty built-in. No tedious scrubbing—it cleans with simple, quick mopping—stays clean longer, gives you more time for relaxation.

Vina-Lux is a product of today—a vinyl asbestos triumph over old-fashioned cleaning methods—a brilliant color partner with today's new fabrics and decorative ideas—an enduring challenge to tomorrow's use and abuse.

For more information about Vina-Lux, America's leading vinyl asbestos tile—send for the Vina-Lux Catalog, with color chart and product data.
Now... Westinghouse Air Conditioning

COOLS... HEATS...

...makes possible America's

EASIEST-TO-KEEP-

Westinghouse combination Heating-Cooling Unit with Precipitron® — the Electronic Air Cleaner — gives Architects and Builders a new “plus” to offer home buyers

With new-home sales growing more competitive every day, it is important to offer shoppers a stand-out feature that your competition does not have.

The Westinghouse Year-Round system with PRECIPITRON is that important feature...

... because the Westinghouse PRECIPITRON removes five times more dirt, dust and pollen from the air than the mechanical filter in any air conditioner on the market.

When you stop to think of it, the average housewife spends an appalling number of hours every month in dusting, polishing, washing, scrubbing the venetian blinds, furniture, bric-a-brac, lampshades, mirrors, curtains, drapes, woodwork, etc.

It is a thankless, endless job that no man would put up with if he could be shown a way out... Westinghouse AIR CONDITIONING with PRECIPITRON reduces this tedious job from hours to minutes... throughout the year.

From your own experience you know that, within the bounds of a workable budget, “he” is much easier to sell if the house makes a hit with “her”.

You can imagine, then, what is going to happen when “she” has a chance to choose between “X house”, “Y house”, and America’s “Easiest-to-Keep-Clean House”.

No matter how short the hot weather season, she’ll want the home with Westinghouse AIR Conditioning and PRECIPITRON.

Only Westinghouse offers Year-Round AIR CONDITIONING with PRECIPITRON. Be the first to offer it in your area. For more information mail the coupon at the right, today!

YOU CAN BE SURE... IF IT'S
with Precipitron

Cleans

Air Electronically

CLEAN HOUSE

HEATING-COOLING UNIT

- Cools in summer—makes every room comfortable.
- Heats entire house in winter, at the level you choose.
- Removes excess moisture from the air on hot, sticky days.
- Oil or gas-fired furnace, for maximum fuel economy.
- Westinghouse-designed thermostat—completely automatic.

Westinghouse Air Conditioning, Dept. H-3
Box 510, Staunton, Virginia

☑ I'd like to have a look at "6-Step Plan to Speed Home Sales"
☑ I'd like to have complete information on the Westinghouse Precipitron, Heating-Cooling Unit Combination. I'm interested as an:

- Architect
- Builder
- Other

NAME: Please Print
TITLE: 
STREET: 
CITY: ZONE: STATE: 

Here's a down-to-earth plan that spells out practical promotion for quicker sales. Any builder can use it to advantage—to step up interest and boost the percentage of closures.

The 6-Step Plan includes merchandising ideas...effective literature...salesman's 10-point selling guide...big eye-catching displays...all specifically aimed to sell your prospective home buyers.

Whether you're located in the North, East, South or West—whether you're a large scale developer or a custom builder—you'll get real help from the Westinghouse "6-Step Plan to Speed Home Sales."
high in style... low in cost
high in style... low in cost

with the exciting new Midnight Finish

A distinctive random-width oak floor at low cost

Here's a new idea in floors... a floor that will give any home added style and beauty without extra expense. Bruce Fireside Plank Floor has all the well-known advantages of solid oak, plus these winning features:

Stylish Midnight Finish

The mellow, dark intensity of this entirely new finish is smart, interesting, appealing. Factory-applied by the Bruce "Scratch Test" method, it's baked in for long life and easy care.

Alternate widths, wide bevels

Bruce Fireside Plank has the charm of an expensive random-width plank floor. Alternating 2 1/4" and 3 1/4" strips form an attractive pattern that is accentuated by the shadow lines of wide, yet shallow, side bevels.

Low installed cost

Because it's completely finished at the factory, Bruce Fireside Plank costs no more installed than a comparable grade of plain strip flooring. There are no on-the-job finishing costs and builders save 3 to 5 days' working time per house.

Leading Architects and Decorators praise Bruce Fireside Plank Floor

"It is a floor that has character! It can be used without reservation for any flooring need, not only because of its natural beauty but also its modest price."
Eugene Voita, A.I.A.
Chicago

"The new dark finish of Fireside Plank Floor is particularly appealing to me, and I am certain it will be welcomed by architects and decorators throughout the country."
Pipsan Saarinen Stearns, A.I.D.
Bloomfield Hills, Michigan

"The alternate width of the boards, with the beveling, produces an overall texture that provides a perfect background for any furniture styling and any color."
James P. Erdman, A.I.D.
Grand Rapids Furniture Guild

"I am particularly pleased with the new dark finish, as it most certainly adds to the appearance, and the beveled effect makes it very distinguished in character."
Angus McSweeney, A.I.A.
San Francisco

BRUCE Fireside Plank Floor gives homes extra floor appeal at no extra cost. Write for literature.

E. L. BRUCE CO., MEMPHIS 1, TENN. World's largest maker of hardwood floors
GENEVA
gives you more...
the Kitchen that whispers

Full line of
Color at no extra cost

Unexcelled Quality
Competitively Priced
Most Extensive and Versatile Line

Full Warranty
Stainless Steel, Porcelain and Built-in Sinks
Trained Kitchen Specialists to help you
Special Feature Cabinets

Custom-built Units
Nationally Advertised

NO OTHER KITCHEN CAN COMPARE WITH GENEVA

Large or small home...a GENEVA kitchen is the perfect answer. By offering the greatest selection of kitchen cabinets available, a GENEVA kitchen can be tailored to specific room dimensions. No wasted time...no wasted space. And of equal importance a GENEVA kitchen can be personalized to meet any individual whim—and any budget. To be sure of the finest...choose GENEVA.

Here are two houses, identical in almost every respect, including price. Yet the one on the left was sold the first day the houses were open. The one on the right has had prospective buyers tramping through it daily ever since, and is still unsold.

Why? Because the house on the left is equipped with a Rheem Year 'Rounder—central air-conditioning and heating in one unit. The house on the right has only a conventional forced-air furnace. It just stands to reason that most home-buyers prefer a house with air-conditioning to one without, other things being equal. That's where the Rheem Year 'Rounder comes in. It provides year-round central air-conditioning—heating in the winter and cooling in the summer—efficiently and economically. The Year 'Rounder's lower cost is achieved by combining heating and cooling equipment in one perfectly designed compact unit.

The Rheem Year 'Rounder line also provides models that adapt themselves to "zone cooling"—cooling the living quarters in the daytime, the sleeping quarters at night. This saves on operating costs as well as on original investment.

Why not find out for yourself, as so many builders have, how quickly the Rheem Year 'Rounder can change "For Sale" signs into "Sold" signs. For full information, call our nearest office. Or write to Rheem Manufacturing Co., 7600 S. Kedzie Ave., Chicago 29, Illinois.

Switch-in-Time, Switch to Rheem

RICHMOND AND SOUTHGATE, CALIFORNIA; HOUSTON, CHICAGO, NEW YORK, NEW ORLEANS; LINDEN, N. J., AND SPARROWS POINT, MD.
HOW DO YOUR HOMES RATE IN

UNDER-POWERED

60 AMPERES, 120/240 VOLTS

The 60 Amp. house has a basic electrical capacity of 14,400 Watts. This will supply lighting and plug-in appliances, plus range.

The system would have to be enlarged before any of the major appliances listed under "Full-powered" could be added.

A 60 AMP. SERVICE ENTRANCE JUST ISN'T

Wires large enough to carry full, healthy loads of current... plenty of circuits for both large and small appliances... sufficient outlets to feed current to every spot where it's needed. These are the vital factors to consider when building a truly modern home!

Before a home can be called modern, it must function in a modern manner! Home wiring must not only meet the electrical needs of today — it must also look ahead to the future. Too often, the addition of a single new appliance can quickly change the adequately...
THEIR SERVICE ENTRANCE EXAMS?

Typical 100 Amp. fuse-type combination main switch and branch circuit panel. OR A circuit breaker service and load center.

FULL-POWERED
AT LEAST 100 AMPERES, 120/240 VOLTS

The modern, "Full-powered" house has an electrical capacity of 24,000 Watts — enough power for home lighting and plug-in appliances PLUS the major appliances listed on the right.

- Automatic Washer: 700 watts
- Dishwasher:
  - Waste-Disposer: 1500 watts
  - Waste-Disposer alone: 500 watts
- Electric Clothes Dryer: 4500-9000 watts
- Water Heater: 2000-4000 watts
- Home Freezer: 350 watts
- Water Pump: 700 watts
- Built-in Heaters: 1000-1650 watts
- Room Air Conditioner:
  - (3/4 ton): 1200 watts
  - (1 ton): 1540 watts
- Home Freezer: 350 watts
- Water Pump: 700 watts
- Built-in Heaters: 1000-1650 watts
- Room Air Conditioner:
  - (3/4 ton): 1200 watts
  - (1 ton): 1540 watts

ENOUGH FOR THE HOUSES YOU BUILD TODAY!

wired home of today into the underwired home of tomorrow! Avoid this! Build your homes with an accent on sound, adequate wiring — it will make your houses easier to sell, will add to your reputation as a builder of quality homes.

Free Home Wiring Wall Chart! Send today for Kennecott's handy wall chart showing typical home circuit loads. Use it as a check list when planning home electrical systems. For your copy, write Kennecott Copper Corp., 161 E. 42nd St., New York 17, N. Y.

Kennecott Copper Corporation
Fabricating Subsidiaries: CHASE BRASS AND COPPER CO. • KENNECOTT WIRE AND CABLE CO.
Another Installation of Genuine ORANGEBURG ROOT-PROOF PIPE

GO MODERN... UNDERGROUND, TOO!

More and more builders and architects are turning to Orangeburg Root-Proof Pipe because it is ideally suited for modern construction methods. Over one million installations are now giving dependable service to homes from coast to coast.

Today’s construction demands speed and quality and Orangeburg’s speed of installation and proved quality are unsurpassed by any other pipe.

Orangeburg’s famous Taperweld joints seal root-proof with a few hammer taps... no cement, no caulking, no compounds. The long 8 ft. lengths are so light, one man can easily carry several lengths... so rugged and durable that drain lines installed 49 years ago are good as new today.

Where time is money, it pays to use genuine Orangeburg Root-Proof Pipe. Made in 2", 3", 4", 5" and 6" sizes.

Use Orangeburg Root-Proof Pipe for house sewers, storm drains and other non-pressure lines. Use Orangeburg Perforated Pipe for septic tank disposal fields, foundation drains, wet spots everywhere.

ORANGEBURG ROOT-PROOF FITTINGS

Orangeburg Fittings are precision made of famous Orangeburg materials and include a complete line of ¼ bends, ½ bends, Wyes and Tees. Each fitting has the exclusive Taperweld Joint for making fast, root-proof joints.

ORANGEBURG ROOT-PROOF PIPE

ORANGEBURG MANUFACTURING CO., INC. • Orangeburg, N. Y. • West Coast Plant, Newark, Calif.

SEND FOR ALL THE FACTS

ORANGEBURG MANUFACTURING CO., INC. • Orangeburg, N. Y. • West Coast Plant, Newark, Calif.

ORANGEBURG MANUFACTURING CO., INC. • Orangeburg, N. Y. • West Coast Plant, Newark, Calif.

LETTERS

MUST READING

Sirs:
... [Minority housing (April issue)] should be “must” reading for builders considering this market. ... 

RALPH H. SIMS
Crawford Corp.
Baton Rouge

Sirs:
... Highly informative... the treatment was refreshing, new and original. It was an objective, fair appraisal. This should become a miniature bible for those in the housing industry and government, who really and honestly want to know the score.

REGINALD A. JOHNSON, director
Dept. of housing activities
National Urban League
New York City

Sirs:
... Highly instructive... an excellent piece of research and writing.

GORDON W. ALLPORT
Professor of Social Relations
Harvard University

Sirs:
... Incisive and timely.

WILLIAM MANN JR.
Tuskegee Institute

Sirs:
... Mr. Howden, commentator on a weekly broadcast, “Dateline Freedom,” discussed and recommended the article highly. ...

DR. IRVING BAROW
Council for Civic Unity of San Francisco

Sirs:
House & Home is to be highly commended for contributing points of view which should develop a wider public understanding.

HENRY G. RITTER III, President
National Association of Manufacturers

POURED ON

Sirs:
Seal, Turner and Pomeroy’s High Meadow development is far from being all wet in spite of having been ‘poured over’ (see March issue). The developers deserve high praise for having placed over-all design control in the hands of the one professional specifically trained to handle it: the landscape architect.

JAMES FANNING, landscape architect
New Canaan, Conn.

- Landscape Architect Fanning’s spelling puts H&H editors to shame.—tn.

HOT-WATER HEAT

Sirs:
... A splendid article (April issue). The industry is grateful. ...

NORMAN J. RADDER, secretary
Plumbing and Heating Industries Bureau
Chicago, Ill.

continued on p. 100

HOUSE & HOME
YOU CAN SELL AMERICAN-STANDARD EQUIPPED HOMES QUICKER, EASIER... BECAUSE

American-Standard product development brings you more sales-building features

Nothing gives your homes more glamour... more customer-appeal... than quality products which are new-as-today. That's where American-Standard gives you particular sales help, with constant development of new products that are the finest in styling, durability, and efficiency of operation.

These always-new products by American-Standard are powerful sales aids when installed in your homes. They tell the public that you have used quality materials... create confidence in the quality construction of your entire home.

And more and more homemakers are becoming familiar with American-Standard products every day, through the consistent, full-color advertising which appears in the most popular magazines. This pre-selling, of course, pays off in easier, bigger sales for you!

To aid you further in your sales efforts, American-Standard offers you many special services and sales supports... such as the very popular "Blueprint for Sales" which currently is being offered free to builders. Ask your American-Standard Sales Office about this sales-booster, or write direct to Plumbing and Heating Division of American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pa.

AMERICAN-STANDARD

Now... see the Latest Sales Clinchers!

all-new steel kitchen cabinets...
two new lines of plumbing fittings
They’re New! They’ll Stay New!

These American-Standard products will add new beauty, convenience...and sales appeal...to the homes you build

What housewife could resist the modern-as-tomorrow products shown here? And what man-of-the-house would not be impressed with the construction features that spell convenience and easy maintenance!

The superb styling of the new American-Standard Fittings is apparent at a glance. The distinctive Monogram line brings exciting color and personalized monogramming to the bathroom. And the smart Quality line offers graceful styling and outstanding convenience. Both lines are designed to meet the demands of today’s quality-conscious homemakers.

The new American-Standard kitchen is all new. Horizontal cabinet styling makes the kitchen look more spacious. Counter tops, sinks and handle color-guards offer just the right amount of color for distinctive kitchen decorating. And the wide selection of handsome all-steel cabinets — including those for built-in cooking units — makes kitchen planning easy.

Behind the beauty of these fine products is sound construction that can result only from months...years...of research, engineering, testing, perfecting. They’re quality products in every detail. Just imagine the extra value these American-Standard products will add to your homes! Plumbing and Heating Division of American Radiator & Standard Sanitary Corp., P. O. Box 1226, Pittsburgh 30, Pa.

MONOGRAM FITTINGS with satin chrome finish can be personalized with owner’s initials.

CLEAR OR COLORED non-slip handles increase the charm of Monogram fittings.

QUALITY FITTINGS of sparkling Chromord are non-tarnishing, easy to keep clean.

GRACEFUL AND PRACTICAL Quality Fittings come in center-set or spread styles.

EASY-TO-GRIP Quality Fittings are durably made and smoothly finished for lasting beauty.

SINK FITTINGS have finger-tip control and long swinging spouts for easy use.
CONVERTIBLE CABINETS. The exclusive convertibility feature is an important selling advantage for you. Sliding wire shelves and drawers in base and undersink cabinets can be added or rearranged at any time—thus offering more usable storage space. What's more, American-Standard convertibility lets you offer competitively-priced kitchens that the home owners can tailor to suit their particular needs with extra shelves, drawers and accessories.

STYLED FOR BEAUTY . . . AND BUILT TO LAST! American-Standard kitchen cabinets are made of sturdy steel, Bonderized for long life. The smooth, baked-on enamel finish resists scratches, won't discolor. Cabinets are fully enclosed for extra rigidity. Solid-sounding door and drawer fronts are insulated with honeycomb-type material. Drawers and shelves slide easily on nylon. Superior construction advantages like these assure many years of service—and lasting owner satisfaction.

EXCLUSIVE SNAP-LOCK ASSEMBLY. This revolutionary assembly principle makes installation easier, quicker, cheaper. The unique interlocking assembly channel aligns the cabinets, clamps them together and also fastens them securely to the separate, easily-leveled sub-base. Only a pair of pliers is needed for assembly! You'll save time and labor with this remarkable kitchen.

Cabinets of Steel for Lasting Appeal

AMERICAN-Standard

Serving home and industry: *AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS & WALL TILE
DETROIT CONTROLS • REMANUFACTURERS • ROSS EXCHANGERS • SUNBEAM AIR CONDITIONERS
Home owner Satisfaction is a Custom Built trademark

This house was oriented on a lot to take advantage of picture window privacy and beautiful wooded view. Weakley Custom-Built homes are designed to give you flexibility.

The many designs and variations in the Weakley Custom-Built line hold irresistible appeal for home buyers of every price range. No matter how many units you are now building — Weakley’s Planned Program can enable you to build more units at less cost with more profit. The Weakley way is the best plan ever offered. You get —

• Top design and engineering
• A complete package, eliminating material waste and inventory warehousing problems — more rapid investment turnover

Yes, you'll build more, at less cost, with a greater profit than you can imagine. Let us show you how — the Custom-Built way.

WRITE NOW . . . for plans and full details

Custom Built homes division
WEAKLEY MANUFACTURING CO., DEPT. H • NEWARK, OHIO

THERE IS A HOME FOR EVERY NEED AND INCOME GROUP IN THE COMPLETE CUSTOM BUILT LINE
all eyes are on WESLOCK'S Black Rose

Here is unique custom-styling at budget prices for every door in the house. All Weslocks in all finishes are now available with black rosettes at no extra cost.

Keep your eye on Weslock

To order Black Rose, simply add "BR" to regular WESLOCK stock numbers

WESTERN LOCK MFG. CO.
Manufacturers of Weslock Residential Locksets and Builders Hardware

GENERAL OFFICES: 211 NORTH MADISON AVE., LOS ANGELES 4, CALIF. • FACTORY: HUNTINGTON PARK, CALIF.

JUNE 1955
Year 'round air conditioning adds
first home in Frigidaire's

For more complete details of the Frigidaire "Kitchen Plan" program, see page 208 A.

For greater comfort and health, architect Robert A. Little has included Frigidaire's combination heating and cooling system in his plan

The first home in Frigidaire's "Kitchen Plan" program comes from architect Robert A. Little, of Cleveland, Ohio, winner of various architectural prize awards for his work in designing present day homes. Air conditioning is playing an ever-increasing role in modern home planning and should be provided for in even the lower price home plan. Location and space requirements are especially important in smaller homes, and the compact, well-designed Year-Round Frigidaire Conditioner fills the bill completely.

Now even low-cost homes can offer the advantages of one-temperature comfort all year 'round. Air conditioning is no longer a luxury found in expensive homes. It is a feature that prospective buyers ask for, even in lower cost homes. And for wise builders, it is a sales tool that offers buyers more comfort today and greater resale value for their property tomorrow.

With the builder and his special requirements in mind, Frigidaire has developed packaged air conditioning units designed to fit builders' plans.

In architect Little's design, the Frigidaire Conditioner is located in closet opening onto the entry hall. Conditioned air is supplied to all rooms through a ceiling duct running the length of the house. Air returns to the conditioner through ducts in the slab floor.

Compact in size and flexible in application, Frigidaire Conditioners are easy to install and maintain. Most important of all, they offer home buyers assurance of dependable, economical service.

See your Frigidaire Air Conditioning Dealer today. Or write Frigidaire, Dayton 1, Ohio. In Canada, Toronto 13, Ontario.
extra sales magic to the
new "Kitchen Plan" program for builders

extra sales magic to the
new "Kitchen Plan" program for builders

Year-Round Frigidaire
Conditioners are specially
designed to fit into today's
more compact home plans

Provide both automatic heating and summer cooling
in a single, compact unit no larger than many furnaces alone! Only 46" wide, 25" deep at the base,
and 75" high. Easy to install almost anywhere.
Single, combination unit cuts installation costs.

Designed for basement, utility room, closet or
cove. Choice of gas and oil-fired models. Famous
Frigidaire XD Meter-Miser Compressor supplies
cooling power in 2- and 3-ton capacities. Operates
with air cooled, water cooled, or evaporative conden­ser. Cushioned blower assures quiet operation.
Large, efficient air filter.

And remember these other Frigidaire Conditioners designed
for builders to fit into other home plans

This Multi-motic Conditioner adds
summer cooling to heating systems
Teams up with almost any forced air heat­ing plant using the same ductwork, or it can
be installed to operate independently. 2, 3,
and 5-ton models. Available with or without
blower. Can be divided into sections for
installation in attic or crawl spaces.

Frigidaire Room Conditioners
fit regular and casement windows
Available in a wide range of capacities.
Easily adapted, if desired, to "through the
wall" installation.
W-COST COOLING SELLS
SHARP & ISFORT PROSPECTS!

Mr. Sharp says:
"We've realized for some time that home buyers put extra comfort first. But of all our efforts, no other low-cost comfort feature does so much to close sales as the Robbins & Myers Attic Fan. They help so much, we've installed 72 of these units within the past 3 years."

Ray Sharp, Partner
Sharp & Isfort Builders
Cincinnati, Ohio

Your prospects aren't different from Sharp & Isfort's in this respect... they're comfort-minded! And when you talk about complete home cooling (which sounds expensive), they're bound to be impressed!

Expensive as it sounds, you can promise this cool living, cool sleeping, for as little as $137.60, list. That's complete, with automatic ceiling shutter! Another money-saving feature is the easy installation, shown below. Plus the fact that builders from coast to coast report "no costly service or maintenance of any kind!"

Include this sales-closer in your homes!

A low-cost R & M Attic Fan forces out pent-up heat; pulls cool night air through every room in the house. Available in sizes with certified air deliveries of 5,000, 7,000, 10,500, and up to 16,000 C.F.M. The smallest unit requires only 18" of attic clearance; the largest only 25". Fan guaranteed 5 years; motor and shutter, 1 year. Write for our reliable guide to comfort cooling!

EASY TO INSTALL-1-2-3!

1. Fan and shutter arrive set up. Simply place fan over framed ceiling opening. Rubber cushion makes it self-sealing!
2. Complete automatic shutter unit screws to ceiling opening frame; flange forms trim. No finishing needed.
3. Ready-made attic louvers can be installed quickly by one man. Sizes for each of various-sized fans.

ROBBINS & MYERS
"Package" attic fans &

ROBBINS & MYERS, INC.
Fan Division HH-65, 387 S. Front St., Memphis 2, Tenn.
Please send your booklet, "R & M Comfort Cooling and Ventilating," A.I.A. File No. 30-D-1.

LETTERS continued from p. 92

Sirs:
... This article will help builders and architects and others in the industry to appreciate more fully the latest features of modern hot-water heating systems.

Edward F. Ford
Bell & Gossett Co.
Morton Grove, Ill.

AIR-CONDITIONED VILLAGE

Sirs:
The work done by the NAHB Research Institute in connection with Air-conditioned Village (March issue) points up the value of a type of housing research which can have many similar practical applications.

Charles A. Bowser, assistant commissioner
Technical Standards, FHA

Sirs:
If builders would study your story and give a lot of thought and planning to their own air-conditioning jobs, I am sure they could vastly improve their performance.

F. C. Brandt, regional manager
Minneapolis-Honeywell Regulator Co.
Dallas

Sirs:
The prefabricator has a definite responsibility to point out to the builder the necessity for proper solar orientation. Everyone in the housing industry shares responsibility for proper design for air conditioning.

Herbert T. Gilkey, research associate
in mechanical engineering
University of Illinois

Sirs:
Very informative... the highlight of the report was the cost analysis. I think air conditioning is here to stay; this report proves it.

Bob H. Rezn, assistant research architect
Texas Engineering Experiment Station
College Station, Texas

NO FIRM PRICE

Sirs:
In New Products (March issue), you quoted the new BullDog Electrostrip at $1.10 to $1.25 per foot—outlets $1 each.

This may or may not be the complete installed price, depending on factors such as quantities sold, installation charge, etc.

No firm price can be given except by the electrical contractor involved.

George Sevick, sales manager
Electrostrip Division
BullDog Electric Products Co.
Detroit

ERRATUM

Sirs:
I cannot reconcile your $8.30 cost figure (March issue, p. 124). The extra 272 sq. ft. at $3 will not reduce the cost that much.

Ralph M. Peters
Peoria, Ill.

• Reader Peters is right; the figure should be $8.45.—ED.
Gentlemen: I am interested in the Stylon Ceramic Tile Story. Please send me complete details.

Name

Position

Firm Name

Address

City

State

Why fast-selling Stylon is fairest of them all

Where beauty makes the difference between a prospect and a profit, Stylon shines!

No wonder. For only Stylon among American Tiles offers the prospect such beauty and variety in color. Seventeen shades in bright-glazed wall tiles. Seventeen matching contrasting shades in crystal-glazed floor tiles. Eight shades in matt-glazed wall tiles. Thousands of striking combinations.

And these are thrilling decorator colors, every one.

For the architect whose interiors must inspire attraction at first sight, affection in the years to follow . . . for the builder whose homes must turn prospects into profits, the fairest choice is Stylon Ceramic Tile

STYلون CORPORATION
Milford, Mass. • Florence, Ala.

Beautiful • Enduring • Economical

JUNE 1955
SAVES 40% in Labor Cost with

One carpenter, shown cutting interior studs, keeps the other men busy nailing up a steady stream of lumber—cut to exact dimension on Hinkle's Delta 12" Radial Saw.

DELTA QUALITY COSTS NO MORE

Delta 12"-14" Radial Saw
Also available in 10" portable and 16-20" Standard Models
Hinkle's attractive homes sell "quickly and profitably" according to Don Hinkle, who has saved 40% in labor by using a Delta 12" Radial Saw "on-the-job."

Fairview, Pa. Builder Stops Waste!

"40 per cent cost savings may sound extravagant," says Don Hinkle, Fairview, Pa. home builder, "but that's exactly what happened when we took our new Delta Radial Saw to the first job. The precision and easy handling built into that saw provides us with an on-the-job mill to cut joists, hip-rafters, subflooring and studs fast—and to absolutely accurate dimension.

"One man on the saw keeps several carpenters busy nailing. We change the setting on the saw in seconds to cut completely accurate pieces. Our Delta Radial Saw really cuts out waste, too. We're able to use practically every piece of wood we take to the job."

There are sound reasons why the Delta Radial Saw cuts costs for Don Hinkle and other progressive builders. Delta's exclusive 360° turret action lets you make every cut—miters, dadoes, straight crosscuts and rips—all above the work table, fast. Positive, precision stops assure constant accuracy for production line cutting with far less waste. And, you can take it with you—right to the job. Many builders have paid for their Delta Radial Saws—out of cost savings—on the first job!

Find out how YOU can cut costs—build greater profits—with a Delta Radial Saw. Talk over your requirements with your Delta Dealer today! (He's listed in the classified pages of your phone book under "TOOLS" or "MACHINERY"). Or, send the coupon, for catalog information.

Delta Power Tool Division, Rockwell Manufacturing Company
542-F North Lexington Avenue, Pittsburgh 8, Pa.

☐ Please send Delta Catalog.

☐ Please send name of my nearest Delta Dealer.

Name_________________________Title_________________________

Company_____________________

Address______________________

City_________________________County___________________State__________
**ONLY A. R. B. METALS**
give you removable wood windows with
**Precision Adjustment**
**BOTH**
Looseness and Tightness

**HERE'S WHY—**

1. These adjusting screws turn in METAL threads. They loosen *and* tighten with thumb and one finger on the screwdriver.

2. These coil springs are free to expand and compress because they are inside a friction-free metal cage.

With over 1,000,000 A.R.B. metals sets now in service, both builders and householders know that only A.R.B. has positive, permanent adjusting mechanism.

If you're looking for saleable features, take a careful look at A.R.B.

"**Plus**" Values of A.R.B.

A.R.B. Metals also produce wood windows — double-hung and glider — that lift out easily. They require no weather-stripping. They don't rattle or permit drafts. Even if "painted in," they can easily be freed. And they are as easily installed as any other prime window.

**New**

**The Simple**
**"FINGER LIFT" BALANCE**
optional on "**400**" double-hung windows
**AT SLIGHT EXTRA COST**

Press the plunger, and the Balance is disconnected. Close the window all the way, and the Balance is automatically connected again.

All windows equipped with the A.R.B. Balance are also removable and adjustable.

See your lumber dealer, or
**A.R.B. WINDOW SALES COMPANY**
- 19433 John R Street • Detroit 3, Michigan
June, 1955

39 NEWS
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106 WHEN DOES A FLAT ROOF MAKE SENSE?
108 SIX REASONS WHY A FLAT ROOF MAKES SENSE
110 THREE WAYS TO MAKE A FLAT ROOF LOOK WELL
112 WITH THIS FLAT ROOF, NO COSTLY VALLEYS
Architect Andrew Steiner designs a 1,400 sq. ft. house whose flat roof covers a T-plan without cutting light from the patio. In Atlanta.
114 THIS FLAT ROOF PERMITS OVERHANGS WHERE NEEDED
Architect Victor Bruno wraps a house on a small city lot around a large patio. Glass is shaded by extensions of the roof. In New Orleans.
116 FLAT ROOF UNIFIES LARGE AND COMPLEX PLAN
Architect Edward Larabee Barnes uses a flat roof to solve big-house problems of interior light and over-all unification. In Fort Worth.
122 A FLAT ROOF CAN FIT ANY PLAN
124 ROUND TABLE REPORT
Panel of experts urges use of far less door and window sizes, finds that current sizes add $100 to the cost of a small house. They recommend three basic lengths and six widths for builder-house windows.
132 HOUSE & HOME'S CONSUMER MAGAZINE REVIEW
On the newstands this month: prefabs, open kitchens, a plank-and-beam house, a flat-roofed house, glass walls, open plans, family rooms.
136 NEWS
138 CAN SIMPLIFIED STEEL FRAMING COMPETE WITH WOOD?
Houston, Tex. J&B Manufacturing Co. develops a promising modular, steel frame for an 1,150 sq. ft. prefabricated house, so simple to erect that it may put steel in competition with wood.
146 NINE MORE WAYS TO BUILD BETTER FOR LESS
Third in a series of articles presenting new building techniques designed to cut costs and improve the final product—the house.
151 HOUSE & HOME DETAIL SHEETS
Beginning a new series: the first three sheets are concerned with data for flat-roof construction.
154 SEPTIC TANKS OR TREATMENT PLANTS?
This is a $100,000,000 question which can cause homeowners and builders severe headaches.
160 SUCCESS ON ODD LOTS
Builder Garry Grover builds all over Lafayette, near Oakland, Calif., using variations on four plans to fit varying terrain.
164 NEW PRODUCTS
Wide selection available today for floors.
WHEN

DOES A

FLAT ROOF

MAKE SENSE?

Some people think that the only reason for using a flat roof is to save money. (This is a debatable advantage: flat roofs sometimes cost more.)

Others think the flat roof is some sort of "modernistic trademark"—like the fishtails on the Cadillac—and that the reason for making your roof flat is to make your house look like the very latest thing on the market.

And, finally, there are some people who think that all flat roofs are ugly and ought to be forbidden.

All this just means that too few people understand what a flat roof is good for and how it should be used.

There are at least six very good and practical reasons why a flat roof is often the best kind of roof to use—see pp. 108-109.

And there are three simple rules you should remember if you want your flat roof to look well—see pp. 110-111.

You will find these six advantages and these three design principles listed on the next four pages. And you will find these advantages and principles demonstrated in the four houses shown on pp. 112-123.
SIX REASONS WHY A FLAT ROOF MAKES SENSE

1. **A flat roof can adjust itself economically to any plan, however irregular.** As our production houses get larger they tend to become better zoned into nighttime and daytime areas. Results: more T-plans, L-plans, H-plans and offset plans—with one wing for nighttime areas, one for daytime areas, and an entry in the middle (see pp. 112-113). Sketches at left show a typical two-zone plan, sheltered (top) under a flat roof and (below) under a series of pitched roofs. The pitched roofs call for complicated framing, costly flashing. The flat roof overcomes all these problems.

2. **A flat roof can be punctured with skylights, patios, trellis cutouts and clerestories anywhere and everywhere.** As we begin to use more inside rooms—baths, utility cores, storage areas, wide hallways for double use as play areas or laundries—the need for skylights and clerestories grows by leaps and bounds. No problem at all with a flat roof, tough to solve with all but the shallowest pitches. Sketches at left also show ease of roofing over a patio house with a flat top, relative difficulty of doing same thing with a traditional pitched roof. Patio houses like the one on pp. 114-115 are becoming increasingly popular in many parts of the country.

3. **A flat roof can be added to with the greatest of ease.** More and more people are using FHA home improvement loans to add porches, extra rooms, garages and so on to their basic houses. The flat roof makes all this very simple—the pitched roof does not. Needless to say, you can always add a flat-roof wing to a pitched-roof house. But few people have done it successfully. The New Orleans house shown on pp. 114-115 had an extra room added to it after the owners moved in. The addition is undetectable—never made a ripple or left a wrinkle in the over-all shape of the house.
4. A flat roof can give you deep overhangs where you need them. Most glass walls need protection, and the simplest way of protecting a glass wall is to use a deep roof overhang. With a pitched roof, such occasional deep overhangs cause plenty of framing and flashing problems (see sketch). Result: most pitched-roof overhangs built today are inadequate. No such difficulties with the flat roof—it can be pulled out like taffy to give you overhangs and entrance canopies wherever you need them (see house by Architects Bassetti & Morse with a flat plank roof, Jan. issue, pp. 118-119).

5. A flat roof can make a short house look longer. Everybody is familiar with the optical illusions that involve two identical boxes, and horizontal stripes vs. vertical stripes: the box covered with horizontal stripes always looks longer and lower; the one with vertical stripes always looks shorter and taller. In the 2½-story house of the past, architects tried to make the facades imposing by stressing the verticals in the windows, porticos and so on. In the low-slung houses of today the important accent is the horizontal: a flat roof, especially one with deep fascias and projecting overhangs, can make the smallest house look longer and larger.

6. A flat roof makes a plank-and-beam ceiling much easier. By using the increasingly popular (and quite traditional) plank and beam construction (see June '54 issue), you can have an integral flat ceiling at no extra cost. Plank roof decks are full of problems: 1) you need extra insulation because the conventional air space is eliminated; 2) you need good vapor barriers in most climates; 3) you need good lumber or a well-finished synthetic plank; 4) you need to plan your wiring with greatest care. Nevertheless, long-span planks have proved inexpensive and handsome in many houses, and can give you a roof and ceiling all in one.
THREE WAYS TO MAKE A FLAT ROOF LOOK WELL

1. USE OVERHANGS

YOU CAN DO A HANDSOME JOB WITHOUT THEM...

BUT IT'S A LOT EASIER IF YOU MAKE THEM DEEP

2. SHARPEN THE SILHOUETTE

The most important line in any flat-roofed house is the gravel stop—the line you see silhouetted against the sky. If that edge gets ragged and dented (because painters and roofers lean their ladders up against it) the whole house can appear shoddy and poorly detailed. To avoid this, many architects use a steel or bronze angle to reinforce the flashing. Others use heavier gauge materials for the stop itself—extruded aluminum copings or stainless steel stops. These details are a little more expensive than the traditional gravel stops without stiffening—but they will more than pay off in terms of better over-all appearance.

3. USE BROAD FASCIAS

YOU CAN MAKE THEM PAPER THIN...

BUT A BROAD FASCIA LOOKS MORE SUBSTANTIAL
People in northern countries have become so used to seeing a "lid" on top of their houses that the absence of one makes the whole house seem incomplete. (In Latin countries there is no such tradition, and houses with roof terraces bounded by parapets are a generally accepted sight.) Whatever the reason, roof overhangs suggest shelter to most of us, and their absence is often disturbing. Flat roofs without overhangs can be handsome—but only when handled by an expert. (Note: all this is quite apart from the questions of sun and glare protection—which make overhangs a necessity in most areas and orientations.)

Where a plank roof deck is used, or where the overhang is framed with light outriggers, there is a tendency to make the fascia no thicker than the structure dictates—i.e. as little as 2" deep. Result: the flat roof looks as if a good storm might blow it off. A deep fascia—12" or thereabouts—forms a substantial finish line against the sky, gives the whole house a greater sense of repose. Added advantage: a broad fascia plays down imperfect alignment, etc. (Note: If you use a wood fascia, try to use long boards with few if any joints; if you use a fascia of a sheet material, see that the joints are evenly spaced.)

The houses shown on the next 12 pages demonstrate many of the advantages of the flat roof and many of the design details listed here. And on pp. 151-153 are shown some of the construction details that apply to flat-roof building: details of skylights, drainage, ventilation, gravel stops, etc.
WITH THIS FLAT ROOF, NO COSTLY VALEYS

Costs of this handsome house were cut sharply with a flat roof.

Architect Andrew Steiner's T-shaped, two-zoned home in Atlanta was designed around a patio divider. Had a pitched roof been used, the plan would not have proved nearly so workable, from the standpoint of both design and cost.

With the planning freedom produced by the flat roof, the garden patio is well lighted from above along its whole length. It was planned to be the core of the house—physically during most of the year in Atlanta, visually the year around. Architect Steiner would have had three solutions with a pitched roof: with any of them, costs would have mounted and appearance suffered. Had the ridged roof of the bedroom wing been extended fully to the living-dining-kitchen wing's ridge, two valleys would have been formed from the juncture down to eaves. Extra costs would occur in framing and fitting jack rafters against valley rafters. Half the patio would have been covered, unduly darkening it unless part of the roof were chewed out. In one case there would be two valleys with the nuisance of flashing (a chief cause of water trouble); in the other case there would be one valley to flash. The third choice—leaving the entrance hall flat-roofed between two pitched-roof wings—would have meant a house divided against itself in appearance.

This house was built by an architect for himself, but could well serve for a builder's house. It contains 1,480 sq. ft., was built for only $15,000.
Core of the house is this central patio separating living-dining-kitchen wing at right from bedroom wing at left.
THIS FLAT ROOF PERMITS

OVERHANGS AS NEEDED

Not only do flat roofs give you overhangs at less cost where needed; they also permit you to eliminate them where they aren't needed.

That's one advantage of flat-roof construction made clear in this handsome New Orleans house wrapped around a garden patio. The house was designed to make the most of a small but costly, shallow but wide city lot. The flat roof's flexibility allowed Architect Victor Bruno to face all the major living areas, including two of the three bedrooms, on the inner patio, where they are shielded from a flat, treeless, uninteresting neighborhood. No part of the lot has been wasted around the house, except for a small front lawn required by zoning.

Exterior walls facing the rear and sides thus could be kept largely blank for maximum privacy. Costs were lowered by not having to use windows facing the street and other houses. An additional saving came through elimination of overhangs over the blank walls, a saving which would have been impossible with any pitched-roof construction. Elsewhere there are 4' overhangs over all windows and over floor-to-ceiling sliding glass doors.

The only bedroom that does not enjoy the view of the delightful patio was added at the owner's request after the house was built—an easily handled matter with this type of roof.

Total cost: $23,700, or $11.25 per sq. ft.
Central patio, screened both at top and open sides, is in effect another room as large as the rest of the living area inside house.
A SWEEPING FLAT ROOF UNIFIES THIS LARGE AND

Plan is divided into three major units connected by patios and pergolas. Main part of house has large and small skylights to light interior of 7,500 sq. ft. area.
A big house is a lot more than just a small house that has been over-inflated: a big house is a distinctly different architectural problem, and this Texas house is a first rate solution to the problems of bigness.

Actually, those problems are twofold: there are purely practical problems, and problems of esthetics.

The chief practical problems are these:

1. How do you light the inside of a 7,500 sq. ft. living area? Answer: by introducing skylights wherever necessary (no trouble at all with a flat roof).

2. How do you unify a large assortment of complicated plan elements? Answer: the flat roof with its unlimited flexibility again offers the best solution. (This house, to be specific, is really five separate houses under one sweeping roof—a living house, a sleeping house, a kitchen house, a servants' house and a recreation house. The flat roof unites them all.)

So much for the practical problems. The esthetic problems (and opportunities) are discussed on the following pages. Because Architect Ed Barnes handled those opportunities with such great skill, this house was one of 19 US postwar houses chosen for "quality and significance" by New York's Museum of Modern Art (Feb. '53 issue).
INTERIOR SPACES IN MOTION

Modern space is meant to be seen in motion—that is the reason for continuously flowing spaces, for open plans rather than tight cubicles.

The trouble with the small house, of course, is that you are likely to find yourself out in the lucky yard before you have had a chance to experience very much "space in motion."

So the big house offers special opportunities. To realize them fully, the architect had to analyze his problem this way:

a. A big house has to be given coherence, as it may tend to "fall apart" visually. Solution: emphasize and repeat the basic structural pattern, in this case an ever-present oak ceiling plane supported on incredibly thin pipe columns.

b. The spaces should be molded by "slabs" that are set apart from the structure: "slabs" of stone, glass or wood, arranged in vertical planes that overlap, advance and recede. Some other devices shown in these pictures: changes in floor level (to make some important rooms more formal), changes in lighting (through strips of skylights) and changes in view.

These two devices—structural pattern and space division with a few geometric planes—are often confused or misused for decorative trickery. By treating the two as distinctly separate entities, and by making the most of the interplay of these different elements, Architect Barnes has designed a house that is both spatially interesting and architecturally coherent.
OUTDOOR SPACES IN REPOSE

The problem inside a house is to prevent the space from becoming "bottled up." The problem outside is to prevent the space from running away.

To give architectural form to the spaces surrounding a building is a practical necessity: outdoor living (like indoor living) seems to call for a variety of different "rooms"—or, at the least, a suggestion of rooms.

Barnes has, in effect, created a half dozen distinctly different outdoor rooms around the periphery of this luxurious house. Some are walled-in patios, sharply delineated. Others are contained between deeply projecting floor and roof planes, but left open on most sides. These deep porches are excellent sun protection in this climate, and essential even in this air-conditioned house. Finally, there are some outdoor spaces that are merely suggested by a trellis, some planting or a pattern of paving. The range is all the way from greatest formality (as in the entrance court) to the pleasant informality around the pool.

Few houses are built today on this scale—even in Texas. And among those that are built the trend is all too often toward garish vulgarity. When a client can afford to buy good design and good art—and does—the resulting house will advance architecture on every level. This house has made an impressive (and well-deserved) splash in Fort Worth, and the circles are beginning to widen.
Living area (seen in the rear) and recreation wing. Pergola at right links this wing to the main house.
WHAT BETTER EVIDENCE COULD YOU HAVE?... A FLAT ROOF
CAN FIT ANY PLAN

Free-form composition of roof and pool is visible from surrounding mountain tops.

Seldom has there been a more dramatic demonstration of the complete flexibility of modern flat-roof construction than in this new house in Rio de Janeiro by Brazil's famed Oscar Niemeyer.

The house is first of all a playful exercise in architectural sculpture. Designed to be seen from the mountains towering above it, it is a composition of overlapping free-form patterns and textures—like the result of some imaginative contour plowing among the rocks (one of which actually penetrates the plateau on which the house is located).

As in so much fanciful architecture, there is a hard core of practical sense in this house: the structure—a free-form roof slab on a few thin columns, spaced far apart—is completely divorced from walls and partitions (which follow an entirely different free-form pattern). This makes the plan entirely flexible, to follow its own particular logic.

To those familiar with Niemeyer's work, this house will recall the free-form patterns of his frequent collaborator, the landscape architect Roberto Burle-Marx. However, this is the first time that Niemeyer has completely integrated the patterns of garden and house into a single, free-flowing composition, and the result is up to the architect's own highest standards.

Existing rock was incorporated in free-form composition, extends from living room all the way out into the pool.
**Standardization Round Table urges use of less door and window sizes**

**Question:** What size windows and doors will best meet all the needs of the builder’s house and how much money could be saved by standardizing on these sizes?

**Answer:** Close to $100 a house could be saved by standardizing on the right six window widths, the right three window heights, the right two door sizes. And these sizes would do more than just cut costs. They would also help builders offer better design.

That is the report of a Round Table jointly sponsored by the American Standards Association, the Research Institute of the National Association of Home Builders, and HOUSE & HOME. Their report begins on page 125. The sizes they recommend are told on page 127 and explained in detail on pages 129 through 131.
Doors and windows in too many wrong sizes add nearly $100 to the cost of a small house

In recent years the window and door industries have both made outstanding contributions to better homes—picture windows, awning windows, jalousie windows, sliding windows, reversible windows, removable windows, double windows, sectional windows, glass doors, flush doors, hollow core doors, and many other new and improved products.

The glass industry has revolutionized its production, thereby enabling architects and builders to use large glass sizes economically and to buy double glazing in a single light.

Now the time has come to integrate this revolutionary progress in manufacturing with the simultaneous revolution in homebuilding and the great change in how most homes are now put together by the merchant builders.

This change makes it newly important that all building components be coordinated to fit together with minimum waste of material and minimum waste of time and labor. To that end, the sizes of framing, dry wall, sheathing, insulation, bricks, concrete blocks and most exterior finishing materials have already been dimensioned or redimensioned to work. But homebuilding cannot cash in on the full economy of this coordination until the openings in the other components are coordinated too.

Metal window catalogues now offer a bewildering choice of more than 600 different sizes. Wood window catalogues offer perhaps an equal number.

All these hundreds of sizes are far more than any architect or builder needs or wants, far more than he has time even to read.

All these odd sizes offer little advantage to the architect. On the contrary, they make it harder for him to line up a simple, coherent design.

They are no help to the builder. On the contrary, they make it hard for him to dimension any other wall component until the windows have first been chosen and bought.

They are no help to the manufacturer or the lumber dealer. On the contrary, they eat into the savings of quantity production and compound distribution, warehousing and inventory costs all along the line.

But with all this needless choice of dimensions, all architects and builders still find it hard and often impossible to get the sizes that would best fit the dimensions of the other wall components, best fit the new design requirements of the one-story house, best suit the line-up of the other openings, best suit the changing needs of modern living, because:

1. There is little planned coordination with dimensions of other wall components.
2. There is no planned coordination among wood, steel, or aluminum windows.
3. There is little planned coordination between sizes of various window types.

For want of that coordination window openings in all their multifarious odd sizes now cause the greatest single waste of time, materials, and money in framing and enclosing a house.
Uncoordinated door dimensions increase the waste. Unfortunately, all of us are so accustomed to this waste that not one builder in ten has any idea of the hidden price he pays for wrong-sized openings.

The cost of this waste seldom runs less than $3.50 for any one opening, often as high as $10 or $12, probably averages close to $100 for each small house. On 1.2 million builder houses this year this waste must be costing the home-buying public close to $100 million. This figure covers only the builders’ own material and labor cost for needless studs and needless cutting of dry wall, sheathing, insulation, and exterior facing to fit around the openings. It does not include the added costs now borne by manufacturers and distributors.

Many of today’s window sizes can be traced back to union dictates which put a price penalty on glass cut off the even inch. With today’s larger and fewer panes there is no good reason why we should go on fitting the window to the glass instead of to the house.

Other window sizes can be traced back to style dictates of Colonial, Tudor, Spanish, or French Provincial. Windows and doors are just about the oldest of wall components, old enough to be loaded down with out-of-date requirements. Significantly, the newer window types already reflect a trend to fewer sizes.

In yesterday’s handicraft house with yesterday’s handicraft glass it may have made sense to cut all the other wall components to fit the odd size of the doors and windows. But for today’s engineered house and today’s mechanized glass industry there is no good reason why doors and windows should not be dimensioned to fit predetermined openings whose size will work without waste of material or labor with the already coordinated modules of all the other wall components—the 16” or sometimes 24” module of wood framing and batt insulation, the 8” module of brick and concrete block, the 4’ and 8’ module of most interior and exterior facing sheets, and the standard 8’-plus-a-tolerance ceiling height jointly recommended for builders’ houses by the NAHB Design Committee and the AIA Committee on the Homebuilding Industry. All these modules already conform to the basic American Standard 4’ module jointly sponsored by the Producers’ Council, the AIA and the NAHB.

For the present confusion in window sizes we cannot blame the manufacturers. They just supply—often at substantial added cost to themselves—the sizes architects specify and builders order. We cannot blame the architects and builders. They just specify and order the sizes manufacturers list in their catalogues and lumber dealers carry in their yards.

The fault lies rather in a complete failure of industry teamwork. It reflects a 15-year time lag in recognizing all the implications of today’s new kind of house and the new way it is being put together by the merchant builders.

That is the failure and that is the time lag we now hope to start correcting by:

1. Letting the manufacturers know the few sizes that will fit all the real needs of the builders’ house most economically.
2. Outlining a workable program for getting these sizes widely used as soon as the manufacturers make them available at prices based on volume.
Three basic heights and six widths are all we need for builders' windows

All of us—architects, builders, manufacturers, distributors, and research technicians—are unanimous in affirming that:

Better designed houses could be built substantially cheaper, with much less waste of materials and much less waste of labor, if window and door manufacturers could concentrate their production on a much smaller number of sizes and if architects and builders would concentrate their buying on these sizes, but:

1. These few sizes must be carefully coordinated with the framing spacing and the standard modular dimensions of other wall components.

2. These few sizes must be carefully coordinated one with another to look right and work right together.

3. These few sizes must be carefully selected to meet the needs of the people who will live in the houses.

To achieve the dual objective of better design and greater economy we are unanimous in urging the immediate adoption of:

1. Three basic window heights
2. Six basic window widths
3. Two basic outside door heights

The three basic window heights we recommend are 3', 4', 6' rough openings.

The six basic window widths we recommend are 24", 32", 48", 64", 80", and 96" rough openings. Our reasons for selecting these few basic sizes are explained in the next section. A few of us believe a seventh basic width of 16" should be accepted; a few others favor 40" even though 40" would not fit either 16" or 24" stud spacing. Not all heights would be needed in all widths; for example, we would expect little demand for windows 6' high in the narrowest widths. With the 3' height only, one more basic width may also be needed to fit the standard 5' bath from wall to wall. Perhaps this bathroom unit should also be offered 2' high.

The two basic outside door heights we recommend are 6'-8" and 7'. These would give architects and builders the choice of lining up their door and window heads at either 6'-8" or the more often preferable 7'.

General acceptance of these few coordinated dimensions could save manufacturers millions of dollars by enabling them—and their suppliers—to concentrate production on a few sizes and by justifying a far greater investment in automation. It could save distributors and lumber dealers millions of dollars by minimizing their inventory. It could save builders millions of dollars by speeding up construction, by reducing waste and, perhaps most important, by making it easy to predetermine window opening dimensions. It would let small builders cash in on quantity production savings now available only to big operators. It would save architects countless hours of design time coordinating sizes.

To realize all these savings we recommend that the door and window manufacturers and their various trade associations avail themselves at the earliest possible moment of the services offered by the American Standards Association Committee A62 to work out with them all the details that must be solved before the basic dimensions we propose can be issued as new national standards.

Over and above these dimensional proposals we offer two other recommendations to reduce the cost of door and window openings:

1. We hope more manufacturers will offer window and door units incorporating structural posts and lintels fitted to the 8'-plus-a-tolerance ceiling height that is now coming into general use in low- and middle-priced houses.

2. We hope that in determining many details that must be worked out for these coordinated sizes, the A62 Committee will bear in mind the importance of eliminating the costly cripples now required over many window openings and the extra studs usually required alongside.

JUNE 1955
Detailing these standards will be a big job; so will getting all the builders to use them

First the manufacturers and the trade associations must work out countless details of coordination before the American Standards Association Committee A62 can issue these sizes as American standards. No one should underestimate for a minute the problems that remain to be solved.

After the new basic sizes are put on the market there will be a transition period, short or long, when there will be just so many more dimensions on top of all those now available. Even after the transition is accomplished some special sizes will still be needed for custom-designed homes in traditional style.

Fortunately:
1. This inevitable time lag means that manufacturers need not worry about having plenty of time to dispose of odd sizes in their present inventory.
2. Almost all new windows and outside doors go into new houses, so their makers are not tied to the past by a major market in the old house. This leaves them free to concentrate on dimensions that best suit today's kind of house.

To shorten the transition period we hope the American Institute of Architects, the National Association of Home Builders and the National Retail Lumber Dealers Association will give their support and encouragement to the new sizes.

We hope the builders, large and small, the lumber dealers, and the architects designing for the builders’ house will all be quick to support the program in the most practical of ways—by ordering, stocking, and specifying the new dimensions as soon as they are made available. But the customers alone cannot carry the whole responsibility for speeding this transition.

The two quickest ways to encourage general acceptance of these waste-saving dimensions are within the power of the manufacturers:

1. They can give every builder a profit incentive to buy these sizes by basing their prices on anticipated volume and quoting substantially more attractive prices for units in these basic dimensions than they offer for odd sizes.
2. They can make it easy for architects and builders to specify these coordinated dimensions by cooperating in the publication of a special directory of modular components whose standard sizes will all fit together without waste.

Yost: The younger architects are trained to work on a modular base.

Norman: We'll only use one size of outside door.

McGehee: We can accommodate frame, brick or solid masonry by variations in our jamb detail.

Plummer: The same window width that works for wood can be made to work for masonry.

Lendrum: I am campaigning for one thing only, and that is a window size that lets a builder carry on framing without interrupting his module.

Hopkins: The initiative must come from builders. Manufacturers will make what sells.

Lance: We'll be glad to cooperate with all interested agencies.

Thompson (right): The place to start is coordinating the framing.

Demarest: You don't have to give serious consideration to every multiple of 8”.

Pollman: Filling around an opening is a high-priced labor item and can be very wasteful of material.
Six window widths would fit other wall components

In setting basic window widths, the No. 1 need is to make windows fit the other wall components, all of which have already been coordinated on 8" or 16" increments. Our proposal is simply to adopt these same increments for the fenestration, increasing window widths in 8" jumps up to 32" and in 16" jumps for wider openings.

The only erection problem this raises is how to make windows work simultaneously with both wood framing and masonry veneer. In wood framing, with its grid 16" on centers, the stud opening is bound to be one stud width (15 5/8") narrower than the nominal opening in the masonry.

How this can be met is indicated in the detail below, which shows that framing and masonry openings will work perfectly together provided:

1. The studs are carefully positioned right on their module.
2. Any extra studs are placed outside the opening.
3. The staff bead or brick mold is adjusted to compensate for the difference between the brick and framing openings.

The trim would have to perform a similar function with solid walls of brick or concrete block.

For manufacturers of repetitive window units the framing module will also pose a special problem for the first framing opening is also bound to be one stud width narrower than the spacing increment in the framing itself. Presumably some kind of spreader will be required to meet this discrepancy.

Principles of coordinating masonry and frame openings:
1) studs on modular grid; 2) brick mold compensated; 3) extra stud outside of grid line. These sketches are diagrammatic only; each manufacturer would have his own details—notes Leonard G. Haeger, AIA, who drew them.
Lining up windows and door heights at either 6'-8" or 7' gives an ordered appearance to any elevation. The higher a window is in a wall, the better a room will be lighted.

Three window heights would meet the needs of people

The three basic window heights we recommend will work with either 6'-8" or 7' window heads, giving architects and builders a choice between sills at 3'-8", 2'-8" and 8" or at 4', 3', and 1'.

All of us believe that the higher the window head the better the light in the room, but in conventional construction 7' seems to be as high as wide and narrow windows can be lined up under an 8' ceiling. Even medium openings require a double 2x10 header under the plate, and wide openings would need steel or plywood reinforcement in the headers to line up at 7'.

In setting window heights, dimensional coordination with other wall components is much less important than in setting window widths. Any desired window height works equally well with both wood framing and batt insulation, and in one-story houses any desired window height works equally well with brick or concrete block, since generally masonry should not be carried across the top of the opening. The three window heights we recommend would all permit cutting dry wall, sheathing, and exterior facing without waste, whether the window head is set at 7' or 6'-8".

In picking window heights to recommend, our No. 1 consideration was not for materials, but for people and most specifically for the sill heights people will find most satisfactory for various rooms.

Assuming a 7' window head, the 3' window would permit a 4' sill in bedrooms, bath, and kitchen. We are unanimous in affirming that this sill height is high enough for all reasonable requirements of privacy, even in bathrooms, high enough to permit placing all but the tallest furniture beneath it. We believe most people will find their rooms much pleasanter and much less confining if the sills are kept well below the 5' level that has of late been common, and we note that at least one insurance company is refusing to take mortgages on houses with only such high openings because children cannot escape through them in case of fire.

The 4' window height we recommend would give a 3' sill under a 7' head or a 2'-3" sill under a 6'-8" head. Either would be comfortably below eye level for anyone sitting down and just above table height.

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The 4' window height we recommend would give a 3' sill under a 7' head or a 2'-3" sill under a 6'-8" head. Either would be comfortably below eye level for anyone sitting down and just above table height.

We anticipate that most of the windows used in builders' houses would be 3' high, putting the sill at 4' or 3'-3". This would let architects design with the strong middle line often used to make a small house look bigger. Sills under 4' and 6' windows would be enough lower to avoid the unpleasant effect of a near miss in alignment.
Two basic door heights are all that are needed

In recommending basic door opening dimensions for builder houses we had to recognize several facts:

1. Most outside door openings have already standardized at a 36" rough opening width which FHA requires as a minimum for at least one entrance.

2. It is impossible to coordinate this width with either stud spacing on 16" centers or masonry openings on an 8" module.

3. Since there are far fewer doors than windows, the waste involved in uncoordinated door widths is much less costly than the waste caused by uncoordinated window widths.

4. Most door openings have already standardized at a 6'-8" rough opening height, the FHA minimum.

5. This is too low to line up with the 7' height which is most often preferable for window heads.

In view of all this, we are not recommending any change in door widths, but we do recommend that doors should be offered in two basic heights—the minimum 6'-8" and the preferable 7'.

The one best way to reconcile door openings with the other wall modules is to incorporate them in prefabricated floor-to-ceiling panels, three stud spaces wide, with the doors prehung and weatherstripped.

Concerning the increasingly popular metal-framed sliding glass doors, we recommend that these be dimensioned to fit into the modular grid, starting with a rough opening width of 96" (minus) and increasing in increments of 48". We also recommend that they be designed visually to align with the head heights recommended for ordinary doors and windows.

We particularly recommend that the manufacturers of these large sliding units include a structural lintel and structural jambs as part of their package, since all but the smallest of these units require special and costly header reinforcement over and beyond the common double 2" x 10". We urge the glass industry to adjust its double-glazing dimensions to the requirements of the most popular of these sliding doors—48" widths and 80" to 84" heights.

Problem of lining up garage door height with man-door and window heights is too difficult to solve. Most practical suggestion: standardize at a 7' height.

Garage doors might be standardized at a 7' height

We wish we could suggest some economical basis for lining up garage door heights with the other openings, but the lower level of the garage floor (usually 6' lower in the slab house, 18" lower with crawl space) makes this problem too difficult. The highest practical garage door height is around 7', for many upward acting doors require 14" clearance; yet the lintel of a 7' garage door would be too low to line up even with window heads dropped to 6'-8".

We do believe that garage doors are now offered in many more sizes than are needed, and we recommend that garage doors might well be standardized on a height of 7', with a single car width of 9' and a two-car width of not less than 16' and 18'. These are already available at prices lower than odd sizes.

This 7' height would at least line up with a 7' man-door opening into the garage itself.
On the newsstands this month—

—prefabs
—new ideas for open kitchens
—a plank-and-beam house from the Northwest
—a flat-roofed house from Illinois
—and plenty of glass walls, open plans and new plans, houses with separate family rooms

This month, more than 6 million subscribers* of three leading consumer magazines are being told that they “should look at the many important advances made in the manufacture of prefabricated homes.”

They are being shown pictures and plans of some new prefab vacation cottages, costing as little as $2,500, as well as pictures and plans of a half-dozen new prefabricated all-year-round homes costing from around $10,000 all the way up to $60,000.

In short, prefabs are being given a tremendous boost. And since most of them are well designed by first-rate architects, good design is being given a big boost with them. Other consumer magazines are promoting open kitchens—kitchens that are so open that they were designed to look like living-room cabinetwork (which indeed they are).

And the rest of the consumer press, without exception, is giving its readers still another gentle push in the direction of quality contemporary design. Two magazines (combined circulation: 7½ million) are showing their subscribers advanced contemporary design in the traditionally conservative Middle West—houses with flat roofs, glass walls, open plans and all the rest.

As we said last month: better keep your eye on the newsstand—because your customers do.

*Note: each subscriber's copy, it is estimated, will be read by five or six people,
A big month for prefabs

BetterHomes (Circ: 4,044,335): "The best summer home buy yet!" BH&G editors call this prefabricated Tech-built vacation house designed by Architect Carl Koch. Two-bedroom version with fireplace, bath, complete building instructions costs about $2,500.

National Homes (Circ: 517,023): The June issue is devoted to prefabs, introduces National Homes' new $16,000 "Canterbury" designed by Architect Charles Goodman. Says H&G: "... an example of American assembly-line wizardry."

Parents (Circ: 1,570,566): In a long story written by MIT Architect Richard W. Hamilton PARENTS' readers learn that "acceptance of prefabs is snowballing... Home buyers, lenders, and government agencies have become enthusiastic boosters." So, it seems, have the editors of PARENTS.

A big boost for the living kitchen

LIVING (Circ: 520,353): "One of the handsomest features of the house [by Architect Paul Hayden Kirk] is the kitchen," says LIVING "Cabinetwork is walnut, well scaled."

Home Beautiful (Circ: 622,477): "Hottest news of all is the new concept of the kitchen itself as an indoor-outdoor food center, a place to give parties as well as to work," says HB, devotes 18 full pages to new equipment by all manufacturers, concludes that "in the wonderful world of kitchens, the dreams have already come true."
A dramatic showing for plank-and-beam

A modern trend in the Middle West

"Luxurious without being extravagant, for its 2,080 sq. ft. of main floor area offer good living to a medium-sized family," comments AH. Architect Donald I. Grieb's house has an additional 412 sq. ft. upstairs, 600 sq. ft. in garage. Transition design contrasts flat and hip roofs.
A magnificent two-level house of planes of glass and wood by one of the Northwest’s most talented architects, Paul Hayden Kirk. Says LIVING: “The house presents to the eye a sweeping simplicity which is disarming... It is also a house of simon-pure, unadulterated quality.”

In view of LIVING’s past policy of publishing only under-$15,000 houses, this obviously more costly house suggests that the editors have taken cognizance of the trend toward more expensive “quality” construction. The roofs, incidentally, consist of 5 lineal miles of cedar and fir 2” x 4” spiked together side by side to form tremendous slanting decks that span between deep beams spaced far apart. Dampproofing was used on top of the decks, then insulating board, then built-up roofing.

... and a wide agreement on the use of glass

The “abundance of windows (in Architect Donald I. Grieb’s house) would do well by any agreeable site.” Shown, four pairs of glass doors, set between structural posts.

Your single-purpose rooms can do double duty,” says WHC, of this handsome family room by Architects Campbell & Wong. “By day it’s an indoor play space for youngsters, and at night it helps the living room accommodate big parties, makes extra room for overniggers.”
BAN ON NEGATIVE NO-DOWNS BARELY DENTS THE BOOM AND ALMOST EVERYBODY APPREHENDS THE MOVE

16-CITY SURVEY FINDS RECORD SALES, LITTLE OVERHANG OF UNSOLD HOMES. BUT GRADUAL MORTGAGE MONEY TIGHTENING MAY DAMPEN BOOMING HOUSE OUTPUT BY AUTUMN

The VA ban on negative no-down mortgages is not likely to do more than scratch the surface of the housing boom.

Builders and lenders in 16 cities surveyed by House & Home last month reported business as usual—in most areas better than usual—and they saw no sign of a fall-off ahead.

“IT ISN’T GOING TO MAKE A BIG DIFFERENCE TO US,” said Big Builder Donald Metz of Al- don Construction Co. of Los Angeles. “If people want to buy a home, they should be able to put up at least $200 to $300. . . . We went into the no-no-down only because the competition did.”

Commented President James W. Bailey of the Dallas Home Builders Assn.: “It should have been stopped a long time ago. Now maybe the 30-year loans will be eliminated.”

START OF A SNOWBALL? VA asserted that it had no further plans to brake its fast-moving home loan guarantee program. But the agency had voiced a similar hands-off policy only a few weeks before the ban on no-no-downs was issued late in April. With increasing attention from Congress focusing on the pros and cons of the boom, further restrictions of the government mortgage program were always a possibility.

VA knocked out absorption of the closing costs by the builder and had issued an order requiring the builder to certify that he had not given or loaned the buyer funds to meet the costs. (FHA issued a similar order, but its effect would be even smaller than VA’s.)

The important side of the VA order was that it presaged a harder look by the administration at some builders’ habit of using give-away inducements to sell their houses. VA pointedly reminded its field offices of “instances in which builders are advertising cash payments for moving expenses, premiums of one type or another and other tangible inducements to promote sales.” Warned VA: “In addition, there has been some indication of other circumstances which tend to raise a question as to the propriety of VA valuations. Your office should maintain close scrutiny of such cases, . . .”

Thomas J. Sweeney, VA loan guarantee chief, said there was no cause for worry over give-away tactics unless they got out of hand. The inference was that VA was going to pay closer attention to appraisals (Sweeney told a House committee that VA “had evidence of very poor compliance inspection” and was “trying to take corrective action”) in order to cut down the possibility of 100%-loan homes having less value than that specified on the CRVs.

CUTBACKS ON CRVs. Two other notable facts emerged in conjunction with announcement of the VA ban. One was that far fewer builders were actually using the no-no-down than one would believe from listening to all the hullabaloo about loose housing credit; the other was that VA has, like FHA, been rationing issuance of CRVs (firm commitments in the case of FHA) in several areas.

“It is something we have always done,” Sweeney said of the rationing policy. “The discretion of when to slow down is left to the regional offices.” He told an MBA mortgage conference in New York (see p. 41) that about 28% of VA loans closed last year were no-down but only 1.2% were no-no-downs. It had been previously established before the House veterans affairs committee that the average down payment on new houses purchased by veterans has been 5.4%.

Hot weather expansion. Meantime, builders pushed ahead with new projects, undismayed by a slight tightening in mortgage money or the fact that they had to sell harder in some areas. Items:

• “We have no overhang of unsold homes,” said Philip Klutznick of American Community Builders in Chicago. “We expect to build as many or more homes during the next year as we did during the past one. You understand, there isn’t the pressure demand for houses there once was. People who are in the market can afford to wait and shop. But they’re buying.”

• Edward Rose & Sons of Detroit had their biggest first quarter (212 homes sold) in 34 years. Said President Irving Rose: “We confidently believe we are on the way to setting a new record.”

• A poll of Portland, Ore. builders showed that 10% planned greater production this year, 80% the same as last year, and 10% somewhat less.

How much money? The present boom was feeding on mortgage money allocated last fall. The pinch that experts say is about to start will not really be felt until this fall. According to a cross section of lenders: “So far nothing serious.”

That did not apply to no-down VA money, however. Commented one Louisville banker: “The market for 100% GI loans on future projects is almost nonexistent except with a five-to-six point discount.” In Houston, 30-year VA money had tightened within the last month, was going at a three-point discount. The implication of a continuing tight market for the still-approved no-downs was expressed by Stanley M. Earp, president of the Citizens Mortgage Corp., in Detroit: “The VA officials know that the mortgage company is charging the builder points—I would say it was at least a 5% discount—and naturally they will begin to look into the probability that the CRVs are too high.” Earp’s company, with a portfolio of more than 20,000 homes, is holding to 10% down payments on their VAs, has never taken no-no-downs.

Way down South and West. What was the situation in areas famous for their negative no-down dealings? House & Home’s survey showed this picture:

Miami: With a good 50% of home sales based on some form of the VA no-down, it was thought that the ban would hurt a little, but not drastically. The boom was still...
"solid enough," said one builder. Commented Elliott Mackle of the big Mackle Co., Inc.: "A great many new people coming here are bringing money. They're not all looking for no-down-payment deals."

**Houston**: Home sales were also estimated to be 50% no-down, with about four-fifths of this segment no-no-down. Officers of the Home Builders Association estimated that ban would cut back total sales 10-18%. The reason it would not hurt more, according to Association President S. N. Adams, was because "most of the buyers will be able to dig up the closing cost money." (Many builders and lenders felt this way. As Duane Sarles of the San Francisco VA office put it: "Buyers figured if they weren't asked to pay, why should they? It gave them a little more money to buy a TV set.")

**Los Angeles**: A rough estimate put 20% of home sales on a no-no-down basis. Earl S. Anderson, executive secretary of the Los Angeles Real Estate Board: "It won't be serious. As long as the influx of population continues and people need homes, they are going to have to buy them and anyone who buys a home expects to put something down."

**Suspension in action.** No-no-downs were few and far between in Dallas, but builders there were still up against a suspension of speculative firm commitments by the local FHA office pending an examination of the city's vacancy situation (see below). The cutoff was not troublesome, "Everybody except the Dallas builders are worried about this Dallas FHA suspension," said Hal McGraw, president of the Texas Home Builders Assn. Some erroneous wire service stories from Washington reporting that FHA had suspended all activity in Dallas (individual requests, minority housing commitments and conditional commitments were not affected by the order) had upset Eastern lenders and caused misunderstanding in other areas. But home buying in Dallas picked up after a slight March-April slump; most builders who were not still using pre-March 1 commitments had been able to find other financing.

**1.5 million supervisors?** The VA move, plus increased information on government commitment rationing and the market's own self-regulating mechanisms, seemed to have made for more optimism about the boom. Sen. John Sparkman (D, Ala.) remarked at a hearing of the Senate banking committee last month that he was "not afraid of the present level of home building." Moreover: "I don't believe the construction of 1.5 million housing units this year would be too much." Sparkman did say—somewhat equivocally—that he was not sure the housing was being built in the right places and expressed concern about the "virtual drying up of rental housing." Administrator Cole, answering the implied criticism of the FHA cost certification requirement, said he did not know how it could be eliminated, but averred he was willing to try to discover "some other way to prevent windfalls."

Sparkman also wanted to know how much more money a home buyer had to spend now than a few years ago and Carter McFarland, acting asst. HHFAdministrator, told him that the median price of a house has risen 35% since 1949, while construction costs have increased 18%. Half of total homes, he said, were now priced at $12,500 or over, against one-fifth so priced six years ago. Sparkman deduced from these figures that 50% of all homes are being built for families with incomes of $4,500 or higher.

**Seven million by 1960?** More discussion of the price of housing came up at the committee's second round table. Prof. William Wheaton of the University of Pennsylvania's city planning department said the nation would need 7 million additional units by 1960. To get them up, the industry would have to tap a large segment of the lower-priced market "now being neglected." Wheaton thought 800,000 units a year could be built for low and middle-income families (the definition would vary with locality) without subsidies, but not at the going interest rate. He recommended loans at the "cost of the money to the government, plus an operating margin" (perhaps gained through FNMA assistance) to result in an interest rate of 3½%.

**Vacancies reach 10% in Los Angeles, Dallas; surveys indicate buyers come from rentals**

Rental vacancy rates reported in *House & Home's* 16-city survey varied from next-to-nothing to a startling 10%. It is almost as difficult to determine a city's vacancy rate as it is to pin down reliable figures on household formations, a fact that cuts the shock of the reported high-vacancy estimates and makes for re-examination of some of the lower estimates. But coupled with information on who is buying houses and why, the figures add up to a new look at local markets.

Cities with over 5% vacancies:

**Dallas**: The local FHA office, at work on a survey of both rental vacancies and unsold houses, estimates that the rental figure may be as high as 10%. Director Ellis Charles said it "is probably the highest ever," but emphasized that he did not feel this rate was having an alarming influence on the home market. Charles has said several times recently that he does not think Dallas is overbuilt ("But caution from FHA and builders is needed") and builders in the city are sensitive about reports that it is. Charles' point that the rental vacancy figure is not as worrying as it sounds is based on his belief that fast-building Dallas needs an above-average number of apartments to facilitate the location of families moving in from other areas.

Two principal types of buyers in Dallas are families with two or three children looking for a larger home ("New babies, not new brides, are increasing the market," says President James W. Bailey of the Home Builders Assn.) and older couples without any dependent children at all.

**Los Angeles**: Apartment vacancies are at an all-time high (the Los Angeles Apartment Assn. estimates it at 10%) because of heavy home building. Apartment owners say it is impossible to rent an apartment when a family can buy a home with four bedrooms and two baths for the same monthly pay.

(continued on p. 170)

**FIRST TO HEAR of VA's ban on negative no-downs were members of the House veterans' affairs committee, shown the day they called VA officials in for discussion. Standing: Phil Weaver (R, Neb.), William H. Ayres (R, Ohio), Charles M. Teague (R, Calif.). Seated: George S. Long (D, La.), Chairman Olin E. Teague (D, Tex.), Elizabeth Kee (D, W. Va.).**

Photos: Remi
Can this simplified steel frame . . .
compete with a wood frame?

"Yes," say its manufacturer and architect emphatically. And that's what makes this the most remarkable prefabricated package of '55.

For years architects, engineers and builders have believed steel framing could be competitive with wood for residential framing. Their reason: cyclical fluctuations in wood prices. Many previous steel systems failed because they tried to compete on wood's own ground: the tremendous ease with which it is cut, fitted and nailed. On this basis wood always ended up cheaper than steel. But this new system competes with wood by depending on scrupulous engineering rather than on imitating wood's qualities and because:

- It is extraordinarily simple: its developers have worked eight years to engineer a frame that can be bolted together in half an hour with common tools.
- It comprises only a few parts to erect in the field: six steel frames with preglazed windows and 16 steel trusses form the skeleton of a 1,150-sq. ft. house.
- Its modular dimensions inside and out integrate it with dimensionally standard components like plywood, exterior and interior gypsum and brick: except for cutouts in gypsum for electrical outlets and recessed lighting, no materials need be cut in the field.

Other significant features of the system: 1) It uses only one special connector almost throughout which converts gypsum sheathing and wallboard to structure on steel studs and trusses. 2) Its cavity wall is utilized for passage of sliding windows, doors and window walls. 3) Its exterior frame can house a variety of partitions—closet walls, even paper honeycomb core panels. 4) Its exterior can be faced with steel or concrete panels or brick. 5) It is almost fireproof, bugproof. 6) Thermal conductivity of its walls with a brick veneer is .24 or .01 lower than uninsulated wood framing; U factor in its walls with 1"-thick concrete panels and no insulation is .30.

As a prefabricated package, it is now being manufactured by the J&B Mfg. Co. of Houston, newest entry in the fast-growing prefab industry. It is being market tested in a nine-house cul-de-sac outside Houston where it was shown to the public May 22. Price range: $16,000 to $18,000 for three- and four-bedroom, two-bath, attached garage or carport houses including $3,000 to $4,000 lots.

Marketing plans at present will limit distribution to select builders in the Southwest and one Midwest prefabricator.
Frame is erected in four hours with an eight-man crew

8 AM: Truck arrives at site with complete first load: six sections of steel frame, 16 steel trusses, 34 galvanized steel, paint-grip birdstops, plywood for roof, two gable ends, exterior gypsum for wall sheathing, concrete panels to go over windows, metal spline connectors and nails.

8:05 AM: First of 3' o.c. stud-spaced frames, with preglazed windows inserted, is unloaded. Heaviest frame weighs almost 400 lb. and can be handled by four men. Exterior gypsum is site applied since it would double weight of portable frame. Other frames have prehung doors.

8:30 AM: Four walls are up, leveled with metal shims, anchored to slab with bolts. Wall sheathing operation in field was speeded when manufacturer started to deliver frames with sheathing applied under all windows (see photo right, opp.), adding only negligible weight.

8:35 AM: Trusses are placed 3' o.c. over studs. Plywood sheathing (see below) is nailed directly to 16-ga. steel trusses with helically threaded nails spaced 12". Trusses, manufactured to faro factory tolerances, square frame at top, allow application of plywood in precut 4'x6' and 4'x9' sheets.

11:40 AM: Vented metal gable end, shipped to site in two pieces, is placed. House has been completely sheathed with exterior grade gypsum by means of special galvanized steel splines (details, p. 142). Eight-man crew can comprise three carpenters, five unskilled laborers.

11:45 AM: Workmen put finishing touches to exterior: here birdstops are fastened to trusses over windows where concrete or metal panels will be inserted. Within 15 minutes, before lunchtime, house will be ready for mechanical trades and interior partitioning (see pp. 142-143).
Steel birdstops are nailed through prepunched steel trusses at top, fastened to asphalt-painted steel studs with wide clips and ¼" bolts.

Square steel gussets, three at a corner, are hammered into place, bolted with common ½" bolts that tie all wall sections together. Frame goes together like a Meccano set.

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Trusses are bolted to 16-ga. steel lintel through steel flange which was shop-welded to truss. Connector is ¼" bolt. Tool used is screw-type wrench. Note (right) how continuous lintel eliminates window headers.

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Simple connectors, common tools are used to assemble steel frame

Full complement of tools needed to erect house comprises hammer, wood saw, level, metal snips, pliers, taping trowel, drift pin, wrenches. Connectors, with exception of the metal spline (next page), are all common ¼", ½", ¾" bolts or helically, threaded nails used to apply plywood roof deck to 16-ga. steel trusses. Studs were placed 3' o.c. to get a wide, mullionless window in a single unit ("a 2' window would have been too narrow"). A 4' stud spacing would have been too wide for a light steel frame and would have forced use of roof purlins between trusses anchored over studs, thus adding many more connectors.

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Frame is engineered to lowest common denominator of field crew skills

Splines convert gypsum sheathing to structural material

Chief new structural technique—and key to whole system—is a metal spline used to apply gypsum to steel studs. Splines are friction fitted to a T-shaped hot-rolled structural shape (the stud); U-shaped channels grip special 2'-wide gypsum sheets above and below, thus act like girts every 2' and meet FHA requirement for 2' o.c. spacing simply by turning requirement on its side.

Corner post permits 3' module both on the interior and exterior

Corner details solve ticklish problem of utilizing 3' module inside and out: exterior gypsum is applied to outside in 3', 6' or 9' lengths; on the interior instead of one gypsum sheet butting against another, each barely touches, leaving a 1/8" square void. Corner cover plate (right, above) ignores module. Corrugated metal strips are welded to splines and corner to form brick ties.

Frame is engineered for preglazed, disappearing windows

Cavity wall formed by two T-shaped structural shapes, welded together by steel straps, is 5 1/2" deep on inside face, allows passage of single-hung window on top track. Although no insulation is used in Houston houses because of two-cavity wall (other cavity is formed between sheathing and brick facing), insulation batts as thick as 2 3/16" could be applied in steel wall cavity without windows or sliding doors snagging them. All window trim is within grid lines of the 3' module. All other trim is flush.
**Interior partitions: steel studs, splines and dry wall**

Same spline system used on exterior is utilized to construct interior partitions. After outside walls and ceiling have been dry-walled, 16-ga. steel sills are anchored to slab with stud gun. Clever leveling jack which is merely the base spline and two bolts can be raised or lowered to take up slack in slab-to-ceiling height (8' plus tolerance). Splines are taped over as nails in dry-wall finishing.

**Interior partitions are wired by drops from ceiling**

Metallic cable is dropped from ceiling between 2" studs and connected to boxes by steel L-plates secured to channel-like studs. Low-voltage wires for remote switching are dropped in same manner. Note holes for recessed lighting in ceiling. Interior partitioning, say developers, is comparable in time to conventional building.

**Double wall around plumbing gets pipes in without cutting studs**

Open stud lets pipes pass through partition horizontally, eliminating frequent need to cut or notch as in wood framing. Ceiling panels in 2' x 3' rectangles are attached to trusses by splines. Manufacturer points out that extra taping required by formation of many more joints is largely counterbalanced by elimination of nail spackling. Ceiling and base trim are snapped in place. Only two basic corner posts are used for interior partitioning.
Staging its own Parade of Homes, J&B's first nine houses were sited in a well planned court (see plot plan, opp.). Air conditioned house with family room, two baths, features master bedroom on opposite side of house from children's rooms (left). Note from grid lines how architect maintained 3' module on all major partitions; interior module starts on inside face of inside walls. A custom-designed L-shaped house came off drawing board April 15, will be finished for June 11 opening of Houston Parade of Homes. Public showing of nine houses, unfinished as HOUSE & HOME went to press, will be May 28.

What prefabricators and building experts think of steel framing

Len Haeger, technical director, Levitt & Sons: "I'm one of those who think that steel framing will ultimately be made practical. I'm dubious about the possibility of it being competitive with wood at present. The sliding window in this system may force it into a limiting situation much as a nailable steel frame prescribes its own limits. The ultimate solution to steel framing will be simple tools designed for the system; it is to the credit of this system that the tools are all simple ones."

Burnham Kelly, left, MIT professor, author of "The Prefabrication of Houses," industry source book: "I'm glad to see someone trying to use steel again but disappointed that it is not being used in a bold new way. Many will ask the question I do: "When you have a structural steel system, why face it with structural brick?" The framing itself looks cleanly detailed."

John L. Morley, right, president, Midwest Houses: "Here is the basis of a system that could end by producing a steel house that could compete with wood. Right now the system will compete very successfully in the Southwest."

Ned Cole, president, Fabricon, which uses a steel truss: "Detailing is simpler than most other residential framing systems and the frame seems to be well engineered. The fact that there aren't many pieces to go together is a big point in its favor. The sliding windows pocketed into cavity walls are new, different and good. It is possible that the system may have to freeze on just a few basic plans and elevations. Studs are open enough to avoid the condensation problems inherent in steel framing."
System is adaptable to host of exterior treatments ranging from steel through plastics. Note in model elevations how nontraditional materials are first being introduced in carports, garages, fencing, over and under windows where developers think public acceptance is most likely. More steel will be introduced, first in closet wall system.

Horace Durston, president, American Houses: "This system will interest prefabricators chiefly because steel is more stable in price than wood. That's important because prefabbers must make advance commitments on materials. Over the years we have been looking for a satisfactory substitute for wood. If steel costs the same as wood, this could make a most attractive package to all builders."

Howard Vermilya, left, vice president, American Houses. "There should be no difficulty with mechanical trades, not much conductivity through walls. I wonder if the use of gypsum with brick will limit the market: not everyone can afford brick. Flexibility in house appearance, important to buyers, is here, though.

Dave Slipher, right, chairman, NAHB Research Institute: "You cannot put enough value in a panel unless you put the ultimate in labor and finish in it; it makes no difference if the panel is a big steel frame. The big question is how much of this house can be packaged as a finished product."

Robert Lytle, president, Modern Homes Corp., which uses a steel floor framing system: "This frame accomplishes only as much as others—structure. It doesn't get deeply into finishing, the major problem of builders. Gypsum limits it. But the introduction of steel in a frame is important, the disappearing windows a major advance, elimination of headers over windows excellent. The system leaves an awful lot of work to be done on site."

JUNE 1955
$50 for each new way!

House & Home will pay $50 to any architect or builder who sends in a new way "to build better for less" that is published in this monthly department. Contributors must include all the needed pictures, drawings and facts, and of course the editors' decision on what suggestions would interest our readers must be final.

House & Home is always particularly pleased to publish a new idea developed by a small builder that big builders will have to borrow and copy!

Send your suggestions to: H&H, new ideas editor, 9 Rockefeller Plaza, New York 20, N.Y.

9 MORE WAYS TO BUILD BETTER FOR LESS

This is the third of a series of cost-cutting articles appearing regularly in House & Home

27 Taping tools produce smooth joints

"We are very happy with the job we get using taping tools for the joints in our drywall installations," reports The Schuermann Construction Co., of St. Louis. Builder Schuermann has used the tools for 1½ years, finds the clean and uniform joints reduce buyer resistance to gypsumboard interior finishes.

Since the tools nearly eliminate human error, workmen can quickly be trained to produce uniformly good jobs. One builder reports a saving of ten man-hours per house. Several varieties of the tools are available to do any number of tasks from laying the tape in mastic to applying the final finish with perfectly feathered edges. As sanding is kept to a minimum and loose spackling compound is not spattered on the floor, clean up is kept at rock bottom.

Taping tool shown above lays tape in bed of mastic, can travel horizontally or vertically or across the ceiling. Tool at right is used later.

Finishing tool above has self-contained supply of mastic which is automatically ejected and spread to produce a uniform joint contour.
28 Multipurpose framing system saves $200

In the past when splitting and checking of exposed rafter s in Builder Tom Todd’s houses forced him to box them in, he looked fast for a cheaper solution. Now he saves the $200 cost of casing an rafter has a recessed light and electric raceway to boot. He replaced the timbers with a pair of 2 x 10’s separated by a 4 x 4, all more dimensionally stable than the timber. The 4 x 4 is kept far enough below the plank deck to allow for a wiring chase, and a fluorescent lamp is mounted below the 4 x 4. Quarter-inch mahogany plywood finishes off the bottom of this laminated beam. Openings sawed into it allow the lamp to project light where it is wanted.

![Diagram of the framing system](image)
3-in-1 rafter currently uses fluorescent fixture, will eventually have ordinary lamp receptacle and standard bulb, a further saving.

29 Intelligent stock piling saves $200 on every job

Fred Bopp, a custom builder in St. Louis, plans his material stock piles carefully because he is sure he saves over $200 on every house that way. Organized well in advance, his materials are scheduled to arrive at the site at the proper moment to be stock piled in logical order of use. Nothing is put further than a few steps from the house. Builder Bopp once added up the time his carpenters spent walking back and forth to a lumber pile 50’ from the house, found it staggering. “But you must use judgment,” warns Bopp. “Cement cannot be delivered in advance, but lumber will be well seasoned if stacked properly, well ahead of use.” And Bopp believes in having lots of tarps, stepladders on the job.

![Builder Bopp's lumber yard](image)
Builder Bopp would prefer to “strip” his lumber stacks, then cover them with tarps
Natural wood interiors match dry-wall costs

"With no increase in cost we can offer mahogany-paneled interiors," says Builder Don Drummond. He often uses cheap (about 14¢ per sq. ft., in Kansas City) ¼" plywood in conjunction with other wall materials, finds that it lends luxury at no extra cost. Either redwood or rotary-cut mahogany plywood is used, sometimes (on exterior walls) glued to the studs, and sometimes nailed. It is quickly finished with one coat of shellac followed by one coat of dull varnish, with a light sanding between. Further savings result from the elimination of door and window trim and nail-hole puttying because of the few nails.

Pecky cypress makes inexpensive exterior walls

"Just about the cheapest wall material we can use," also reports Don Drummond. He uses vertical boards (usually 10" or 12" width) with 1" battens. For smaller houses he occasionally uses 6" or 8" boards, but never in random widths. The worm-eaten material described by local FHA officials as "so bad it looks good," was, however, accepted by them.

The 1" boards are applied rough sawn and stained, a fast and inexpensive process. The walls have a rustic and attractive appearance that appeals to buyers. Because of the low cost (about $1.45 per M in Kansas City) and because it looks and weathers well, several other builders in the area have begun to use pecky cypress.
32  **Save $20 with simple soffit detail**

The clever soffit shown at right saves St. Louis Architect-builder William Schlesinger six carpenter-hours or about $20 per house. "It goes up in a hurry and gives a good tight job," says Schlesinger, who now uses it as a standard detail. Horizontal cuts are made on the rafter ends to afford nailing for the plywood soffit, and the fascia board is rabbeted to provide a weather-tight joint at the eave. Schlesinger formerly used a standard soffit with 2 x 4 lookouts above it, finds this one better all round.

33  **Save your buyers $25 in valance costs**

A bonus that St. Louis Builder Schlesinger gives to his buyers is the ready-made curtain valance shown at right. While the buyer must ordinarily invest about $25 to enclose the drapery track, Schlesinger is able to do it during construction at no extra cost. The trick he uses is simply in allowing the slightly oversize cornice molding to pass directly in front of the window offsets. He thus creates a pocket over the window that is as deep as his interior window reveal. While this is not applicable to all types of construction, many builders can use it with very little adjustment of their window details. An added attraction is the tidy look of the continuous ceiling molding without the usual protruding valance.
34 Eggbeater eliminates stem wall forms

An ingenious attachment to their trenching machine allows Strauss Bros., Builders, of Lincoln, Neb., to dig the foundation stem walls and spread footings in one operation. Designed and built by Partner Abe Strauss for less than $500, it has paid for itself many times over, since the machine leaves a perfectly shaped footing and foundation form in the ground, ready for concrete. No concrete is wasted.

The trenching machine digs itself in to footing depth at the starting corner, excavates a 16" wide, flat bottomed footing and 8" vertical stem cavity about it. Concrete is poured, screeded at ground level. The ½" steel pins are forced into the still-wet concrete, projecting about 4". These pins later tie the rough foundation to the finish foundation, poured above it.

A conventional trenching machine was used as basis for the special implement . . .

35 One man carries 25' of sewer pipe

T. Harding, Jr.

A booster for lightweight fiber pipe in sewer installations is Little Rock Builder, Jack Bracy. After using it in over 1,000 homes, Bracy says: “It gives a better sewer, we get a more perfect job of laying, and it definitely is more root proof. In addition, we think we save approximately one cent per foot.” Other features of the pipe that appeal to Bracy are the easy transportation of the pipe to the building site and fast handling on the job. In a typical Bracy installation his two-man crew digs the sewer trench (with machinery), lays the fiber pipe and backfills in a total time of 1½ hours. The pipe is made by several manufacturers, is available perforated (for drain fields) or solid for piping. Various fittings and bends are made to fit the standard 4" pipe.

Connector is tapped onto tapered end

Lightweight fiber sewer pipe quickly follows trenching machine into the ground is coupled to the next piece with a tight-fitting ring connector. Not as resistant to damage as some other types of pipe, the fiber material is usually buried far enough below the ground to be safe from such crushing blows as those of a heavy delivery truck.

...and next section fits into it

...which is shown here with the propeller-type attachment about to dig itself into the ground. Strauss Bros. are delighted with it.
Fascia detail, designed by Architect Marcel Breuer, features 1) a metal gravel stop that cannot be disfigured by workmen's ladders marring the roof lines, 2) a wood trim that acts as a drip, and 3) a cement-asbestos fascia that is inexpensive and permanent. At Croton-on-Hudson, N. Y.

This wood fascia is sloped to protect it from the weather and to give a long subtle line to the roof. Designed by Frank Lloyd Wright, it provides a drip at the bottom of both boards used in the finish fascia. Mr. Wright has many variations of this detail for flat roofs, often uses a metal fascia. At Charles City, Iowa.

This flat roof detail by Architect Edward Larabee Barnes incorporates a recessed lighting trough and curtain pocket. Note Barnes' solution for the different roof levels, caused by the change in structure where overhangs meet the major roof construction. At Fort Worth, Texas.
This clerestory cupola admits light and ventilation to a central utility core. Its trim construction is similar to that of the rest of the house, designed by Architect John Jahnensen. Hopper sash is operated from inside with an extension pole. At New Canaan, Conn.

For a mild climate, Architect Victor Bruno finds this an inexpensive skylight solution. Glass is fastened to the frame with bolts through holes drilled in glass. Bruno also uses a skylight having a metal collar that turns up over edges of glass. At New Orleans.

This plastic skylight has been so successful that it has been put into production by a manufacturer. Designed by John Black Lee, it features a flange that is built into the roofing, forming integral flashing. At New Canaan, Conn.

This little skylight is seated in mastic on a metal flashing collar. The light is a split glass block, available in most areas. The box is lined with aluminum for maximum light reflection into the room below. Designed by Charles Warren Callister. At Belvedere, Calif.
Should you use treatment plants or septic tanks?

Do you know the economics of sewage?

This year 400,000 new homes will have septic tank systems. That means builders are spending more than $100,000,000 this year for this kind of sewage treatment.

That is too many and too much. One-third of all new urban nonfarm houses is too high a share of housing to get septic tanks. In many cases—no one can say how many or where—these systems will cost both homebuilders and buyers a lot of extra money and trouble in years to come. Sanitary engineers say septic tank systems are the most complicated form of sewage disposal known. Although the federal government has just completed a $300,000 nine-year study of them, a lot of the answers to why they sometimes work and sometimes fail are still unknown.

Most new home owners will get public sewer facilities this year. In nearly all such cases, this means lower sewage costs in the long run. Obviously, builders connect their houses to existing sewer lines whenever possible. And some go a step farther, erecting their own treatment plants and providing sewer lines. Few who do so make a mistake; in fact, many find it a most profitable move.

Septic tanks are often the economic solution, nevertheless. The question is, when? Few builders know:

1. Septic tank systems may not be as cheap and safe as they seem
2. Sewage treatment plants are cheaper than they look
3. In the absence of existing sewers, either may be the answer
4. The choice often depends on the condition of the soil
Architects E. H. and M. K. Hunter are convinced that flat roofs are most suitable to areas with deep winter snow. Some of their reasons: 1) It is desirable to maintain snow on a roof as extra, free insulation, full of air cells. 2) Pitched roofs must usually be shoveled after a very heavy snowfall because they are not designed to carry the heavy snow loads that sometimes accumulate even though the roof is pitched. 3) The membrane type of covering which is used on flat roofs is the best and least expensive type available. 4) Flat roofs may be flooded for summer cooling. 5) Unless the roof pitch is expressed inside the building, the cubic feet lost in pitched roof construction is an expensive waste of space. While some of these items apply to all areas, the Hunters find them very important in New Hampshire. When designing flat roofs for their area, the Hunters begin by computing a load of 70 lbs. per sq. ft., which allows for 4" of wet snow. They use a strong gravel stop detail, and flash and counterflash at chimneys. They handle drainage cleverly—interior roof drains are installed next to the heater room flue to avoid freezing, a serious problem in the area. "Around here no gutters are practical since heavy ice soon removes them, opening up the roof for leakage," say the Hunters.
Septic tanks present a paradox:

**today septic tank systems fail less often technically but builders face more red-tape trouble**

For a time after the war, unwary builders were having more trouble with septic tank systems than almost anywhere else. There were plenty of reasons:

- Many builders were developing land in the suburbs for the first time, out beyond the sewer lines. They had had no experience with septic tanks.
- There was little dependable scientific data on septic tanks. They had been developed in rural areas. If one went wrong on a farm, there was so much land it didn't make much difference.
- What might originally have been an adequate prewar tank and drainage field became inadequate under overloads from the new automatic washers, the new garbage disposers, the new baby crop with all its diapers, and the second bathroom.

In the past few years, considerable knowledge of septic tank systems has been developed for builders, subcontractors, government health and housing officials, state and local authorities and to some extent home buyers themselves.

Most builders no longer need to worry about their septic tank systems working, provided they follow proper procedures in installing them. New knowledge of what kind of tanks and tile to install, how to test soil, what to do about extra water from automatic washers and waste from garbage disposers is available which could prevent 80% of failures. In fact, FHA experts say nearly every case of failure they have investigated could have been prevented by proper engineering. But even so, too few people in the field who approve plans or install the systems know much about the subject. In half the counties of the US, there are only part-time health officers. They pay less attention to housing sanitation than to other health problems. And most sanitation officers have their own pet notions about septic tank systems, which is why there are almost as many different state codes governing septic tanks as there are states. FHA's preferred code—five years old and somewhat out of date already—has been adopted in only ten states. But it has also been adopted in Alaska and Puerto Rico, evidence that it would be suitable in all states.

Wary, experienced builders are still having trouble, but of a different kind. Now they are having trouble largely with FHA, VA and local health authorities; all are making it harder to put in any septic tank systems, much less inadequate ones.

FHA, VA and the US Public Health Service are slowly making progress—held back by slow-moving state health authorities and their own inadequate staffs—to spread the new knowledge about these systems. Over the long run, however, this means fewer and fewer installations. The time will probably come when very few states will permit big builders, even those putting up as few as 25 or 50 houses in a project, to get along without public sewers.
Sanitation is the first problem to solve
whether you are building one house or 1,000

If you are considering use of septic tank systems . . .

There are eight things to do before you buy the land

1. Make a rough appraisal of the soil
Size it up for texture, structure and color.
Texture can best be judged by the feel. The best, light, sandy soils feel gritty when rubbed between your fingers. Silty soils feel floury: when wetted they have no cohesion. Heavier clay soils are dense and hard when dry; when wetted are slick and greasy.

Structure. Its nature can be recognized by the way a clod or lump breaks apart. There are four fundamental structural types, according to the shape of the particles and the way the clod breaks: platy (poorest for absorption), prismlike, blocklike and spheroidal (best for absorption).

Color is an important clue. Most soils contain some iron compounds which take on a reddish-brown to yellow color if the soil is alternately exposed to air and water. Thus, a reddish-brown to yellow color indicates there has been free alternate movement of air and water in the soil. Poorest soils are dull gray or mottled, which indicates little movement of air and water through them, thus poor absorption characteristics.

2. Get a soil map of the area from the Department of Agriculture or a state agricultural college, and study it

3. Ring doorbells in the area
If you are new to the area and have any doubts at all about the soil, ask home owners if they have had any trouble with septic tank systems. Frequently what appears good absorptive soil will be found giving people trouble. (Not that they always realize the occasional plumbing trouble, fetid odors or wet spot in the yard are caused by failures.)

4. Drill 6' to 10' to determine water table, find height of rock or hardpan
In one state this spring a builder tested some soil, found it nearly perfect for absorbing effluent and bought the land. Then he was shocked to be turned down by FHA. Reason: hardpan lay just below the drainage-tile level. He had not made a drill test.

5. Think twice if you will need to grade
Remember that septic tank fields almost never should be placed in backfill, and grading often takes away the good topsoil from cut-away land. Some areas require grading plans with 2' intervals to determine more adequately the final grade and soil tests at final grade whenever it will be changed more than 1'.

6. Make a percolation test, at least one hole per acre
The most important finding in the government’s nine-year study of septic tank systems is that they must be geared to the soil. This can only be judged safely by a percolation test, although in itself it is not always sufficient. Legal requirements for such tests vary widely. Wise builders will often spend more money to go beyond what is required. Best procedure: follow the recommendation in the government’s research report as far as possible. That method is described in full on pp. 178-179, as is a table for applying any such soil test to various houses.

7. Get FHA approval
If you want FHA mortgage insurance, get the FHA to pass on the soil absorption qualifications before you proceed, even though you have approval from a sanitary engineer or local health authority. Play it safe. Often the FHA knows best about soils in an area.

8. Follow the FHA minimum standard
The FHA has a master standard for septic tank systems which is the closest thing yet to the findings in the government study.* This has been adopted in several states.

*The USPHS has just published its final report on the research “Studies on Household Sewage Disposal Systems. Part III.” This extremely technical report, like Parts I and II, will be interpreted for health authorities, builders, and others, in a 120-page booklet to be published next year. Many of the findings, however, are available now in HIF’s year-old Construction Aid 5, “Septic Tank Soil Absorption Systems for Dwellings,” obtainable from the Superintendent of Documents, US Government Printing Office, Washington 25, D. C., for 25¢.

If septic tanks are indicated, be sure to put them in right . . .
What about the costs of treatment plants?

The question is

not whether builders and the public can afford them

but, rather, can builders afford not to have them?

Most 50-house builders can double their profits by putting in sewage treatment plants rather than septic tank systems.

That is so even though the cost per house of a large treatment plant may be double that of many small septic tank systems.

The public benefits monetarily as well as by getting superior sanitary facilities. For one thing, builders can actually sell houses for less when they provide community sewage systems at a higher cost per house. (This is only the immediate gain to home buyers. But ultimately, septic tank system costs are inevitably greater.)

In some cases, these facts hold true for builders of even 25-house developments.

The most remarkable aspect of these economic facts is that so few experienced builders have learned them.

It is true that costs of treatment plants, sewer lines, engineering and legal fees vary widely, sometimes even in the same locality. It is true that some builders cannot set aside enough money for a big plant when they start a development. It is true that in some areas there is no way to dispose of the purified effluent from a treatment plant. It is true that some local governments (in fact, one whole state) will not permit such plants.

It is also true that some or all of these obstacles have been overcome by some builders who are now much more successful because they provide community sewage systems (which they can turn over to the community free at no cost to themselves).

And it is true, as the examples on the next page show, that some land—otherwise uneconomical to develop because soil conditions rule out septic tanks—can be used only if treatment plants are installed.

Perhaps the biggest obstacle the builder must overcome is the appalling lack of information extant about treatment plant costs and engineering. There is no one source of information on it. Sanitary engineers and equipment manufacturers have many widely varying ideas on the best way to handle a specific plant set up. The federal government survey of household sewage disposal did not cover any aspect of community sewage. Builders' best current source of information is other builders who have had experience with treatment plant problems.

For some specific case histories, turn the page . . .
On Grosse Ile, a plant at $200 a house

In Michigan, the first sewage treatment plant for a builder's development went in last winter. Rossin & Ringler, who built it near Warren Village, are now starting a larger development on much neglected housing-site Grosse Ile in the Detroit River. Total cost per house in each case: $200.

As a result, Johnson & Anderson, the engineering firm that designed the plants, now has plans on the drawing boards for 15 other plants, all for builders.

Partner Paul Ringler paved the road for builder construction of sewage systems for two reasons: (1) unfavorable soil conditions would have made septic tank systems cost $600 to $700 a lot, and (2) he believes a builder should not risk his reputation on the future of septic tanks (homeowners usually must bear a future double cost of sewer facilities, meanwhile frequently paying upkeep costs).

He found that a complete treatment plant would run to only $500 per lot, or $75,000 for his 150 houses in the first development. He obtained the community's willingness to accept the plant, as the state requires. He also agreed to build it bigger so another and larger builder could use it. The plant as completed takes care of 600 houses. Total cost: $120,000. Cost per house: $200.

Now Rossin & Ringler are starting a 450-house development on the choice Grosse Ile island area (where septic tank installations are costly). Since the plant need provide only primary treatment, it will cost $35,000, will handle 900 houses. The building firm is giving the plant to the township as a gift. For the builder's own development the cost is $200 per house.

The plant will be entirely underground except for a small attractive pump house which looks like a residence. The plant is guaranteed against noise and odor, and is only 100' from the nearest real house.

These builders find treatment plants the solution for sewage problems
Treatment plants are going in all over

In St. Petersburg, Fla. Builder Mark J. Emden turned from a "nightmare" with septic tank systems to a development with a treatment plant giving him "a very definite sales advantage and lot appraisals more than offsetting the additional cost."

In Wichita, Realtor Don Morris developed a large tract with a treatment plant on the prized northeast side of the city, where septic tank systems called for 1,000-gal. tanks on half-acre lots.

In Hillsboro, Ind. Engineer C. O. Snyder has just designed a treatment system for a 100-house project at $500 a house.

With one plant, room for swimming pools

"Prospective purchasers smile when told there are no septic tanks."
Builder Randolph Parks of Sacramento has found reasons of his own to smile after providing a sewage treatment plant for the 400 homes of his Parkway Estates development. Cost per lot was only $180, far less than septic tank alternative.

"Within the development," he says, "there will never be a tank to clean or a tile field to add to. With this system, garbage disposal units can be included in the house with freedom from worries of tank overloads. Septic tanks mean no chance for owners to put in swimming pools, terraces and the like. The investment of the home buyer has been insured and increased."

Another Sacramento builder who finds cost lower, customers happier with community sewage is J. C. Hecke of Hecke & Hurst.
The developer is building a plant for $15,000 which is big enough to serve 1,100 acres with an average of four houses per acre. Entire costs are far less per house than average septic tank cost would be in area.

Houses with sewers outsell other houses ten to one

In Congers, N. Y., Builders Eugene Blumenthal and Philip Shapiro are selling houses cheaper because they have a sewage treatment plant that cost $850 per house.

Because they put in a treatment plant for 200 houses, the local town government permitted them to build on 10,000 sq. ft. lots. Houses with septic tanks must have 15,000 sq. ft. lots. This difference allows the builders to make a good profit on an additional 40 to 50 houses.

Paradoxically, the doubled cost of sewage per home over septic tanks reduced the builders' costs and permitted them to price the houses lower. There were more houses sharing the cost of streets, drainage and other offsite improvements, so that this cost was pared per house. And the houses sold faster, reducing selling costs and interest.

"The value of a home to its owner or a lender is stepped up $800 to $1,000 with urban facilities, chiefly the sewers," says Blumenthal. "Our houses sell for $15,500 up, but that applies to any house over $12,000 in a project of 50 or more. Our prospects are accustomed to the convenience of city sewers. The first thing they want to know is whether you have public sewage. Under certain circumstances, they are willing to pay $500 more for it, too."

The building team feels strongly that putting in good sanitation facilities is a moral responsibility of a builder. They feel they can rest easier knowing that their buyers will have good sewage conditions for the years to come. They hope to build another 150 homes in the project later. They will build another treatment plant for these houses, of course.

The first plant will cost $80,000. provide complete treatment. Other costs include manholes ($75 per house), sewer lines ($262 per house) and miscellaneous fees and charges which bring the total cost per house to about $890. This is included in the price of the house. Home owners later will pay about $2 a month for operation. The plant will be turned over to the township.

Builders may obtain complete details on the treatment plants discussed in this article from the following engineers and companies:

Beckerle & Brown, Pearl River, N.Y.
Dorr-Oliver Co., Stamford, Conn.
Enziger Co., Wichita
Harry N. Jenks, Palo Alto, Calif.
Joseph E. Spink, Sacramento, Calif.

JUNE 1965
Success on odd lots...

How to get repeat-order economies with one-at-a-time houses

How to build houses efficiently on individual, leftover lots is what many builders want to know these days. Builder Garry Grover seems to have found the solution.

Using four basic plans, he relocates windows, carports and fireplaces to take advantage of ground contours and view. His basic plans range from a two-bedroom, 912 sq. ft. house selling for about $9,000 to a four-bedroom luxury model having 1,680 sq. ft. and selling for about $19,000.

His impressive record: 60 houses per year, all on individual sites, wooded and barren, sloping and flat.

Grover builds all over Lafayette, a middle- and upper-income suburb east of Oakland, Calif., which embraces some steeply sloping land. His newest and most dramatic solution is the house shown above. Built on timber struts, it rides high and dry above its hillside sites, doing away with excavation and leveling. For details on Grover’s economy methods for this and his other houses, turn the page.
Designer-Builder Garry Grover began building after World War II, has upped his production from six to 60 houses per year. Although he is often able to undersell his competition by using the cost-cutting techniques shown here, he ascribes his success to good design. Grover is President of the General Contractors Assn. of Contra Costa, Calif. (NAHB)

Two-bedroom houses at top and bottom have same plans, look different because carports are relocated to fit the sites.

Four-bedroom house (center) is similarly adapted to fit rolling land. Angled counter (see plan) between kitchen and dining room earned favorable comment.
Grover cuts cost four ways to meet stiff competition

1. He carefully plans each piece of lumber for a house on the drawing board so that a local lumber company can deliver each piece precut and ready to assemble. Grover found precutting paid off after the first few houses, both in time savings and elimination of waste.

2. He assembles the precut pieces on jig tables at the job and erects the assemblies very quickly. This operation is so efficient that a saw is never needed on the job.

3. He uses a module (determined by the 2" roof decking) in all his houses. The insulating decking spans 32" or three spans to an 8' sheet. Grover felt that windows would be too narrow at 32" but too wide at 96", decided on a 5'-4" module equal to two spans.

4. He uses plastic tubing for radiant heating in his slab houses. This flexible polyethylene tubing forms a virtually jointless and seamless system, saves him 10 per cent on his heating installation.

   While Grover uses the first three economies listed above in his strut supported house, it costs him more to build than his slab types. This house costs $16,000, about $13.50 per sq. ft., nearly $2 per sq. ft. more than his other types. Grover feels the extra cost is justified by (1) the built-in deck which equals a patio (not offered with his slab houses); (2) the added sales appeal of wood floors; (3) the cheaper cost of hillside lots.
NEW PRODUCTS

New floorings for the slab ... 1,000 sq. ft. of eye-catching sales appeal

Embedded pigment chips are scattered at random throughout Confetti asphalt tile, right, laid out strikingly in this room.

Not cork, but a clever optical illusion, is Corktone asphalt, below, which ranges from a light tan to dark brown in color.

Homebuilders will put up almost 750,000 concrete-slab-floor houses this year and, as never before, will have an almost unlimited choice in floor coverings. New materials, new adhesives and new methods have widened the selection; new colors and designs have beautified it. Slabs are no longer restricted to marbled asphalt; the builder can use vinyl-asbestos, plastic, cork, even real marble tiles. Hardwood strip flooring can be laid on screeds (Jan. issue), or laminated blocks laid directly on the slab. Even stain asphalt has changed its spots; changed them to multi-hued spatters, an optical-illusion cork, a 4" x 24" random plank.

Stick-to-Itiveness

a. Biggest advance is the invention of water- and alkali-resistant adhesives, like Armstrong's On-Grade Cement and Chemical-Set Cement and Congoleum-Nairn's Three-Twenty. The first two permit the entire range of resilient flooring (except linoleum and linoleum tile) to be used on grade, the third can be used even below grade with rubber or vinyl tile. A well-drained subbase, vapor membrane, and outward sloping grading (normal good practice) are the only qualifications. Before any resilient flooring is installed, the slab should be dry, clean and cured to a hard, nonpowdery finish, free of imperfections. Capillary moisture, alkali

continued on p. 182

Moisture and alkali were always destructive of many adhesives used on or below grade before invention of improved cements.

Other NEW PRODUCTS in this issue

Cabinet doors without handles ... p. 220

vinyl threshold ... p. 192 perimeter cold- and warm-air diffuser ... p. 214 thin marble tile ... p. 188
Section shows continuous reinforced concrete footing for struts, tied to upper footing with 8" grade beam at center and each end of house. Metal gussets, made specially for these houses, are of 1/4" steel plate. System is adjustable to various slopes.

Wall-to-wall bathroom window over tub (far left) is pleasant feature of house. Post-and-beam nature of panels is illustrated by photo at left. Horizontal nailers were used for earlier redwood siding, are not important with plywood siding.

Cutaway section of standard slab construction used by Grover shows panels in place with vertical shadowline plywood siding. Panels fit 5'-4" module, are assembled as unit on slab, then tilted into place. Grover gets impressive savings with this system.
Talk about wind resistance...

FIRE-CHEX SHINGLES wouldn’t say “Uncle” to the Hurricanes!

Here’s real proof that Fire-Chex shingles have no equals for rugged strength and wind-resistance. Not a single Fire-Chex roof, inspected in the wake of hurricanes Carol, Edna and Hazel, was found to be damaged!

You can feature unequalled protection and value in roofing, Fire-Chex, for just a few dollars more than conventional materials. And for much less than slate or tile (both of which knuckled under to the hurricanes). By any comparison, Fire-Chex are an economy for home-buyers. "They will outlast conventional roofing several times over," as stated by a foremost authority.* And Fire-Chex are the only roofing of any kind rated Class A for fire-safety, without asbestos underlayment!

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Complete 16 foot sliding glass door is easily handled by one man. Ador doors are shipped knocked down, compactly packaged in easy-to-handle cartons.

Savings of 50% or more in shipping costs are not uncommon with Ador's package design. No expensive crating is necessary, yet doors are completely protected against damage. Shipping weight is substantially reduced.

Secret of Ador design centers around unique self-contained "unitized" construction. Both door and frame are complete integral units held together by heavy duty corner castings—an exclusive Ador feature.

First step in installation is setting the threshold on level, flat surface—either sub-floor or slab. The threshold is easily leveled by means of shims. Note tapered design and full 9 1/2" threshold width.

Interlocker is now placed over blocks on header and threshold. The interlocker consists of two heavy duty extrusions, one a ribbed hollow tube unit. This permits the extremely narrow sight lines characteristic of the Ador door.

The door frame assembly is completed by installing the kickplate between interlocker and jamb. In the Ador design virtually all installation screws are hidden by the snap-on glazing bead.

The sliding section is now assembled by means of corner castings and Phillips head bolts. It is a completely self-contained unit not dependent upon glass to hold unit together—an extra safety feature.
58 minutes
to install 16' door

Savings of 50% or more in installation costs
through unique design and packaging of
Ador all-aluminum sliding glass doors

2 Then jamb is set at either end of threshold in the heavy permanent mold corner castings. This assures a perfect installation with weathertight joints between jamb and threshold.

3 The header extrusion is now installed by sliding the unit up into the castings attached at the upper end of the jamb. Self-threading corrosion resistant Phillips head screws are used throughout.

After installation of the sliding unit in the door frame the hardware is attached. The distinctive lucite pull and eccentric latching mechanism are exclusive Ador features that add security and beauty.

Another unique feature of Ador design is the adjustment provided for perfect alignment of the sliding unit with the frame. Both sheaves may be raised or lowered by simple screw driver adjustment.

Complete information on Ador Sliding Glass Doors is available from:
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Final proof of Ador design is a permanent perfectly functioning door... easily installed; fully weathertight; operating with finger-tip ease; alumilite finished; competitively priced.

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they said they’d be back, but...
HOW MANY TIMES HAS IT HAPPENED TO YOU — BECAUSE YOU DIDN'T HAVE THE RIGHT PROGRAM FOR MERCHANDISING YOUR MODEL HOME?

The prospects were interested, but didn't stay long. Said they'd be back, but probably won't. Not that they didn't like the house. But there just wasn't anything in it to spark up the features; make a strong "want-to-buy" impression.

It could be a different story, if you had more merchandising helps—the kind that bore right into the prospect's mind and stay there. Newspaper ads, radio spots, billboards to help bring them. Smart displays, unique devices in the house to impress them. And above all, take-home literature they can study at leisure—the kind that brings them back for another look.

Chances are that this kind of merchandising is more than you care to tackle—alone. To get it, you need professional assistance—and that's where Lennox comes in with the Model Home Promotion Plan.

There's nothing like it in the industry—nothing that reflects such intimate knowledge of builder problems; such skillful merchandising sense; such expert use of words and graphic techniques. And when you specify Lennox Winter or Summer Air-Conditioning it's yours practically for the asking—at a fraction of the cost you'd pay if you produced it yourself; You have no preparation problems. Lennox does all the work; you make the sales. The Lennox Model Home Promotion is a proved merchandising plan that's working right now for all types of homes and builders in every section of the country.

FREE! Write Lennox Furnace Company, merchandising dept., Marshalltown, Iowa, for free sample copy of 4-color custom-made literature described below. Full information on the complete merchandising plan will be included. Write Lennox today, or see your Lennox dealer.

Professionally prepared advertising and merchandising tools

COLORFUL LITERATURE!
Specially prepared for you by Lennox. Beautiful full-color cover; inside spread that talks about your homes, your site, your features. No printing or processing headaches for you. Lennox does the work!

MYSTERY VOICE!
Stop prospects in their tracks, with this amazing new electronic device that makes walls talk; creates a "talking" model home hostess; gives Lennox equipment a voice. What a stopper!

CHARMING HOSTESS!
She meets your prospects—even "speaks" to them when you use her with the "mystery voice". Miss Lennox is an attractive life-sized cut-out display. And here's more! Giant balloons, billboard designs, product signs, newspaper ads, radio spots—field-tested to help you sell!!

IT'S GOOD BUSINESS TO BUY

THROUGH 5,422 HOME COMFORT SPECIALISTS

Air Conditioning, Heating—Since 1895: Marshalltown, Iowa; Des Moines, Iowa; Columbus, Ohio; Syracuse, N. Y.; Ft. Worth, Texas; Salt Lake City, Utah; Los Angeles, Calif.; Decatur, Ga. In Canada, Toronto and Calgary.
"Talk about selling homes faster," says Mr. Dunbar, "We've hit the jackpot with Suburban—especially the new Copper-Tan finish. Here is all the luxury of copper—with none of the upkeep. Our prospects really go for that beautiful lifetime porcelain enamel finish. It blends with any color scheme... won't scratch or tarnish, is heat proof, acid resistant—and easy to clean. And, like all Suburban ranges, it has more features wanted by more women than any built-in I know of. No wonder my good friends at Toledo Pipe & Supply Co. (local distributor) call it the 'wife-saver' range!"

GAS OR ELECTRIC—Suburban is the best deal yet for builders. Interchangeable gas or electric units use the same cabinet... choice of stainless steel, Copper-Tan, and decorator colors... all units competitively priced... backed by powerful national advertising.

OVER 1,500,000 GAS AND ELECTRIC APPLIANCES NOW IN USE

SAMUEL STAMPING & ENAMELING CO., Dept. D-6, Chattanooga, Tenn.

At no obligation to me, please send complete information checked below:

- SUBURBAN GAS BUILT-INS
- SUBURBAN ELECTRIC BUILT-INS
- SAMCO GAS RANGES
- SAMCO GAS HEATERS
- SAMCO GAS FLOOR FURNACES

Name ______________________ Address ______________________

City ______________________ State ______________________

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**NEWSTOLED**

**Migration, rental exodus**

**prop sales, survey shows**

Neither FHA nor VA was cutting back, but both were watching operations carefully. Big builders figure that 45% of their customers come from rentals; 40% from smaller or older homes and 15% from out-of-town. A total of 75% were classed as married couples between 25 and 30 years old, married two years and with at least one child.

**Portland, Ore.** Three 608 projects with vacancy rates ranging from 17% to 28% were throwing off total estimates for city and state. Not counting the 608s, figures from a half-finished survey by the Oregon Apartment House Assn, put vacancies in newer apartment buildings at 6.8%; in apartments over 12 years old at 5.6%. FHA had come up with a statewide vacancy rate of 7.4%, but it was far from meaningful because the 608s were counted. Said FHA: "Oregon is not overbuilt, and vacancy figures are misleading in that the bulk is in one large block of apartments in Portland."

The block of 604 units had suffered a real pull from VA's home-buying terms. Jack Binford, owner of one of the projects, started advertising one month's free rent a few weeks ago. Binford claims there is not a solvent 608 in the city, but FHA denies this, pointing out that only two of them are under foreclosure, while a third has FHA as the mortgagee under a reorganization that has resulted in increased tenancy.

**In from out of town.** Cities enjoying the full brunt of immigrating families had little to worry about as far as a thriving home-building business went. It was not certain that such families would fill all of the apartments all of the time, but it was a safe bet they would fill new houses before long. Examples:

- The population of Dade County, Fla. (750,000) is expected to double by 1960. The developers of Leisure City there say that their 1,300 home owners come from all 48 states and seven foreign countries.
- Ed Northway of Hutchinson Homes in Denver figures that 40% of the expected 12,000 persons who will buy homes in the Denver metropolitan area this year will be from out-of-town; 30% will be looking for bigger and better houses and another 30% will be first-time home buyers.
- In Atlanta it is estimated that 20-25% of home buyers come from outside the city; perhaps 50% move from apartments and 10-15% buy to upgrade what they have.

In larger cities, like Detroit and Chicago, the picture changes to increased emphasis on a family's desire for better and newer homes, plus a marked increase in the number of buyers moving out of rentals.

In Detroit, Donald E. Munro, president of Edward Rose Sales Co, made an analysis of his last 700 sales, found that 40% were to families formerly in older or smaller homes; 35% to renters; 15% to new families and 10% to out-of-towners.

Park Forest in Chicago reported that during the past year 60% of their home buyers moved out of Park Forest Apartments; 30% moved out of other rental units in Chicago and 10% moved in from out-of-town.
In the "Air-Conditioned Research Village"...

the lowest cost-to-operate air-conditioned home is equipped with a Halstead & Mitchell Residential type Cooling Tower

According to cost figures comparing the twenty homes in the Air Conditioned Research Village in Austin, Texas, Halstead & Mitchell Residential Cooling Towers were installed in homes which ranked No. 1 and No. 6. (Ratings from HOUSE + HOME, March, 1955).

HOUSE + HOME, reporting results from the project engineers, showed that water costs with cooling towers for the entire five-month Texas-summer season were as low as $2.00 per summer. So small was the cost, indeed, that special meters had to be installed to read the daily consumption.

Certainly house design and air conditioning equipment design were the major factors in the low cost of air-conditioning operation in these homes. But it is a tribute that two of America's leading manufacturers selected Halstead & Mitchell's Residential Cooling Towers with such happy results.
Faulty installations cause most failures

How to install septic tank systems

With basement plumbing, provide a sump pump. Septic tanks should not be placed deeper than 2' below ground surface; house sewer should not slope more than 1" in 20' to tank. Otherwise, without a sump pump, the tank and the sewer would be too deep in the ground.

On sloping lots, always locate disposal system on the downgrade side of the house.

Surface drainage from the vicinity of the disposal field should be away from the source of potable water.

Research also shows:

- **Tank design**: two-compartment tanks with half to two-thirds of their capacity in the first compartment give top performance. Multi-compartment tanks give as good or better performance than single-compartment tanks. Two-compartment tanks may be either round or rectangular. Tank capacity should be 50% greater if there is a garbage grinder in the house.

- **Sludge and scum accumulation**: increased water consumption in homes with automatic washers has no effect on tank size requirements but calls for more tile field. Chemical cleaners do not hurt the tanks but harm (shorten life of) tile field. The same is true of water softeners.

- **Distribution boxes**: such boxes, with inlet baffles, are much preferred to clay tile Ts and Ys.

Properly designed and installed, the average septic tank system will last 20 years, if the tank is pumped out every three years cont'd on p. 175

Minimum distances for installations of septic tank systems are recommended as shown here by the government. Local requirements may vary somewhat.
nothing's more violent than a tea party!

Scorching utensils, acids, rough abrasions, anything that mars ordinary hard surfaces has no effect on Pomona Tile's "Space-Rite" Perma-glaze deck tile. Fused by an exclusive Pomona process, Perma-glaze has flint-like hardness. That is why this steaming kettle and potent lemon juice acid prove harmless to its lifetime jewel-like surface. Note the smart, new 6" by 4¾" size tile in Pomona's textured Sun Yellow Perma-glaze. To guarantee complete client satisfaction, specify Pomona "Space-Rite" tile.

Write for free catalog with actual tile samples of full line of colors.

POMONA TILE

POMONA TILE MANUFACTURING CO.
629 N. La Brea, Los Angeles 36, Calif. • York 1177
Seattle • San Francisco • Pomona • Long Beach • Arkansas City, Kan. • Houston • St. Louis
Phoenix • Salt Lake City • N. Hollywood • N. Kansas City, Mo. • Chicago • Denver • Dallas
It doesn't take long to make a trench dry with a Homelite Gasoline Engine Driven Pump on the job. Doesn't take long because it's easy to get it to the job . . . no planking, no hauling . . . one man sets it up. Yes, and it doesn't take long because a Homelite is quick starting, fastest self priming and gushes water out as much as 15,000 gallons per hour. Eliminate delays . . . save money . . . with Homelite Carryable Pumps.

HOMELITE CORPORATION
5806 RIVERDALE AVENUE
PORT CHESTER, N. Y.
MATICO PARQUETRY TILE FLOORING

A truly different, distinctive tile, MATICO Parquetry creates the luxurious effect of wood block flooring in low-cost asphalt tile. Parquetry is ideally suited for installation in offices, institutions and private homes because its rich, natural tones harmonize with any decor or style of architecture. Sturdy, durable, resistant to stains and scratches, Parquetry can be installed on, above or below grade. Available in four desirable shades—walnut, oak, maple (shown above) and mahogany.

Now at C group asphalt tile prices, MATICO Parquetry is as economical as it is handsome and practical. Be sure to consider Parquetry when next you specify flooring.
Today's home buyer is more interested in "Quality" than ever before. No longer is he satisfied with just a house. He demands better design, better construction, better materials. Today, he is a QUALITY-minded buyer.

To make your houses more readily saleable in today's market, give them the magic "touch of quality." Include "Quality-Approved" aluminum windows — windows that cannot rot or rust... that save money on painting and maintenance year after year... that always operate easily, effortlessly, efficiently... windows that remain up-to-date and beautiful for the life of the house.

"Quality-Approved" aluminum windows are nationally advertised in leading magazines. They are readily accepted by home buyers as a mark of quality construction. As you plan and build new houses, install "Quality-Approved" aluminum windows and see for yourself how they stimulate sales. Your prospective buyer, as well as your financing agency, will appreciate it if you also include screens and storm sash as part of a complete single-package mortgage.

"Quality-Approved" aluminum windows are available through many manufacturers (see list on next page) in all sizes and styles (swinging, casement, double-hung, projected and sliding). All are tested against rigid performance standards. All are APPROVED for quality of materials, for strength of sections, for sound construction, and for low air infiltration.

For additional information, consult any of the manufacturers listed on the next page, or write to Dept. HH-65.
These Reputable Manufacturers are ready to supply you with Quality-Approved Aluminum Windows.

ALCASCŌ PRODUCTS, Inc.
12640 Bent Road, Detroit 32, Michigan
ALUMINUM HOME PRODUCTS CO.
Carr St., Knoxville, Tenn.
THE WM. BAYLEY COMPANY
1200 Wando St., Springfield 99, Ohio
CECO STEEL PRODUCTS CO.
2651 West 26th St., Chicago 30, Ill.
CUPPLES PRODUCTS CORPORATION
2650 So. Hanley Rd., St. Louis 17, Mo.
FENTRON INDUSTRIES, INC.
2801 State St., Seattle 7, Wash.
MICHAEL FLYNN MFG. CO.
GENERAL BRONZE CORP.
Stewart Ave., Garden City, N. Y.
METAL ARTS MANUFACTURING CO., INC.
Harwell Rd., Atlanta, Ga.
REYNOLDS METALS CO. (Window Div.)
3000 S. 9th St., Louisville, Ky.
THE F. C. RUSSELL CO. (Aluminum Division)
Box 27, Bristol Pa.
J. S. THORN CO.
8251 Hyperion St., Philadelphia 36, Pa.
UNIVERSAL WINDOW CO.
935 Parker St., Berkeley 10, Cal.
WARE LABORATORIES, INC.
3700 N.W. 25th St., Miami, Fla.
WINDALUME CORPORATION
Kenvil, N. J.

For Quality Materials
For Sound Construction
For Strength of Sections
For Low Air Infiltration
PALCO
Architectural
Quality Redwood

REFLECTING MORE NATURAL BEAUTY—
AND YET SO PRACTICAL... for exterior and interior finishes

Tone and texture of redwood lend themselves as in no other material to design flexibility—
while offering the practical advantages of easy workability, dimensional stability,
high paint retention, and ageless defiance of weather, insects or decay.

To assure full value of these premium qualities at no higher premium in cost,
Certified Dry Palco Architectural Quality Redwood is selected, manufactured,
handled and subjected to reinspection at every step by the most advanced
facilities and procedures in the industry. By specifying Palco Architectural
Quality, you can be sure of highest uniformity of grade—yet you pay no more!

THE PACIFIC LUMBER COMPANY
The best in Redwood—Since 1869

100 Bush St., San Francisco 4 • 35 East Wacker Drive, Chicago 1 • 2185 Huntington Drive, San Marino 9, Calif.

MEMBER OF CALIFORNIA REDWOOD ASSOCIATION
that is more than a beautiful floor covering.

The ability of a floor tile to stay beautiful is the sum total of numerous factors—color, surface and resistance to everyday indoor highway wear. All these and built-in protection against greases, oils, mild acids, alkalies, gasoline and naphtha are important properties of this all-purpose plastic floor tile. Flexibility, resilience and unlimited application possibilities are inherent in Vinylflex. Vinylflex is used in homes, commercial establishments, institutions and industry with exceptional results in performance and economy. Vinylflex Plastic Floor Tile carries the Hachmeister workmanship and quality material warranty. Write for suggestions on how HAKO Floor Tiles can help you.
Add Lupton Windows as a sales feature

The Lupton Residential Casements shown here are as smart and modern as the ranch homes in which they are used. Their trim lines, easy operation and sturdy construction make them a decided sales-plus. On either side of the fixed glass panels are standard Lupton Casements... with all muntins removed. Result... modern-styling with traditional casements.

For single homes or for operation houses... for modern or traditional architecture... you can select exactly the window you need from the complete Lupton line. That's why you see so many Lupton Windows in so many projects. There is a standard Lupton Window available, or one can easily be adapted, for practically any building. Lupton has the size and style you want!

Variety is only one reason for building with Lupton Windows. They are designed and built for easy operation and long life. Dealers can offer prompt delivery. There's the integrity of a window manufacturer with over 40 years experience behind every Lupton Window sold.

Why not contact your nearest dealer — listed in the "Yellow Pages"— or write direct to...

MICHAEL FLYNN MANUFACTURING COMPANY
700 East Godfrey Avenue, Philadelphia 24, Pa. Member of the Steel Window Institute and Aluminum Window Manufacturers Association

Lupton Windows
METAL WINDOWS
For sure sales pick-up, builders turn to brick homes

As buyers become more selective and insist on higher quality, more and more builders in the highly competitive Long Island market are choosing brick.

Here's what they say—

“We find people prefer brick because of its warmth, quality and maintenance economy. In three weeks we sold 20 of the 35 brick homes in our newest section.”

Newman & Wiesbarth
Central Homes, Bellmore, N. Y.

“When we build with brick, sales are faster. We also prefer brick because it gives us pride in the quality of our product. Our present price range is $14,790-$17,340.”

Walter Beck, Beck and Rapone
New Bridge Terrace, Plain Edge, N. Y.

“In two months we sold 60 brick homes in the $18,500-$20,000 range. Brick makes them easier to sell—in fact, people demand brick in this price range.”

Joseph Mascioli
Clearview Village, Hicksville, N. Y.

Structural Clay Products Institute
1520 18th Street, N. W., Washington 6, D. C.

The beauty and variety of brick and tile make home sales easier
hard to talk to them all
What brought the cars? News. News of a good house on a good site with good financing. News told through the papers, the mails, and by word of mouth. News of a better house full of quality brands.

For example, there's the Jones' car. Mother, father, and three kids. They're "trading up" from a two-bedroom house. Lived in it six years. Know a lot about houses . . . and they're looking hard. Looking for quality, durability, names. Brand names. Brand names that to them stand for money well spent.

And there's Mr. Cook's car. Great do-it-yourself man, Mr. Cook. Knows tools, woods, and quality. Knows brand names, too. And, like the craftsman he's fast becoming, he wants quality from A to Z. Knows it by eye.

The hang of a door and the name of a floor.

And there's the car that belongs to the young couple from the apartment house. They've saved and saved. And read and read. And dreamed, too. Dreamed of finding a kitchen like this ad or a bathroom like that. Dreamed of good roofing and washable paint. Dreams based on beautiful convincing ads in the magazines they've read.

All types go through a house. The lookers, the buyers, the chatters, the dreamers. Hard to talk to them all. But they're all important. One way to reach them, though. Merchandising at the point of sale. Pointing up the nationally advertised features they'll know and respect. Features they've seen advertised in LIFE. Last year advertisers invested more dollars in LIFE than in any other magazine.

That's why, more than ever before,

\[
\text{in this changing, building America}
\]

LIFE helps make the sale!
How to make a percolation test

The fundamental soil test
developed by the government's long research
of septic tank systems is given in full below.

Says the report

"A test providing opportunity for saturation and swelling is indicated for about 50% of the soils of this country . . . Shortcut tests developed for local conditions should be checked against this fundamental test."

- Number and location of tests: six or more tests should be made in separate test holes spaced uniformly over the proposed absorption field site.
- Type of test hole: dig or bore a vertical hole with diameter or side widths of 4" to 12" to depth of the proposed absorption trench. These can be bored with a 4" auger to save time.
- Preparation of test hole: remove all loose material from the hole. Scratch bottom and sides to provide natural soil interface into which water may percolate. Add 2" of coarse sand or fine gravel to protect bottom from scouring or sediment.
- Saturation and swelling of the soil: fill the hole with clear water to minimum depth of 12" over gravel. Refill as necessary to keep water in the hole for at least four hours and preferably overnight. Allow the soil to swell overnight to insure its approaching conditions of wettest weather. (In sandy soil with little clay the swelling procedure is not essential.)
- Percolation rate measurement: if water remains in the hole after the overnight swelling period, add clear water to bring the depth of water in the hole to about 6" over the gravel. From a fixed reference point, measure the drop in water level over a 30-minute period. This drop is used to calculate the percolation rate.
  If no water remains in the hole after the overnight swelling period, add water to bring depth of water in the hole to about 6" over the gravel. From a fixed reference point, measure the drop in water level at about 30-minute intervals for four hours, refilling 6" over the gravel as necessary. The drop that occurs during the final 30-minute period is used to calculate the percolation rate.
  In sandy soils (or other soils in which the first 6" of water seeps away in less than 30 minutes, after overnight swelling) the time interval between measurements should be taken as 10 minutes and the test run for one hour. The drop that occurs during the final 10 minutes is used to calculate the percolation rate.
- Additional criteria: Results of the percolation test should be applied with caution if (a) the water table is normally at a depth of less than 4' for any extended period during the year, or (b) impermeable layers of rock, clay or hardpan are found at depths less than 6'.
How to apply the percolation test results

Required absorption area
Square feet of absorption trench bottom per bedroom

<table>
<thead>
<tr>
<th>Percolation rate</th>
<th>1 without garbage grinder or auto. washer</th>
<th>2 with garbage grinder</th>
<th>3 with automatic garbage grinder and auto. washer</th>
</tr>
</thead>
<tbody>
<tr>
<td>time required for water to fall one inch</td>
<td>50</td>
<td>65</td>
<td>75</td>
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<tr>
<td>in minutes</td>
<td>2 or less</td>
<td>60</td>
<td>75</td>
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<td>3</td>
<td>70</td>
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<td>60</td>
<td>225</td>
<td>275</td>
</tr>
</tbody>
</table>

Over 60
Unsuitable for shallow absorption system

How to install the distribution system

Extreme care must be used in laying the distribution piping. Most state health departments prefer that the grade of pipe or tile be only 2” to 4” per 100’. Unless it is laid by an experienced crew, it may make an otherwise properly installed septic tank system fail completely.

Several types of nonmetallic piping, all 4” in diameter, are used for the field distribution system. Perhaps most common is common agricultural or farm drain tile, usually a foot long, laid with joints opened from one-quarter to one-half inch. Such tile is cheapest—initially, at least—but more susceptible to damage. Grade boards provide one method of obtaining proper slope. Bell and spigot clay pipe, laid with joints opened about 1/4”, may be used without grade boards. Perforated bituminized fiber pipes usually have a higher initial cost but are not subject to much damage, infiltration by roots, and the like.

The average trench spacing requirements in the various states is 8’ from center to center of parallel trenches. Most states require trenches 18” to 24” wide. The wider the trench, the more disposal area per lineal feet of tile used, thus the lower the cost per square feet.

Coarse material must surround the piping, preferably gravel, crushed stone, slag and similar material. The piping should be at least 6” underground in areas where freezing might occur, but seldom should be more than 18” below ground level.

COMMERCIAL PROJECTED WINDOWS

* Heavier Extruded Aluminum Sections
Meet All Architectural Requirements!

Wherever you're planning low-cost window walls — whether in hand, tier or flush-wall arrangements — you'll find Ualco Aluminum Commercial Projected Windows fill the bill. Heavier extruded aluminum sections meet all requirements for strength...are made to take single or double glazing. Available with either project-in or project-out vents. Lifet ime aluminum meets investors' requirements, too! Will never rust, rot or warp...never need painting. Ualco Aluminum Projected Windows give investors their money's worth!

SOUTHERN SASH SALES & SUPPLY CO. - SHEFFIELD, ALABAMA

UALCO ALUMINUM WINDOWS ARE UNCONDITIONALLY GUARANTEED AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP

UALCO - WORLD'S LARGEST MANUFACTURER OF ALUMINUM WINDOWS
Home Builder Builds Better with

LACLEDE STEEL JOIST FLOORS

When C. E. Dalton, Designer and Builder, Inc., included Laclede Steel Joists in the 120 new homes in his Al-Clare Meadows development, St. Louis, the construction advantages to the builder and benefits to the owner were even greater than anticipated.

FASTER CONSTRUCTION—easy handling and placing of Laclede joists effected substantial speed-up in construction and lowering of cost.

TROUBLESOME SHRINKING, WARping and resultant CRACKING were ELIMINATED.

FLOORS WERE MORE LEVEL

UNOBRstructED BASEMENTS—no supporting posts or columns needed.

HIGHER BASEMENT CEILINGS—heating ducts and wiring channeled right through the open-web joists.

WARMER BASEMENTS—heat rising from the furnace is not trapped, but allowed to circulate freely.

BUILT-IN RESISTANCE TO VERMIN, TERMITES AND FIRE

... and All This at a Cost No More than the Most Competitive Type Floor

LACLEDE STEEL COMPANY
SAINT LOUIS, MISSOURI
Quality Steel for Industry and Construction
Amazing new way to provide electric outlets anywhere... anytime

EVEN INCH AN OUTLET!

BULLDOG ELECTROSTRIP

NEW! DIFFERENT!

New Bulldog Electrostrip® is sturdy wire molding that provides electrical outlets exactly where they are needed, as they are needed—outlets you can move as you move furniture, change lighting arrangements or shift office layouts.

Ideal for modernization or new construction, Electrostrip can be installed easily and quickly on any surface—in any type building. Sold through Bulldog distributors to qualified electrical contractors. Write: Bulldog Electric Products Co., Detroit 32, Mich.

SIMPLE! Electrostrip mounts easily on walls, baseboards, floors, anywhere... bends to fit any room contour. In shops, stores, homes—new buildings or old—it opens the door to complete freedom from fixed electrical outlets.

CONVENIENT! Receptacle plugs clamp into Electrostrip wherever you want them. Outlets can be placed at any spot on the strip... moved elsewhere in seconds. Neat and attractive, its natural color harmonizes with any color scheme.

SAFE! Bulldog Electrostrip eliminates the hazards of long, dangerous extension cords and overloaded outlets. Receptacle plugs lock securely in position. All wires are enclosed for complete safety. Listed by U. L.

BULLDOG ELECTRIC PRODUCTS COMPANY
A Division of I-T-E Circuit Breaker Company
NEW PRODUCTS continued from p. 164

leached out of the concrete, or radiant heat (up to 85°) in the slab will not affect the performance of either the adhesive or the flooring itself. Even wet areas like bathrooms or kitchens can be tiled, using these waterproof cements.

Manufacturers: Armstrong Cork Co.
Lancaster, Pa.
Cotyoleum-Nairn, Inc.
195 Belgrove Drive
Kearny, N. J.

Vinyl-asbestos, like Excelon (above), and cork (at left), shows design possibilities.

Gonna change my way of looking

One basic change in asphalt tile is Tile-Tex’s Modern, which discards the standard 9” x 9” size for a plank-like 4” x 24”, wood grained. By cutting the starting tiles to different lengths a random pattern can be created. Four wood tones are made, which can be used in numerous combinations.

Price: Approx. 25¢ per sq. ft. installed
Manufacturer: Tile-Tex Div. of Flintkote
1232 McKinley Ave.
Chicago Heights, Ill.

Two other asphalts, Hako’s Poly-krome and Matico’s Confetti, have chips of pigment embedded throughout the background to give a color-sprinkled look to each tile.

Price: Approx. 19¢ per sq. ft.
Manufacturers: Hachmeister, Inc.
1300 Island Ave.
Pittsburgh, Pa.
Mastic Tile Corp.
Newburgh, N. Y.

Powder and liquid are mixed here to form chemically-fusing, below-grade adhesive.

Kentile’s Carctone performs the difficult optical illusion of looking like cork, yet retaining all the properties of asphalt. Four shades, ranging from light to dark cork color, may be combined in any random combination.

Price: 16¢ per sq. ft.
Manufacturer: Kentile, Inc.
50 8th Ave.
Brooklyn 15, N. Y.

The laminated hardwood of World War II’s famed PT boats is the straight-line ancestor of Higgins hardwood flooring. A three-ply cross-grain, T&G product, the 9” x 9” blocks are pressure bonded with marine type water-resistant glue. Installation can be made over subflooring or directly on a concrete slab, using adhesive.

Factory finishing and waxing eliminates that on-the-job operation (though it can always be sanded and refinished later), and wood pores are sealed to minimize dirt penetration. There are no rights and rights, each

continued on p. 184
THINK OF THE SALES PUNCH!

THE BEST IN HEATING NOW
...SUMMER COOLING
NOW OR LATER!

ONLY WATER CAN GIVE YOUR HOMES ALL THESE ADVANTAGES

For solid comfort every month of the year, equip your homes with a B & G Hydro-Flo System. No other type of system can add so many sales appeals...make so many contributions to utterly comfortable living.

That’s because mechanically circulated water is the most effective and versatile medium for both heating and cooling. It provides radiant heating—uniform, draftless warmth...plus the convenience of an all year round supply of hot water for kitchen, laundry and bath. Snow melting and summer cooling equipment can be included when the heating system is installed or at any time later.

Owners can be assured of low heating costs, because the B & G Hydro-Flo System closely adjusts fuel consumption to weather conditions. No wasteful overheating, even in spring and fall when little heat is needed.

Year 'round hot water
An ever-ready, ample supply, heated by the same boiler that heats the house—no separate heater needed.

Snow Melting
Snow can be melted as fast as it falls, by means of pipe coils installed under sidewalks and circulated with hot water from a B & G Hydro-Flo System.

HOW THE B & G HYDRO-FLO SYSTEM OPERATES
1. The thermostatically controlled Booster Pump circulates hot or cold water through the system, depending upon the season. 2. The Flo-Control Valve helps maintain a uniform home temperature and permits summer operation of the boiler for domestic water heating. 3. The Indirect Water Heater produces an ever-ready supply of domestic hot water, winter and summer.

Send for full-color booklet which gives the complete story of the B & G Hydro-Flo System.

Hydro-Flo System
BELL & GOSSETT COMPANY
Dept. DX-10, Morton Grove, Illinois

Canadian Licensee: S. & Armstrong, Ltd., 1400 O'Connor Drive, Toronto, Canada

JUNE 1955
Now...at last...an all aluminum sliding glass door designed specifically for multiple housing projects and low budget installations. New improved production techniques have made it possible to produce a quality door at the lowest price ever before offered.

Prices on Sun Valley "JUNIOR" Door

<table>
<thead>
<tr>
<th>DOOR WIDTH OPENING</th>
<th>LIST PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>6' - 0&quot; (2 panel)</td>
<td>$ 90.00</td>
</tr>
<tr>
<td>8' - 0&quot; (2 panel)</td>
<td>$102.00</td>
</tr>
<tr>
<td>10' - 0&quot; (2 panel)</td>
<td>$114.00</td>
</tr>
<tr>
<td>12' - 0&quot; (2 panel)</td>
<td>$126.00</td>
</tr>
</tbody>
</table>

- locking stiles may be reversed permitting sliding unit to be right or left.
- all aluminum
- aluminum etched for corrosion resistance.
- units will accommodate glass of 3/16", 7/32" or 1/4" thickness.
- quantity discounts available.

For further information on the Sun Valley Junior and Sun Valley Aluminum Sliding Glass Doors, write:

SLIDING DOOR COMPANY, Dept. 104
8354 San Fernando Road, Sun Valley, Calif.

* LET IN THE SUN
WITH SUN VALLEY

NEW PRODUCTS continued from p. 182

block fits anywhere, and tongues and grooves are integral. Because the lamination is not harmed by heat, the flooring can be used directly over radiant heated slabs, without danger of buckling or separating.

Blocks are packed 32 to a case, enough for 18 sq. ft. The precision edges fit flush to reduce surface grooves to a nondust-catching minimum.

Price: 60c sq. ft. average
Manufacturer: Higgins Industries, Inc.
Box 8169, Michaud Lane
New Orleans, La.

One of the most popular luxury features a house can have is cork flooring in selected areas, especially since adhesives have been developed that permit its use on grade if desired. Latest innovation is Dodge Cork's Parquetry tile, which resembles hardwood parquetry, but has the customary resilience and quietness of cork.

Tiles are the usual 9" x 9", and are available in ¼" and 3/16" thicknesses, with beveled or straight edges. A 12" x 12" tile will be offered in a wider stripe than the smaller tiles. Both are factory-finished in light tan random shades.

Price: 3/4", 90c per sq. ft.; 3/16", $1.15
Manufacturer: Dodge Cork Co., Inc.
Lancaster, Pa.
ART METAL lighting adds gaiety and color to the kitchen

Contemporary kitchens—the heart of the modern home—take on new life and interest when illuminated with ART METAL lighting equipment.

The many advantages these units offer include ease of cleaning and relamping as well as a gay, contemporary appearance.

See an authorized ART METAL distributor for detailed information on these and other ART METAL lighting units.

The ART METAL Company CLEVELAND 3, OHIO
Masonite research adds sales power
to Barber-Colman garage doors!

Could Masonite produce an exterior panel that would meet the rigid standards set for Barber-Colman doors? Masonite could—and did! Today, these attractive, long-lasting "Weather-King" doors carry a certificate guaranteeing that the smooth, sturdy panels in the doors will never split, splinter or crack from natural causes. What's more, these dense, grainless panels are easier to paint, stay new-looking longer.

With the development of "Weather-King" panels, Masonite research has solved another problem for the building industry... created welcome economies in both manufacturing and on-the-job use. To get the complete story—write Masonite Corporation, Dept. HH-6, Box 777, Chicago 90, Illinois.

WEATHER-KING PANELS
Lifetime Guarantee

Look for This Man—He Makes The Difference

MASONITE CORPORATION
MANUFACTURER OF PRESDWOOD® PANEL PRODUCTS
Cut Built-In Installation Costs...Use American Kitchens

NEW SET-IN OVENS AND RANGES TO SELL YOUR HOMES FASTER!

WOOD For Warmth
COPPER For Charm
STEEL For Strength

COMPLETE UNITS... GAS AND ELECTRIC
Just “Set-In” Place ... Harmonize Perfectly!

Nothing else clinches a home sale faster than a beautiful custom-built kitchen. And now, you can dazzle your potential home customers with built-in kitchens that require no costly installation!

American Kitchens set-in ovens and ranges make possible this cost-cutting magic. Just set them in place ... no expensive custom-built installation costs!

Available in choice of white or copper finishes ... gas or electric models ... complete flexibility of arrangement. Ovens can be built into the wall, too.

Let these dramatic new American Kitchens ovens and ranges cut your kitchen installation costs—and sell your homes faster!

Here is an American Kitchens oven and range in gleaming white. Note the giant storage space in the base cabinets. Bake and broil units are recessed for greater oven capacity ... can accommodate a 25 lb. turkey. Send coupon today!

American Kitchens Dept. HH-6-55
AVCO Manufacturing Corp.
Connersville, Ind.

☐ I'd like to have "no obligation" quotation on my next kitchens.
☐ Please send your new Architects' and Builders' File.
Name:__________________________
Address:________________________
City  Zone  State

JUNE 1955
NOW...get arcadia quality features in aluminum, too!

Here is a partial list of quality features that make Arcadia's new custom aluminum door the strongest, most weathertight sliding aluminum door ever made...

**GENERAL**
- All members are Type 6063-T5 aluminum alloy extrusions, average wall thickness .094".
- Lustrous, clear Alumilite finish.
- Designed for either single or double glazing with standard 3/4" plate or 1" insulating glass.
- Glass Mould snaps on and off for fast and easy glazing.
- Beveled Mould for 3/4" plate prevents collection of dust and dirt.
- Hollow box-type Sections provide extra strength and rigidity.
- Weathersealed on all four sides with Double-Seal Wool Pile Weatherstripping, Silicoated to protect against moisture, abrasion and staining.
- All weatherstripping replaceable without dismantling door.
- All installation and assembly screws are stainless steel or Alumilized aluminum.
- Variety of materials available for decorator-type Door Pulls.

**FRAME ASSEMBLY**
- Heavy-gauge stainless steel Track, easily replaced if damaged.
- Replaceable Threshold.
- Box-type Head and Fixed Interlocker.
- Bottom line of Head is continuous.
- Plaster Key in Jambs.
- Need for blocking eliminated.
- Snap-in Flashing Fins for simplified installation.

**SLIDING PANEL**
- Box-type Stile and Sliding Interlocker.
- Sliding Panel easily removable without dismantling Door.

**HARDWARE & FITTINGS**
- Positive Night Latch.
- Non-corrosive, cad-plated Lock Mechanism.
- Schlage cylinder lock available.
- Smooth-rolling, large diameter Nylon Sheave, adjustable and replaceable without dismantling door.

For complete information and detailed specifications, write for literature on Arcadia's new aluminum door. Ask for Catalog A-55.

HELP BUILD A BETTER AMERICA
- SEE AN ARCHITECT

**arcadia**

sliding glass doors

Arcadia Metal Products - Arcadia, California

DISTRIBUTORS THROUGHOUT U.S., CANADA & PUERTO RICO

---

**NEW PRODUCTS** continued from p. 184

**Serrated adhesive** is spread on wall with a notched trowel (above). Tile then set in place. In mortar method, each piece is buttered with mortar (above, right) before setting. Where odd-shaped pieces are needed, tiles can be cut (right) with a marble saw, and finished with clippers.

---

**Spacer string** is removed from between rows of tiles right, leaving joint which will be filled with grout. Marble veining runs in random directions.

---

**White Portland cement** is mixed to thin paste, left, then spread by hand, till all the joints are filled flush with surface of the marble.
NOW... get arcadia quality in **aluminum** too!

Today, after nearly six years of patient planning and exhaustive research, Arcadia proudly announces a magnificent new line of custom sliding doors of **aluminum**... designed and engineered to meet or surpass all commercial and residential needs! Here, at last, is an aluminum door worthy of the name **Arcadia**... long the leader in steel sliding glass doors. Before you specify any door, see the all-new Arcadia aluminum door. Compare it with all others... you'll see the difference. Then decide for yourself.

**arcadia** sliding glass doors

*first choice in steel... NOW first in aluminum, too!*

**Arcadia Metal Products • Arcadia, California • National Member Producers' Council, Inc. and National Association of Home Builders**
Your AIR CONDITIONED FUTURE demands...

Rustproof Ducts of REYNOLDS ALUMINUM

You're bound to have complete home air conditioning. And that means moisture condensation on cold ducts...the threat of rust damage to duct system, rust stains through walls, expensive replacement. Insure yourself! Look for this Seal that guarantees rustproof ducts. Write for folder that also tells how aluminum speeds air flow, improves efficiency.

Reynolds Metals Company, General Sales Office, Louisville 1, Kentucky.

SEE "MISTER PEEPERS," starring Wally Cox, Sundays, NBC-TV Network.

Today's Home Buyers

Another in the Reynolds series of advertisements emphasizing the importance of aluminum ductwork. Consumers will be reading this message in June BETTER HOMES & GARDENS. Other advertisements appear in SMALL HOMES GUIDE and LIVING FOR YOUNG HOMEMAKERS. By calling attention to a modern home essential, they create an important selling point for builders.

SEE "MISTER PEEPERS," starring Wally Cox, Sundays, NBC-TV Network.
More than ever before a homeowner expects to do a major portion of maintenance himself—witness the established fact of the "do-it-yourself" movement. Naturally the new home prospect looks for minimum maintenance. And today, that means aluminum.

Aluminum ductwork belongs with present or future air conditioning—rustproof forever. Aluminum siding, windows, doors, combination storm sash and screens never need painting, give years of superior performance. Aluminum flashing, gutters and louvers are preferred for trouble-free service. And now new forms of aluminum sheet, natural and color-anodized, are inspiring new concepts in modern home design.

For standard building products designed in Reynolds Aluminum, call your regular supply source. For other product requirements, call the nearest Reynolds office listed under "Aluminum" in classified telephone directories. Or write for descriptive literature.

Reynolds Metals Company, General Sales Office, Louisville 1, Ky.

LOOK FOR ALUMINUM

Aluminum makes neater, cleaner thresholds—easy to install, long lasting, modern looking.

Aluminum storm-screen doors and windows never warp or bend, always look good.

Aluminum siding never needs painting, can't rot or crack, Fire resistant, too!

Aluminum hardware is preferred for its soft lustre, its modern white-metal look.

This seal, color-printed on Aluminum Foil, is a means of identifying products or parts "Designed in Reynolds Aluminum."

For quick reference see Catalog “5a Re in Sweet's Architectural File.
Sewers go in faster with L-M Perma-Line

Perma-Line is a bituminized-fibre general-purpose pipe. Long lengths and tapered drive-on couplings make installation simple and economical. The pipe is light and strong, easy for men to handle.

Joints are leak-proof and don’t attract roots. Joints need no cementing or cauling. Perma-Line can’t rust, doesn’t shatter. It lasts as long as the best of other kinds of pipe.

Perma-Line offers marked savings to builders and protection for owners. It’s suitable for sewers and drains. The perforated type is used for septic tank beds and land drainage. A full line of fittings, couplings, and adapters is available.

Any good bituminized-fibre pipe offers many advantages over other materials. We think L-M Perma-Line has advantages over other brands. Mail the coupon or ask your plumbing distributor to get in touch with us.

PERMA-LINE® Pipe

LINE MATERIAL COMPANY
(a McGraw Electric Company Division)

A land-drainage installation of perforated Perma-Line pipe on the

NEW PRODUCTS continued from p. 183

j. FLEXIBLE VINYL STRIP weatherproofs door sill, prevents leakage of air or dust

A tubular vinyl strip, Duraflex, keyed into an extruded aluminum threshold gives a positive sill seal under any door. When the door is closed the tubing compresses against the door bottom, sealing out dust and drafts. A second vinyl strip weatherproofs the joint between threshold and floor. Nothing need be attached to the door itself.

Lengths of the Duraflex range from 30" to 72"; two heights (3/4" and 1 1/2") allow for clearance of rugs up to 1" (Texas oilman carpet depth) thick. Finish is standard mill finish, but thresholds are anodized, for a small price premium.

Flexing the tube does not destroy its ability to bounce back, and it is estimated that

the vinyl seal can withstand a half million openings and closings without showing wear. Dirt can be swept right over the top of the seal. If the plastic is ever torn or damaged, it can be replaced.

Price: $1.60 per lin. ft. (average threshold, about $5)

Manufacturer: Duraflex Co.
3275 NW 37th St.
Miami 42, Fla.

k. INTERLOCKING HINGE FINGERS eliminate mortising of doors and jamsbs

Interior doors, and some exterior (up to 1 1/2" thick), can be hung without going through the usual mortising of door and jamb. The McKinney hinge is screwed flush with the door and jamb edges, and when closed, the leaves telescope into a single 3/4"
DRESSES UP DOORWAYS

The distinctive square Imperial escutcheon is more than just a new design. Combined with its smaller companion, the Regent, it introduces an original lock design concept in door decor — matching motifs you can establish throughout your homes. And it gives you — together with Schlage's round escutcheons — an even wider range of novel entranceway effects. It lets you feature Schlage quality and beauty at a cost well within the limits of a modest building budget.

ORIGINAL...
When placed on the diagonal, the Imperial presents a dramatically different diamond effect — welcome variety without added expense for the volume builder — another example of tasteful originality in door decor made possible by these advanced escutcheon designs.

VERSATILE...
The smart distinction of the Imperial can now be repeated on interior doors with the smaller Regent — adding a new note of beauty to interior styling — protecting the door surface from unsightly scratches.

DISTINCTIVE...
In a square setting, the beautiful new Imperial escutcheon forms a striking concave background for Schlage locks — adds just the right touch of distinction to entranceways. And, with Schlage's original long backset feature, greater freedom of lock placement creates even more possibilities for original doorway styling.

SCHLAGE ESCUTCHEONS... for the favorable first impression that helps sell discriminating home buyers.

Send for "NEW DESIGNS" FOLDER No. 626-E-6
This new folder suggests many refreshing ways to feature door decor... incorporating Schlage's five beautiful new lock and escutcheon designs. Fully illustrated, with complete specifications.

The Imperial and Regent escutcheons are available in wrought brass, bronze or aluminum, in all standard finishes... can be used with a wide variety of Schlage lock designs.
Great Utility

the Special

by

Martha Washington

Lowest priced in the line... 16" x 19" x 14"... with glass door and interior light... automatic, if you wish... completely equipped... a real buy!

In Copper, Stainless or 4 Colors!

Write for Brochure & Name of Your Distributor

MARTHA
WASHINGTON
167 Avenue A
Bayonne, N. J.

BUILDER-DEALERS

WANTED!

INVESTIGATE THIS EXCELLENT OPPORTUNITY WITH NATIONALLY-FAMOUS

Place Homes

The hottest line of conventionally-built, packaged homes in the industry!

Place Homes—leading manufacturer of pre-cut, conventionally-built homes—is moving ahead... finds it necessary to appoint additional dealers in Indiana, Ohio, Michigan, Illinois and Wisconsin.

Cash in on this excellent opportunity in the great and growing home-building industry as a dealer for our fine nationally-recognized homes.

You can qualify for a Place Homes franchise if:

1. You own ten or more lots subject to F.H.A. approval, or other low down-payment financing.
2. You have building "know-how", plus sales and promotional ability.
3. You have approximately $25,000 working capital to begin a building program.

Call, wire or write—

Place Homes, Inc., 1226 S. Walnut, South Bend, Ind.
A BOON TO BUILDERS!

Consoweld®

CURVATOP®

Preformed plastic surfacing—one-piece counter top and backsplash—ready to install in kitchens and bathrooms

The “custom-look”
at a production line price!

Want something that’s really packed with appeal for the feminine half of your market? Here it is—new Consoweld Curvatop—the preformed counter-top surfacing for kitchen counters or bathroom vanities. Gives the custom-made look that puts the lady on your side!

Easy to install—right on the job! No special tools or forming equipment needed. Easy, step-by-step application procedures assure fast installation by your regular workmen. Counter edges are finished off with beautiful Consoweld Twin-Trim® Mouldings, color- and pattern-matched with Curvatop, for a neat, permanent and beautiful installation.

Get the facts on the entire Consoweld line! Curvatop is a companion to other Consoweld surfacings, each especially designed to produce the best results at a minimum cost, depending on the requirements of the job: whether shop-fabricated or job-installed; vertical or horizontal. Inquire about extra thick Consoweld 10 for bathroom walls and shower stalls.

Curvatop is registered and sold in Canada by The Arborite Company, Ltd., Montreal, Quebec

Mail coupon today for complete information

Consoweld Corporation,
Wisconsin Rapids, Wisconsin

Please send me complete information on Curvatop and name of nearest Consoweld distributor.

NAME ___________________________
FIRM ___________________________
ADDRESS _________________________
CITY ___________________ STATE ______

JUNE 1955
HERE'S WHY

1. *Waste King* attracts more home sales and rentals than any other visible feature costing up to five times more. It's your lowest budget, highest quality feature!

2. *Waste King* is now a household word that means greater convenience. Saves time, steps, and work by eliminating garbage automatically. It's your best new saleable feature!

3. *Waste King* features exclusive Lifetime Grind Control for clogproof, longer service and exclusive Super “Hush-Cushions” for smoother, quieter, operation!

4. *Waste King'*s service record is best in the industry... Less than 1% callbacks. Relieves the builder of past-sale complaints.

New Products

Continued from p. 192

**NEW PRODUCTS**

- **Waste King**
  - Attracts more home sales and rentals than any other visible feature costing up to five times more. It's your lowest budget, highest quality feature!
  - Now a household word that means greater convenience. Saves time, steps, and work by eliminating garbage automatically. It's your best new saleable feature!
  - Features exclusive Lifetime Grind Control for clogproof, longer service and exclusive Super “Hush-Cushions” for smoother, quieter, operation!
  - Service record is best in the industry... Less than 1% callbacks. Relieves the builder of past-sale complaints.

**NEW PRODUCTS**

- **Snap-On Trim**
  - Requires no nails, snaps into place. Door openings can be trimmed in less than five minutes, using *Snap-On Trim*, a new metal molding made by US Gypsum. Intended for dry-wall construction, the trim consists of metal bull-nose casing that snaps into a saw kerf cut in the door frame. Only the pressure of the hand is required to install each piece.

Builder Ellbert Fausett's Broadmoor project in Little Rock used almost 21 miles (110,000 lin. ft.) of the trim on windows and doors. Cost studies showed a saving of $47 per M. lin. ft. over conventional casing.

Continued on p. 202
A good example of how INGERSOLL gives you more quality for less money is this fact: 56 INGERSOLL Bathtubs in a 224 unit apartment building, in reality, are free when compared to the cost of old-fashioned tubs. Yes, in any type of construction, you can buy four INGERSOLL acid-resisting, porcelain-on-steel tubs for less than three heavy tubs with acid resistant finish. You save even more when you figure the labor, saved by installing light weight INGERSOLL Bathtubs. Yes, you’re always ahead with INGERSOLL... in quality as well as cost. Check the partial list of INGERSOLL Bathtub features... write for full information.
Looking for ideas to hold costs down?

SAVE DOLLARS ON FRAMING, HANGING, FINISHING CLOSET

You save hours, save dollars and add closet convenience that sells homes—all with Truscon Steel Sliding Closet Doors.

Here’s how. You simply build the wide opening to size and attach your Truscon Steel Door Frames. Shipped knocked down, they are easily assembled in minutes. Corner connections form neat hairline joints. These Truscon Frames are finish trim and molding, too. And, they’re sized to fit practically every type of wall construction.

Now install the floor track, engage door leaves in header and track and you’re done. No cutting, fitting, planing needed. You’ve erected a door that slides quietly on nylon rollers, that won’t stick because steel can’t ever warp, swell or shrink. One-coat painting to match room decorations completes the job.

And what superb closet convenience you have to sell! Women love closets they can see in, see up, reach in, reach up. No fumbling. Everything in plain sight. Closets with sliding door convenience sell homes. Truscon is pre-selling them in extensive national advertising.

Truscon Steel Interior Swing Doors and Frames offer the same easy, time-saving, money-saving erection. They’re sound-deadened, too. Both types quickly available in popular sizes from Truscon warehouses. See them at your dealer’s, or write Truscon for details and specifications.

REPUBLIC STEEL

SAFE, GROUNDED WIRING IS A SALES POINT

A modern pull-in, pull-out, grounded steel raceway system is safer . . . and salable. Provide quality wiring protection with Republic ELECTRUNITE® E.M.T., the original lightweight rigid steel raceway. Exclusive "Inch-Marks" and new "Guide-Line" make ELECTRUNITE easiest of all to install . . . with minimum waste. Exclusive inside-knurling cuts friction, makes wire-pulling easier. No threads to cut. Compression-type connectors and couplings keep moisture out. It’s galvanized to resist rust. Approved by the National Electrical Code for concealed, open and concrete construction. Tell your electrical contractor you want ELECTRUNITE E.M.T. for safety.
FITTING, DOORS

TRUSCON METAL LATH HELPS KEEP CEILINGS CRACK-FREE

Expanded metal lath is your best plaster base. It resists cracking and crumbling. Only metal lath grips plaster so tightly that the surface is virtually earthquake resistant! Fire resistant, too. Metal lath and plaster are ideal for ceiling radiant heating systems. Truscon Metal Lath is easy to erect, easy to work over. More than 40 different Truscon Metal Lath items and accessories are approved by all building codes. Tell your plastering contractor you want the crack-resistance of metal lath.

Please send me details and specifications on:

- Truscon® Metal Doors and Windows
- Republic ELECTRUNITE® E. M. T.
- Truscon Metal Lath

REPUBLIC STEEL CORPORATION
3122 East 45th St.
Cleveland 27, Ohio

Name: ____________________________
Company: _________________________
Address: __________________________
City: ___________________ Zone: __ State: __

JUNE 1955
When Gerholz Community Homes, Inc. decided to develop their Westgate Park community of 800 homes in Flint, Michigan, they enlisted the help of architect William K. Davis.

Davis’ drawing board solution: Design each house from inside-out. Give the customer, not what he thinks he can buy, but what he dreams of owning!

The new 3-bedroom contemporary-styled homes now offered by Gerholz prove the value of this solution. They feature sales-winning, all-electric show-place kitchens equipped with the new Hotpoint Customline built-in appliances. And Gerholz’s desire to incorporate into general specifications as many luxury features as possible, and still keep the price within reach of the average new home buyer, is being rewarded in heavy buyer demand!

The fact that you can now offer families of modest incomes the luxury and convenience of Hotpoint Customline built-in kitchens . . . plus the widest choice of installation designs . . . gives you today’s most outstanding sales advantage! Because these kitchens are built in . . . they can be covered by FHA mortgages and included in regular monthly home payments!

Remember, the Hotpoint name on appliances in homes you build is the sign that gives credence to your desire to offer the best. It’s the name that proves only the finest is good enough. Join the builders who stand out above and beyond the rest . . . whose homes sell faster . . . whose reputations for quality are the finest . . . because they offer the finest—Hotpoint All-Electric Customline Built-In Kitchens and Home Laundries.

The fabulous new Customline Ensemble by Hotpoint gives you a kitchen that’s beautiful and functional—built-in cooking top and oven, built-in refrigerator-freezer, undercounter dishwasher, garbage disposer unit . . . plus the famous Hotpoint Lounduet.
Kitchens
Flint, Michigan, Westgate Park Homes!

"We selected Hotpoint Customline Appliances for our 1955 Pacemaker Homes because they best expressed the Advanced Design for Living in Westgate Park, our new 800 home community."

R. P. Gerholz

Holder of the most coveted NAHB awards, Robert P. Gerholz has gained a national reputation for outstanding quality, design, and lasting value in home building.

Have your Hotpoint Distributor show you how leading builders are using Hotpoint Customline Built-In Appliances to make their homes the most modern in their area. Consult him before starting your next project. He'll give you many helpful ideas.

Anniversary—Your Golden Opportunity

JUNE 1955
You can install it as is — and give your homes the powerful sales appeal of both heating and cooling.

You can install it as a furnace alone in your budget homes. And you can point to its integral cooling casing as a money-saver when the home-owner wants to add cooling later on.

**Mueller Climatrol**

announces a new combination year-'round air conditioner

**Fits the Cost-Conscious Builder’s Budget**

Type 128 (gas) — 228 (oil) furnace is a prewired unit compact enough to install in closet, basement, or utility room. 59½" high (to top of casing) x 47½" wide by 36" deep (with burner). 100,000-Btu input on gas, 110,000-Btu input on oil. Backdraft damper, standard equipment. Vestibule, optional.

Type 928 cooling unit is a 2- or 3-hp refrigeration assembly mounted on a frame that slips easily into the cooling casing provided with the Type 128-228 heating unit. Operates on single or 3-phase current. Uses same blower as furnace.

There’s no doubt about it — this Mueller Climatrol combination unit is one of this year’s best bets for turning prospects into buyers of your homes. And, it’s priced to fit even your low-cost homes. Write for further details: Mueller Climatrol, Dept. 265, 2020 W. Oklahoma Avenue, Milwaukee 15, Wisconsin.

**NEW PRODUCTS** continued from p. 196

Snap-On Trim is delivered to the job with 7" side sections having right and left mill-cut copings. Head sections (42") are cut on the job to fit any width, using tin snips to cut to size. The lengths of casing are then inserted into the saw kerfs with pressure from the heel of the hand.

Packaging is in quantities for six doors, both sides, with a second unit of 10' sections for picture windows or other odd-sized openings.

**Price:** Approx. 10c per lin. ft. (Chicago area)

**Manufacturer:** US Gypsum Co.

300 W. Adams St.

Chicago 6, Ill.

**m. ZINC PAINT** protect metal from rust, can be applied with brush or spray gun

Cutters, corrugated steel, and other exposed metal can be rust proofed with a new brush or sprayed zinc coating that claims all of the advantages of hot-dip galvanizing.

Zinktron can even be used over rusted surfaces (loose scale removed), for the galvanic action takes place right through the rust. If the coating is scratched, rust will not travel beneath it, assuring no hidden rust.

Coverage is up to 650 sq. ft. per gal, and the product dries in one hour. In tests, Zinktron-painted metal withstood bending of 180° without flaking off at the bend.

**Price:** $14 per gal.

**Manufacturer:** The Constad Laboratories

214 W. 29th St.

New York 1, N. Y.

continued on p. 206
From the first rough sketches . . .

Frank Lloyd Wright specified Colorundum floors for their warmth of color and beauty."

Mrs. I. Zimmerman, Manchester, N. H.

"Look at these photographs of our exciting new home and you can see why we just wouldn't consider drab, colorless concrete. From the first rough sketches," writes Mrs. Zimmerman, "we planned attractive, luxurious Colorundum for the patio and the service areas . . . especially when we found out how little it cost!"

Colorundum is the ideal solution to the problem of exposed or uncarpeted areas of plain concrete. It provides colorful, wear-resistant floors at just a fraction of the cost of tile.

Colorundum is far more resistant to traffic than ordinary concrete floors. It is a balanced formulation of nonslip aggregate (next to the diamond in hardness), water-repellent compounds, and durable colors . . . contains no silica, quartz, metal or sand. It is easy to keep clean, and since it contains no metal, it will not rust or stain.

Colorundum is available in eleven decorator colors.

Fused color. Not a paint or coating! Colorundum is troweled into the concrete topping and becomes an integral part of the surface, producing beauty and durability.

A Subsidiary of
Chemical Corporation

A. C. Horn Co., Inc.
Long Island City, Los Angeles, San Francisco, Atlanta
Houston, Chicago, Toronto

DIVISIONS OF SUN CHEMICAL CORPORATION
HORN • HUDSON • WILLEY (paints, maintenance and construction materials, industrial coatings) • WARWICK (textile and industrial chemicals) • WARWICK WAX (refiners of specialty waxes) • RUTHERFORD (lithographic equipment) • SUN SUPPLY (lithographic supplies) • GENERAL PRINTING INK (Sigmund Ullman • Fuchs & Long • Eagle • American • Kelly • Chemical Color & Supply Inks) • MORRILL (news inks) • and ELECTRO-TECHNICAL PRODUCTS (coatings and plastics)
Remarkable how inexpensive it is to give drainage lines two-way extra quality, with Chase copper drainage tube (DWV). Far longer service life and greatly improved efficiency are assured.

Drainage lines of Chase copper tube resist corrosion—can't clog with rust—stay efficient over the years! Their interior is smoother; flow is unobstructed at joint connections—larger volumes of waste water can pass through them because friction is reduced!

Chase copper drainage tube is 4 times lighter than ordinary drainage pipe. Can be pre-assembled and installed with great savings in time! It can be cut to length right on the job. Requires fewer joints because it comes in 20 foot lengths. And rugged, leakproof solder joints fit within standard partitions, eliminating expensive furring out!

Insist on Chase copper drainage tube (DWV). Add extra-value to every home—with little or no extra cost!

**Chase® COPPER...sign of QUALITY in drainage lines!**

**The Nation's Headquarters for Brass & Copper**

**CHASE® COPPER CO.**

**WATERBURY 20, CONNECTICUT • SUBSIDIARY OF KENNECOTT COPPER CORPORATION**
NOW—LUDMAN QUALITY FOR EVEN THE LOWEST-PRICED PROJECT HOUSES!

Ludman’s NEW Housing Window With FULL WEATHERSTRIPPING.... CENTER ROTO-OPERATOR.... SMART, MODERN APPEARANCE....

At A Price Within The Reach of EVERY Project Builder

Here’s a type of window that’s sweeping the country in major building developments. Now, LUDMAN Engineering Research has established new quality standards.... Completely Vinyl Weatherstripped to make it the tightest-closing Housing Window.... with beautiful Center Under-Screen Roto-Operator to make it the easiest to operate.... with handsome, substantial sections for smart, modern appearance.... designed to make it easiest to install.

Unlimited combinations are available, with any desired venting arrangement. Although designed for lowest-priced housing, this quality window has features that make it desirable even in the best homes. The coupon will bring you all the facts about this window.

FOR THE BUILDER WHO Wants TO ADD PROVED SALES-APPEAL by providing an awning window with 100% ventilation and an exclusive night vent, the famous AUTO-LOK.... recognized everywhere as the finest.... known as the tightest-closing window ever made.... adds the “Quality-Look” and consumer acceptance. Successful Project Builders from Coast to Coast have learned that AUTO-LOK is worth the difference!

Another LUDMAN Contract-Closer.... the new Aluminum All-Weather Sliding Glass Doors.... engineered by LUDMAN with the builder in mind. Easiest to install.... no adjustment required.... smartest appearance.... exclusive separate sub-sill prevents damage during construction.... and many other exclusive features.

Investigate the cost of using LUDMAN’S finest quality Sliding Glass Doors. You’ll be amazed at how much sales-appeal you’ll add to your house.... sales-appeal that adds value out of all proportion to the slight extra cost. (Frequently, Sliding Glass Doors may be installed at no more cost than conventional wall construction.)
Specify the new, large

**THERMADOR**

**Bilt-in Electric Oven**

Superbly styled in lifetime stainless steel, the brilliant new “Masterpiece” oven is proudly added to the celebrated selection of Thermador Bilt-in Electric Ranges...the Original and the Finest. Only with the “Masterpiece” can you offer: More usable space in oven 18” wide, 18” high, 19 ½” deep (even a 37-lb. turkey leaves space to spare!) • Vented* oven door, never too hot to touch • Cool, plastic handle* and inclined controls finished in dark Master Blue • Amazing new baking element* distributes heat quickly, evenly, for the most perfect results! • Recessed* Infra-Red broiler, with specially designed pan and tray* for smokeless broiling • Electric Tele-minute Timer, with chime reminder • Clear-Brite oven interior in stippled, acid-resistant white porcelain • New, exclusive indicator lights* • Automatic thermostatic controls • Automatic interior light • Heat-deflecting hood* • Plus many other sales-building features in a super-size “Masterpiece” oven that fits any standard 24” cabinet.

Thermador, the genuine Bilt-in Electric Range made only by Thermador Electrical Manufacturing Co., offers a choice of 12 stainless steel cooking tops...2, 4, or 6 easy-to-clean surface elements...large, versatile oven...170 square inch griddle with Vari-Speed Switch...Duo-Cook that converts from deep-well cooker to extra surface element. Also, special models in choice of eight porcelain enamel decorator colors.

*A Thermador Exclusive!

Write or wire today for details.

**THERMADOR ELECTRICAL MANUFACTURING CO.**
Division of Norris-Thermador Corporation
5119 District Blvd., Los Angeles 22, Calif., Dept. HH-655
Builders get four real economies in Harbor's dramatic new sculptured plywood: 1. A rigid structural and finish panel all-in-one. 2. A finish material of lasting beauty with tremendous sales appeal. 3. A paneling or siding that costs considerably less than most materials you would want in your homes. 4. Big, easy-to-handle panels that go up fast—32 square feet at a time.

Harborwave is made in three designs; KNOTTY PLANKED has faces carefully selected for even natural beauty of grain and knots, with random-width plank pattern. KNOTTY has same face without planking. CLEAR relief grain has select faces, even-grained without knots.

Use Harborwave for siding, soffits, entrance accents, fences, built-ins, paneling, ceilings... in homes, stores, commercial buildings. May be finished in warm natural stains, exciting tone-on-tone combinations or colorful paint. Use Harborwave to build style, quality and economy into your homes. Ask your lumber dealer.

from the makers of the royalty of plywood... SUPER Harbor

HARBOR PLYWOOD CORPORATION, ABERDEEN, WASHINGTON.
YOU CAN BUILD SLAB-ON-GRADE CONSTRUCTION WITH PERMANENTLY WARM AND DRY FLOORS!

This illustration shows how the proper installation of Premoulded Membrane and Corktite completely isolates the superstructure from the soil... the source of 80% of all destructive moisture. Insures a permanently warm and dry floor slab. In most cases you can eliminate expensive gravel fill when using Sealtight Premoulded Membrane.

**Sealtight**

**Premoulded Membrane**

the original **TRUE VAPOR SEAL**

The popularity and economy of slab-on-grade construction is a proven fact. Its feasibility, however, rests on the proper application of a true vapor seal to keep the slab dry and a resilient, impermeable perimeter insulation to prevent heat loss.

Unfortunately the building industry has been guilty of the promiscuous use of permeable materials under the guise of vapor barriers. When purchasing any vapor seal material be sure it meets these Sealtight standards of quality: permeance rating of only .0066 grains per square foot... resistant to rot, mold and termites... strong enough to resist tearing and puncturing... expandable... quickly and easily installed—Premoulded Membrane has them all.

Don’t risk your reputation by using an inferior "so-called" vapor seal material. We sincerely advise and invite your comparison of Premoulded Membrane against all other vapor barrier products... we’re sure that once you do you’ll also agree that there’s only one true vapor seal on the market... Premoulded Membrane. Equally effective for crawl-space or basement installation.

**Eliminates**

- Excessive Window Condensation
- Blistering of Exterior Paint
- Deterioration of Adhesives
- Bonding Floor Finish Materials
- Deterioration by Mildew of Rugs, Furnishings and Clothing

**Guardian of the Home**

**W. R. MEADOWS, INC.**

10 KIMBALL STREET • ELGIN, ILLINOIS

ARCHITECTS, BUILDERS, HOME OWNERS... Remember, the time to "eliminate" destructive moisture is in the original construction, with the use of Sealtight Premoulded Membrane and Corktite... all other methods are merely temporary "stoppages." A complete set of structural recommendations (tech-tips) on the applications of Sealtight Products is available... WRITE TODAY for your copy.
See how these modern Frigidaire products fit into the architect's over-all plan

Frigidaire two-door Food Freezer-Refrigerator Model CIV-150 is strategically located in the center of the inside wall to facilitate both food storage and meal preparation. Imperial Wall Oven, with space-saving French Doors, is on same wall at comfortable height.

Frigidaire Imperial Washer and Filtra-matic Dryer in production line order form, handy laundry unit combined with utility sink and wall cabinet for detergents, soap and brushes. No venting is needed because Frigidaire Filtrator traps excess lint and reduces moisture.

Frigidaire Fold-Back Surface Units swing down for counter-top cooking, lift with a touch and turn off automatically when not in use leaving counter space clear. Frigidaire Under-Counter Dishwasher and sink, with built-in waste disposer is located on window wall.

Frigidaire Year-Round Conditioner in utility area, heats in winter, cools with refrigeration in summer. Provides a one-temperature home 365 days a year. For more details, see the Frigidaire Air Conditioning advertisement in this issue. Frigidaire upright Electric Water Heater is fully automatic, dependable.

Frigidaire
Built and backed by General Motors
Meet Mr. Robert A. Little, designer of this unique Frigidaire "living" kitchen

Born in Boston, Mass., and a graduate of Harvard, Bob Little has taught and lectured on architecture at many of our leading universities. After serving a "hitch" in the army he settled in Cleveland, where he organized his present firm in 1947. Here he has built an enviable reputation, designing among other projects, the Better Homes & Gardens "Home For All America," the McVey House, Chagrin Falls, Ohio, which won the Progressive Architecture award in 1955.

Read architect Little's thinking behind this kitchen design

Today's kitchen, as I have conceived it, is central to family living in several ways. (1) For the lady of the house, the kitchen center is an office for menu planning, a factory for food preparation, a laboratory for recipe experiments and a processing plant for washing and care of clothes.

(2) For children, the kitchen is a snack bar, and the laundry can double as a wet-weather entrance.

(3) For the man of the house, it's an aid to entertaining, a bar for parties. Our Frigidaire Kitchen fulfills these needs in a way that fits most moderate-cost development houses.

The house is shown with a front yard car port and patio, but the kitchen can be used on the rear wall, facing back yard outdoor living, in one-story and two-story houses. The kitchen is semi-open to dining space and to patio.

The problems encountered in planning this kitchen were greatly simplified by the well thought out design of the Frigidaire products given us. Our efforts in saving labor, for instance, were helped considerably by the built-in labor-saving devices in the Frigidaire Appliances themselves. And the up-to-the-minute styling on all products, both outside and in, permitted us to retain a modern "look" throughout the entire area.

See back page for more detailed views of the kitchen.

Send for complete details of this first Kitchen Plan showing how you can adapt it in whole or part to the homes you're building today. You'll find a wealth of usable ideas in this and the other plans to follow. Start your file now. Just send $1.00 with your request on your letterhead, or use the handy coupon at right.

Making the kitchen the a compact, utility entrance

1. Automatic Electric Water Heater
2. Year-Round Air Conditioner
3. Automatic Electric Washer
4. Automatic Electric Dryer
5. Electric Ironer
6. Two-Door Refrigerator-Food Freezer
7. Wall Oven with French Door Design
8. Fold-Back Surface Units
9. Turbo-Spray Dishwasher
10. Food Waste Disposer

TEAR OUT AND SAVE FOR YOUR FILE
center of activity in medium-priced 1600 sq. ft. house
ANNOUNCING FRIGIDAIRE'S NEW
"KITCHEN PLAN PROGRAM" FOR BUILDERS

to help you sell the room that sells the house

As a service to builders, Frigidaire is commissioning outstanding architects to design a series of exciting, yet practical, new kitchens

With this initial kitchen design idea, by architect Robert A. Little, of Cleveland, Ohio, Frigidaire launches a new program aimed at fulfilling a long-felt need of project and merchant builders for help in designing kitchens.

Here's the way the plan works: Frigidaire is commissioning a number of the nation's most talented architects to create original designs for today's modern, functional kitchens.

Some of you will be able to use these kitchen ideas without any change. Others may adapt just part of the design to your homes. Either way you will have attractive kitchens that prospective buyers will find hard to resist.

Designs will include kitchens for homes in the most popular price classes to meet a variety of tastes. Kitchens will be designed for ease and economy of construction, using standard parts, components and materials, and will include Frigidaire's newest, most modern products.

Thus, this program will give builders a continuing series of designs, by different architects—such as Carl Koch, Harwell Harris, Rufus Nims, A. Quincy Jones—Fredrick E. Emmons, and Robert A. Little—each from a different part of the country.

Remember, in a new home, the kitchen is the one room that really sells the house. And here is one way to make sure your kitchens are real "salesmen"—the Frigidaire Kitchen Plan Program is designed to do just this!
Here's an idea as exciting to the home buyers as it is practical for you. Blue Ridge Patterned Glass gives that new, modern treatment that folks are looking for in houses. It's distinctive...decorative...functional. And being neutral in tone, it harmonizes with any color scheme and period of home furnishings.

Patterned Glass partitions decorate two rooms at once, sharing the light and making the area seem more spacious. Still, the privacy of each room is maintained.

There is a variety of patterns for a variety of effects—linear, checkered and over-all patterns in plain, textured or Satinol* finish. This selection lets you use a uniform panel size with similar framing in many of your homes, yet each may have a distinctive “new” treatment.

Your L-O-F Distributor or Dealer can show you samples of the patterns and finishes. Look for him in your phone book under “Glass”. He'll show you how little it costs to build this modern feature into homes in any price class.

**Ideas for design**

Our 16-page book illustrates many ways leading architects and designers have used this versatile glass for striking effects in homes. Mail the coupon.

Libbey-Owens-Ford Glass Co., Dept. B-765
608 Madison Avenue, Toledo 3, Ohio

Please send me your book showing ideas on decorating homes with Patterned Glass.

Name (please print)

Street

City Zone State
This attractive lakeside homesite contributes its full measure of natural beauty to everyday living, thanks to Andersen WINDOWALLS. Here Andersen Gliding Units specified by Architect Norman Johnson, form a WINDOWALL to open up the view, let in sunshine and fresh air. Yet on unpleasant days, they close tight to form a weatherproof barrier against cold, dust and moisture.

Get full information on Andersen WINDOWALLS for homes you plan or build from your lumber and millwork dealer, Sweet's Files, or write Andersen. WINDOWALLS are sold by established lumber and millwork dealers throughout the country including the Pacific Coast.

ANDERSEN CORPORATION • BAYPORT, MINNESOTA
Here’s why
structoglas®
IS NO. 1
plastic building panel

COLOR • A choice of 21 beautiful colors.

STRENGTH • Shatterproof ... withstands impact, weathering.

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IN A BUYER’S MARKET, you need something new and different to add extra buy appeal . . . spark interest . . . help close the sale. That is why architects, builders and contractors specify STRUCTOGLAS!

This decorative and functional translucent plastic paneling creates its own sales talk . . . adds new eye-appealing interior and exterior motifs. STRUCTOGLAS also is tops in quality. Made by an exclusive molding process, it features extreme and consistent uniformity of color, gauge and strength. This accuracy makes installation fast, easy and profitable.

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write today for details and name of nearest distributor.

Problem windows? no problem with LOUVERDRAPE

Yes, LOUVERDRAPE FABRIC

Vertical Blinds fit any window, regardless of size or shape . . . SLANTING—SLOPING—even SKYLIGHTS

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For complete information, contact your nearest distributor, or write: VERTICAL BLINDS CORP. OF AMERICA • 1936 Pontius Ave., Los Angeles 25, Calif.
Modernfold gives our houses more flexible space...greater sales appeal

"Our Model Nine Seventy Six is a big hit with buyers who have difficulty in deciding whether they need a two bedroom or a three bedroom home. A MODERNFOLD door quickly converts the study into a third bedroom and turns many lookers into buyers. And in the front hallway, we consider MODERNFOLD an absolute necessity from the standpoint of design, because it eliminates congestion and door-swing in this area...another important selling feature."

Wherever MODERNFOLD is installed, it attracts the prospect's attention. You can demonstrate a Modernfold door to potential buyers, while explaining its space-saving and room-dividing advantages. It's one of those unique, low-cost features which add so much to the saleability of a house.

These rugged doors are built to last the lifetime of the house. MODERNFOLD construction standards are the highest in the industry; balanced, double-strength steel frame mounted on overhead tracks and covered in long-wearing, washable vinyl fabric, which keeps a fresh, new appearance for years.

MODERNFOLD doors are easily installed, and require almost no maintenance. Builders every day are finding new ways to turn lookers into buyers when they install MODERNFOLD.

MORE HOMES!
Assure your prospects of adequate storage space. Precision and Simplex Folding Stairways can help your homes move fast for more sales!

PRECISION QUALITY
Plus Sales Features
AMERICA'S NO. 1 STAIRWAY
Stacked by 130 leading jobbers in the U.S.A. and Canada.

SEVEN EXCLUSIVE FEATURES
1—HYDRAULIC SAFETY CHECKS
2—ACTUATED BY COUNTERWEIGHTS
3—LIFE-TIME ROLLER BEARINGS
4—RUGGED AND STRONG
5—INSULATED DOOR PANEL
6—FULL WIDTH SAFETY TREADS
7—FITS ANY CEILING HEIGHT
TWO STANDARD SIZES: 8'9" & 9'9"

SIMPLEX QUALITY
Plus Low Cost
NO. 1 PROFIT-MAKER
New! BALANCED SPRING ACTION for effortless operation.
- SIMPLE AND EASY TO OPERATE
- RUGGED AND STRONG
- TWO STANDARD SIZES: 8'9" & 9'9"
- NO. 1 KILN DRIED LUMBER—HEAVY GALVANIZED STEEL—ALL PARTS SECURED BY BOLTS AND SCREWS—NO NAILS
- SHIPPED IN ONE PACKAGE MANUFACTURED IN PRECISION'S MODERN PLANT.

NEW PRODUCTS
continued from p. 206
p. PERIMETER REGISTER changes hot or cold blasts to gentle zephyrs
Another engineered baseboard diffuser for use with perimeter warm-air heating systems is Auer's Perfusaire, an angled grill-faced register that can diffuse cool air as well. At an air pressure of 110 cfm., the Perfusaire will spread air horizontally over a 13' wall, while throwing it to a vertical height of 6' 6". No stackhead is required, and a patented balancing damper permits complete control over predetermined cfm. requirements. Louvered fins are factory set for proper angle of deflection, and the entire face lifts off for easy installation.
Price: $3.90 to $5.60
Manufacturer: The Auer Register Co.
6600 Clement Ave.
Cleveland 5, Ohio.

q. BASEBOARD DIFFUSER for heating and cooling gives scientific air distribution
A fan-shaped blanket of air is spread over perimeter walls by Lima's newest baseboard diffuser. Standard lengths are 2' and 4', but connectors convert both sizes into multiple units for continuous installations. In new construction, the diffuser can be installed against the studs before plaster or dry wall is applied, leaving little protrusion (diffuser is 2 1/2" deep).
Four rows of horizontal louvers running the length of the register provide proper air distribution upward and outward over a wide area. A built-in, spring-loaded, hinged damper can be set for any flow, even to a complete shutoff. Registers are factory finished in beige, but can be repainted.
Price: 4', $9.35; 2', $6.95; connectors, 35¢
Manufacturer: Lima Register Co.
Lima, Ohio.
continued on p. 220

WHAT!
NO BATHROOM?
A MODERN, AUTOMATICALLY HEATED HOME WITH NO TRASH AND GARBAGE DISPOSAL FACILITY IS JUST AS LOGICAL

INCINERATOR gas-fired incinerator
MODEL BI—2-BU. Capacity
To sell a house—you must please the housewife. She's quick to see the advantage of Incinor. It ends the problem of trash and garbage disposal—gives her undreamed of convenience. Incinor is fully automatic, too—"just set it and forget it."
You can claim this powerful selling advantage by featuring Incinor in the homes you build. It's a must in homes with automatic heat.
Put this low-cost sales tool to work now. Choose from a complete line of dependable, trouble-free Incinor models. Incinor is A.G.A. approved for use with natural, manufactured, mixed or LP gases.

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BOWSER, INC., CAIRO, ILLINOIS
"PIONEERS IN GAS-FIRED INCINERATION"
Garage Door Beauty
that helps sell the home

Rō-WAY
Individualized
Garage Door
Designs

Over 40 decorative designs
afford unlimited combinations
Flush Doors • Raised Carved Panels
Applied Rosettes • Accent Molding

there's a Rō-WAY
for every doorway!

Rō-Way
OVERHEAD TYPE
DOORS

ROWE MANUFACTURING COMPANY
1159 HOLTEN STREET • GALESBURG, ILLINOIS

JUNE 1955
THE "FORWARD LOOK" COMES TO KITCHENS THANKS TO CRANE!

"Wide-Open Spaces" for a ranch house. Extended L design. Planning ideas for this and other Crane kitchens available for builders.

"Planter's Punch" includes eating area. Soffit is Crane radiant baseboard panel. Crane experts will help with ideas for your kitchens.

"Island Magic" is double U design, includes eating and laundry area. Wide variety of Crane wall and base cabinets suit any builder need.

"Pewter and Pink" is attractive small U kitchen built around Crane sink... the heart of a modern kitchen.
Smart, new-design base and wall cabinets of lifetime steel... in white or color

A good many forward-looking builders, these days, get not only the kitchen sink from Crane, but the rest of the kitchen as well. Crane's newly introduced "Forward Look" cabinets are the reason... and a very good one, too.

Contoured cabinets of lifetime steel have a distinctive new look that people notice—right off. They were designed primarily for the builder... easily installed and priced right. Available in white or four colors that mix or match to give you more variety in the homes you build.

The Crane name is one you can use with real selling advantage when you take prospects through your kitchens. Everybody knows Crane. And you know how often the kitchen is the clincher that closes the sale.

Call your Crane Branch or Crane Wholesaler today. Talk it over with a Crane Kitchen Specialist, and see how neatly Crane kitchens fit into your plans... and your budget.

Your prospects are seeing Crane kitchens in LIFE magazine. They know that a Crane kitchen is a good sign the rest of the house is well constructed, too.

"Don't Fence Me In" kitchen includes laundry and eating space. Crane cabinets are lifetime steel. Won't warp, never need painting.

"Carousel" is happy design for small home. Crane cabinet drawers have one-piece interiors and roll easily on Neoprene tires.

CRANE STARTS ITS SECOND CENTURY OF QUALITY Founded July 4, 1855
Automatic defrosting at the push of a button in four, low-cost **Westinghouse Refrigerators**

New home prospects are seeking higher living standards . . . more conveniences. Automatic defrosting is one way you can help them attain these desires. The new, exclusive patented Westinghouse system permits Freezer to be defrosted so quickly that frozen foods remain firmly frozen. User merely pushes "Defrost" Button, and frost is removed automatically as soon as unit starts to run.

All four Westinghouse Push-Button* Automatic Defrosting Refrigerators also offer such most-wanted features as full-width Freezers; bonus egg and bottle storage in deep Shelves-in-Door; full-width Humidrawer® with moist cold to keep vegetables crisp and fresh; and the famous, extra-capacity, ¾-hp Economizer Mechanism.

Put one of these model home salesmen to work for you now. For more details, see your distributor or write WESTINGHOUSE ELECTRIC CORPORATION Electric Appliance Division • Mansfield, Ohio

* U. S. Patent Issued. No. 2,243,309

**Other sizes available:**
- Model PH-125—12.5 cu. ft.
- Model PH-109—10.9 cu. ft.
- Model PH-90—9 cu. ft.

Makers of Refrigerators • Home Freezers • Ranges • Laundromats • Clothes Dryers • Dishwashers • Water Heaters • Vent Fans • and Food Waste Disposers

YOU CAN BE SURE...IF IT'S **Westinghouse**
Fasco Ventilating Fans

No other inexpensive "Extra" gives such push to your new home sales!

Low-Cost Ventilation - Low-Cost Installation
MODELS FOR EVERY NEED • NO SERVICE CALL BACKS

FASCO offers a complete line of ventilating fans for every building need... in kitchen, bath and utility rooms... at prices to fit your building budget. All models guaranteed 5 years! Specify FASCO for your new homes.

MODELS 728-1021
For inside walls and ceilings. Turbo-Radial Impeller develops greater pressures. 728, 7" Impeller, 325 CFM; 1021, 10" Impeller, 520 CFM.

MODEL 880
For single story houses—in ceiling. Simple to install—low in cost—high efficiency. 8" blade, 475 CFM. Also model 1080, 10" blade.

MODELS 882-1082
Automatic wall ventilating fan Switch operated. 882, 8" blade, 375 CFM; 1082, 10" blade, 550 CFM.

MODELS 847-1047
OUTSIDE WALL VENTILATING FAN
A sturdy, efficient, low-cost fan for any home. Automatic pull-chain operation. For outside walls, 4½" to 15" thick. 847, 8" blade, 475 CFM; 1047, 10" blade, 650 CFM.

Write Today for literature on the FASCO fan line.
TILES
by
SPARTA

SPARTAN MOSETTES
An extremely versatile natural clay type tile, available in full range of attractive unglazed colors. Sizes 1x1, 2x1, 2x2, 3/4" thick. Rugged, impermeable, slip resistant, with high degree of vitrification. Mounted in choice of unlimited patterns for easy and inexpensive setting, even in irregular spaces.

A most practical tile for floors in Schools, Hospitals, Institutions and Swimming Pools.

Other Spartan Specialties include:

DRESDEN PORCELAIN — A vitreous porcelain body tile in sizes 2x2, 2x1 and 1x1 approx. Eleven attractive colors to harmonize with or match glazed wall tile. Stain resistant. Easily cleaned. For residential and light duty commercial floors.

CONDUCTIVE TILE — A much needed tile for Hospital Operating Rooms. Provides a conductive medium to dissipate electrostatic charges on personnel and equipment in contact with floor. Meets all specified requirements of National Fire Protective Assoc. Bulletin No. 56.

Write for Complete Information

THE SPARTA CERAMIC CO.
One of the Largest Manufacturers of Floor Tile
Since 1922

MEMBER TILE COUNCIL
AND THE PRODUCERS' COUNCIL
P.O. BOX 7, EAST SPARTA, OHIO

NEW PRODUCTS continued from p. 214

CLOSET DOORS stretch from floor to ceiling to open up storage space

All closet space, including usually hard-to-reach overhead shelves, is opened to view and to hand with Evco's sliding doors. Stretching the full height of the wall, the Neverfly panels are top hung from an extruded aluminum track on nylon rollers. Steel channels bind the edges to prevent warping, with rear-surface scoring as extra insurance against this problem.

Standard (6'-8½") bright doors are also made and either size may be had in a birch veneer face, if desired, at a higher price.

Price: 4' wide, $46; 5', $54; 6', $64 (Noreply). Stops, finger pulls, and bottom guide strips included.


SLEEK WOOD CABINETS have no protruding hardware, are birch-finished

Originally designed for Chicago's luxury 1000 Lake Shore Drive apartments, the Centennial line of kitchen cabinets has now gone into general distribution. The contemporary lines are not interrupted by hardware; all doors open by finger wells grooved into top or bottom edges.

A full line of cabinets and bases is available from narrow 12" units to wall-length 84" bases. Mortise and tenon and T&G construction are used throughout, with glued and screwed corner cleats for extra rigidity. If desired, Centennial cabinets will be shipped semifinished, knocked-down.

Prices: (dealer) 12" cabinet, $19.65; 36", $36.50; 60" base, $26.50; 36", $40.25


Here's The Built-In That's Your Best Buy

No Johnny-come-lately, Stiglitz Built-Ins are backed by over 135 years experience in the manufacture of cooking equipment —your assurance of sound engineering—your customer's assurance of trouble-free performance. The insert oven, for example, is so perfectly insulated it can be inserted in a wood cabinet with only ½" clearance, underwriters approved! Stiglitz has extra quality features to offer, too.

Let us tell you more reasons why Stiglitz Infra-Aire is your best buy.
In these days of competitive selling, builder profits often come from savings in labor. Here Ceco Steel Casings helped Builder Richard A. McClatchy in his Row House Project at Folcroft, Pennsylvania. Ceco Steel Casements were ordered with Inside Casings attached at the warehouse. Installation was simplified because the entire window unit was placed in the opening in one operation. That eliminated finishing the inside of the opening, with resultant labor and material savings of $3.50 per window, compared to older, time-consuming methods. Architect Erling Wenge said, "Ceco Casements are easy to open and close—and are giving fine performance." Ceco Casements offer these additional advantages: 1—Principal sections are 1½" deep, heavier and stronger than other casements; 2—Two-point parallel contact lapping full 3¾" provides tight window with minimum air infiltration; 3—100% ventilation available—vents can be arranged to bring in air from any direction. See Sweet's Files for details of Ceco Steel and Aluminum Windows.

In construction products CECO ENGINEERING makes the big difference
Ideal for the game room, recreation room, den, study or modern living room. Panelgroove goes up quickly, takes and holds any surface finish, resists all kinds of bumps, scrapes and surface hazards. Use Panelgroove for interesting, serviceable walls in public rooms, too.

When Individuality Counts Use

NEW MASONITE PANELGROOVE

Different—distinctive—and desirable! Offers you a vertical accent for exteriors in homes of all types, for garages, shops, and many another structure. Creates a refreshing contrast to other design treatments. Makes good-looking gable ends—quickly—economically! Perfect for use between and around windows, on short runs, and in featured areas.

Masonite Panelgroove needs no joint treatment...edges are shiplapped to create a continuous pattern. Square-cut grooves are 3/8" wide and 4" on centers. Panels are 4" wide, 5/8" thick and up to 16' long.

When you build with Panelgroove you will profit from all the weather-defying advantages of Masonite Tempered Presdwood—plus a continuous high-styled design with great popular appeal. Sold by lumber dealers. For complete information write Masonite Corporation, Dept.HH-6, Box 777, Chicago 90, Illinois.

Look For This Man He Makes The Difference

MASONITE PANELGROOVE
TEMPERED PRODUCT OF MASONITE CORPORATION

Not immediately available west of the Rockies
What successful builders think of home air conditioning

"Air conditioning helped me sell fifteen $19,000 homes in one day"

says builder Kemmons Wilson of Memphis, Tennessee.

Recently Mr. Wilson completed 18 homes equipped with complete heating and cooling plants in the exclusive Reddock Cove suburb of Memphis. Playing up the air conditioning feature heavily, he sold 15 of these homes—at $19,000 to $19,900—the first day he offered them. The other three were sold before he ever got the advertising he had planned into print.

WILL OFFER YEAR-ROUND AIR CONDITIONING IN LOWER-PRICED HOMES

"Careful study of the home-buying market has convinced me that central heating and air conditioning are no longer luxury items," states Mr. Wilson. "It's rapidly becoming a standard feature that potential buyers look for and are more than willing to pay for. That's why I'm putting the ductwork and piping needed for a year-round central plant into the new homes I'm working on now—homes in the $12,600 to $14,600 range. I'll offer the combined heating and cooling system as an optional extra. Frankly, I don't expect many to pass it up."

SELLING POINTS FAR OUTWEIGH COSTS

"Any sales resistance they start out with falls flat as soon as I describe the comfort of a cool, dry home in midsummer," continues Mr. Wilson. "Remember, these folks know what Memphis' heat and humidity can be like in July and August. Of course, I go out of my way to show housewives the filters that will free their homes of so much dust, soot and pollen. And these Frigidaire units change over from heating to cooling at the flip of a switch. That makes the whole thing seem so effortless that people are amazed at getting so much for so little money."

EQUIPMENT USES "FREON" SAFE REFRIGERANTS

Like most air conditioning units in service today, the equipment that cools Mr. Wilson's homes operates with Du Pont "Freon" fluorinated hydrocarbon refrigerants. Wise builders specify "Freon" in the units they choose, relying on Du Pont's reputation for producing pure, noncorrosive refrigerants of the highest quality.

Of course, "Freon" refrigerants are safe—nonexplosive, nonflammable, virtually nontoxic. They meet building-code requirements everywhere. There are "Freon" refrigerants to serve every type and size of air conditioning equipment. Specify Du Pont "Freon" refrigerants in the equipment you select for every home you build.

LEARN HOW OTHERS use air conditioning to help sell homes. Read Du Pont's brochure "What Successful Builders Think of Home Air Conditioning." For your free copy write to E. I. du Pont de Nemours & Co. (Inc.), "Kinetic" Chemicals Division 126, Wilmington 98, Delaware.

Frigidaire three-ton units serve Mr. Wilson's Reddock Cove homes, and operate so quietly they can be located in easy-to-get-at closets.
CONCRETE FORMS
1. Weldwood L-IR—an interior grade panel made with Weldwood's exclusive L-IR mold-resistant adhesive; gives many of the advantages of exterior grade at interior grade price.

2. Weldwood Exterior Plywood—a true waterproof adhesive makes these panels the standard of the industry for many-time use.

3. Weldwood Plastic-Faced Fir—fir surface is protected by a sheet of plastic-impregnated paper, adding materially to performance in resisting moisture-caused delamination.

SIDING
4. Weldwood Exterior Fir—with waterproof adhesive bond; may be applied vertically or horizontally with battens, V-grooves or flush joints.

5. Exterior Weldtex—the original striated paneling patented by Weldwood. Striations give interesting highlights and shadows, assure no grain raising or checking; panels can be stained or painted; no joint problems because nails are concealed in striations.

6. Weldtex Siding—same as above except cut into wide panels 48” x 15½”; can be installed at great savings in labor cost compared to usual siding. Approved by FHA.

7. Weldwood Texture One-Eleven—exterior grade, rough, unsmoothed Fir gives dramatic, textured look; can be installed without sheathing; fine also for gable ends and soffits.

8. Weldwood Duproy—plastic-faced Fir is a low-cost, weather-resistant panel that gives maximum protection against grain raise or checking. Perfect also for signs and other utility applications.

9. Weldwood Plyscord—meets every requirement for economical wall and roof sheathing. Unsmoothed, low in cost but high in strength and rigidity; available with L-IR adhesive.

SHEATHING
10. Weldwood Plybase—sanded one side, excellent for linoleum, tile, wall-to-wall carpeting.

11. Weldwood Plyscord—unsmoothed; especially good under solid wood flooring.

INTERIOR WALLS, PARTITIONS
12. Weldwood Plyponel—provides solid, sturdy interior walls that can be painted, stained or enamelled; first sealer coat of Firzite recommended to eliminate wild grain.

13. Weldwood Duproy—plastic facing on Fir takes paint beautifully, gives extra-smooth surface.

14. Interior Weldtex—gives unusual wall treatments; can be finished natural, stained, painted or given two-tone effect; irregularly-cut grooves permit butt joints with nails concealed in grooves; available also in squares.

15. Sea-Swirl* and Surfwood*—two panels with the weather-beaten beauty of sea-washed driftwood; fine for dens, playrooms; texture hides nails; available also in squares.

CEILINGS
16. Weldwood Plyscord—unsmoothed; perfect for attachment of acoustical tile or decorative ceiling material.

17. Weldwood Duproy—easy painting, plastic-faced Fir gives beautiful smooth ceiling finish.

18. Weldwood Plyponel—goes up on ceiling joists quickly, easily; can be painted, stained or enamelled.

STORAGE WALLS
19. Weldwood Plyponel—easy to cut, easy to work, easy to finish; use of plywood actually gives more interior cubage than use of solid lumber.

BUILT-INS
20. Interior Weldtex—makes bookcases, cabinets look like expensive custom work yet costs so little that builders of lowest priced homes can use it.

KITCHEN CABINETS, COUNTERS
21. Weldwood Duproy—takes paint so well that surface resembles painted glass.

22 & 23. Weldwood Plyponel—inexpensive way to provide fine wood cabinets in low-cost homes; fine, sanded surface for plastic-laminated or linoleum-covered counter tops.

OUTDOOR STORAGE
24. Weldwood Texture One-Eleven—adds expensive-looking touch to small terrace at low cost by furnishing storage space for lawn mower, garden tools.

BREEZWAYS, FENCES AND SOFFITS
25. Weldwood Texture One-Eleven—gives strength with minimum of framing; looks especially well when stained.

26. Exterior Weldtex—striations add 3-dimensional look; can be either stained or painted.

GARAGE DOORS
27. Weldwood Duproy—tough, plastic-faced panel especially fine for overhead doors.
27 ways you can build a better house and save money too!

Use Weldwood Fir Plywood to make a house more livable, more beautiful, more salable!

Home buyers are shopping around—they're looking long and hard at things like wall treatments, storage space, built-ins—even construction details.

Look at the list on the left—every single item can be merchandised as a plus for your better-built home.

And you save money because Weldwood Fir Plywood is so easy to put up, to fabricate, to finish. You'll find that you can often use it in place of more expensive materials.

At amazingly low cost you can give your homes the extras that really close sales...with superior Weldwood Douglas Fir Plywood!

FREE BUILDER HANDBOOK! Send coupon today for your copy. It contains complete descriptions, specifications and application hints on all Weldwood building products.
A TV Antenna Custom Installed by RCA Service Company

With a view to increased, faster, new-home sales, make television viewing easy for home buyers. Have RCA Service Company custom install a reliable, powerful antenna...roof- or attic-mounted...with concealed interior wiring and baseboard plug-in outlets.

An RCA Custom antenna installation costs you little, yet works so hard at selling homes because it saves home buyers really considerable money. And depend on RCA Service Company technicians for exactly the right installation for local conditions. Their work fits smoothly into your construction schedule. Coupon brings RCA Service Company help in planning your developments with RCA Custom TV Antennas—an "extra" that really does sell your homes.

RCA SERVICE COMPANY, INC.
A Radio Corporation of America Subsidiary

218. FIREPLACES, What You Should Know About Fireplaces. Superior Fireplace Co., Dept. HH, 1708 E. 15th St., Los Angeles 21, Calif. Single sheet, 8½” x 11”

"See what the boys in the back yard will have" is the invitation to this colorful book of factory-fabricated rustic fences. Photographs, specifications, and uses from a manufacturer who probably shudders at the song, "Don't fence me in."


What factors decide the choice of windows in a house? SHC says that both function and characteristics of the various types must be considered, and includes a chart rating each kind's suitability for various wall placements.

Double-hung, sliding, casement, awning, jalousie and hopper windows are illustrated, and good and bad points noted. Also included are examples of fixed and movable sash in combination units.


The basic fundamentals of electric heat, how to determine heating requirements and to estimate costs. Westinghouse wisely includes a chapter on the necessity for adequate wiring in this step-by-step "how to design for electric heat" booklet, as well as weather data for major cities in all 48 states.

221. HEATING. Electric Heating for Homes Guide. Westinghouse Electric Corp., Dept. HH, 401 Liberty Ave., Pittsburgh 30, Pa. 32 pp. 8½” x 11”, $2, but free to those concerned with design or installation of electric heating systems.

For all types of windows and doors

By using National Weatherstripping on the homes you build, you can give your buyers extra value for their money. That's because National Products make any house more weatherproof, more comfortable, and much less expensive to maintain. Yes, the added buy appeal of National Weatherstripping costs only a few dollars per house—certainly a worth-while investment in added customer satisfaction, quicker sales, and greater profits.

PACKAGED WEATHERSTRIP for DOORS and WINDOWS

COLUMBIA SPRING WEATHERSTRIPPING

National's Columbia Spring Weatherstripping is available in either bronze or aluminum. It's furnished in 32” or 100’ rolls, pre-punched and with an ample supply of nails, ready for speedy, simple installation.

NATIONAL METAL PRODUCTS COMPANY
2 Gateway Center, Pittsburgh, Pa.
WATER WORRIES BANISHED!

Here is the most wanted, most trouble-free water closet you can offer. It's the famous CASE Non-Overflow One-Piece* that hushes rushing water down to a WHISPERING FLUSH. Every time you install a CASE Non-Overflow One-Piece, you'll build your good reputation because it's the finest water closet available.

Look at these exclusive features. Non-Overflow bowl: safeguarding antisiphon ballcock; healthful seat height; streamlined, up-to-the minute design, time tested, with the whispering flush that's already known throughout the industry.

You have the added advantage of offering the CASE Non-Overflow One-Piece water closet in 32 pastel colors and sparkling black and white...the widest vitreous china color selection on the market. Your Case distributor is in the "Yellow Pages". Phone him or write W. A. Case & Son Mfg. Co., 33 Main Street, Buffalo 3, N. Y.

W. A. CASE & SON MFG. CO., 33 MAIN STREET
BUFFALO 3, NEW YORK

CASE QUALITY VITREOUS CHINA PLUMBING FIXTURES

1853-1955
ONE LOUVER

FITS Any Roof Pitch

The ADJUSTABLE, ALUMINUM VARI-PITCH LOUVER

The modern trend to low pitch roof design in homes, multiple dwellings and commercial construction requires new types and sizes of louvers... THE ADJUSTABLE, VARI-PITCH LOUVER ADAPTS ITSELF TO MODERN DESIGNS.

And with the increasing use of air conditioning in building, ventilation is of major importance... THE VARI-PITCH LOUVER PROVIDES THE KIND OF SCIENTIFIC AIR CIRCULATION THAT IS DEMANDED.

Here's the practical, economical solution to any ventilating problem.

INSTALLATION IS SIMPLE—labor and fitting time is reduced to a matter of minutes. VARI-PITCH conforms instantly to the opening... fits tightly, securely.

ONE LOUVER FITS MANY SLOPES therefore only 1/5 the storage area is required to stock VARI-PITCH in quantities than is ordinarily required for standard units.

ALL ALUMINUM CONSTRUCTION INSURES LIFETIME SERVICE... no rust, no maintenance, no replacement... ever! F. H. A. approved design.

VARI-PITCH LOUVERS are attractive louvers that actually cost less per square foot than the building materials they replace.

Complete with 8" mesh screen, VARI-PITCH is available assembled, ready for quick easy installation or knocked-down for on the job assembly.

Get all the facts on this adaptable, adjustable louver from your dealer or write to LOUVER MANUFACTURING AND SUPPLY CO. for complete information.

LOUVER DIMENSIONS

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Pitch Angle</th>
<th>Rise per Foot</th>
<th>A</th>
<th>B</th>
<th>C</th>
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</thead>
<tbody>
<tr>
<td>A50B</td>
<td>44 1/2°</td>
<td>24&quot;</td>
<td>10&quot;</td>
<td>11&quot;</td>
<td>12&quot;</td>
</tr>
<tr>
<td>A60B</td>
<td>52 1/2°</td>
<td>30&quot;</td>
<td>11&quot;</td>
<td>12&quot;</td>
<td>13&quot;</td>
</tr>
<tr>
<td>A68B</td>
<td>60°</td>
<td>36&quot;</td>
<td>12&quot;</td>
<td>13&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>A88B</td>
<td>72°</td>
<td>42&quot;</td>
<td>13&quot;</td>
<td>14&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>A88B</td>
<td>80°</td>
<td>48&quot;</td>
<td>14&quot;</td>
<td>15&quot;</td>
<td>16&quot;</td>
</tr>
</tbody>
</table>

Approximate opening dimensions: VARI-PITCH louvers will fit when set at the maximum or minimum pitch each will accommodate.

LOUVER MANUFACTURING & SUPPLY COMPANY

5815 West 36th Street • Minneapolis 16, Minn.
Color style interiors to order with NEW TEXOLITE* DECORATING SCHEMES

7 proved color guides created by leading decorating consultants to assure room-to-room color harmony

Imagine how it pleases a prospect when you say, "And we'll decorate to order from any of these seven exciting color schemes." It may well cinch the sale for you!

Cynthia Montgomery and Lillian Rawlings, leading color authorities, created this TEXOLITE decorating service, specially for the home builder. It's versatile...it's appealing wherever you use it.

There's enough variety to capture the fancy of any prospect: enough flexibility to assure good taste in any home, regardless of size, design or climatic location. Moreover, each scheme is planned for perfect room-to-room color harmony. And just think—you accomplish all this with minimum paint inventory!

FREE! Ask your TEXOLITE representative for your set of decorating schemes or write Dept. HH-3, 300 West Adams St., Chicago 6.

TEXOLITE DURAVAL® LATEX PAINT
ready-mixed colors are shown in your TEXOLITE Decorating Schemes. Many of these same colors are also available in other TEXOLITE paints.

U.S. GYPSUM
The Greatest Name in Building
This demonstration shows how Johns-Manville Shingles can make your selling job easier

In this actual photograph, notice that the water from the hose is spraying equally on both sides of the Colorbestos Siding Shingles. But what a difference! The side that is Silicone Sealed repels water. It doesn't darken or change color.

J-M Colorbestos Shingles are **Silicone-Sealed** to shed water, resist soiling and discoloration

New Colorbestos Shingles have been developed by Johns-Manville to offer the ideal combination of function and beauty to meet today's architectural designs.

Made of Asbestos and cement, they are fireproof, rotproof, never need paint to preserve them. And, thanks to the new wonder chemical, Silicone, they are virtually self-cleaning. Water rolls right off, no dirt deposits are left behind.

As for beauty, the random-ribbed, striated pattern and soft pastel colors of these shingles offer a distinctive new style. When applied with J-M Shingle Backer, they cast heavy shadow lines which accent each course and add character to the house.

Because Colorbestos Shingles are 32" wide, they save time and money in application...there are fewer shingles to handle per square.

Keep up with the times. Offer Silicone-Sealed Colorbestos Shingles for lasting beauty and economy. For more information, write Johns-Manville, Box 111, New York 16, N. Y.

Johns-Manville sponsors "Meet the Press" alternate Sundays on NBC-TV. We invite you to tune in.

Johns-Manville

230
with MARLITE WALLS you measure your work in hours—not days!

Isn’t this the real answer to your problem of paneled walls?

Marlite Planks and Blocks go up fast ... give every interior a beautiful finishing touch ... mean faster job completions. And Marlite’s exclusive tongue and groove joint simplifies installation; conceals all fastening.

This easy-to-handle paneling means more customer satisfaction, too. The soilproof plastic finish resists smudges, grease, and stains; never needs painting; wipes clean with a damp cloth.


PLASTIC-FINISHED WALL AND CEILING PANELING

Marlite Plank and Block Patent Applied For—Made With Genuine Masonite® Tempered Duolux®
WOVEN WOOD SLAT FOLDING DOORS & ROOM DIVIDERS

HERE'S A SPACE-MAKER THAT'S ADAPTABLE TO ANY BUILDING PLAN. WHEREVER THERE'S A NEED FOR CLOSETS, UTILITY SPACE, ROOM DIVISION, VENI-FLEX FOLDING DOORS MEET THAT NEED ECONOMICALLY. EASY AND QUICK TO INSTALL, VENI-FLEX SAVES NOT ONLY ON LABOR AND HARDWARE COSTS BUT ALSO ELIMINATES EXPENSIVE OVERDOOR FRAMING AND THE COST OF STUDDING, PLASTERING AND PAINTING OPENINGS. AVAILABLE IN BEAUTIFUL NATURAL WOOD FINISH OR IN A CHOICE OF 11 DECORATOR COLORS. FOR MAXIMUM SALES APPEAL PLUS MAXIMUM ECONOMY, INSTALL VENI-FLEX, THE DOOR OF MANY USES.

ROL-TRAK
Exclusive Rol-Trak Hardware assures fingertip control . . . years of trouble-free service . . . smooth, dependable operation. A typical top-quality Veni-Flex feature.

CONSOLIDATED GENERAL PRODUCTS, INC.
24th & Nicholson, Houston, Texas

BUILT-IN RADIOS

... Only 3½" Deep!

- Fits in standard 4" partition
- Excellent tone and selectivity
- Installed as easily as any electric outlet
- For kitchen, bath, bedroom, etc.
- Colored plastic panels
- Approved by Underwriters
- Retail for $43.50 less panels

Write today for specifications and low builder prices.
(Dealer inquiries invited)

RADIO COMPANY
1012 HH 8 Cleveland St., Clearwater, Fla.

Are You Changing Your Address?

If so, please tell us at your earliest convenience so that you may continue to receive copies without delay.

To expedite the change kindly send the old address as well as the new to:

house & home
540 North Michigan Avenue
Chicago 11, III.

TECHNICAL PUBLICATIONS

Continued from p. 226

223. HARDWARE. Grillcraft Barbecue Units. Grillcraft Co., Dept. HH, 477 E. 7th St., Saint Paul 1, Minn. 3½" x 8"

Basic design for installing an outdoor cooking unit, plus details and dimensions of several elaborate fireplaces.

224. AIR CONDITIONING. Who's Zoo In Air Conditioning. Carrier Corp., Dept. HH, 300 S. Geddes St., Syracuse 1, N. Y. 24 pp. 8" x 8"

Cartoon animals humorously define the advantages and pleasures of air conditioning, which are then translated to human terms. Easy-to-take promotion.

225. HARDWARE. How To Fasten To Masonry. Diamond Expansion Bolt Co., Dept. HH, Garwood, N. J. 8 pp. 3½" x 6"

Complete instructions and diagrams on the use of patented anchors and nails.

226. SLIDING DOORS. 1955 Catalogue. Arcadia Metal Products, Dept. HH, P. O. Box 657, Arcadia, Calif. 12 pp. 8½" x 11"

Steel-framed sliding doors by a pioneer in the field. Technical specifications and quarter-size details are included, and a data chart which lists glass sizes, rough openings and shipping weights of all sliding door frames.

227. AIR CONDITIONING. 50 Air Conditioned Homes You Can Afford. Airtemp Division, Chrysler Corp., Dept. HH, Dayton 1, Ohio. 48 pp. 8½" x 11". 25¢ ea.

50 plans by Richard Pullman, with mechanical layouts for both heating and cooling with Chrysler equipment.

228. AIR CONDITIONING. Climatic Selection Guides. Airtemp Div., Chrysler Corp., Dept. HH, Dayton 1, Ohio. 6 pp. 3½" x 6½"

Intended for use in selecting room air conditioners for different climate zones and construction methods, these tables are made up for four different dry-ball, wet-ball design areas.

continued on p. 238
Mississippi Glass Adds Beauty and Utility That Sells on Sight

Once your prospect exclaims, "what a beautiful bathroom" you’ve won half the battle and the sale has a much better chance of becoming a reality. You can give your bathrooms the wanted luxury look with translucent, light-diffusing glass by Mississippi and at reasonable cost. For instance, a tub enclosure of handsome figured glass transforms bathrooms into sheer beauty and luxury. Translucent without being transparent, these lovely panels flood the tub enclosure with soft, figured light that completely protects privacy. A wonderful idea for dual purpose bathrooms.

Another bright idea—easily installed figured glass partitions bring unexpected beauty to lavatories. Separating the area from the bath, they insure privacy, yet flood the interior with borrowed light. Practical as they are pretty—simple to keep shining clean—never rust, corrode or wear out, never need painting—provide the new look that lasts.

Mississippi manufactures only glass. Metal members available through other sources.

See how a dash of glass can spice up your bathrooms... achieve elegance... easily and inexpensively. Select from a wide variety of figured patterns. Specify Mississippi. Available wherever quality glass is sold.

Write today for free booklet, "Modernize Your Home With Decorative Glass." Photographs of actual installations give you many ideas on ways to use this beautiful medium. Address Dept. 9.

MISSISSIPPI GLASS COMPANY
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New York - Chicago - Fullerton, Calif.
World's largest manufacturer of rolled, figured and wired glass

take a good look at LARCH

one of 10 woods from the

WESTERN PINE region

Strong, durable and straight-grained, Larch is a favorite for framing, sheathing, subflooring, flooring and siding. Tough-fibered and rigid, it works well, holds its shape and resists nail withdrawal. Its handsome grain, satin-smooth surface and reddish color suit it well for interior paneling and cabinetwork.

Larch comes in 3 select, 5 common, 3 structural, 4 dimension grades. Your local lumber yard carries Larch from the Western Pine region—or can get it for you quickly!

the Western Pines

the Associated Woods

get the facts on LARCH write for the FREE illustrated booklet to WESTERN PINE ASSOCIATION, Dept. 304-Y Yeon Bldg., Portland 4, Oregon
SYMONS FORMS Support 20-Ton Truck

A freak accident demonstrated the ruggedness and strength of Symons Forms. A 20-ton ready-mix truck, backing up to pour concrete at a house under construction, got too close to the edge of the excavation, softened by rains and topped over on the Symons Forms. The forms supported the loaded truck's full weight. After the removal of the truck, the contractor, Regan Brothers, was able to straighten the poured walls by replacing the water and adding two braces. The completed wall showed no sign of damage.

Symons Forms can be rented with purchase option—rental charge apply on purchase price, during a 60 day period. Symons Catalog No. F-10, which describes and illustrates the Symons Forming System, will be sent upon request. Symons Clamp & Mfg. Co., 4277 Diversey Avenue, Dept. F5, Chicago 39, Illinois.

FREE! New Catalog and Wall Chart!

Illustrates and describes complete line of new Bessler Disappearing Stairway Models to meet all your needs. This beautiful and wall chart should be in your files for ready reference—write today.

IMMEDIATE DELIVERY!

Build More Saleable Area into Homes with BESSLER

Disappearing Stairways

1. THE ORIGINAL Disappearing Stairway—made for over 40 years.
2. A real stairway—not a ladder.
4. Safely-designed in every detail for your protection.
5. Suitable for the front house—old and new.
6. Operates from above and below.
7. Full width treads—SAFE for everyone.
8. All steps are of equal height.
9. Treads and stringers are made of solid lumber.
10. Full stair width whenever ample access for large objects.

11. Full Snatch-SAFE hand rail.
12. Complete architectural design assures easy and SAFE installation and does not affect appearance.
13. All principal parts are made of strong, SAFE pressed steel.
14. SAFE pressed steel, available on special request for all models—no “impairing.”
15. Every model of White Pine and Fibre in two-panel and flash type, hand-crafted to fit flush, free from any discernible seams.
16. Tallier-made for all heights—short or long steps.
17. Handsome and convenient, self closing.

BESSLER—best for over 40 years!
NEW!
a recessed chime that can be heard all through the house!

Wall box easily nailed to studs. After plastering, wire and mount mechanism. Self-aligning cover slips into position. 2" deep — no problem even in modern shallow wall construction.

Featuring exclusive Vibrechord sound, the New Edwards Hideaway offers a melodious, sustained signal as long as a finger lingers on the button! Unlike ordinary chimes, it can be heard in every room!

Easily, inexpensively installed, the Hideaway fits flush. Can be concealed by a picture or draperies . . . painted to match or contrast wall.

Different, truly modern, new Edwards chimes are a definite "plus" to every prospect who enters your model homes. See, hear, try them.

Here is the practical answer to the urgent demands of home owners for low cost, year round comfort — CHELSEA attic fans! They provide complete home comfort . . . extra comfort in every room — in a way that every home owner can understand and afford. Regardless of the size of the home . . . in new construction or remodelling — CHELSEA attic fans satisfy customer cooling and ventilating requirements.

**Chelsea DELUXE ATTIC FANS**

**IN ARCHITECTURAL DESIGN...**
26 different models of Chelsea attic fans provide flexibility in meeting exacting cooling requirements. Exclusive Spring Mounting insures quiet, trouble free operation. Chelsea attic fans require no unusual structural changes or supports, and can be used in practically any type of dwelling because of compact design.

**IN ACTUAL CONSTRUCTION...**
Low cost CHELSEA attic fans are quickly and easily installed because they are furnished as a complete package, complete with all accessories. Nominal initial costs are offset by the tremendous sales appeal they add to every home.

WRITE FOR BULLETIN /610-55
CHELSEA FAN AND BLOWER CO., INC.
PLAINFIELD • NEW JERSEY

All Chelsea attic fans have a PFMA Certified Rating and are guaranteed for 5 years.
The catch that never misses!

MAGNETIC Latch

with new FLOATING ACTION

From Leco, world's largest manufacturer of magnetic fastening devices, the powerful new Leco-Latch with floating magnet poles to assure a positive, non-slip grip. Holding force equal to over 700 times the weight of the magnet. Pulls even sagging or warped doors up snugly, yet so gentle it opens easily, quietly.

Ruggedly built for lifetime service!

New Leco-Latch is built into a rugged, shock-resistant polyethylene case. Powerful, permanent magnet, lasts a lifetime!

Write today for FREE SAMPLE

Test new Leco-Latch on wood or metal screens, doors, cabinets. Hundreds of hardware and builder applications. Free sample on request.

World's leading magnetic fastening engineers

LABORATORY EQUIPMENT CORP.

101 Hilltop Road, St. Joseph, Michigan

A Jewel of MECHANICAL PERFECTION

The Home-Selling WasteMaster

FOOD WASTE DISPOSER

Easy to install! Easy to sell! Makes kitchens more attractive to home buyers. Exclusive Sheridan Slinger keeps motor dry at all times. Write NOW for detailed information!

A PRODUCT OF THE

LOCKLEY MACHINE COMPANY

WASTEMASTER DIVISION

210 GROVE STREET

NEW CASTLE, PA.

RICH BEAUTY...LOW COST

WITH SOLID HARDWOOD PANELING by STEM

Mr. Builder: Here is wall paneling in solid Walnut, Cherry, or Butternut that will add distinction and charm to any room.

The cost compares favorably with paint and plaster. Installation is fast and easy. Boards are tongued and grooved, V-joint, sanded one face, 3/4" thick. Widths are 4" to 9"; lengths 4' to 16'. Paneling is very easily installed in a horizontal or vertical pattern.

CHESTER B. STEM, INC.

549 Grant Line Road, New Albany, Ind.

NEED KILN DRIED HARDWOODS?

Black Walnut, Wild Cherry, Hard Maple, Northern Birch, Indiana Soft Textured White Oak, Limba, Teak, African, Honduras, Philippine Mahogany and many others.

SEND FOR THIS FOLDER TODAY

HOME-WAY MODEL 8511X6

• We furnish complete factory-built home. Meets requirements of modern building codes. You handle erection, utilities.

• Home-Way stays ahead of the field. New low roof line (see illustration) is highly popular. New ranch types; many other standard models. We can meet every family's needs.

• Quality material, carefully processed; rapid delivery.

• Cooperative advertising; personal dealer service.

The Small Builder is our Business

We can help you get much bigger volume and much better profits. WRITE TODAY

GBH-WAY HOMES, Inc.

Dept. HHD • WALNUT, ILLINOIS
PLASTERED BRICK
A new type real brick which lets your dreams become realities. Don't be limited.

ARCHITECTS recommend it
BUILDERS like it

OLD-FASHIONED PURITY - with the NEWEST IMPROVEMENTS

POLAR WHITE Paint and Enamels are ABSOLUTELY PURE. As in days of old before fillers, extenders, and extenders, only the purest and best hiding pigments—Titanium and "Behr Process" resin-free, elastic, non-crocking, fast-drying binder—all combine in POLAR WHITE to make it last longer and stay whiter. Thus the new improvements are added to the time-proven method of manufacturing old-fashioned pure paint.

POLAR WHITE'S 100% Titanium pigmentation provides superior covering power on all wood surfaces. Due to its great flexibility, POLAR WHITE does not crack or peel.

Self-Cleaning: Surface stain or dirt is chalked away leaving a clean white surface years longer.

Easy Maintenance: Repainting is a one-coat process requiring a minimum of surface preparation.

POLAR WHITE is available in Outside Gloss White #711, Gloss Enamel #14, Semi-Gloss Enamel #147, and Satin Velvet Flat #700.

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YEAR-ROUND • HEATING-COOLING

"Home Conditioning"
integrated with famous
VULCAN TRIMLINE

Never has there been anything like it — the first integrated year-round baseboard heating-cooling system for the American home.

Advanced engineering that retains 100% of its heating performance and still furnishes a comparable amount of cooling comfort.

In Winter — smooth, balanced distribution of heat from Vulcan's famous TRIMLINE baseboard radiation.

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Every homebuilder knows the appeal of color in selling to today's home-buyer.

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ARMERICAN STANDARD • AMERICAN BLOWER • CHURCH SEATS & WALL TILE • DETROIT CONTROLS • KEWANEE EXCHANGERS • SUNBEAM AIR CONDITIONERS

TECHNICAL PUBLICATIONS

229. AIR CONDITIONING. The Automatic Housekeeper. Trion, Inc., Dept. HH, 1000 Island Ave., McKees Rocks, Pa. 4 pp. 8 1/2" x 11"

An illustrated explanation of Trion's electronic dust precipitation, what it does, how it works. Specifications.

230. HEATING. Radiant Panel Heating. Kritzer Radiant Coils, Inc., Dept. HH, 2901 Lawrence Ave., Chicago 25, Ill. 4 pp. 8 1/2" x 11"

Finned tubes as a heat source, installed in walls and beneath joists, are the subject of this booklet. Perspective drawings illustrate various uses.

231. WINDOWS. Crestline Removable Windows. The Silcrest Co., Dept. HH, Wauwatosa, Wis. 4 pp. 8 1/2" x 11"

Double-hung windows that lift out for painting or cleaning. Details.

232. HARDWARE. Quality Builders Hardware. Quality Hardware Mfg. Co., Dept. HH, Los Angeles 11, Calif. 34 pp. 8 1/2" x 11"

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   b. Congoleum-Nairn vinyl tile (4)
   c. Tile-Eye Modern plastics (7)
   d. Bako-Poly-krome tile (5)
   e. Martino Castello tile (6)
   f. Kerlite Grotto tile (5)
   g. Rogers block flooring (5)
   h. Dodge marble core tile (5)
   i. Vermont marble tile (5)
   j. Durline threshold (8)
   k. McHenry hinges (7)
   l. Snap-On trim (8)
   m. Zinko paint (7)
   n. Panelfold doors (8)
   o. Luminous ceilings (9)
   p. Auer registers (9)
   q. Lima filters (9)
   r. Roca sliding doors (7)
   s. L.X.I. kitchen cabinets (7)

TECHNICAL PUBLICATIONS

218. Fireplace problems
219. Habitant fences
220. Small Room Control pamphlet
221. Westinghouse electric heating
222. Emerson exhaust fans
223. Giffenaii hot-water units
224. Carrier air conditioning
225. Masonry fireplaces
226. Central-aired heating
227. 80 air-conditioned homes
228. Chrysler climate guides
229. Trion precipitators
230. Kitter radien panels
231. Crestline windows
232. Quality builders hardware
233. Kawneer sun control products

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June 1955
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A rugged waterproof paper for protection and for curing concrete.

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Standard panel sections and Flush sections available in Masonite, and carry the famous Masonite "Lifetime Guarantee".

Write direct for full details on the complete Raynor Line.
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ONLY 45 MINUTES TO COMPLETE FOUNDATIONS!

Dig trench with a Buckeye 403 and pour concrete, all in 45 minutes!... Concrete can be poured immediately to prevent cave-ins... Full crawler mounting for work in any weather or on unstable ground. Digs to 5' depth. 8" to 16" widths.

HOUSE FOUNDATIONS or SERVICE LINES...

Buckeye 403 squares foundation corners, leaves trench clean for pouring—eliminates hand finishing and ditch clean out... Digs service lines flush with foundations—cuts through tree roots. Accurate grade to 1/4" with fast, easy operation.

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WAYNE, MICHIGAN

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PROVIDES SMART CEILING FINISH, TOO. Cushiontone is decorative as well as acoustical. Its clean white finish and smart random design bring fresh new beauty to any room where you install it. Cushiontone is factory finished, needs no painting or further treatment.

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Sound Conditioning your homes

New nationally advertised Cushiontone ceilings are low cost, easy to install, add sales appeal.

QUICK, EASY TO INSTALL. All you do is nail 1" x 3" furring to joists, then nail Cushiontone to furring, and the ceiling is completed. No special skill or tools are needed. In one simple installation, Cushiontone gives you sound conditioning, beauty, and a finished ceiling.

FREE PROMOTIONAL MATERIAL FOR YOU. Cushiontone is rapidly becoming a nationally known brand name. So promote it with signs in front of your homes, in every sound-conditioned room, and in local advertising. For free material, see your Armstrong building supply dealer or write Armstrong Cork Company, 4206 Sixth Street, Lancaster, Pennsylvania.

Armstrong CEILINGS
Cushiontone® Temlock® Tile
... to quiet and beautify homes
Slam... Slam... Slam... 642,934 Times...
But it couldn't faze a New Londoner door!

After slamming a Curtis New Londoner hollow-core flush door 642,934 times with their special slamming machine, the "torturers" got tired—but the door didn't! Banged 72 times per minute with a force of 192 foot-pounds per second—the equivalent of a lifetime of slamming—the New Londoner door failed to show the slightest injury.

What's the reason for this amazing stamina? It's the patented locked-in, all-wood gridlike core that keeps the Curtis New Londoner door hale and hearty through long years of use—eliminates warping and sagging—gives the owner more for his door dollars.

And that, in turn, is the reason why so many architects and builders consider these superior doors the mark of a better built home. And why, too, they are so widely used in schools, hospitals and other public buildings.

Curtis New Londoner doors and all Curtis Woodwork are sold by retail lumber and building-material dealers everywhere. For complete information, write Curtis Companies Service Bureau, Clinton, Iowa.
Form and function—

—are your stock in trade. And popular Eljer fixtures add these values to your homes. For here is sculptured beauty . . . designed for enduring service. Eljer fixtures are available in cast iron, formed steel, and vitreous china. In white and five high-fashion pastel colors. Your prospects see the dramatic Eljer story regularly in the nation's leading magazines.

ELJER, DIVISION OF THE MURRAY CORPORATION OF AMERICA, THREE GATEWAY CENTER, PITTSBURGH 22, PA.

ELJER — the only name she needs to know in plumbing fixtures
How Successful Would You Like To Be?

National Homes Corporation offers you the biggest opportunity in the Home Building Industry today, if you can qualify as one of its Builder-Dealers.

Demand for its homes has made National Homes Corporation the largest producer in the United States.

Since 1948 our production has increased better than 1300 per cent.

Today a house comes off National's production line every 11 minutes on the average—and the trend is up.

National Homes Widely Accepted...

... by home buyers throughout the 41 states within our marketing area. Today more than 80,000 American families, living in 3,000 or more communities, own National homes.

... by banks, insurance companies, savings and loan associations and other lending institutions. More than 600 of these institutions—among them the largest in the country—have invested in mortgages on National homes across the land.

... by building authorities whose standards are highly respected by local code and planning agencies. These include the Building Officials Conference of America, Pacific Coast Building Officials Conference, Southern Building Code Congress, and the New York State Building Code Commission.

... by more and more home builders who recognize the significant trend toward building homes the better, modern, industrial way. Over 550 Builder-Dealers already are sharing the success that has resulted from National Homes' leadership in this field.

What National Homes Offers You

As a National Homes Builder-Dealer you will have:

A trained organization to assist with land acquisition, site planning, and your entire building program.

A house package that represents two-thirds of the building job. This is delivered to the site on schedule for the most economical use of local labor. There is no need for warehousing or inventory.

A faster completion time that means a more rapid turnover of capital and a higher dollar volume of profit.

Financing by the National Homes Acceptance Corporation of VA or FHA-approved mortgages.

A coordinated program of advertising and sales promotion of our brand-name product on national and local levels.

What Can You Offer National Homes?

As a National Homes Builder-Dealer you must have the vision and ability to develop the land on which you build.

You must have sufficient capital to finance the kind of a project you have planned.

You must have the ability to manage these finances and the building operation throughout your program.

Above all, you must have integrity and good standing in your community.

If you feel you have these qualifications and want to grasp this opportunity to make your own success bigger by sharing in the most successful home building operation in the country today, please write to me personally.

If you feel you have these qualifications and want to grasp this opportunity to make your own success bigger by sharing in the most successful home building operation in the country today, please write to me personally.

Nothing is more important to me than the development of our Builder-Dealer organization. James R. Price, President, National Homes Corporation, Lafayette, Indiana.

Why NATIONAL HOMES Outsell ALL Others

• Every National home is architect-designed by Charles M. Goodman, AIA, and color-styled by Beatrice West, both foremost authorities in their fields.

• There are 38 basic floor plans—with two to five bedrooms—and more than 200 exterior variations to suit every need and desire.

• Prices range from $6,000 to $40,000. Variations in price are due to size, extra features desired by the buyer, and location of the home.

• National homes are produced better, faster, and more economically—which means a lower selling price—by the assembly-line methods of modern U.S. manufacturing.

• They are built of quality materials. No. 1 kiln-dried lumber, for example, is used for all structural framing in National homes.

• Mass purchasing of brand-name materials results in important savings that can be passed on to the home buyer in the price and in important advantages which he gets in the quality of his home.

• The quality of National homes is standardized—every home is engineered and manufactured in accordance with exacting factory standards.