

AMERICAN BUILDER

THE WORLD'S GREATEST BUILDING PAPER

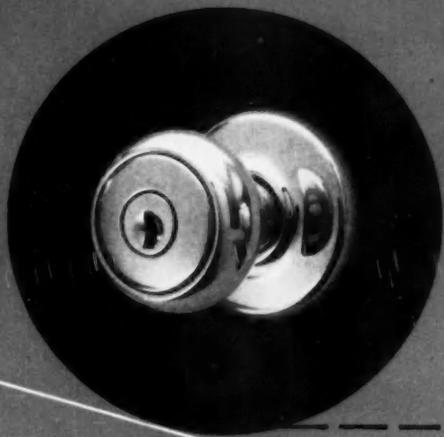
NOVEMBER 1952 PRICE 75 CENTS

the 1953
PACE SETTER
house with eight
selected features page 96

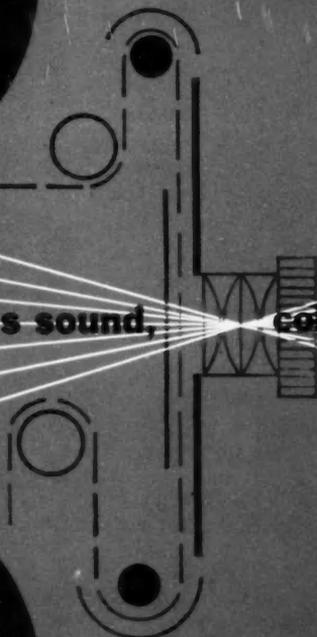


turning lookers into buyers

page 114



see kwikset's sound, color movies



how a lock is made

"Locking Up" shows how a modern cylindrical lock is manufactured.

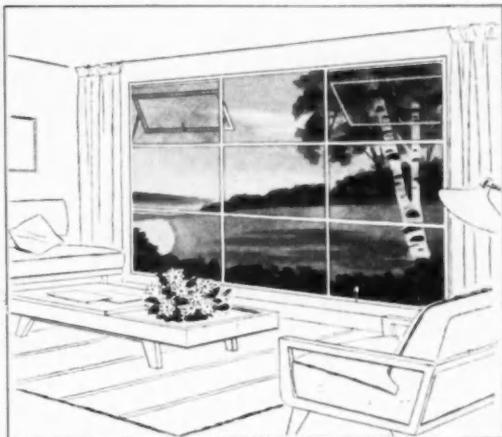
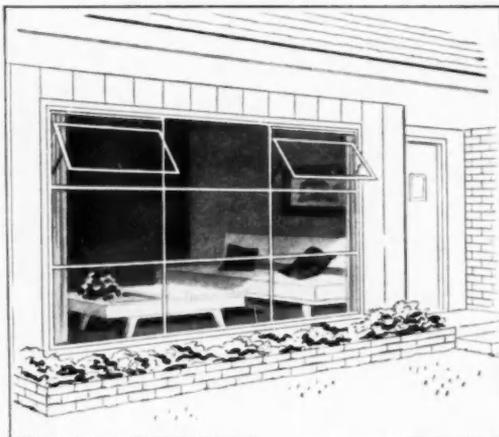
keying procedures

"Securely Yours" illustrates all phases of keying procedures from maioning to master-keying.

powder metallurgy

"Precision Parts From Powdered Metal" demonstrates a modern method of producing parts. Kwikset will gladly arrange to show these sound, color films to your organization at no cost.

Write: Room 201, Kwikset Sales & Service Co.,
515 East Santa Ana Street, Anaheim, California



NOW A WONDERFUL NEW KIND OF WINDOW WALL... THE *Fenestra* WINDOWALL* UNIT!

IT'S MADE OF STEEL

Made of solid, hot-rolled Intermediate Window sections a full 1 1/4" deep with interior bars continuous and rigidly interlocked . . . ample strength for large window openings. Available from warehouse stocks in two sizes—6'-3 3/8" wide by 6'-4 1/8" high (six lights) and 9'-4 1/8" wide by 6'-4 1/8" high (nine lights).

AWNING-TYPE VENTILATORS

WindoWall Units feature the popular projected-type, open-out vents which provide ventilation even in down-pouring rain. Ventilators may be installed in any or all lights, or may be eliminated, as desired. Specify the number and location of ventilators on your order.

INSIDE METAL SCREENS

Fenestra all-metal screens go on easily and quickly from inside the room where they are protected from the weather. They are top hinged to provide convenient access to ventilator hardware.

IDEAL FOR INSULATING GLASS

Depth of window sections permits the use of 1/2" insulating (double-paned) glass in stock sizes for all-season comfort . . . no need for storm windows. Units may also be glazed with single lights of plate or double-strength glass. Glass size for fixed lights is 36" x 24" . . . for ventilators, 34" x 21 3/8".

*Trademark

Call your Fenestra Representative or write today to Detroit Steel Products Company, Dept. AB-11, 2260 East Grand Blvd., Detroit 11, Michigan.

Fenestra® STEEL RESIDENCE WINDOWS

...everything in windows for the home

Published monthly by Simmons-Boardman Publishing Corporation, Emmett St., Bristol, Connecticut. Editorial and Executive Offices, 79 W. Monroe St., Chicago 3, Illinois, and 30 Church Street, New York 7, New York. Subscription price United States, Possessions and Canada: 1 year \$3.00; 3 years \$5.00. Foreign countries: 1 year, \$10.00; 3 years \$20.00. Single copies, 75 cents; April issue \$2.00. Entered as second-class matter July 20, 1950, at the Post Office of Bristol, Connecticut, under the act of March 3, 1879.

NOW! Here's a real finish sander from Black & Decker!

NEW!



**Black & Decker
Utility**

No. **44 SANDER**

(takes 3½" x 9" sheet)

only **\$46.95** (list price)

4 Exclusive Features

that mean better work!



KING-SIZE BOTTOM PLATE extends beyond body of tool for sanding in very close quarters... like sanding stair treads up close to risers.



MODERN SWITCH HANDLE is located close to housing for better control, less operator fatigue. Instant-release trigger switch.



AUXILIARY KNOB HANDLE gives choice of three positions for ease in sanding close to obstructions, more comfortable right or left hand operation.



UNIQUE PAPER HOLDER stays open when attaching or detaching paper. No "tools" required. Facilitates quick change of grits for progressive finishing.

DO ALL THESE JOBS FASTER AND BETTER WITH THE NO. 44 SANDER!

- **Preparing** flat surfaces (windows, doors, woodwork) for painting
- **Leveling** wood, wallboard, or plastered wall joints
- **Removing** paint, varnish and imperfections from wood or metal
- **Chamfering** edges, dressing corners and joints, sanding plastic
- **Feather-edging** painted surfaces on wood or metal
- **Sanding** in corners or alongside raised edges (as in sanding stair treads up against the riser)

THIS smooth-operating, new B&D Utility No. 44 Sander has *everything* you need to do a perfect job every time! It's ten times faster than hand sanding on any material. Its orbital motion insures a satin-smooth finish without *any* handwork. Husky, heavy-duty parts, yet weighs only 5½ lbs. Ask your B&D Utility Dealer for a demonstration, or write for more details to: THE BLACK & DECKER MFG. CO., Dept. H.663, Towson 4, Maryland.





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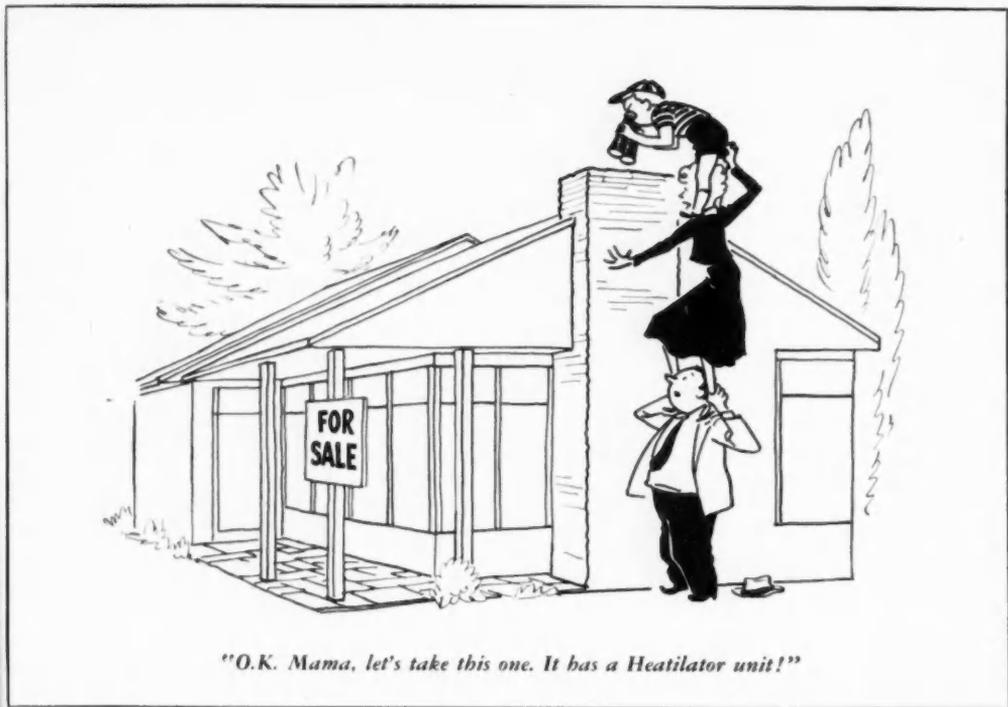
| | |
|--|-----------|
| Front Cover | 1 |
| House Beautiful's 1953 Pace Setter House, story starts Page 96 | |
| Editorial | 19 |
| Washington Newsletter for the Light Construction Industry . . . | 20 |
| Trends | 22 |
| Association News | 29 |

FEATURES

| | |
|--|------------|
| Study These Advanced Design Features For Your 1953 Houses | 96 |
| An exclusive presentation of House Beautiful's 1953 Pace Setter House | |
| Winner of Home Builders' Design Contest | 107 |
| Detroit Home Builders sponsored contest for architectural students; here is winning design | |
| A House with Four Levels | 108 |
| American Builder's Blueprint House of the Month | |
| Materials List for Blueprint House | 113 |
| Tested Features Turn Lookers to Buyers | 114 |
| Extras people like and materials they know about produce quick sales for this builder | |
| Take Advantage of that Sloping Lot | 116 |
| A practical design for a hilly terrain | |
| Here Are Some Useful Tips on Winter Building | 123 |
| How one Milwaukee builder keeps his operation normal despite low temperatures and snow | |
| Striking Design for a Triangular Site | 128 |
| An example of how a unique design is easily wed to a difficult site | |
| Speaking of Modular | 130 |
| Experts comment on modular at meeting in Chicago | |
| Modular Principles in Half Story Construction | 131 |
| Chapter 11: Quick assembly of non-rectangular wall sections | |
| Demonstration Houses Show Value of Modular Coordination . . | 135 |
| Labor-saving potential of modular construction is demonstrated by Small Homes Council | |
| Idea of the Month: How to Build in a Dressing Table | 136 |
| An idea taken from the Pace Setter House of 1953 | |
| The Second Round of Operation Trade Secrets | 146 |
| This Modern Farm House Serves Today's Farm Needs | 148 |
| Here is a formula for designing a modern farm house based on scientific studies | |

DEPARTMENTS

| | | | |
|--|-----------|-----------------------------------|----------------|
| Letters to the Editor | 44 | Better Detail Plates | 154-157 |
| On and Off the Record | 51 | New Products | 158 |
| Technical Guide, How-To-Do-It . . . | 56 | Catalogs | 176 |
| "Ask the Experts" | 90 | Index to Advertisers | 216 |



"O.K. Mama, let's take this one. It has a Heatilator unit!"

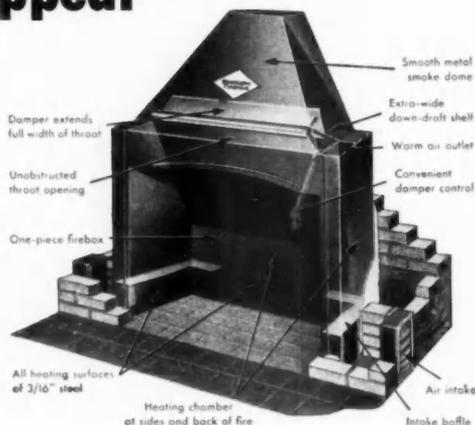
The HEATILATOR FIREPLACE UNIT gives your homes "sales appeal"

IN the living room, recreation room or den, The Heatilator* Fireplace unit gives you an extra-value feature people are looking for today. And it costs you less than almost any other important feature. People want fireplaces. Give them a Heatilator unit and you'll increase the "sales-appeal" of your homes.

It's easier to build a fireplace around a Heatilator unit. And there's no limit to mantel design or decorative treatment. You save time, labor and materials because the Heatilator Fireplace is a compact, ready-to-install unit. You can guarantee your buyers a trouble-free operation for the Heatilator unit eliminates the common causes of smoking.

Specify the famous Heatilator Fireplace . . . your prospects know and respect the name. Heatilator, Inc., 3211 E. Brighton Ave., Syracuse 5, N. Y.

*Heatilator is the reg. trademark of Heatilator, Inc.



HEATILATOR FIREPLACE

U. S. PAT. OFF.



ARISTOFLEX
VINYL-ASBESTOS
TILE FLOORING
SOLD

HERE'S THE CLINCHER ON NEW HOME SALES!

Nation-Wide Survey Proves Home Owners Want **ARISTOFLEX** ADVANTAGES

Alert builders have known it all along — now an analysis of a recent survey among building supply and floor covering dealers proves it. Home owners want the advantages of modern vinyl-asbestos tile flooring in their home. No other type of flooring offers the radiant lasting beauty . . . the years of wear . . . the carefree cleaning of MATICO Aristoflex. Solid vinyl-asbestos (no felt backing), Aristoflex resists grease, acid, alkali and fire . . . has excellent indentation recovery . . . can be installed on, above or below grade.

You can use MATICO Aristoflex even in budget homes, because it's available in low-cost standard-gauge, which is priced right in line with grease-proof asphalt tile, as well as $\frac{1}{8}$ " heavy-duty thickness. Aristoflex helps you cut installation costs, too, because it lays in tightly, immediately, and standard-gauge Aristoflex cuts clean without use of a torch.

Consider MATICO Aristoflex on your next job, it's a plus feature that helps clinch a sale.

Write for complete specification and installation data and Free Color Chart.

Dept. 5-11

MASTIC TILE CORPORATION OF AMERICA

Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.

QUALITY CONTROLLED

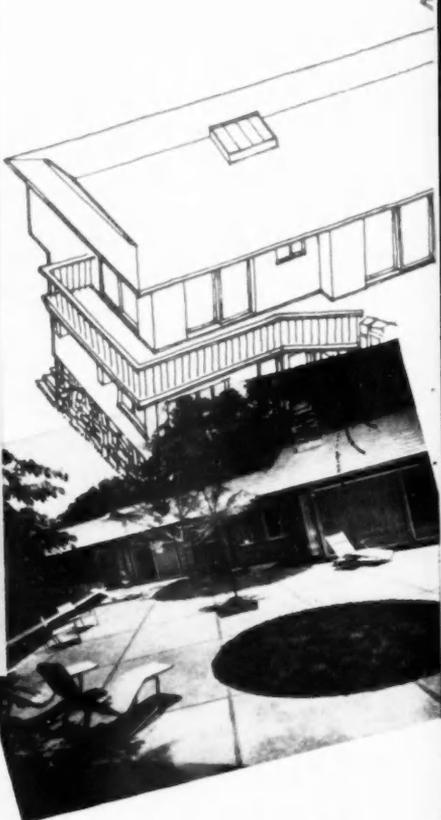
MA-TI-CO
TILE FLOORING

MANUFACTURED BY MATICO OF AMERICA
Guaranteed by
Good Housekeeping
ON ALL ADVERTISED PRODUCTS



**Manufacturers whose products
are in the 1953 Pace Setter**

- UNIVERSAL ATLAS CEMENT CO.
- RODDIS PLYWOOD CORP.
- RED CEDAR SHINGLE BUREAU
- C. W. STOCKWELL CO.
- MURALS INC.
- ANACONDA SALES CO.
- GLIDE WINDOWS, INC.
- ANDERSEN CORPORATION
- LIBBEY-OWENS-FORD GLASS CO.
- SEMON BACHE & CO.
- POLYPLASTEX UNITED, INC.
- ROLSCREEN CO.
- HUNTER-DOUGLAS CORP.
- OVERHEAD DOOR COMPANY
- NEW CASTLE PRODUCTS CO.
- PAUL HEINLEY
- DORFLO MANUFACTURING CORP.
- P. & F. CORBIN
Division of The American Hardware Corp.
- NATIONAL LOCK COMPANY
- KNAPE AND VOGT MFG. CO.
- CHAMBERLIN CO. OF AMERICA
- ACCURATE METAL WEATHERSTRIP CO.
- THE MARTIN-SENOUR COMPANY
- KENTILE, INC.
- THE MOSAIC TILE CO.
- THE TILE-TEX DIVISION
The Flintkote Co.
- AMERICAN BILTRITE RUBBER CO., INC.
- THE SPONGE RUBBER PRODUCTS CO.
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- KOHLER CO.
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- MIAMI CABINET DIVISION
Philip Carey Mfg. Co.
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- L. J. MUELLER FURNACE CO.
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- ROCHESTER PRODUCTS DIVISION
General Motors Corp.
- TACO HEATERS, INC.
- NU-TONE, INC.
- ELECTROMODE CORP.
- HEATILATOR, INC.
- MINNEAPOLIS-HONEYWELL REGULATOR CO.
- HUNTER FAN & VENTILATING CO.
- PRYNE & CO.
- ILG ELECTRIC VENTILATING CO.
- KIMBERLY-CLARK CORP.
- OWENS-CORNING FIBERGLAS CORP.
- BENNETT-IRELAND INC.
- GENERAL ELECTRIC CO.
- LIGHTOLIER, INC.
- FINLAND HOUSE
- DALMO-VICTOR CO.
- MAGNAVOX CORP.
- PRECISION PARTS CORP.
- R. D. WERNER CO., INC.



Will your sales curve be a **1953 Pace Setter,** *too?*



**there are thousands of
profit opportunities for you in
this biggest home building
promotion of the year**

Look at the front cover and pages 96 to 106 of this issue of *American Builder*. Then get a copy of November *House Beautiful* where you'll find every editorial page devoted to the most advanced house ever built... *House Beautiful's* 1953 Pace Setter House. Here's bed-rock practicality and eye-popping glamor rolled into the neatest package ever handed to the building trades.

In past years hundreds of builders, contractors, building material dealers have built prestige and profits with Pace Setter tie-ins. Now it's your turn... with one of the most exciting and thorough treatments of a Pace Setter house ever published. The 1953 Pace Setter will be featured in the November issue... in December... in January... and for many months to come. Month after month, it will pyramid interest and enthusiasm among home owners and remodelers.

On the opposite page are those firms whose products were selected for participation in this 1953 Pace Setter house.

House Beautiful

572 Madison Avenue, New York 22

BRANCH OFFICES: Atlanta, Boston, Chicago, Cleveland, Los Angeles

NOVEMBER 1952

House Beautiful has made tie-in merchandising material available to these manufacturers. Many of them have prepared their own material to help you make more sales! Contact those manufacturers today whose products you wish to push and promote during 1953. Talk to their representatives about how you can tie-in with this great nationwide operation. You'll find them anxious to cooperate because they—like the alert builders, contractors and dealers of the country who've already tried it—know the sales magic of the words: *House Beautiful's* Pace Setter House.

Be sure that you see the November issue of House Beautiful that is entirely devoted to the 1953 Pace Setter House, as well as all of the future issues that will feature it. You'll find these issues invaluable in sparking sales building ideas. A special subscription discount of 40% is now being made to bona fide contractors, builders and building material dealers only, bringing the regular annual subscription price down from \$5 to \$3. Drop a note on your business letterhead today to Merchandising Division, House Beautiful Magazine, 572 Madison Avenue, New York 22, enclosing check or money order for \$3.00.



Washable interior walls

*help to make Gunnison
a lot of home for a little money*

Housekeeping becomes a pleasure in a Gunnison Home and a lot of the credit goes to Gunnison's wonderful Mellow-Tone inside walls. It's a finish that stays clean longer . . . can be wiped clean quickly and easily.

Finger daubs, smudges, even crayon marks, come off easily with a little soap and water or a mild detergent. It's a feature that every housewife will appreciate . . . and *want*.

Every member of the family will like the appearance of Mellow-Tone walls. The finish preserves the natural beauty of carefully selected wood. As a result, Mellow-Tone walls blend with any decorating scheme, either modern or traditional.

Attractive, easy-to-clean Mellow-Tone walls have special appeal to young people with small children—the largest group of low-priced home buyers.

The Mellow-Tone interior walls are just one of many luxury features that combine to make the Gunnison Home *a lot of home for a little money*.

GUNNISON HOMES, INC., NEW ALBANY, IND.



Gunnison Homes

A lot of home for a little money



SUBSIDIARY OF **UNITED STATES STEEL CORPORATION**

Other outstanding features of Gunnison Homes

- New Perimeter heating system
- Mor-Sun automatic gas or oil furnaces
- Beautiful exteriors
- Flush panel doors
- American Kitchens
- Fenestra steel windows
- Thermo-Pane window walls
- Permaglas water heaters
- Ceiling-to-floor sliding closet doors

"Gunnison"—trade-mark
of Gunnison Homes, Inc.

CASE and HANG a DOOR in 20 minutes

with
 **READY HUNG**
 packaged door units

An amazing new patented crating method is the secret behind this completely packaged door unit. Made with machine precision and completely assembled at the factory, the door arrives at the installation complete — with all joints square and tight.

The door is hung in the frame on 2 butts. Lock, trim, stop — everything is already installed.

All you have to do to close the rough opening is to slip the two parts of the Hasko Ready Hung Unit into place and nail them to the wall.

The operation is so simple that a hammer, nails and a level are the only tools you need.

Through the reduction in door hanging time, up to \$50.00 can be saved on the installation of every ten Hasko Ready Hung Units.



Slip first half into opening.



Check plumb, shim, and nail first half to wall.



Slide other half into opposite side and nail to wall.



write today for complete catalog. Sold through established wholesalers.



There's a trouble-free Hasko Door for every opening



Decorative



Decorative



Decorative



Plain



Decorative

HASKO

HASKELITE MFG. CORP.
Grand Rapids, Mich.

For 30 Years America's



An old friend, and a leader in weather strip sales for 30 years. Conveniently packaged in sets for windows or doors in individual cartons. A perfect over-the-counter sales item. Place your order now for a supply of Numetal and be ready to make those weather strip sales.



FOR WINDOWS

Numetal Window Sets come complete in convenient packages. Fits all standard 28", 30", 32" and 36" double hung windows. Quickly and easily installed by anyone. Each set contains necessary strip for complete job, plus nails and instructions. Individually packaged — ready to hand customer!

Nu-WAY WEATHER STRIP Easiest in the world to put on

Any clerk, regardless of experience, can sell Nu-Way Weather Strip! That's because any customer can put it on quickly and easily.

Nu-Way works perfectly on most any type window, storm-sash or door. Made of moth-proof, pre-shrunk, color-fast wool felt and white metal.

Yes, Nu-Way keeps out cold — saves fuel. And sells at a low price that really brings in sales!



This colorful, attractive display carton really sells the goods! Contains one individual 18 ft. roll of Nu-WAY, with sufficient nails and instructions for easy installing. Stock up today!



Mac says "Be prepared for **COLD WEATHER SALES!**"

ORDER NOW — your order will be shipped same day received

Leading WEATHER STRIPS!

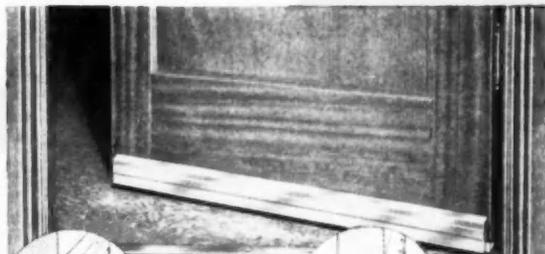
FOR DOORS

NuMetal Weather Strip comes in handy sets for almost all standard doors. Available with regular stainless steel and felt door bottom strip, or with threshold and exposed hook. Easily installed — no special skill or tools needed. Comes complete. All ready to install.



Nu GARD Automatic DOOR BOTTOM & DRAFT ELIMINATOR

Show customers how it works, and this automatic door bottom sells itself. It's the perfect answer for all drafty doors — inside or outside! Completely solves the old problem of clearing rug or carpet every time door opens. Nu-GARD is beautifully designed with smart, silvery-satin finish and easily installed. Will not rust or tarnish. Furnished in 28", 32", 36", 42" and 48" lengths. May be shortened approximately 2". Packed in individual cartons.



UP
automatically
when door
opens
Felt bottom
raises to clear
carpets and rugs.



DOWN
snugly when
door closes
Thick felt
bottom now
hugs floor to
seal out drafts,
noises, odors.

Numetal DOOR BOTTOM STRIP



Here's a fast-selling weatherproof item that is tops in the field! Made of thick, wool felt and heavy gauge stainless steel. Furnished in standard lengths — 28", 30", 32", 36", 42" and 48" — packed 1/2 dozen same length to carton. Also furnished in special lengths.

MACKLANBURG DUNCAN CO.

OKLAHOMA CITY, OKLAHOMA

**MACKLANBURG
DUNCAN CO.**
MANUFACTURERS OF
QUALITY
BUILDING
SPECIALTIES

*Here's how One Man
can Equal Many* →

with
**THE FORD TRACTOR
and NEW DEARBORN
INDUSTRIAL LOADER!**

The new Dearborn Industrial Loader was designed to leave the Ford Tractor's hydraulic system free for operating rear-mounted equipment. As a result this new loader and its working mate, the Ford Tractor, can be teamed up with other Dearborn tools to handle a wide variety of secondary jobs—saving time, helping to keep the equipment busy and making it possible for one man frequently to do the work of many.

IT SUBSOILS

For example, with the new Dearborn Industrial Loader installed *in front*, the same Ford Tractor can be equipped with the *rear-mounted* Dearborn Subsoiler, controlled by the tractor's own hydraulic system. The subsoiler can effectively loosen gravel and other materials to a depth of 18 inches.

MAKES WINDROWS AND LOADS THEM

In only a couple of minutes, the switch can be made from Dearborn Subsoiler to Danuser All-Purpose Blade. Then the same man is set to windrow, "clean up" loose material and keep himself and his equipment usefully employed between loading operations. This stout blade is also lifted, lowered and controlled by the Ford Tractor's hydraulic power.

HUSTLES HALF-TON LOADS "UP THERE"

Then the Dearborn Industrial Loader lifts and loads the loosened and windrowed materials—as much as 1000 pounds at a "bite", as high as 10' 8"! Its own hydraulic pump is front mounted directly on the Ford Tractor. Two hydraulic cylinders control, stabilize and smooth bucket action. And one man can loosen, windrow and load materials—do all three jobs.

Visit your nearby Ford Tractor dealer soon. Find out about the numerous profitable tool combinations you can use—with the new Dearborn Industrial Loader, one tractor and one operator!



DEARBORN MOTORS CORPORATION

Birmingham, Michigan

National Marketing Organization for the Ford Tractor and Dearborn Equipment

NEW-

Economical Solution
to an Old Problem

Keymesh-KORNER

GALVANIZED REINFORCING
for corners and joints
wherever plaster is applied

Pre-formed for Corners . . . while Keymesh-KORNER is purposely supplied pre-formed for corners, it still lies flat when applied on flat surfaces. It forms easily for corners by merely flexing the cut piece. Its convenient width and low cost permit a fast, economical reinforcing job on any location where interior plaster is used . . . and helps prevent future crack troubles.

SAFE HANDLING . . . IMPROVES BOND AND REINFORCEMENT

Keysmesh-KORNER has smooth selvage edges . . . will not injure the hands. It's galvanized against rust, too. And, the open mesh permits the first coat to flow through and around the mesh giving a generous bond of plaster to rock lath, insulation lath, etc., embedding the steel wires . . . thus making a strong, reinforced section where needed . . . with an even base for a firm, smooth, lasting finish!

SIZED RIGHT . . . FOR EVERY PLASTER REINFORCING JOB

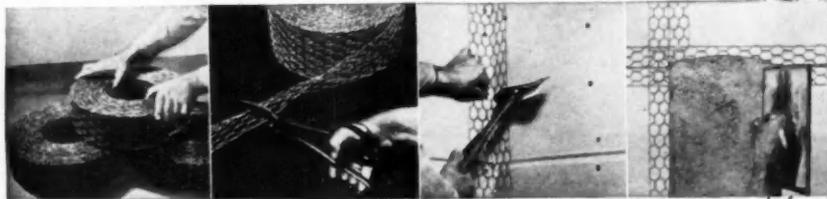
Keysmesh-KORNER is manufactured in 150 foot rolls in several widths. For corners and joints it is made in 4", 5" and 6" widths, 1" mesh, 18 and 20 gauge. For reinforcing above large windows and openings, 12" width with 1" mesh, 20 gauge is recommended. Keysmesh is also available in 3 and 4 foot widths for easy over-all lathing reinforcement practice . . . other widths and gauges available.

Write for Prices and Other Information on Keymesh Products

KEYSTONE STEEL & WIRE COMPANY

BUILDING MATERIALS DIVISION • PEORIA 7, ILLINOIS

KEYMESH • KEYMESH-KORNER • TIE WIRE • WELDED FABRIC • NAILS
KEYSTONE NON-CLIMBABLE FENCE • KEYSTONE ORNAMENTAL FENCE





"Competition means nothing to us now that ...

EVERYTHING HINGES ON HAGER!"*

C. Hager & Sons Hinge Mfg. Co. • St. Louis, Mo.
 Founded 1849—Every Hager Hinge Swings on 100 Years of Experience



AMERICAN BUILDER

A NEW SURFACE! A BEAUTIFUL THOROSEAL SURFACE!

**PILGRIM BADGE
BUILDING**
BOSTON, MASS.



Above photograph shows extreme blistering and spalling of concrete spandrel beams and columns of Pilgrim Badge Building, Boston, Massachusetts which is now entirely protected and further deterioration arrested.



Restoration of concrete spandrel beams and other structural concrete work done by contractor Henry Gironi, Allston, Massachusetts. THORITE Patching Mortar used to seal rods and patch blistered concrete and THOROSEAL to protect surface and patched areas.

HOW TO DO IT

- Get our 20-page brochure, pictorially described in detail; also, architect's chart for your wall.

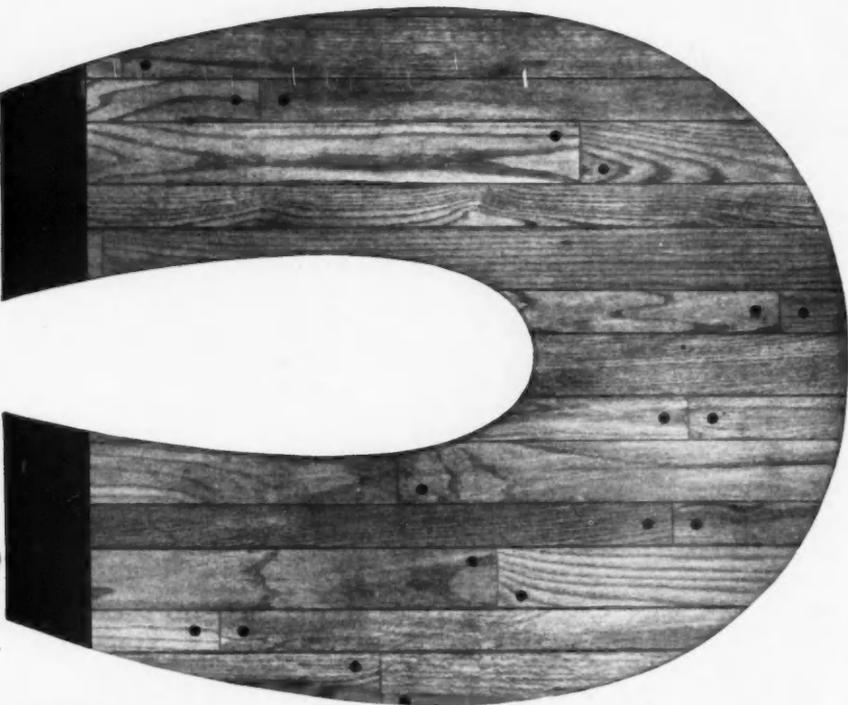


Standard Dry
NEW EAGLE

40th
YEAR

Wall Products
PENNSYLVANIA

Sure way to attract home buyers



Use the
magnetic appeal of

Bruce Ranch Plank Floors

The popularity of a Bruce Ranch Plank Floor is easily explained: It gives a home the natural charm and lifetime durability of solid oak *plus* the interesting, decorative design of walnut-pegged strips in random widths. The rich Decorator Finish (factory-applied) accents the mellow beauty of a Bruce Ranch Plank Floor—makes it so easy to keep clean and lustrous at all times.

A Bruce Ranch Plank Floor is usually the first thing a prospective buyer notices on entering a home. His first impression is favorable . . . and you know how important that is. Right away he thinks: "this house is built of quality materials."

Moral: to attract home buyers, use an attractive floor. Write for our booklet with color photos of Bruce Ranch Plank Floors in modern interiors.



PRODUCT OF E. L. BRUCE CO., MEMPHIS, TENN.
World's Largest Maker of Hardwood Floors

what should a sale cost?

RECENTLY a group of builders were discussing sales costs. The percentages they cited ranged from one to 3.5, and averaged about 2.1. Chief reasons for the variation were advertising budgets and salesmen's compensation. An onlooker listening to the conversation could not fail to get the impression that the object of most of these builders in establishing sales costs was to get the cost of selling each house down to as low a figure as possible.

Now, no one, of course, wants to establish an arbitrarily high sales cost per unit. The reasons are obvious. But whether the lowest unit sales cost is the most profitable one is open to question. Carried to an absurdity, this policy would amount to building a house or houses, saying nothing about them verbally or in print, and leaving it up to a prospective buyer to find the house and then try to find someone who would sell it.

It is equally obvious, therefore, that striving for the lowest sales cost is not a sound answer to selling. The right answer is arriving at the lowest sales cost consistent with moving the greatest number of houses in the shortest possible time. To do this requires first a careful study of advertising potentials. What kind and size of advertising, what frequency of advertising brings the greatest number of prospects, or the maximum number of sellable prospects who can be accommodated. These are the considerations in determining advertising budgets, and the answer should be based on what it is desired to have the advertising accomplish rather than an arbitrary percentage of expected sales volume. A builder might arbitrarily budget one per cent of expected

gross sales for advertising, only to find that he got no results, whereas, if he had appropriated two per cent he would have got the job done. In other words, some advertising is just wasted money, because it is badly presented or badly timed or addressed to the wrong audience or all three. Thus, the first step in determining a scientific sales cost is creating a sound advertising program.

The next is the sales organization, right in both size and ability, and paid enough to get the houses moved before carrying charges begin to cost more than salesmen's commissions. The first problem, of course, is to find the right salesmen. This is difficult, particularly where the builder persists in hiring self-styled salesmen to whom he hopes to teach enough about the houses he has to get them sold. More and more, builders are finding that the best sales ability lies right in their own organizations. They are bookkeepers, timekeepers, foremen, truck drivers and others in the company who know what the houses are made of, what is in them, and can talk convincingly about the boss's integrity. There are potential or sleeper salesmen in every company if the builder will take the time to look for them.

What to pay them? A flat guarantee plus a commission or bonus for clean, complete and fast sales. The commission to be measured against the cost of carrying complete, unsold houses in inventory.

It is this writer's opinion that aiming for lowest sales cost can be even more damaging than unreasonably high sales budgets. There is a mean between the two, a mean that can be determined accurately, and will in the end be the most economical.

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AB Washington News Letter

For the Light Construction Industry

A special service for American Builder readers. The latest Washington developments affecting the light construction industry assembled by special Washington correspondent and sent by wire to be printed and bound in your American Builder at the last minute before it is mailed. A regular monthly feature.

Washington, October 21, 1952

- ▶ **PROVIDED FINANCING PROBLEMS** can be solved, the home building industry should enjoy continued prosperity in 1953. Government surveys show incomes are still rising, with employment at peak levels. Defense expansion continues, and will not level off before the middle of next year. Any business set-back is unlikely as long as war goes on.
- ▶ **LEADERS IN THE INDUSTRY** already are pondering a financial dilemma. Tight money may cramp new home purchases, despite recent suspension of credit rules. Rising interest rates are squeezing VA-guaranteed and FHA-insured loans. Lenders seem disposed to keep alive the spirit of Regulation X by requiring substantial down-payments for conventional mortgages.
- ▶ **GOVERNMENT-PEGGED VA AND FHA** interest rates are in for new criticism. These rates have not been changed in modern times, while even Federal treasury notes have risen above 2 per cent. Higher interest rates generally mean keener competition for dollars which otherwise might go into mortgages.
- ▶ **AS FINANCING PROBLEMS ARISE**, materials controls fade away. The zeal which marked the "controllers" a few months ago seems to have abated, and the present feeling is that it's just a matter of time before all restrictions are off. Several top men in DPA and NPA have quietly pulled out in recent weeks. Budget cuts have forced staff reductions. NPA bureaus are being lumped together. Eventually, the agency will lose its separate status, becoming another "office" in the Department of Commerce. This could happen in the not-too-distant future.
- ▶ **CONTROLS OFFICIALS** haven't let up on one thing: They insist that a new, and stronger, controls law must be enacted by the new Congress. They say that even if the law is not used, it should be on the books anyway, just in case of a crisis. The present materials controls law expires June 30. Price and rent controls are due to expire April 30.
- ▶ **NPA** has changed the date of its proposed relaxation on construction controls. Previously set at next April 1, the date now is May 1. Reason for the postponement, the agency said, is to make certain the materials situation will present no difficulties.
- ▶ **ORDERS** carrying the May 1 effective date have been issued. This permits builders to go ahead with preliminary planning and place advance orders with their suppliers. NPA cautions that deliveries of materials as authorized in the new orders cannot be made until after May 1.
- ▶ **ORDER M-100**, the housing regulation, is revoked. Provisions which govern residential construction have been incorporated into the general construction regulation, CMP Reg. 6. Only immediate change for homebuilders: They can now use, without limitation, inventory they had on hand prior to October 1, 1951.
- ▶ **THE BAN ON RECREATIONAL**, entertainment and amusement construction is being lifted as of May 1. After that date it will be possible to self-authorize five tons of carbon steel (including up to two tons of structural shapes), 500 pounds of copper and copper-base alloys, and 300 pounds of aluminum per project per quarter.
- ▶ **FOR ONE-THROUGH-FOUR FAMILY HOUSES** it will be possible, after May 1, to self-authorize 1,500 pounds of structural steel per dwelling unit in addition to materials now permitted.
- ▶ **MULTI-UNIT RESIDENCES** will come under self-authorization for the first time. Beginning May 1, walk-up apartments will get two tons of carbon steel (including 500 pounds of structural), 200 pounds of copper and 275 pounds of aluminum per dwelling unit. Elevator apartments will be permitted more material per dwelling unit: Three tons of carbon steel (including 600 pounds of structural), 225 pounds of copper and 275 pounds of aluminum.

▶ **"ALL OTHER" CONSTRUCTION**, including commercial, will share in the increased allotments. After May 1, it will be possible to self-authorize (per project per quarter) 25 tons of carbon and alloy steel, including structural; 5,000 pounds of copper, and 4,000 pounds of aluminum. The steel quota may not include more than 2 1/2 tons of alloy and no stainless.

▶ **VA HAS FURTHER MODIFIED** its down-payment requirements since termination of Reg. X. No down-payment is required on homes costing \$8,000 or less. Formerly, the no down-payment terms applied to houses costing no more than \$7,000. This change is designed to put veterans in a more favorable position in the \$7,000-\$8,000 price range.

▶ **CLOSING COSTS** must be paid in cash in any case. Veterans must make a minimum down payment of 4 per cent on homes costing from \$8,000 to \$8,400; and 5 per cent on homes costing more than \$8,400. VA cautions that new down-payment requirements are only minimums, and do not prevent lenders from requiring a larger down payment. The following table shows the new minimums now in effect on VA-guaranteed home loans:

| <u>Sales Price</u> | <u>New Down Payments</u> | <u>Former Down Payments</u> |
|--------------------|--------------------------|-----------------------------|
| Up to | | |
| \$7,000 | Closing Costs | Closing Costs |
| 8,000 | Closing Costs | \$ 380 |
| 9,000 | \$ 450 | 480 |
| 10,000 | 500 | 580 |
| 11,000 | 550 | 740 |
| 12,000 | 600 | 900 |
| 13,000 | 650 | 1,450 |
| 14,000 | 700 | 2,000 |
| 15,000 | 750 | 2,550 |
| 16,000 | 800 | 3,100 |
| 17,000 | 850 | 3,670 |
| 18,000 | 900 | 4,240 |
| 19,000 | 950 | 4,810 |
| 20,000 | 1,000 | 5,380 |

▶ **IN "HARDSHIP" CASES** the down-payment requirement can be waived, even on higher priced homes. Likewise, VA can approve a longer mortgage period on such cases. But, VA said such waivers will be granted only if lender agrees to the more liberal terms.

▶ **NEITHER VA NOR FHA** has changed the "Reg. X time limit" for paying off government-aided mortgages —i.e., 25 years on housing selling at \$12,000 or less, 20 years on those selling above \$12,000. The National Association of Home Builders charges that this places a substantial hardship on both veteran and non-veteran home buyers.

▶ **MAXIMUM FHA-INSURED LOAN** on a single-family dwelling is now \$14,000. This means that a buyer of a higher-priced home must arrange for substantial cash to complete his deal. Net effect of the \$14,000 limit is to penalize middle-class home buyers, and force builders into construction of smaller low-priced homes.

▶ **NEW CREDIT TERMS** for multi-unit projects were established by FHA following termination of Reg. X. The maximum FHA-insured loan per unit is 90 per cent on the first \$7,000 of value, plus 60 per cent on the value in excess of \$7,000. For co-operative projects under Title II, the maximum FHA-insured loan will be 90 to 95 per cent of replacement cost, depending upon the proportion of veterans in the co-op.

▶ **COMMERCIAL CONSTRUCTION** gets the best break from ending of Reg. X. As materials become available, this type construction is expected to rise in volume. Reason is that Reg. X imposed a 50 per cent down-payment requirement and permitted no second mortgages. Firms will now be able to arrange financing they can handle.

▶ **PROGRESS** in meeting housing needs in critical defense areas was reported by Defense Mobilizer Henry H. Fowler in his October 1 report to the President. He noted that almost 35 per cent of such housing is under construction, or already completed.

▶ **RECENT SPEED-UP** in construction of defense-area housing may be result of more government aid in financing. Mr. Fowler reported that almost a third of all defense-area starts were recorded since July 1. It was late in June that Congress raised FNMA's advance commitment authority by \$900,000,000. In August, 91 per cent of the mortgages purchased by FNMA were on defense housing.

▶ **VA REVEALS** it still has sold very few of the mortgages acquired in its direct home-loan program. To date, the agency has made about \$200,000,000 in loans but has returned only \$6,000,000 to the "revolving fund" through sale of mortgages. Early this year Congress authorized up to \$25,000,000 a quarter to keep this program going until June 30, 1953. VA says it already has enough loan applications on hand to run through the remaining eight months.

TRENDS *in the Building Field*

average size of household still shrinking

MANY people point to the larger families of today's young married couples as an indication that their small, new two and three bedroom houses will soon burst at the seams, and that they will need to either build additions or to build larger houses. The fact is that the average size of households has shrunk considerably since 1940 and is still shrinking.

A CENSUS REPORT just released shows that the average population per household in 1940 was 3.7 persons, decreased to 3.5 in 1948 and to 3.3 in 1952. The effect of the high birth rates were more than offset by the effects of high marriage rates. Other factors are the large volume of housing construction and the high level of economic activity that tended to increase the number of households.

The postwar marriage boom resulted in a substantial number of new but small households. The high level of economic activity has reduced the size of the household by enabling some married couples and elderly persons to live in their own houses instead of with relatives.

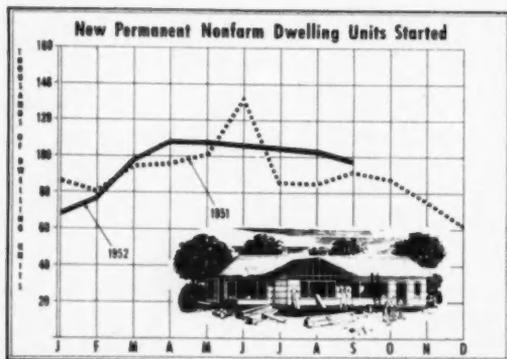
Married couples doubled-up are far less numerous now than they

were in 1940. In that year a total of 1.9 million married couples or 6.8 per cent of all married couples were living with relatives or others. In 1952, a total of 1.5 million or 4.2 per cent of married couples were doubled-up.

THE HOUSING SHORTAGE immediately after World War II may not have been as bad as it was painted. At the peak of the crisis in 1947 a total of 2.9 million married couples or 8.6 per cent were doubled up. It is probable that a large proportion of the 1.5 million couples still doubled up is through choice or because of some special economic conditions that make it impossible for them to maintain separate households.

These facts, which were determined from very comprehensive Census Bureau surveys, lead the building industry to ponder: (1) Can the average size of the American family shrink much further? (2) Has the backlog of doubled up married couples vanished?

All indications point to the necessity for intensified sales efforts throughout the industry to maintain the present excellent rate of 1,000,000 or more new dwelling units built and sold annually.



Sourced States Dept. of Labor
Bureau of Labor Statistics

AMERICAN BUILDER CHART

HOW'S BUSINESS?

Per Cent Change Compared With Last Year

| Dwelling Units Started | Up % | Down % |
|--|---------|---------|
| Month of September | + 1.6% | |
| January Thru September | + .1% | |
| Dollar Volume of Construction (9 Months Ended September) | | |
| Dwelling Units | | - 3.4% |
| Residential Alterations | + 13.7% | |
| Industrial | + 14.7% | |
| Commercial | | - 28.6% |
| Farm | | 5.3% |
| Public Construction | + 19.9% | |
| Total Construction | + 5.0% | |
| Price Changes (September) | | |
| Common Brick | + 9.5% | |
| Cement | + 5.6% | |
| Dimension Lumber | N. C. | |
| Flooring | | - 13.1% |
| Doors | N. C. | |
| Paint (outside) | N. C. | |
| Bathubs | | - 2.5% |
| Furnaces | | - 8.2% |
| Asphalt Shingles | + 2.2% | |
| Window Glass | N. C. | |
| Nails | N. C. | |
| Insulation Board | | - 1.0% |
| Average Hourly Earnings | | |
| Construction Labor | + 4.8% | |
| Construction Cost Index | + 4.3% | |

*N. C. = No Change

WHY THE NEW STRAND GARAGE DOOR

Costs Less INSTALLED!



SAVES INSTALLATION COST . . . One-piece door leaf and factory-assembled hardware permit substantial savings in installation time. Only 30 minutes required to install 8' or 9' Canopy Door (45 minutes for 8' or 9' Receding Door) with capable workmen and prepared opening.



SAVES FIRST COST . . . STRAND is the world's largest manufacturer of metal residential Garage Doors. Low first cost is the result of standardizing on the manufacture of 5 models: 8' x 7' Receding (track) and Canopy; 9' x 7' Receding (track) and Canopy; 16' x 7' Receding (track) only.



SAVES MAINTENANCE COST . . . The strength and durability of steel. Can't rot, warp, sag, shrink, swell or splinter. GALVANNEALED (heavily hot-dip galvanized and baked) for rust protection and clinging base for paint—no prime coat needed.

Order from your dealer, or mail coupon for information and dealer's name.



STRAND GARAGE DOOR DIVISION
Detroit Steel Products Company
Dept. AB-11, 2242 E. Grand Blvd.
Detroit 11, Michigan

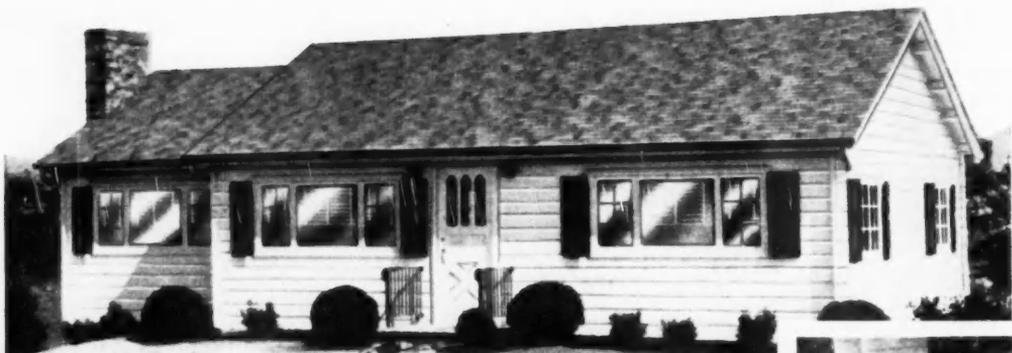
Please rush full information about Strand All-Steel Garage Doors for 9' x 7', 8' x 7', and 16' x 7' openings.

I am a Builder Dealer Prospective Owner Other

NAME _____

ADDRESS _____

CITY _____ STATE _____



We think the **Norge Home** has the maximum of good features—easily constructed, low labor cost, beautiful exterior as well as interior, and minimum upkeep. We are tremendously pleased in every respect with this house.

The only insulation in the house is loose rock wool in the ceiling, and the heating has been very satisfactory during the coldest days that we have had—about zero. The total cost for oil from October to March was \$75.00.
—Brandon Hagey



A beautifully finished interior

"Each Building is a Standing Advertisement!"

The enthusiasm of Norge Home owners prompts letters, similar to one received from Norge dealer Robert Nicholson, of Oak Ridge, New Jersey. In part, Mr. Nicholson wrote:

"We have sold over forty Norge Homes.

"It is a thrill to meet prospective home buyers who tell us how completely satisfied their friends are with their Norge Homes. Norge owners are real sales boosters, and each of the erected buildings is a standing advertisement."

Erected in Just Thirty-two Hours!

Norge dealer E. Burke Finnerty, of Haskell, New Jersey, who received a Norge franchise earlier this year, writes:

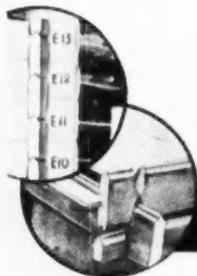
"The elapsed time, from the moment the first bundle of lumber hit the ground, to the finished building, was thirty-two working hours.

"The crew of four men, who erected this Forest Hills model building, have put up a total of thirty-one buildings."

I am very pleased to advise that after making a thorough investigation of your Norge Home I find them as rugged and strongly built as any house of this type could be, and far superior to most. I particularly like the method of joining the walls as it presents an unusually strong and lasting assembly, and your method of constructing the roof. In short, I believe you have a superior product.

Douglas Tuomey

*Douglas Tuomey
Building Editor—Living Magazine—
Government Building Inspector—author of
nationally syndicated newspaper column



Write today for information relative to a Norge dealer franchise for your territory. Many choice areas still open!

Norge Cottages, Inc.
21 West Street, New York 6, N. Y.



Model Home of E. Burke Finnerty & Associates—erected in thirty-two hours!

NORGE "PRE-CUT" COTTAGES

Tiegoard Interlocking Device, eliminates nailing (Patent No. 258814)

AMERICAN BUILDER

BEE GEE

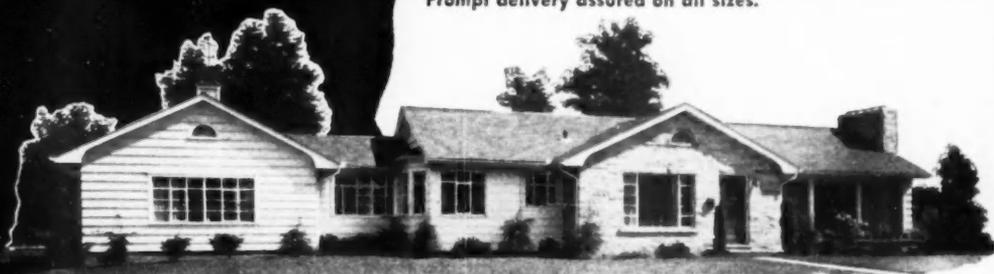
modern wood WINDOWS



for any style home!

Beautiful Bee Gee Modern Wood Windows... styles for every type home... prices for every budget. Bee Gee Windows are complete units consisting of frame, pre-fit glazed sash with glass embedded in putty, copper screen and all hardware installed at the factory... ready to set in the wall.

Picture windows available with Thermopane or Twindow. Prompt delivery assured on all sizes.



BROWN-GRAVES CO.
Akron I, Ohio

Write now! Get the complete, beautifully illustrated Bee Gee Window Catalog.

BROWN-GRAVES CO., Dept. AB-105
Akron I, Ohio

NAME _____

ADDRESS _____

CITY _____

STATE _____

Always starting a building boom!

— these millions of readers with
BUY ON THEIR MINDS!

DID YOU know that 7 out of 10 families who are building new homes read Better Homes & Gardens? But that's not all. The 3½-million families who read BH&G undertake nearly 1¼-million home-improvement jobs a year.

So BH&G families are always in the market for everything in building supplies!

It's all because BH&G fills every issue with practical ideas for improving the home, making home life more enjoyable.

No wonder BH&G readers are building-minded and BUY-minded!

BH&G **BUY**OLOGICAL BRIEFS

- A MAJOR WOOD-SPECIALTY manufacturer's representative, within weeks of the BH&G ad, followed up 17 inquiries in Milwaukee alone and closed 17 sales!
- OPERATIVE BUILDERS say that their customers mention BH&G more than any other magazine.
- BUILDING SUPPLY DEALERS (7-to-1) rate BH&G as greatest selling aid of all major magazines!

MEREDITH PUBLISHING COMPANY, Des Moines, Iowa



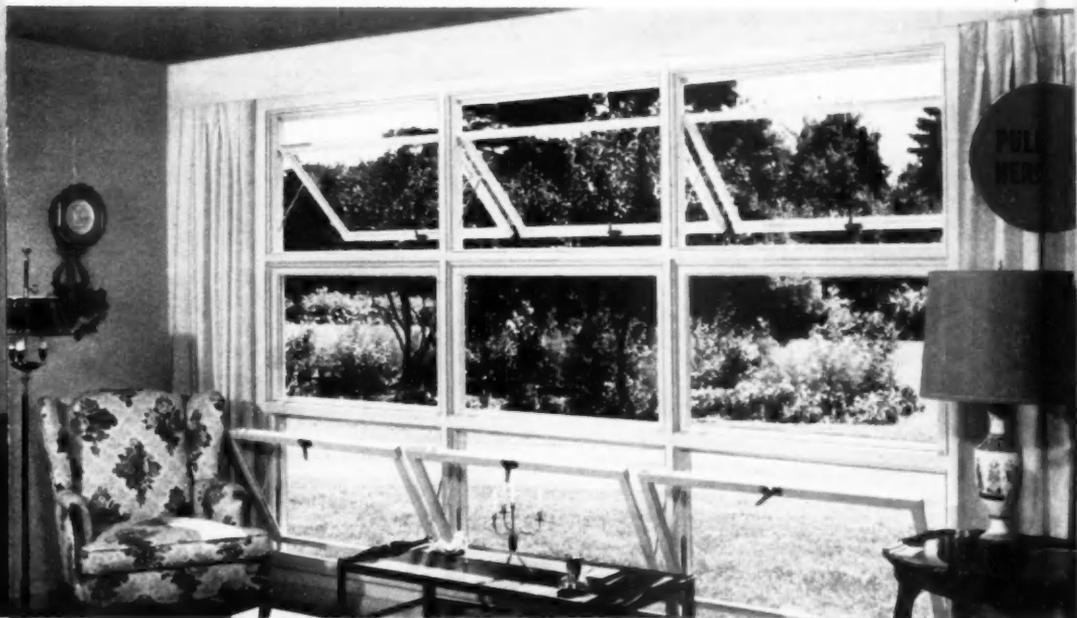
look! **6** whole pages to show how you can use
the most flexible window unit ever made!

THE NEW ANDERSEN FLEXIVENT Window Unit

The most versatile window you've ever seen — the new Andersen Flexivent Window Unit! Hundreds of uses. Low in cost but high in famous Andersen quality! Many sizes. Easy to operate, easy to install. Here it is . . . the utility window you've been waiting for!

◀ here's the window

here's three pages of how to use it ▶



e newest

ANDERSEN
Windowall



Combine Andersen *FLEXIVENTS* for
big windows . . . beautiful windows

NO LIMIT to combinations of new Andersen Flexivent Windows! Combine fixed or ventilating openings! Hopper or awning sash! Build WINDOWALLS of Flexi-

vents as big as you like. Easy to install. Easy to operate. Easy on the pocketbook. A good-looking window, too, carefully manufactured to famed Andersen standards.

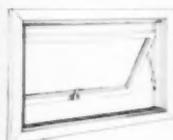
Low cost, weathertight, versati



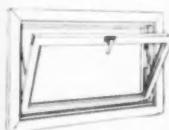
JUST THINK!

3

**sash operations
from just
one unit!**



1. outswinging
awning sash



2. inswinging
hopper sash

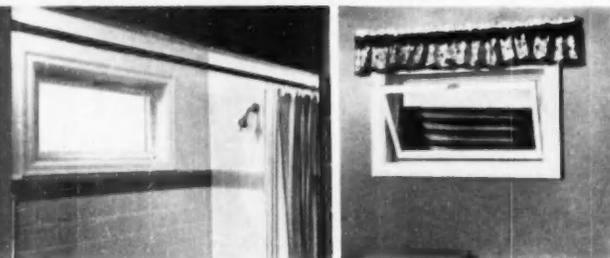


3. outswinging
casement sash

atile ***FLEXIVENT*** window is th

FLEXIBLE is the word for the amazing *FL*

FLEXIBLE! *FLEXIVENT* as singles



IN BASEMENTS, BATHROOMS, use Flexivent Window Units for ideal ventilation. Also in garages, utility buildings, cabins, glass block walls.

Apply it singly... in ribbons...
in stacks... in groups...
with other windows!

It's up to you how you apply Andersen Flexivent Windows, and your choice is a wide one! Stacks, ribbons, groups and combinations with other windows... and you can select from many sizes, as large as 44 $\frac{3}{4}$ " by 22" (glass size).

FLEXIBLE! *FLEXIVENT* in ribbons



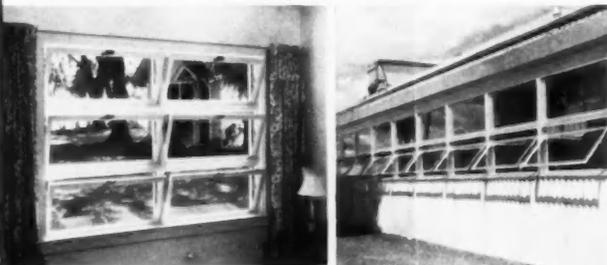
VENTILATION, extra privacy and wall space are benefits of ribbons of Flexivents in bedrooms. Also for clerestory windows, hallways, kitchens.

FLEXIBLE! *FLEXIVENT* in stacks



GET AWNING effect with stacks of Andersen Flexivents. Two-high stack looks like double hung window, but can give 100% ventilation.

FLEXIBLE! *FLEXIVENT* in groups



ENDLESS POSSIBILITIES—Note that hopper vents give ample ventilation without passing drapery line... use big groups of Flexivents for factories, schools.

High in quality, low in cost!

Only quality materials are used in the manufacture of Andersen Flexivent Window Units, including treatment with toxic preservative and water repellent.

Advanced engineering and precise manufacturing have produced an easy-to-operate window that's the tightest on the market.

Yet the Flexivent is low in cost. Simplicity and of over-all design holds cost down. Part of the low cost is in its ease of installation; also the ease of assembling it into stacks, ribbons or groups, on the building site or in the shops of Andersen jobbers.

THESE ARE THE

ANDERSEN
Windowalls

TRADEMARK OF ANDERSEN CORPORATION

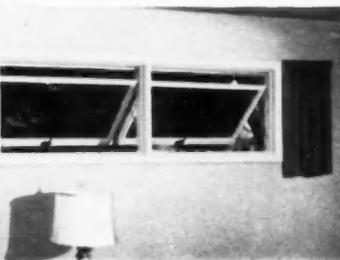
AMERICAN BUILDER

NOVEMBER 1952

- ANDERSEN FLEXIVENT WINDOW UNIT newest WINDOWALL; available soon at millwork dealers everywhere.
- ANDERSEN CASEMENT WINDOW UNIT standard of quality since its introduction in 1932.
- ANDERSEN GLIDING WINDOW UNIT with sash that glide open from side to side.
- ANDERSEN PRESSURE SEAL WINDOW UNIT double hung window with sash that lift right out.

ing FLEXIVENT window

VENT in ribbons



cy and wall space
xivents in bedrooms,
hallways, kitchens.

Choice of 3 sash operations or fixed sash!

Selecting sash operation of Andersen Flexivent Window is simply a matter of installing the unit in different positions. Hopper position has advantage of easiest operation; awning and casement positions, the advantage of outswinging sash. Both awning and hopper positions give excellent ventilation, even during rain. Sash open nearly 90 degrees for easy cleaning from inside.

low in cost!

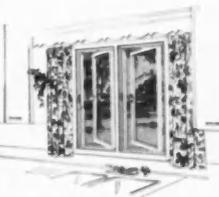
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Window Units, including clear pine
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ribbons or groups, either at the
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FLEXIBLE! FLEXIVENT as a casement

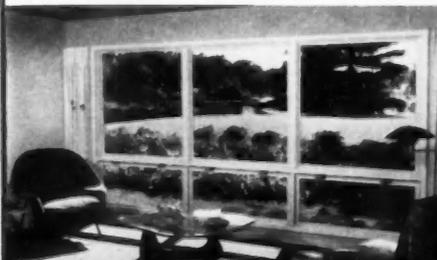


FOR LOW COST casements, Andersen Flexivent Windows are an excellent answer. Lots of ventilation when open—exceptionally weathertight when closed.



FLEXIBLE! FLEXIVENT with other windows

JUST TWO of many possibilities are shown here. *Left*, Andersen Flexivents in hopper position with fixed picture windows. *Right*, Flexivents below new wide Andersen Casement Window Units. Use Flexivents, too, with Andersen Gliding and Double Hung Windows.



New Andersen FLEXIVENT Window Unit

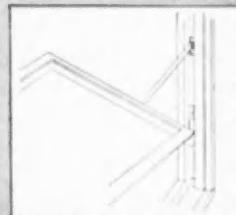
- HIGHLY WEATHERTIGHT
- PRECISELY MANUFACTURED
- EASY TO OPERATE
- EASY TO INSTALL

See the new Andersen Flexivent Window Unit! Then you'll know why it's the hottest window news in years.

Sash are hinged on friction hardware, close tightly against frame and spring tension weatherstripping. Optional double glazing panel fastens to outside of sash. Optional screen is hinged for easy operation. Choice of wood or aluminum screens. Groove glazing for economy, better appearance, extra weathertightness.

BIG SELECTION OF SIZES

| Overall Size | 2-7 1/2 | 3-5 | 4-1 |
|----------------|---------|---------|---------|
| MIN. STUD OPS. | 2-8 1/2 | 3-5 1/2 | 4-1 1/2 |
| SASH OPENING | 2-4 1/2 | 3-2 | 3-10 |
| GLAZING SIZE | 27" | 36 1/2" | 44 1/2" |
| 20 | | | |
| 24 | | 24 | |
| 28 | | 30 | 40 |
| 32 | | 36 | 46 |
| 36 | | 42 | 52 |
| 40 | | 48 | 58 |
| 44 | | 54 | 64 |
| 48 | | 60 | 70 |
| 52 | | 66 | 76 |
| 56 | | 72 | 82 |
| 60 | | 78 | 88 |
| 64 | | 84 | 94 |
| 68 | | 90 | 100 |
| 72 | | 96 | 106 |
| 76 | | 102 | 112 |
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HIGHLY WEATHERTIGHT

Note that sash makes double contact with frame and Metal-one weatherstrip. Result: tests indicate Flexivent ranks with the most weathertight windows on the market. Double glazing panel is on outside of sash in either hopper or awning position.

EASY TO INSTALL EASY TO OPERATE

Flexivent Window Units are factory assembled with sash hung and weatherstrips applied—packed two units to a carton. Installation is rapid in any type of wall.

Operation is easy and simple. Friction hardware will hold sash in any open position. In awning or casement arrangements, just swing screen inward and push sash out. In hopper position just pull the sash inward.



• For specification data and installation details, see your millwork dealer; or write

Andersen Corporation

BAYPORT, MINNESOTA

AMERICAN BUILDER



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YET COST LESS THAN MANY DOMESTIC WOODS!

When home-owners buy furniture, they naturally prefer genuine Mahogany over the ordinary run of domestic woods.

Mengel Mahogany Flush Doors are the built-in furniture of the house. Your customers will vastly prefer them — *will buy your homes more readily, because of them!*

Yet you can equip any building with Mengel Flush Doors or Standardor Flush Doors, with faces of genuine African Mahogany, for fewer dollars than you'd pay for comparable doors of many domestic woods!

The Mengel Company operates its own logging concession and mill in the best Mahogany section of Africa, and imports this King of Woods in tremendous volume. *You get the savings!*

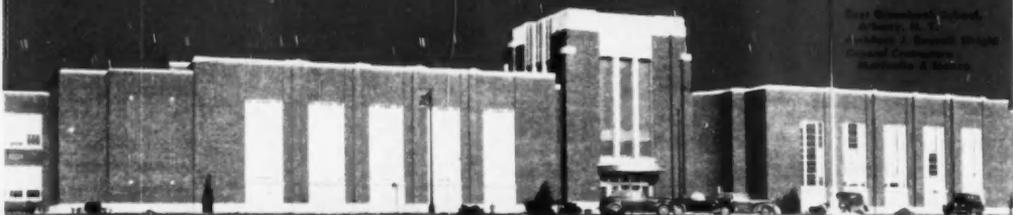
Furthermore, Mengel Flush Doors and Standardor Flush Doors are *better-built*, to give *better service*. Compare specifications, either in Sweet's or at your dealer's. Then judge for yourself!

Door Department
THE MENGEL COMPANY
Louisville, Kentucky

America's largest manufacturers of hardwood products • growers and processors of timber
• manufacturers of fine furniture • veneers
• plywood • flush doors • corrugated containers • kitchen cabinets and wall closets.



Modern Buildings Deserve Modern Fixtures by **ELJER**



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Madison E-3290-A—Vitreous China Lavatory with fittings illustrated. Concealed overflow. Sizes: 20" x 18" and 24" x 20".



Sanus E-5910-V—Vitreous China, Syphon-Jet Closet, with elongated rim. 1½" top inlet for flush valve, as specified. Projection from wall, 28¼". (With round front, projection from wall, 26¼".)



E-8001-V—Vitreous China Stall Urinal. Straight sides. Use singly or in battery. Width, 18", height from floor, 38", height over-all, 42". ¾" top inlet for flush valve, as specified.

Outstanding beauty . . . and finest quality . . . are two good reasons why more buildings are being equipped with Eljer Plumbing Fixtures and Brass Trim.

Another big reason is because Eljer Fixtures are especially designed with the maintenance man in mind. The lustrous finish is easy to clean and easy to keep clean.

You can expect long life and trouble-free service from every Eljer Fixture . . . as proved by Eljer's half-century of experience in manufacturing more than fifteen million plumbing fixtures. Quality is our specialty.

Every day more and more Eljer Fixtures are being installed in residential, industrial, commercial, government and institutional buildings. The line is complete, and Eljer engineering and design service is immediately available to you.

For more information, see your Eljer Distributor or write Eljer Co., Ford City, Pa.

.....NEWS OF ASSOCIATIONS

Lumber Dealer Cooperates In National Home Week

Credit for getting the story of home building across to the American public was given to *American Builder*, the founder of National Home Week, in a 7-column, eighteen inch advertisement sponsored by Burritt's Building Materials, in the Bridgeport Post for Sept. 15, 1952. Using the theme of a racing car, representing the building industry, roaring down the home stretch toward a goal of 1,000,000 new homes in 1952, the advertisement stressed the values of National Home Week—a fine example of lumber dealer co-operation and participation in this important annual event.

Burritt's Building Materials, under the management of Arthur Clifford, has served builders and architects in the Bridgeport area for over half a century, and has established an enviable reputation throughout the New England region.

Also included in the advertisement were pictures of several local homes chosen from Burritt's Home Builders' Service Department plan books, a useful customer aid. A signed statement by David Williams, president of the Greater Bridgeport Builders'

Association, dealing with the investment value of building and owning one's home is a further feature.

Difford Appointed Director Of Plywood Group

West Coast plywood manufacturers have named W. E. Difford of Seattle as managing director of the Douglas Fir Plywood Association, with the responsibility of further promoting markets for this rapidly growing industry.

The announcement was made by E. W. Daniels, Aberdeen, Wash., chairman of the management committee of the Association and director of sales for Harbor Plywood Corp., after unanimous vote of the panel makers at a meeting in Tacoma.

This marks the second time that Difford has been appointed to direct trade expansion for this northwest industry now comprising 85 factories, employing 20,000 workers. In assuming the post again, Difford agreed to give up his Seattle plywood and lumber sales and market development firm, W. E. Difford & Sons, Inc.

Kansas City Proclaims National Home Week

With 104 homes on exhibition, twenty-three of them completely furnished, the builders of the Kansas City area opened National Home Week. The homes are located over a four-county area and were opened to the inspection of the public under the sponsorship of the Home Builders' Association of Greater Kansas City. The group's executive secretary, Leo D. Mullin, reported that the first-day attendance of the homes greatly exceeded expectations.



OFFICIAL PROCLAMATION is signed for National Home Week. Seated (l. to r.), Mayor William E. Kemp, of Kansas City, Mo., and Ralph O. Taylor, Jr., president of Home Builders Association of Greater Kansas City. Standing (l. to r.): Larry Winn, Jr., Winn-Rau Corporation; H. G. Morgan, chairman of the Home Week Committee and builder; and Leo D. Mullin, executive vice president of Home Builders Association

Home Sales Stimulated By NHW in Grand Rapids

More than 50 homes were on display in the Grand Rapids area during National Home Week held under the sponsorship of the Grand Rapids Home Builders Association, the Builders and Traders Exchange, the Lumber Dealers Association, and the Grand Rapids Realtors. It was believed by all cooperating firms and associations to be the most successful National Home Week ever conducted in the local area. As a result of the excellent publicity extended by local newspapers and radio stations, the public reacted to the extent that thousands of local citizens turned out to inspect the homes which were scattered over a wide area of the city. The sales of homes were stated to have been remarkable.

As a feature of the local observance of NHW, a Home Improvement contest, (Continued on page 32)



St. Louis National Home Week Under Way

NATIONAL HOME WEEK COMMITTEE of the Home Builders Association of Greater St. Louis expressed satisfaction for a job well done as they met for a final 1952 meeting at Medart's Restaurant. Seated (l. to r.) are Elmer J. Wieben, Frigidaire Sales Corp., and Builder Ray Talbott, chairman of the committee. Standing (l. to r.) are Builders D. P. Dexter, Robert J. Cassilly and Carl F. Hummelshain, Sr.; Leon J. Paschal, Union Electric Co., and John Eckl, Laclede Gas Co.



Dealer's Viewpoint

H. R. NORTHUP, Executive Vice President,
National Retail Lumber Dealers Association

More Entries Sought for Public Relations Contest

Modesty is a real virtue, but not when it is carried to extremes.

It has always struck me as rather odd that businessmen, including retail lumber dealers and home builders, will speak quite proudly about the virtues of their organizations and the materials and homes they are offering for sale when advertising to the public, but then are most reluctant to tell the fellow members of their own industry about the good things they do in the public interest.

The retail lumber industry conducted a Public Relations Contest this year (and there will be another in 1953) which attracted 139 entries. That was more than before, but nevertheless a comparatively small number for so large a group of businessmen. The same reluctance to put an organization's best foot forward is seen in similar contests.

When individual dealers known to have been doing splendid public relations work in their own local communities are asked why they didn't enter the contest, the invariable answer is: "Oh, I don't like to go around blowing my own horn."

That is one way to look at it, but certainly not the best way. NRLDA holds these Public Relations Contests for two reasons. The first is to bring in factual evidence of the many ways in which the industry as a whole helps bring about community betterment and supports good causes. That evidence is needed to enable us to show the industry in its proper light and to strengthen its position with the public.

The second reason for these contests is to bring out and recognize good examples which will show other dealers how they, too, can improve the standing of their own organizations and, hence, of the industry as a whole.

The more good public relations work dealers carry on over a period of time, the more secure the whole industry becomes against unfair criticism or prejudicial legislation.

The overly modest dealer not only withholds valuable evidence that we can use to excellent advantage, but also deprives the members of his organization of the knowledge that their company had been singled out for special recognition. It is that sort of lift which builds that priceless asset—high morale.

Ed Gavin and his fellow editors who served as the Judges in the 1952 contest urged us to conduct another. They assured us that interest would spread and that the number of entries would continue to grow. We sincerely hope they are right, because we need all the ammunition we can get to establish the undeniable fact that our industry, like so many others, serves the public interest in many ways other than merely supplying one of its most basic needs.

We hope that everyone of the many dealer readers of *American Builder* who has a good story to tell will weigh these arguments carefully and then thrust modesty aside and give us the facts about his own local public relations program.

Kansas City Flood Victims Get New Housing Development

Less than a year after the disastrous flood which swept the Kansas City area rendering thousands of families homeless, a local building firm was in the process of constructing 500 completely finished 2-bedroom homes selling for \$7,000 each, with no down payment required for flood victims.



The first flood victims to buy one of the new homes, Mr. and Mrs. Jesse Gibbs, are interviewed at the opening ceremonies held at the Highland Crest development by E. L. Winn, vice president, and Gus Rau, Jr., president, of Winn-Rau Corporation, Kansas City

Immediately following the flood, the Home Builders Association of Greater Kansas City in cooperation with its active builder members took option on a site with an idea to develop it for flood victim housing. The Association and the Winn-Rau Corporation made application to the FHA under Title II for the construction of 1,000 floods units. The Association's application being denied, it turned over the site option to the Winn-Rau Corporation which agreed to take over the development, with the provision that any builder member of the Association with a quota of flood houses would be given the opportunity of buying lots at cost. Winn-Rau was granted 500 houses under the flood housing plan and began construction early this year.

The development, known as "Highland Crest" has paved curbed streets and a complete sewer system covering nearly 200 acres. Since the official opening in June, over 150 homes have already been sold. The building firm also plans to build 300 additional homes over and above the 500 flood houses on the same site development, to sell between \$7,000 and \$10,000.

Several other Kansas City builder members of the Association also obtained options on various nearby locations for the same purpose, and have been actively engaged in the construction of flood houses. This worthwhile project marks another milestone in what the free enterprise home building industry has accomplished in providing homes for the normal housing market, in addition to rehabilitating families who lost their homes under disaster circumstances such as the 1951 flood.

St. Louis Builders Make Hay While Sun Shines



NEARLY 400 ATTENDED the annual August picnic of the Home Builders Association of Greater St. Louis, held at the Crystal Lake Country Club. The picnic committee included (l. to r.): N. V. Bussman, St. Louis builder; Leon Goldberg, Al Heckelman, Union Electric Co.; and Bildor Harold Kressler, Goldberg served as committee chairman.

Milwaukee Pioneer City In Parade of Homes

Milwaukee's Parade of Homes was officially opened by Mayor F. P. Zeidler and other city officials in a ceremony at the entrance of the exhibit. The doors of the 38 homes were then opened for inspection by the general public.

This year's Parade of Homes was larger and more impressive than any of its predecessors not only in respect to new materials and products but in various types of architecture and design, representing the best in residential construction.

It is interesting to note that Milwaukee is the pioneer in the Parade of Homes movement as a National Home Week project. The Parade of Homes, a movement to foster home ownership, has been accepted in Milwaukee as an annual civic enterprise.

Thirty different builders participated in 1952, with prices of homes ranging from \$11,000 up. The Parade was declared to be an outstanding example and incentive to the people of Wisconsin and Milwaukee to own their own homes as a basis of national security both by Wisconsin's Governor Kohler and Milwaukee's Mayor Zeidler.

Dallas Parade of Homes Draws Thousands

Dallas' annual Parade of Homes—the Southwest's big housing exhibition—featured 30 different homes built by Dallas builders as their contribution to National Home Week. The display was the culmination of the activities of more than 20 members of the Dallas Home Builders Association who participated in the construction. The homes, located in the Casa View Hills district, are all of different design and architecture; all were furnished and decorated by local firms.

A first day crowd of some 14,000 persons visited the Parade of Homes; an estimated 100,000 residents of the city and nearby communities were expected to view the homes during Dallas' National Home Week.

Opening ceremonies were attended by Pat Harness, public relations director for the National Home Builders Association, Washington, D. C., Wilson H. Brown, vice president of the Dallas Association, Grover A. Godfrey, DHBA executive vice president, Avery Mays, national director from the local association, as well as officials from home builders associations in Fort Worth, Houston and Oklahoma City.

Dallas presents an enviable record of new residence units erected in the eight years since World War II; a total of 56,068 new homes were built in that period, enough to house nearly 225,000 people. A new trend in building is now beginning, with prospective buyers seeking new designs and new ideas in the homes they want. Many of the new designs were on display at the 1952 Parade of Homes.

Cortright's Column

FRANK W. CORTRIGHT, Executive Vice President, National Association of Home Builders of the United States



Public Housing—Political Benevolence or Economic Ruin?

Opponents of public housing do not question the worthiness of its avowed objective of helping families with modest incomes to live in decent housing. They claim, however, that in actual practice it does not accomplish that objective, while bringing serious evils which they claim will do more harm to our economy and our American philosophy of government than the evil sought to be cured. They contend that public housing will not do the most good for the most people because:

1. *Public housing is not housing for the public, but is, instead, housing for a selected few. It should more properly be called privileged housing.*

Backers of public housing say that the idea is really no different from the accepted American institutions of public schools, libraries, highways, and the government-owned postal system. Public schools, however, are open to every child. Highways and libraries may be used by everyone. Mail is delivered to all. But public housing is paid for by all and is available only to a privileged few, who pay only a percentage of their actual rent. Yet the citizen being taxed to help pay public housing rent may have to do without needed items because of his own tax load.

2. *Public housing is not low-cost housing.*

It is high-cost housing offered at low rent, possible because the tenant family pays only enough to cover the maintenance of the apartment and the expense of hiring administrators. The cost of the building comes out of the Federal taxpayers' pockets. The taxes which the building does not pay have to be made up by the local taxpayers.

Public housing costs more than private housing. The Housing Act of 1949 authorizes the Administrator to permit construction cost of \$2,500 per room. For a six-room dwelling, this is \$15,000, not counting cost of land and development. Many public housing projects are now bogged down because they cannot even hold costs below this high level.

3. *Public housing does not help those who live under the worst housing conditions.*

As a general rule, the lowest income families are not accepted and families receiving relief are almost uniformly excluded. In practice, only those in the best circumstances among the low income groups—those with steady income—are usually admitted. The families in greatest housing need usually cannot meet the high admission qualifications, but must live on tax-supported welfare wherever they can find quarters.

4. *Public housing does not necessarily clear slums.*

Many persons have been told that public housing is a slum-clearance measure. Yet advocates of the Housing Act of 1949 actively and successfully opposed amendments to the Bill which would have required that public housing units be erected on the site of present slums. The result has been that two-thirds of the existing public housing is on previously vacant non-slum land which would otherwise have been available for taxing purposes.

5. *Public housing can be politically corrupting.*

It offers untold opportunities for exploitation—commissions, fees, jobs and apartments which can be offered as political patronage to voters. The American Institute of Architects has reported widespread instances of graft in the form of "fees" demanded from architects who have been commissioned to design public housing projects.

6. *Public housing kills individual incentive.*

The principle of public housing strikes at the roots of individual independence and incentive. Tenants having half their rent paid by the government, getting utilities at a cut rate, and paying no taxes, lose their initiative. They have no incentive to improve their economic position, since they would thus forfeit their privileged housing and have to work to pay their share of the public housing burden.

7. *Public housing eventually strangles free enterprise building—as has happened wherever it has gained a foothold; England is a prime example.*

In the United States, public housing rents, theoretically, are required by law to be at least 20 per cent below the lowest charged by private industry. Instead of "protecting" private housing, this merely breeds dissatisfaction among private renters, and leads to pressure for larger housing programs to cover middle income as well as low income groups.

Home Sales Stimulated

(Continued from page 29)

under the sponsorship of the Allied Construction and Real Estate Council was held. It began on June 1, and ended September 10, and offered \$1,000 in cash prizes for the best home improvement projects of different kinds made throughout the area. The ingenuity of the ideas put forth by both home owners and contractors proved to be one of the most interesting features of the contest. Many neighborhoods were improved and several unsightly homes were altered to become local centers of attraction.

Home and Home Furnishings Festival Proclaimed in Chicago

Extending from September 14 through October 5, 1952, the sixth annual Chicagoland Home and Home Furnishings Festival was officially opened by a proclamation issued by Mayor Martin H. Kennelly.

The official proclamation stated, in part, that this annual observance has now become an important part of the city's economic and industrial program. Since Chicago is one of the nation's leading centers in the manufacture, distribution and retailing of household appliances and home furnishings, this annual affair enables the general public to inspect and select the latest designs in model homes and furnishings.

Ninety new houses, many completely furnished, were on display, ranging in style from Cape Cod through Georgian, ranch type to contemporary, including several tri-level designs. The homes contain from 4½ rooms up; a few of them were in the low price category, some in the high, but most in the medium and high-income brackets.

The Chicagoland Festival is an excellent demonstration of what architects and builders can accomplish in cooperative efforts to meet the modern demand for smaller, more efficient housing units. Furnishings also contribute more to living comfort than in the past. The festival is sponsored by the Home and Home Furnishings Council of Chicagoland, in cooperation with the Chicago "Tribune."

Maryland Builders 'Talk Shop'

The second in a series of "shop-talk" meetings sponsored by the Home Builders Association of Maryland took place recently at the Lord Baltimore Hotel in Baltimore. With an attendance of around 150 builders and guests, the group discussed several phases of building, with emphasis on successful cost-cutting methods and similar construction efficiency plans. Charles A. Mohr, president of the Maryland group, stated that this series of meetings has as its aim "the building of better homes at lower cost."

Association News Cont. on Page 200



Ohio Builders Hold Summer Meeting

NAHB SMALL VOLUME Building Council held their regional meeting at Hotel Fort Hayes, Columbus. Builders were present from Cleveland, Canton, Columbus and Cincinnati. Shown (seated, l. to r.) are Lillian Tapes, executive secretary Columbus Home Builders Association, C. O. Christenson, associate director, NAHB Technical Service Department; Joseph Entress, Council chairman, Rochester, N. Y.; (standing) A. H. Falace, executive vice president, Ohio Home Builders Association and Raymond S. Barry, president, Columbus Home Builders Association.



Making It Official in New York

Governor Thomas E. Dewey, during his proclamation of National Home Week for New York State to Frank P. Tutaro, president of the New York State Home Builders Association and of the Home Builders Association of Westchester. Looking on are two Long Island Home Builders Institute officials, James Graham, vice president, (left), and Joseph F. Quinn, assistant vice president.

The Governor signed the proclamation in his suite at the Hotel Roosevelt, New York. He observed:

"We have become a nation of home owners to the extent that there is a larger percentage of home owners among us than among any other peo-

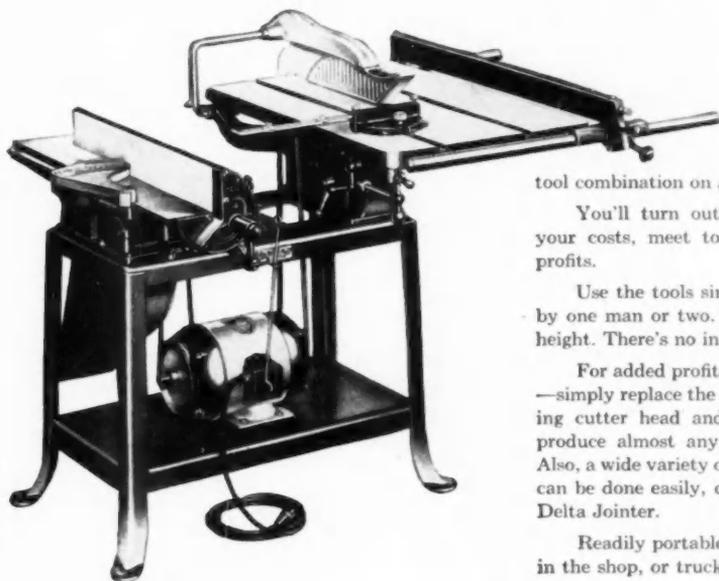
ple on earth. This fact contributes in powerful measure to the stability of the United States. The person who owns his home will rarely be found on the side of crackpot or subversive movements.

"He is permanently opposed to the creeping influence of socialism which already envelops so many of our activities and interests. He is also better protected than other people from the destructive effects of inflation, since the value of real property increases as the purchasing power of the dollar declines. Home owning, therefore, is a strong safeguard against unrest, as it is against inflationary impoverishment."

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★ Make added profits-DO MOST OF YOUR OWN MILLWORK

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Rip a board to right width—then with one easy move put a clean, true edge on it: that's the Delta Saw-Jointer. It's the greatest time-and-work saver you ever saw—a natural tool combination on a single motor.

You'll turn out more work much faster—cut your costs, meet tough deadlines, sweeten up the profits.

Use the tools singly or in team-work; operate by one man or two. Each tool is of correct working height. There's no interference.

For added profits, you can do your own millwork—simply replace the saw blade with the Delta moulding-cutter head and a set of shaping knives, and produce almost any conceivable type of moulding. Also, a wide variety of cabinet and other interior work can be done easily, quickly and accurately using the Delta Jointer.

Readily portable—occupies minimum floor space in the shop, or truck it to the job.

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JOINTER:

Capacity 6" width

Rabbet 1/2" deep

Fence tilts 45° right and left

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Overall Dimensions . . . 37 1/2" deep x 60" wide x 38" high

SAW:

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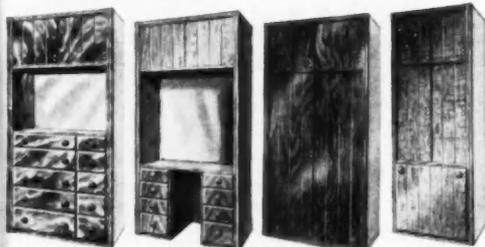
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—designed to reduce the cost of building



BOOKCASE DESK MUSIC UNIT

For every room in the house

THERE ARE HANDSOME, SPACE-SAVING
PRECISION-BUILT
NOVA WALL UNITS



DRESSER VANITY WARDROBE LINEN CABINET

Nova Wall Units may be combined as desired. Or—each can be used individually, as a finished piece of furniture. In addition to the units pictured above, there are spacious bath cabinets, storage wall units, hospital wardrobes. With 2'2" maximum depth, they save space over conventional storage furniture. Used in new construction, they can save as much as 5" in total house length.

Nova Wall Units can replace walls—with units back to back

or alternately serving different rooms. Inner walls and backs are insulating, sound-deadening and mildew-proof. Fronts are of finest plywood or lumber—from birch and gum to imported mahogany. These units are supplied unfinished—or with prime coat, paint, stain or furniture finish.

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*—sheathed and shingled
in one operation!*

Here are the wide exposures and deep shadow lines—the rich beauty formerly available only through expensive "double-coursing". Here are finest cedar shakes and shingles so applied that there can be no curling, no splitting, no rust marks.

Building paper is applied over the entire surface. Then the 8' Nova Clip is placed on

the bottom of the 8' sheathing panel; the two are nailed together at each stud or rafter. The Nova Shingle or Shake is then slid down the panel until the kerf in the butt engages the clip. The second course overlaps the sheathing of the first course by 2". Only 1½ lbs. of 8d galvanized nails are required per square.

Let us send you fully illustrated and detailed literature on this new, finer, money-saving method of shingling sidewalls and roofs

NOVA SALES
Trenton 3, N. J.

A wholly owned subsidiary of Homasote Company—manufacturers of the oldest and strongest insulating building board, wood-textured and striated panels.

SEE OUR CATALOG IN SWEET'S

NOVA SALES CO., Dept. 92-B
Trenton 3, N. J.

Send details on NOVA SHINGLING SYSTEM

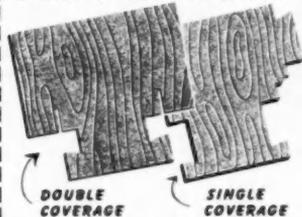
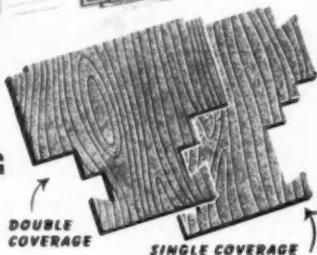
Name.....
Address.....
City..... State.....
My lumber dealer is.....

THIS is what you are selling!



... WHEN YOU OFFER

TEX-LOK INTERLOCKING ASPHALT SHINGLES



In the Northeast it's TEX-LATCH

TEX-LATCH shingles are similar to TEX-LOK except in method of locking tabs. Double Coverage: 230 lbs., 120 shingles, 3 bundles - per square. Single Coverage: 170 lbs., 96 shingles, 2 bundles - per square. Tex-Latch shingles are available from the Edge Moor, Delaware roofing plant.

AND this is exactly what home and building owners are *buying* - long term insurance for peace-of-mind, freedom from worry and protection against serious loss or damage by *weather, wind and fire*. Tough, interlocking, with concealed nailing at four points - **TEX-LOKs stay put!** Fire-resistant of course. And mighty attractive - in rich, solid colors or beautiful color blends. TEX-LOK Double Coverage are the heavy-duty, *all-purpose* shingles. TEX-LOK Single Coverage are the ideal, low-cost, *re-roofing* shingles. For old or new construction - sell the *insurance* TEX-LOK shingles offer. And sell the name that millions know - *Texaco*.



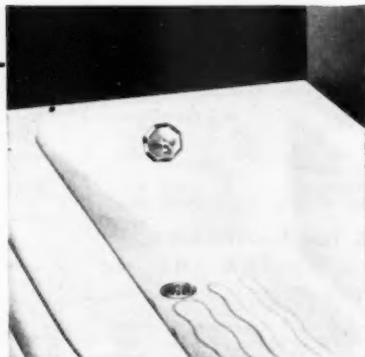
TEX-LOK shingles are available in the areas served from roofing plants located at Lockport, Illinois; Port Neches, Texas; and Port Wentworth, Georgia.

MEMBER OF THE ASPHALT ROOFING INDUSTRY BUREAU



For the acid test . . . count on a **BRIGGS** bathtub—
it's stain-proof!

Stain-proof (acid-resistant) porcelain enamel is only *one* of the safety, comfort and luxury extras which have placed Briggs Beautyware 'way out in front of the field. Only Briggs makes the tub with the famous Safety Bottom. Other features include the wide-rim seat . . . greater area of level bottom . . . straight panel ends eliminating cutting and fitting of adjoining wall tile . . . and leak-proof edges, tub to walls. Only Briggs gives you all this revolutionary designing in the four famous Briggs decorator colors and sparkling white. Write *now* for new catalog featuring Briggs plumbing fixtures and Briggs brass. Briggs Manufacturing Co., 3001 Miller Ave., Detroit 11, Mich. ©1952



ALL Briggs bathtubs are furnished in stain-proof (acid-resistant) porcelain enamel. Both exposed and unexposed surfaces have the protection of a porcelain enamel coat. It pays to specify genuine Briggs Beautyware!

BRIGGS *Beautyware*

"This Crosley Kitchen convinced us!"



"We were favorably impressed with Crosley Kitchens before we decided to buy a house. Naturally, when we were 'house-hunting' and saw a Crosley Kitchen in a home that met our specifications, it helped strongly in convincing us that this house was the *one to buy!*"

Another home sold, largely because the prospect was first taken into the new home through the *back door*... straight into this beautiful, convenient Crosley-equipped Kitchen!

This "back-door" sales approach appeals to both Mr. and Mrs. Prospect. She, of course, is immediately thrilled by

the completely modern, completely equipped Crosley Kitchen. She knows she can depend upon Crosley!

Mr. and Mrs. Prospect will be more than interested when you tell them that they can have this Crosley Kitchen *right away* by simply including it in their package mortgage when they buy the home!

Before you build or plan another house, consider these sales-making Crosley products: Shelvador® Refrigerators, Shelvador® Freezers, Electric Ranges, Automatic Dishwashers, Wall and Base Cabinets, Range and Refrigerator Pantries, Sinks and Electric Food Waste Disposers.

Free Booklet for Builders and Architects!

Builder Sales, Crosley Division
AVCO Manufacturing Corporation
1329 Arlington Street,
Cincinnati 25, Ohio

Please send me:
Free Booklet Information Outlined on Separate Sheet

Builder Sales, Dept. 11AB52

Name _____

Position _____ Company _____

Address _____

Zone _____ State _____

City _____

CROSLEY

DIVISION



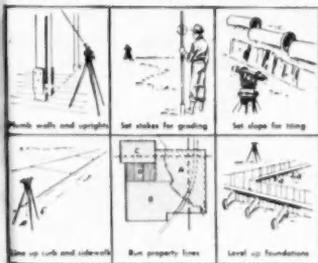
Better Products for Happier Living



White Universal Level-Transit...

most versatile instrument you can own!

Indispensable for these jobs—and many more



ENGINEERS agree: you can do more jobs better — at lower cost — with the White "Universal" Level-Transit. The improved Model 3000 has internal focusing, coated optics, a guarded vertical arc. Plus all the other quality features needed to give you lifetime durability and accuracy. The price: *only \$185**, complete with tripod. See your dealer, or write **DAVID WHITE COMPANY**, 311 W. Court Street, Milwaukee 12, Wisconsin.



We offer the most expert **REPAIR SERVICE** on all makes, all types of instruments.

*Price subject to change without notice.

7197
44

LETTERS

national home week

Art Jones just laid on my desk one copy each of your two wonderful booklets on "How to Plan A Successful National Home Week" for dealers and builders. After reading them, the thought came to our minds that it would be a very good idea if we were to include these in our National Home Week Promotion package. They would be invaluable for our builder salesmen.

We are, as you know, again this year, having a promotion which will have a total of 22 homes in 12 cities. These homes will be, of course, built by the local builder and exhibited during National Home Week, September 14-21, 1952. They will have four or more of the following items of Westinghouse electrical equipment: Refrigerator, Range, Dishwasher, Food Waste Disposer, Poweraire Ventilating Fan, Laundromat Clothes Washer, Clothes Dryer, Water Heater, Unitaire Air Conditioner, Precipitron Air Cleaner, and Micarta Counter Tops. They will have Westinghouse light bulbs, Bryant Wiring Devices; and last but not least an adequate wiring system.

We shall supply each builder with one 504-line ad, a complete promotion package, and if they desire, we review their home plans and make our comments. Our builder salesmen will train their sales people on the selling features of the Westinghouse products in the home.

Would you send me 25 copies of your two booklets, that I may include them as an added "plus" to our builder salesmen for their use in really doing a "Bang-up" job for their local builders. Please invoice me for the cost of these 50 pieces.

R. J. Lightcap, Staff Asst.
Westinghouse Electric Corp.
Pittsburgh 30, Pa.

► Thank you for your interesting letter, your valued comments on the National Home Week booklets, and your plans for a most active participation in National Home Week.

The books which you requested have been sent. We are happy to supply them without charge.—The Editor

a disservice?

We have just received this month's copy of your magazine, and think that your editorial has done a disservice to the building industry. Your

editorial implies that you favor state-wide minimum building standards. The establishment of such standards would certainly reduce private building drastically and encourage further government ventures in the building field. Such a policy would further only the interest of contractors, and would be particularly harmful to farmers and small town people.

I doubt that the sins of the non-professional are laid on the professional doorstep. Even so, these so-called sins are committed partially because of the failure of the building supply dealer to assist and advise his customer.

Further government ventures will be encouraged because of the lower classes' inability to finance the necessarily higher cost of such standards. It is the job of the individual dealer to show his customer the economic value of proper planning.

Another effect of state wide standards will be to increase the impetus toward prefabricated buildings, and this will hurt many dealers who are not able to produce factory-built buildings. We are in the prefabricated building business and know that there is already a recognizable trend in this direction.

Let's keep further governmental regulation out of the building field, and instead concentrate on selling ourselves, our ideas, and our products to our customers.

W. R. Davy
Permu Mfg. Co.
Peru, Nebr.

► Absence of state wide standards as stated in the editorial does not imply that we advocate them. The statement only points out that in their absence a lot of building crimes are being committed. The editorial is a plea to the building industry to take the matter in their own hands, both in the public interest and in the interest of the industry. Builders and retailers can set up local minimum standards agreed upon by the local factors most affected. These will add no cost to the construction, but will guide the owner builder so that he does not ruin material, waste his time, and construct another substandard house.

We want no part of any federal government regulation of any industry. We want as little state and local control as it is possible to get along without.

(Continued on page 46)

AMERICAN BUILDER

GOOD BRICKWORK = GOOD DESIGN + GOOD WORKMANSHIP + GOOD MATERIALS



Slushing does not properly fill the voids in the head joints.



When mortar is spotted on only one corner of the brick, slushing seldom fills the voids.



Even when mortar is spotted on both corners of the brick, slushing will not always fill the voids.

"SLUSHING" INVITES LEAKAGE IN BRICKWORK

WE SUGGEST THAT—

Brick should always be so laid that when the brick is shoved into place, the head or cross joint will be filled solid with mortar, without slushing. If the joints are not completely filled, water may leak through the voids to the inside of the building.

The photos at the left show the voids that often result when slushing is used to "fill" a joint. Even when mortar has first been spotted on both corners of the brick, slushing cannot be relied upon to fill the voids completely.

The great plasticity of Brixment enables the bricklayer to throw plenty of mortar onto the brick to be placed — to use plenty of mortar in the bed joint — and still shove the brick easily into position, with excess mortar oozing out all around, and with all voids filled.

BRIXMENT

Brixment mortar has greater plasticity, higher water-retaining capacity and bonding quality, greater resistance to freezing and thawing, and freedom from efflorescence. Because of this combination of advantages, Brixment is the leading masonry cement on the market.

LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KENTUCKY

(Advertisement)

Redwood in the News

A widespread interest of people throughout the country in the future of the California redwood trees is bringing greater attention to the Tree Farm program of private timber operators. The Tree Farms in the Redwood Region of California are established to provide a permanently renewable source of this beautiful and important commercial wood. Insect and disease control, and protection against hazards of fire, are important phases of the Tree Farm program.

Fundamentally important to the program are improved logging practices such as "selective cutting", with the residuals and seedlings allowed to fill out the forests in a natural cycle. Tree Farms in the Redwood Region are supervised and certified by the California Redwood Association. Further information on their Tree Farm system, including the new data sheet on "Tree Farms in California", can be obtained by writing the Association offices at 576 Sacramento Street, San Francisco 11, California.



THE DEMAND IS FOR CRA REDWOOD!

Your customer wants Redwood he can trust—stock he can count on to give him the fine performance Redwood is capable of giving! And that means grade-marked, trade-marked, Certified Dry Redwood—accurately graded, uniformly milled, properly seasoned.

The demand is for dependable CRA Redwood—so why gamble? Feature CRA Redwood—the Redwood you can be sure of—the Redwood processed by these reputable member firms.

CALIFORNIA REDWOOD ASSOCIATION MEMBERS:

Eureka Redwood Lumber Co. • Arcata Redwood Co. • Coastal Plywood & Timber Co. • Hammond Lumber Co. • Holmes Eureka Lumber Co. • Northern Redwood Lumber Co. • The Pacific Lumber Co. • Rockport Redwood Co. • Simpson Logging Co. • Union Lumber Co. • Warm Springs Redwood Co. • Willits Redwood Products Co.

Letters . . .

(Continued from page 44)

We are going to continue to insist that this industry take the initiative to protect itself and the tax-payer by doing first and best the things which the socialists are trying to do to and for us.—The Editor

wisdom from "the halls of the experts"

Excerpt—paragraph 5, page 3, *American Builder* circular June 9, titled Nation's Churches: "The agencies list private housing starts this year at 1,050,000 etc."

Excerpt, minutes, Stained Shingle and Shake Association, annual meeting December 6, 1951.

"Larry Conaway, Pacific Coast representative for the *American Builder* then introduced Mr. E. G. Gayin, Editor, *American Builder*, Chicago, Ill. who predicted a minimum of 900,000 new residential starts in 1952; that while the first quarter may lag, there will be a marked improvement and added impetus as the year progresses, somewhat similar to the 1950 cycle. Contrary to 1951, mortgage money will become increasingly available at 4 to 4½ per cent. Mr. Gayin chided the membership upon the falacious general thought that today's problems are more difficult than in the 'good old days' and stressed his belief it will require men of vision and determination if we are to avoid the yoke of socialism that is being forged by state planners."

Draw in your chest, let your breath relax. Gazing into the crystal ball, what do you now see? . . . Between you and Nick Woodbridge you cook up a mighty good brew.

R. R. Byers, Secretary
Stained Shingle and Shake Assoc.
Seattle, Wash.

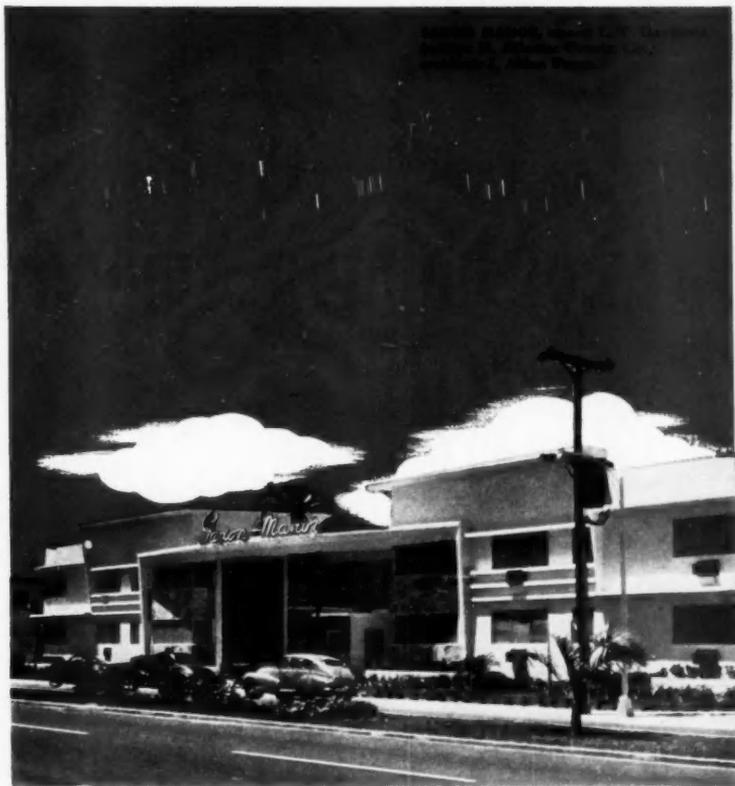
▶ Thank you for your extremely interesting letter. Eventually the law of averages will probably catch up with us. But we have been right for the past five years. We are already crystal balling a minimum of 900,000 for 1953.—The Editor

no play?

"All work and no play makes Jack a dull boy."

With this quote in mind how about printing a set of blueprints for a vacation cottage in one of the future issues of *American Builder*.

H. R. Moran
Pittsburgh, Pa.



Modern Motels Require *RICHMOND*

These 7 very latest Miami Beach motels (comprising 208 units) installed Richmond quality vitreous china water closets, enameled cast-iron and vitreous china lavatories, in smart pastel shades.

Why do so many Florida motels entrust their plumbing



requirements to Richmond fixtures? Because Richmond's complete line of plumbing fixtures meet every requirement of smart design, economical cost and efficient operation.

For motels, custom homes or multiple dwellings when you want the finest in plumbing fixtures, always remember you can rely upon Richmond to fit your exact requirements.



ROBERT LEE APTS., owner: Diane Homes, Inc., builder: Jules Block, architect: August Swarz



RIVIERA, owner: Al Lewis, builder: Al Lewis, architect: L. H. Glasser.



OXFORD APTS., owner: Jordan Davidson, builder: Jules Block, architect: Don Reiff.



DIANE APTS., owner: Diane Homes, Inc., builder: Jules Block, architect: August Swarz.



CHAMPION APTS., owner: Ciampi, builder: Clarciam Realty Corp., architect: Pamorrow Turner.



FOUNTAINHEAD MOTEL, owner: J. Davidson, builder: Shinn Const. Co., architect: Norman Giller.

RICHMOND

RICHMOND RADIATOR CO., AFFILIATE OF DEWOLDS METAL CO.

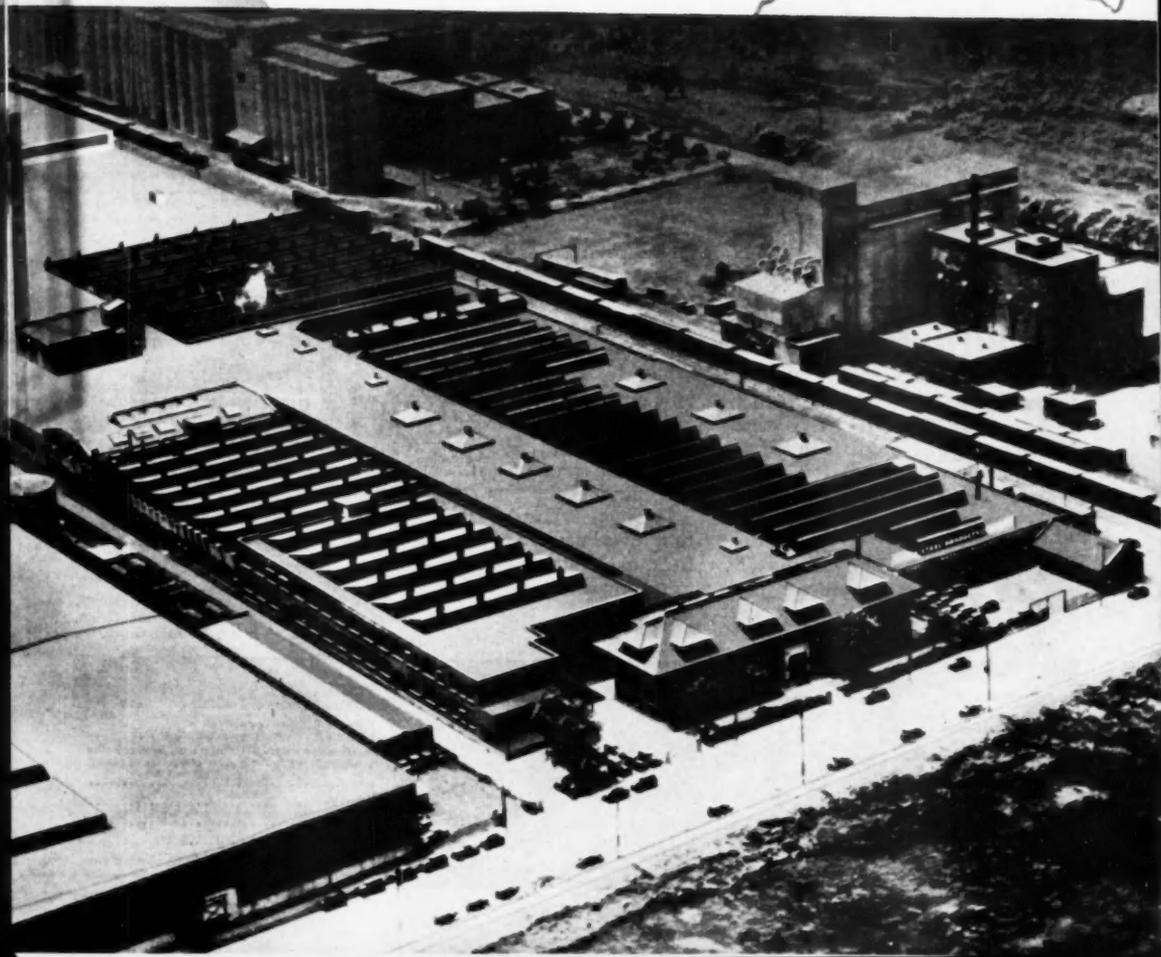
Richmond Radiator Company
19 East 47th Street, New York 17, New York
Please send me more information and literature on the Richmond Plumbing Fixtures. No obligation, of course.

NAME.....
COMPANY.....
ADDRESS.....
CITY.....ZONE.....STATE.....

We are plumbing wholesalers plumbing contractors building contractors.

An illustration of a factory with several tall smokestacks emitting plumes of smoke. The scene is set against a dark background. A white outline of the United States map is overlaid on the right side of the illustration, with a white banner cutting across it.

50 Years of helping America.





Milcor Steel Roof Deck for modern, fire-safe roof construction.



Build better with STEEL!



...trademark of Inland Steel Products Co., a member of the Inland Steel family of steel-producing and fabricating enterprises — for half a century, your partner on the building sites of America

Over the past 50 years, Milcor developments have done much to make steel a standard material in all types of building.

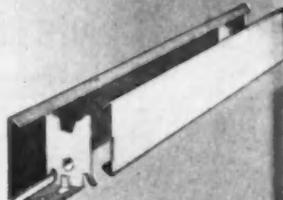
Today, with *Milcor steel products*, you can design and erect a complete, coordinated system of plaster reinforcement and interior trim to meet any condition of fire-safe construction.

Milcor originated and patented Expansion Corner Bead and provides the industry's most complete corner bead line . . . Milcor pioneered the use of

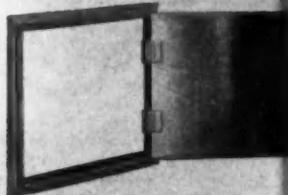
metal trim in both public and residential building . . . Milcor improved the mechanical efficiency of erecting solid-plaster partitions for fire-resistant non-bearing walls.

Consider this "know-how" — and the many raw material resources and production facilities of Inland Steel Company — these add up to why Milcor will continue to be first with the finest steel building products — products that are easier to use, look better and do a better job.

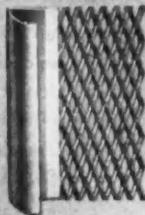
Inland Steel Company's Indiana Harbor plant.



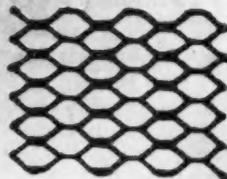
Housing Base for use with solid-plaster or wallboard partitions, furred or masonry walls.



Access Doors for plastered walls, for masonry, brick, stone, tile, etc.



Complete line of Metal Casings, solid and expanded wing.



Milcor Metal Lath for every plastering need.

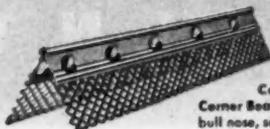
INLAND STEEL PRODUCTS COMPANY

4025 WEST BURNHAM STREET • MILWAUKEE 1, WISCONSIN

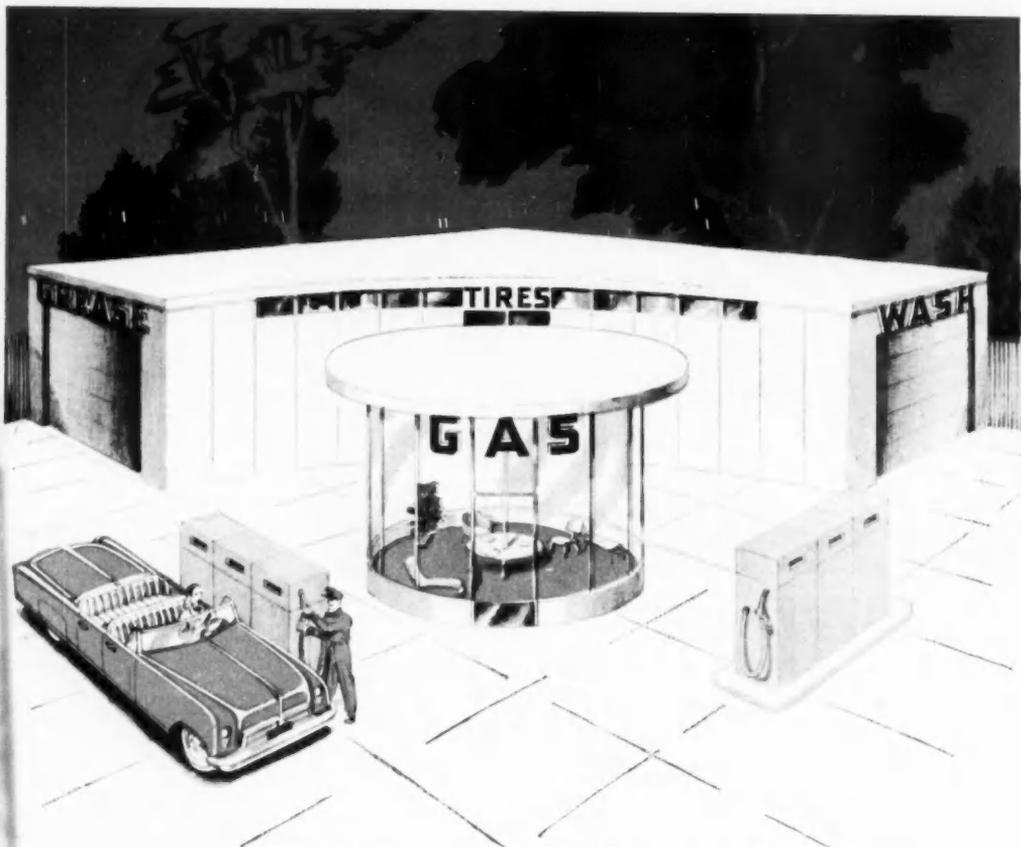
BALTIMORE 24, MD. — 5200 Pulaski Highway • BUFFALO 11, N. Y. — 64 Basin St. • CHICAGO 9, ILL. — 4301 S. Western Blvd. • CINCINNATI 25, OHIO — 3240 Spring Grove Ave. • CLEVELAND 14, OHIO — 1541 E. 36th St. • DETROIT 2, MICH. — 600 Amsterdam Ave. • KANSAS CITY 8, MO. — South West Blvd. and State Line • LOS ANGELES 59, CALIF. — 4807 E. 49th St. • NEW YORK 17, N. Y. — 230 Park Ave. • ST. LOUIS 10, MO. — 4215 Clayton Ave.

Inland Steel Products Company
Milwaukee plant

One of three plants that provide more than 750,000 sq. ft. of production facilities.



Complete line of Corner Beads; small nose and bull nose, solid and expanded wing.



SUPER SERVICEABLE

That's why reinforced concrete is the Number One choice for the construction of super service stations. It lends itself well to clean lines and attractive appearance. It's strong and durable... firesafe, stormproof, watertight and termite-proof. And of special importance, reinforced concrete is easy to maintain... easy to keep clean and attractive.

Concrete reinforced with welded wire fabric provides the strength needed for service station construction. But be sure to specify your reinforcing fabric with the same care as you order your concrete mix. Specify Clinton Welded Wire Fabric. It meets all A.S.T.M. specifications and is available in proper sizes and weights for all reinforcing requirements.

THE CALIFORNIA WIRE CLOTH CORPORATION • Oakland
 THE COLORADO FUEL AND IRON CORPORATION • Denver
 WICKWIRE SPENCER STEEL DIVISION • New York 22, N. Y.

CLINTON
 WELDED WIRE FABRIC
 THE COLORADO FUEL AND IRON CORPORATION **CFI**

ON and OFF the RECORD

DICK HUGHES came up with his 1953 speech at the recent conference of association executives held at Lookout Mountain. He tried out the 1952 speech at the same conference when it was held in Madison, Wis. in the summer of 1951.

DICK'S 1952 oration was rated a masterpiece by his try-out audience, and when he put it on the road for about 40 performances in as many States he received ovations.

HIS MOUNTAIN TOP dress rehearsal for the 1953 forensic model was prefaced with the statement that he was sure that from that moment on he would be known as "one speech Hughes," because he didn't think he could equal the 1952 performance. After listening to him the dress rehearsal audience told him unanimously that he could be sure of at least "two speech" fame.

WHETHER THE HUGHES theory of a new speech every year has influenced his home building policy, or whether the reverse is true is not known generally. It is a coincidental fact, however, that the 1953 speech includes announcement of a policy to come out with a new and distinctive house every year.

IT'S A GOOD POLICY. If we intend to keep home building volume up to the more than one million units annually for the coming six or seven years, it will be necessary to sell dissatisfaction and obsolescence.

WHAT THAT MEANS is making people with the wherewithal to purchase new houses unhappy with their two and three-year old models. Clothing and automobile manufacturers have thrived on the same principle of selling.

THE ALARM WATCH that San Francisco's Bill Blackfield wears is no affectation. Bill is a voluble conversationalist, and like most builders has every hour of the day filled with engagements. Had lunch with him recently in his home town, and in the post-lunch talking the wrist alarm watch suddenly went into action with a low but persistent drone. It reminded Bill that he was then due someplace else. And he went.

AN OLD EDITOR once told a young cub that an account of a dog biting a man was not news, but that if he ever happened on a man biting a dog he would make front page with a banner head.

NOW IF A TEXAN takes a simple truth about his State or any of its inhabitants and stretches it astronomically that is not news in this or any other editorial shop.

BUT, if a Texan complains, however mildly, about an overstatement, of a Texas accomplishment, the millennium has been reached. We really should have left the cover picture off, and told this story there, because nothing like it is ever likely to happen again.

AND ESPECIALLY FROM Grover Godfrey, well known, but not for his modesty in matters Texan. Writes Grover from some obscure town in Texas which the letterhead spells "Dallas."

"We read in the current issue of *American Builder*, page 85, editorial comment on 'advance reports on the 1952 Parade of Homes,' and see where Dallas has 532 homes in the parade, ***?***—32 was a whole lot—and the most imaginative Texan crammed full of mesquite juice would hesitate announcing 532 homes, but I'd compromise for 152 under some circumstances. . . . We just wanted you to know that we are checking very closely."

WE ASKED THE NEWS editor to explain the error. He said, "Sure the release said 32, but I knew it was wrong for Texas. I just put the 5 in front. Why? Should it have been 3200?"

CHARLES V. MOLESWORTH, new vice president in charge of sales for Atlas Plywood Corp. Briggs Mfg. Co. (Briggs Beautyware), announces four new sales managers: **ROBERT ALLAN,** **ROBERT GARVIN,** **CLIFF RUTHERFORD** and **HENRY TULLOS.** Manager of newly created merchandising sales division of The Carborundum Co. is **FRED W. SCOTT, JR.** Minneapolis-Honeywell moves **TOD S. CARLEY** from regional manager in Dallas to manager, midwest region in Chicago, and advances **FREDERICK C. BRANDT** to southwestern manager. **J. R. NICHOLSON** gets appointment as manager of glass block sales of Pittsburgh Corning Corp. **JOHN RUDDY** gets newly created position of special factory representative of M and M Wood Working Company to serve accounts west of Mississippi River. New president of Masonite Corporation is **JOHN M. COATES,** moved up from vice-president.

(Continued on page 52)



What's underneath this

SUPER
SERVICEABILITY?



The many types of concrete construction needed for a service station require as many different weights of reinforcing fabric. Heavy fabric is needed to support the loads on the apron; lighter weights for grease pits, inside floors, walls, and roof decks.

Your Clinton Welded Wire Fabric distributor offers you super service for reinforcing fabric. He has it available in the required weights for reinforcing all concrete work . . . yet in every weight, Clinton Fabric has these advantages:

Simple to Form and Shape. Clinton Welded Wire Fabric possesses the proper flexibility to make it easy to bend, form or shape right on the job. It is sufficiently rigid to hold its shape after forming.

Easy to Handle and Place. Both the heavy and light gauges of Clinton Welded Wire Fabric flatten quickly and easily from the roll.

When you want information on Clinton Welded Wire Fabric—write for the booklet, "Design Manual On Home Construction."

THE CALIFORNIA WIRE CLOTH CORPORATION • Oakland
THE COLORADO FUEL AND IRON CORPORATION • Denver
WICKWIRE SPENCER STEEL DIVISION • New York 22, N. Y.



6116

ONLY THE NEW

Milwaukee

SAWZALL

gives you ALL these features

Not an attachment, but a complete heavy-duty, portable power hacksaw.



1. SINGLE-UNIT, ALL-PURPOSE, PORTABLE POWER HACKSAW.
2. 2250 strokes per minute ($\frac{3}{4}$ " stroke).
3. Lifetime lubricated . . . ball and roller bearing equipped.
4. Milwaukee-Built 9-point motor, famous for MORE "motor guts".
5. Lightweight — only $6\frac{3}{4}$ lbs.
6. Fully guaranteed.
7. Blades for cutting all materials.

\$78.50

including Blades and Steel Carrying Case

You get
**BETTER QUALITY
LONGER LIFE**
for less money
WITH MILWAUKEE
PORTABLE ELECTRIC TOOLS



Amazing new Milwaukee SAWZALL eliminates chuck troubles and coupling problems. Speeds up remodeling and new construction — cuts all materials including light and heavy metals.

Write for folder SW-5.

MILWAUKEE ELECTRIC TOOL CORP.

5356 W. STATE STREET • MILWAUKEE 8, WISCONSIN

Canadian Distributor: MATTHEW MOODY & SONS CO., 740 Inspector Street, Montreal

On and Off the Record

(Continued from page 51)

REGULATION X is gone just as *American Builder* representatives predicted it would go from many speakers' rostrums as long ago as last November. We believed that, politics being the business it is, Washington would feel it to be bad politics to deny the man with a small down payment the opportunity to buy a home in the heat of an election campaign.

WE FELT QUITE SAFE, therefore, in predicting that the Regulation would be rescinded in September or early October.

BUT, REGULATION X is like a faucet. It is good politics to do away with it now, but it may be just as good politics to slap it on again shortly after November 4. It's doubtful, but it could happen.

EARLY REPORTS ON NATIONAL HOME WEEK indicate that it will ring up an all-time high record for home sales. Wider participation and better publicity drew bigger crowds of prospects. And the public is now conditioned to the Week. Also, there was a beautiful assist through the demise of Regulation X.

FALL BOARD MEETING OF NAHB caught Seattle at its best weatherwise. Business and a fair portion of play—the salmon derby plus the Sunday yacht outing on Puget Sound and some detour traveling one or both ways—added up to a satisfying junket.

MORE EXHIBITORS buying more space, and more builders planning to attend is the advance report on the 1953 NAHB convention and exposition.

SLOWLY, BUT VERY SURELY the opportunities afforded by NATIONAL HOME WEEK are beginning to be appreciated by others than builders. Last year Westinghouse participated in some demonstration houses in Chattanooga. More manufacturers joined the move in 1952. Notable among these was Youngstown Kitchens whose entire September national advertising budget was used to promote the Week.

IT'S HARD TO TELL about lumber dealer participation. It is certain that at least 100 dealers operate local NATIONAL HOME WEEK observances in communities not served by NAHB chapters, and that many others are actively connected with observances in larger centers.

ED ELMER, secretary of the Independent Lumber Dealers Association

(Continued on page 54)

NOW — Famous HAR-VEY QUALITY in LOW-COST Hardware!

for interior Rolling Doors
up to 70 lbs.

New **CHALLENGER** Series

SCORES ON
EVERY COUNT



Quality

Economy

Performance



Self-lubricating Oilite bearings
... no maintenance, ever!
Durable NYLON Rollers
Sturdy ribbed-steel hangers,
cadmium plated
ADJUSTABLE for quick,
accurate hanging

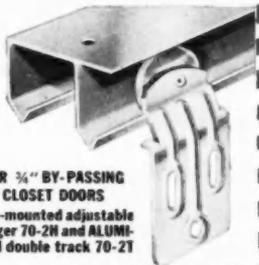


RUSTPROOF ALUMINUM TRACK
Best quality extruded ALUMINUM
Top-mounted for easy installation—no mortising!
V-groove design prevents "chattering" of roller
Track curves as trim—no painting necessary!
— engineered to prevent roller jumping track
— low headroom, 1" — 1 1/4"

3 Models meet all your needs, for doors up to 70 lbs.



FOR SINGLE POCKET OR BI-PARTING DOORS
3/4" — 1 1/4"
Top-mounted hanger 70-1H and ALUMI-
NUM single track 70-1T



**FOR 3/4" BY-PASSING
CLOSET DOORS**
Side-mounted adjustable
hanger 70-2H and ALUMI-
NUM double track 70-2T



**FOR 1 1/4" BY-PASSING
CLOSET DOORS**
Side-mounted adjustable
hanger 70-3H and ALUMI-
NUM double track 70-3T

HAR-VEY HEAVYWEIGHT CHALLENGER

PACKAGED for convenient handling and quick selection in the small, rectangular, easy-to-store Har-Vey Handy-Pak... contains everything for a complete installation, for 2', 2'-6" & 3' doors.

Attractive new Plastic Flush **DOOR PULL** included in every package without extra cost!

New HAR-VEY HEAVYWEIGHT
available for Doors up to 200 Lbs.
— Get the facts today!

Available about Dec. 1st. See your
supplier NOW, or write Dept. ○

Tested and *proven* — In exhaustive performance tests with loads way beyond rated capacities, this new series has excelled in every respect!

NOW you can achieve low *cost* without resorting to low *grade* hardware! Skillful engineering and production know-how have created a dependable, durable hardware series that you can count on *always* for smooth, silent rolling. Just **COMPARE** the new Challenger series with any other — and see for yourself!

METAL PRODUCTS CORPORATION

West. Div.: Calmetco, Inc., 609 S. Anderson, Los Angeles, Calif.

807 NW 20th St.
Miami, Fla.

Mueller Climatrol Heating gives the Pace Setter Home "Climate Control for comfortable living"



Again the choice for top heating comfort ... Mueller Climatrol

The House Beautiful 1953 Pace Setter Home is outstanding in every respect. It is quality constructed — using the finest equipment and material. It is Mueller Climatrol heated.

Yes, like in so many other carefully planned homes designed and constructed by leaders in the building field, Mueller Climatrol was selected because the best was wanted.

The complete Mueller Climatrol line has sizes and types for every home, every type of system, every fuel, warm air, radiator or radiant heat. With Mueller Climatrol you offer the best in heating — yet stay competitive in price. Mueller Climatrol is nationally advertised. It's a name known for nearly a century of heating leadership — a name home buyers accept as standing for quality.

Write for all-products catalog . . . L. J. Mueller Furnace Co., 2021-P W. Oklahoma Ave., Milwaukee 15, Wis.



Mueller Climatrol

FOR GAS

FOR OIL

FOR COAL

On and Off the Record

(Continued from page 52)

in Minneapolis, is an active member of the NHW committee in that city.

THEN, there's the A. W. Burritt Lumber Co. of Bridgeport, Conn. The company promotes NATIONAL HOME WEEK with large newspaper advertisements, some of which are full pages.

THERE IS STILL a long way to go, though, before many dealers will see the great merchandising opportunity the Week gives them—and with a minimum of effort.

COLEMAN COMPANY of Wichita is another producer that tied into NHW in an impressive way this year. Their NHW house built by Ken Stowell, Wichita builder, was a feature attraction in that city.

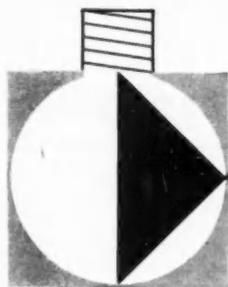
REMODELING, as this magazine has often pointed out, offers untouched opportunities for both builders and retail lumber dealers as an NHW feature. It is hoped that with the prominence that remodeling is expected to assume in the building picture of next year, that many of the NHW demonstrations will include remodeled houses.

AND RIGHT FROM the moment we first proposed the idea of NATIONAL HOME WEEK, we have maintained that the skeleton or X-ray house should play a prominent part. Until this year the only one that has been featured was in Los Angeles four years ago. It was a genuine hit. Why it did not gain immediate nation-wide acceptance is hard to understand.

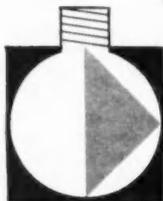
IT HAS BEEN said that since women are in the majority among those who inspect homes during NATIONAL HOME WEEK, the skeleton or X-ray house would get little attention. Nothing could be farther from the truth, if the Los Angeles experience can be accepted as a criterion. There, women not only exhibited most of the interest, but they asked the most intelligent questions.

THIS YEAR, Detroit and Milwaukee decided to take a page from the experience of Los Angeles as we reported it several years ago, and come up with X-ray houses.

SO, IT IS NOT only the finished house, either furnished or unfurnished that gets attention and stimulates sales. It is the unfinished house that leaves the parts exposed that is equally interesting to both men and women. Such a house should not be neglected as a part of every NHW program.



*as fundamental as
built-in cabinetwork...*



*A good house
is always better
when it includes
conduit for
telephone raceways*

Built-in features—from bookcases to breakfast nooks—are sales features, too, in the homes you build these days. And that applies to built-in telephone facilities and concealed telephone wiring.

Pre-planned telephone outlets and conduit built into the walls to keep telephone wires out of sight—these are features that will impress your prospects. The extra value to them is often far greater than the slight extra cost to you.

Telephone raceways are a thoughtful and a profitable addition.

Your Bell Telephone Company will be glad to help you work out economical raceway installations. Just call your nearest Business Office.

BELL TELEPHONE SYSTEM



technical guide

for builders and craftsmen

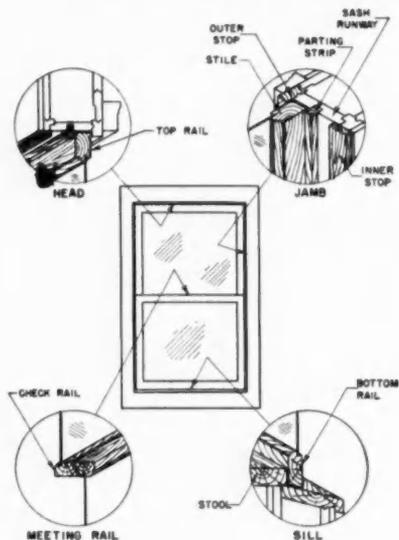
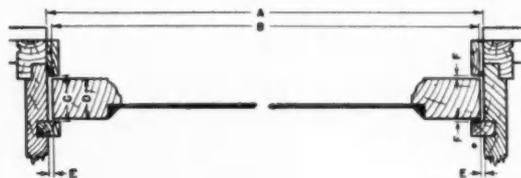


Figure 1. Typical Double-Hung Wood Window Showing Component Parts.



$$E = \text{EDGE CLEARANCE} = \frac{A-B}{2} \text{ (FORMERLY TERMED CRACK)}$$
$$F = \text{FACE CLEARANCE} = \frac{A-B}{2} \text{ (FORMERLY TERMED } \frac{1}{2} \text{ CLEARANCE)}$$

Figure 2. Window Fit

air infiltration through weatherstripped and non-weatherstripped windows

DUE to the increasing importance of reducing fuel costs and the demand for homes with cleaner air and more comfortable living conditions, the need for reducing air infiltration through buildings has become greater.

With the almost universal use of insulation in homes constructed in colder climates and improvements in different types of insulation which have resulted in lower heat loss through walls and ceilings, air infiltration may account for a substantial part of the heat loss from a building. Air infiltration may account for approximately 37 per cent of the total heat loss from a typical five room, well insulated bungalow.

The use of weatherstripping on windows may reduce the infiltration losses to 17 per cent of the total heat loss from a house with a corresponding saving of approximately 24 per cent in the total fuel cost. The reductions will vary above or below the values presented depending upon the fit of the window, the size of the structure, the number of windows, the type and quantity of insulation used, and the type and cost of fuel.

Reduction of air infiltration is desirable not only during the heating season, but throughout the whole year. Where excessive air infiltration occurs, dust and other organic matter can enter the house and have a deleterious effect upon the interior furnishings of the home. It is difficult to evaluate the savings realized through a reduction of such infiltration; however, it is obvious that it is substantial since furnishings will last longer and re-

quire less frequent cleaning when they are not exposed to dust-laden air.

To illustrate the value of weatherstripping, the University of Minnesota, Institute of Technology made an analysis for twelve different cities throughout the United States. The locations were selected to cover the range of climatic conditions for the heating season. The fuel savings are based upon an average five-room bungalow located in Minneapolis, Minn. This bungalow was selected from a study of temperature and humidity conditions within ten typical houses during the winter of 1950-51.

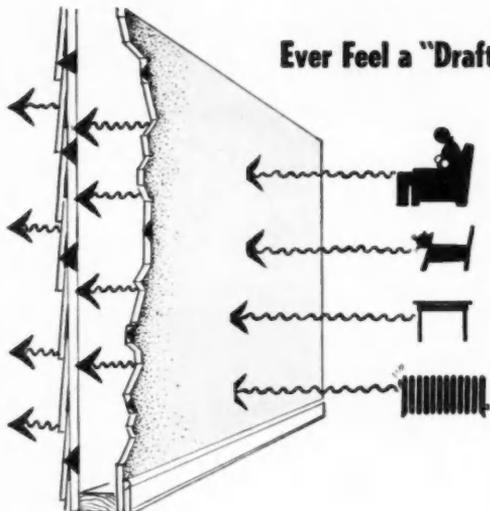
They found that the leakage of air through windows of an average five room bungalow may approach 37 per cent of the total heat loss from the structure. This loss will vary according to the type and fit of the windows and whether or not they are weatherstripped. This loss may be reduced to 17 per cent of the total heat loss by the use of weatherstrips.

The displacement of heated air in buildings by unheated outside air may be due to two causes, namely: (1) the pressure exerted by the wind, and (2) the difference in density between the outside and the inside air because of differences in temperature. The former is generally referred to as infiltration and the latter as stack or chimney effect.

Infiltration means the leakage of air through a window from the outside to the inside of a structure. Exfiltration

(Continued on page 58)

Ever Feel a "Draft" in a Warm, Closed Room?



(RADIATION is the transmission of rays through space. Infra-red heat rays travel at the speed of light, are invisible, have no temperature, only energy. But when absorbed by a surface, they are transformed to HEAT. The surface of any object warmer than absolute zero - the Sun, You, Clothing, Wood, Plaster, an Iceberg, a Stove, a Chair, Paper, an Animal, will RADIATE to a colder surface.)

(CONDUCTION is the process by which warmth flows from a warmer object or particle by direct physical CONTACT, to a cooler one.)

People often complain of "drafts" in a room with air-tight walls and windows. Why? To a large extent because, by Nature's law, warmth flows to cold by RADIATION as well as by CONDUCTION. Cold walls, too, draw heat out of contacting air by conduction, causing a downward current of cold air.

The exposed skin of people and the outer surfaces of their clothing lose heat as infra red heat rays flow from them, at a 90% rate, to a cooler wall plaster surface, which absorbs the rays at a 93% rate and transforms them again to heat. If insulation is lacking or has packed down, most of this heat is transmitted by radiation to the colder outer wall at a 93% rate, absorbed, and then dissipated to the colder, outer air. Ordinary insulation in the wall space, or a solid wall, augments heat flow by direct conduction.

So people are uncomfortable, perhaps only in spots. More fuel is burned to obtain greater comfort. Unnecessarily high, less wholesome temperatures result.

Multiple sheets of accordion aluminum in the wall space would block convection and reflect back 97% of heat rays to re-heat the plaster by their absorption. With plaster sufficiently warm, no heat radiates from bodies to walls. There is no current of cold air on the surface of the wall. Comfort is maintained without unduly high temperatures or fuel costs.

In summer, the process is identical except for direction. Heat by radiation, conduction and convection is retarded by the multiple sheets of aluminum in the outer wall space. The interiors of rooms stay cooler. Their plaster surfaces are cooler than the body. So, by Nature's law that warm radiates to cold, some heat leaves the body for the colder wall surfaces, increasing body coolness and comfort.

The commercial form of multiple accordion aluminum is Infra Insulation, Types 6, 4, and 4 Jr.

INFRA THERMAL FACTORS. TYPE 6

Up-Heat C.089, R 11.23 = 4 $\frac{1}{2}$ " dry rockwool
Wall-Heat C.073, R 13.69 = 5 $\frac{5}{8}$ " dry rockwool
Down-Heat C.044, R 22.72 = 9" dry rockwool

NOVEMBER 1952

This discussion is amplified in Schwartz's "Simplified Physics of Vapor and Thermal Insulation."

Infra Insulation, Inc., 525 Bway., N. Y. C. Dept. B-11
Please send FREE "Simplified Physics of Vapor and Thermal Insulation."

Name _____

Firm _____

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INFRA INSULATION, INC.
525 Broadway, New York, N. Y.

technical guide

for builders and craftsmen

(Continued from page 56)

means the leakage of air through a window from the inside to the outside of a structure. Filtration means the leakage of air through a window in either direction.

The leakage of air through a window is dependent upon a combination of many factors which make it difficult to accurately determine the exact quantity of air filtration. Some of these factors are the variables resulting from the construction of a window, such as edge and face clearance and whether or not the window is weatherstripped. Other factors are variables which occur following the installation, such as the shrinkage of a window and whether or not the window is locked.

The rate of air infiltration through the windows is also dependent upon the wind velocity. The impact pressure of the wind causes a pressure drop across the windows; and as a result, air infiltrates through the windows on the windward side and exfiltrates through the windows on the leeward side of the building. If the resistance to air movement offered by the windows is the same on the leeward side as on the windward side, a build-up of pressure occurs within the building.

By definition, the term par-infiltration is the rate of air infiltration in cubic feet per hour per foot of crack at a pressure drop through the window of 0.20 inch or an equivalent wind velocity of 20.4 miles per hour.

Windows are classified as follows:
Well Fitted— $\frac{1}{16}$ -inch edge clearance and $\frac{1}{32}$ -inch face clearance.

Average Fitted— $\frac{3}{32}$ -inch edge clearance and $\frac{3}{16}$ -inch face clearance.
Poorly Fitted— $\frac{1}{8}$ -inch edge clearance and $\frac{1}{16}$ -inch face clearance.

A graphical comparison of the effect of window fit on air infiltration through windows is shown in Figure 15. These results illustrate the importance of window fit in controlling infiltration through non-weatherstripped windows.

The comparison of the air leakage ratio for par-infiltration based upon the average fitted window is shown in Table V for the well fitted and poorly fitted window.

The par-infiltration rates for each class of window fit—well, average, and poorly fitted for weatherstripped windows are given in Table VIII. These are for windows in an unlocked position with no storm sash. The

average weatherstrip effectiveness for all types of fitted windows is approximately 5.8. In other words the rate of air infiltration through a non-weatherstripped window is approximately six times that of a weatherstripped window. Locking a window

tightens the sash against the head and sill and holds the meeting rails firmly together. Since the crack at these three points constitutes approximately 40 per cent of the total crack, locking the window may serve to hold it at a constant value for any window fit.

Table V. Par-infiltration for Non-weatherstripped Windows (Unlocked—no storm sash)

| Type of Fit | Par-infiltration,* cfh / ft of Crack | Ratio† |
|-------------|---|--------|
| Well | 61 | 0.59 |
| Average | 104 | 1.00 |
| Poorly | 163 | 1.57 |

* At a pressure of 0.20 inch of water (20.4 mph wind velocity).
 † Based upon average fitted windows.

Table VIII. Par-infiltration for Weatherstripped Windows (Unlocked—no storm sash)

| Type of Fit | Par-infiltration,* cfh / ft of Crack | Ratio† |
|-------------|---|--------|
| Well | 14.2 | .85 |
| Average | 16.7 | 1.00 |
| Poorly | 23.8 | 1.43 |

* At a pressure of 0.20 inch of water (20.4 mph wind velocity).
 † Based upon average fitted window.

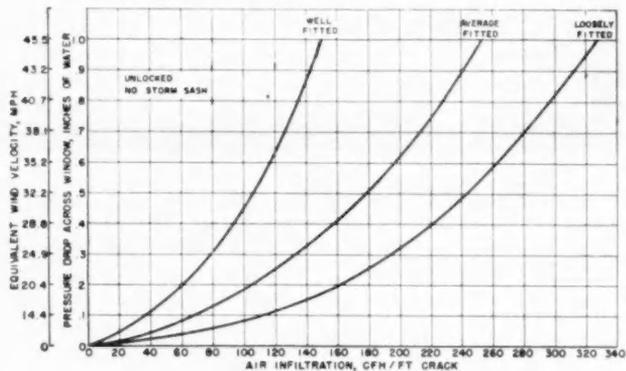


Figure 15. Infiltration for Non-weatherstripped Windows

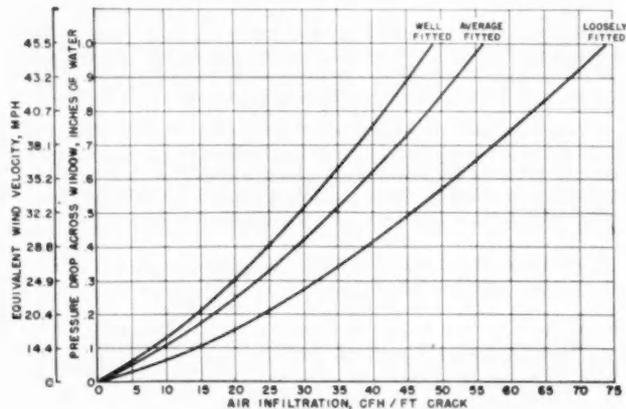
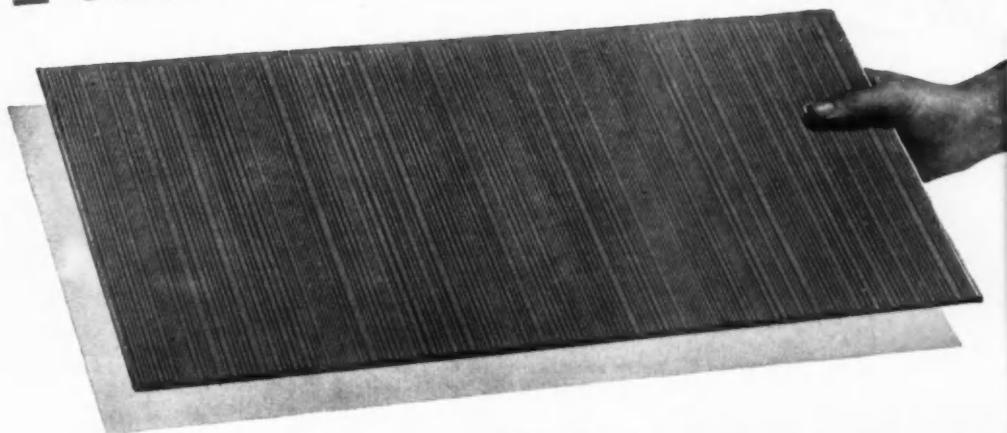


Figure 20. Infiltration for Weatherstripped Windows



**NOW! Cash in on the
nationwide boom in
Exterior Color**

NEW profit-builder from Asbestone



- ✓ **New deep-grain texture!**
- ✓ **New color harmony!**
- ✓ **Same lifetime durability!**
- ✓ **Same low price!**

CHROMA-TEX SIDING SHINGLES have a deep, natural-looking texture. Color is two-toned—dark in the valleys, light on the ridges—for a pleasing *new* kind of decorating effect that lends itself perfectly to modern color-planning ideas for exteriors. Like all Asbestone products, *Chroma-Tex* Siding Shingles are rock-like in their ruggedness—fireproof, weatherproof, rot-proof, termiteproof. Made of asbestos-cement, they need no painting, no preservative treatment, no maintenance of any kind.

Put more color, more style, more **SELL** into every home you build—at no increase in cost.

Give home buyers the rich, textured effect of the costliest sidings on the market—for the same price as regular asbestos shingles.

Use any of 5 appealing CHROMA-TEX colors to style exteriors with true "decorator harmony."

ASBESTONE Chroma-Tex SIDING SHINGLES

COLORS: Twilight Gray • Poplar Green • Pheasant Brown
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Please send me samples and full information on NEW CHROMA-TEX Siding Shingles.

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ASBESTONE—Rugged as the rock it's made from

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Wallboard

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CUTS COSTS
SAVES TIME



... and it's tops in preference
with the home owner

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Dept. A-6, ORLANDO, FLORIDA

The R. J. Coffman Co. Inc.

technical guide

for builders and craftsmen

how to make a projecting corner fireplace

The fireplace located in a projecting corner of the room offers something "different" in fireplace design. Its advantage is that it breaks a severe vertical line in the interior and offers a wider view of the flame. While the visual effect is unusual, the same heat delivery and draft control found in typical fireplaces should not be expected. No real difficulty should result, however, if properly constructed.

Such a fireplace requires a special damper which is, nevertheless, a stock item. To provide for it, the fireplace is given a wide throat and squared ends, capacity being calculated by treating the sum of the front and side openings as the total opening in relation to damper and flue.

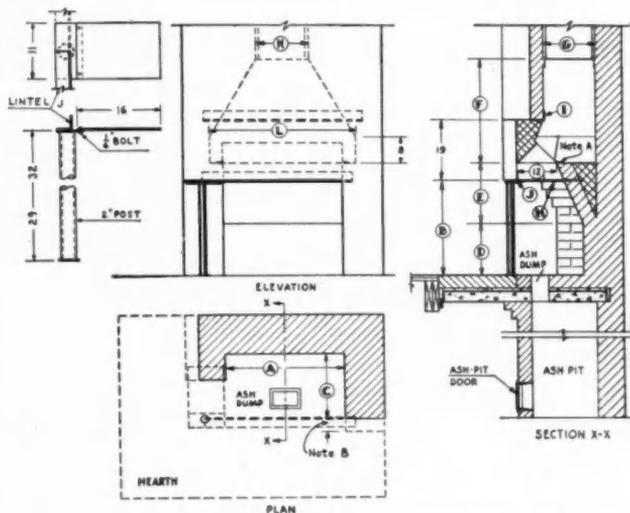
NOTE A—The back flange of the damper must be protected from intense heat by being fully supported by the masonry. At the same time, the damper should not be built in

solidly at the ends but given freedom to expand with heat.

NOTE B—The drawing indicates the thickness of the brick fireplace front as four inches. However, no definite dimension can be given for this because of the various types of materials that can be used, such as marble, stone, tile, etc., all having varying thicknesses.

Unless the rough masonry is of the same material as the facing, it is recommended to install the rough masonry before the facing, as shown in the drawings.

If the structural and face masonry are built in separate operations, the combined thickness is likely to be 13 inches at the projecting end, including structural wall, damper support and facing. An 11x14 inch lintel plate is therefore furnished as standard. Where finished fireplace is to be erected in one operation, a seven inch wide lintel is provided.



| Old Flue Size | | New Flue Size | | Damper | Ash Dump | Ash-Pit Door | Upper Angle | Angle and Plate Lintel | | Corner Post | | | | | | | |
|---------------|----|---------------|----|--------|----------|--------------|-------------|------------------------|----|-------------|-----|----|--------|----|----|---------|----|
| A | B | C | D | | | | | E | F | | G | H | I | J | K | | |
| 32 | 29 | 16 | 14 | 20 | 32 | 13 | 13 | 12 | 16 | 40 | 532 | 58 | 12 x 8 | 42 | 42 | 11 x 10 | 29 |
| 36 | 29 | 16 | 14 | 20 | 32 | 13 | 18 | 16 | 16 | 44 | 536 | 58 | 12 x 8 | 42 | 48 | 11 x 10 | 29 |
| 40 | 29 | 16 | 14 | 20 | 35 | 13 | 18 | 16 | 20 | 48 | 540 | 58 | 12 x 8 | 54 | 54 | 11 x 16 | 29 |
| 48 | 32 | 20 | 14 | 24 | 40 | 13 | 18 | 16 | 20 | 56 | 548 | 58 | 12 x 8 | 60 | 60 | 11 x 16 | 32 |

Drawings and data courtesy The Donley Brothers Co., Cleveland, Ohio.

AMERICAN BUILDER

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... if
it has
an
automatic

Electric Range!

I have my own ideas about what should be included in a house. If a builder wants to sell me, he must remember that. I need equipment that will save me time and work—and in the kitchen that means the efficiency of an *Electric Range!*

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MR. MICHAEL CAMPANELLI of the Natick Building Company, Natick, Mass. "We consider this range an important selling feature. It always attracts the ladies. They not only admire it, but can't keep their hands off it. They go for it in a big way because they already know it means a saving on work and operating cost, and a cool, clean kitchen. We always have house sales 'cooking' with the help of this appliance."

► Every kitchen in the Wethersfield-at-Natick development has an automatic clothes washer, built-in ventilating fan, and steel cabinets. And the range—of course, it's **ELECTRIC!**

► The Natick Building Company is creating a 300-home community of beautiful 3-bedroom ranch-style homes selling for \$13,500, fully equipped. These builders have found it good business to include the Electric Range and other appliances in the home package.



EQUIP
YOUR HOUSES WITH

ELECTRIC RANGES



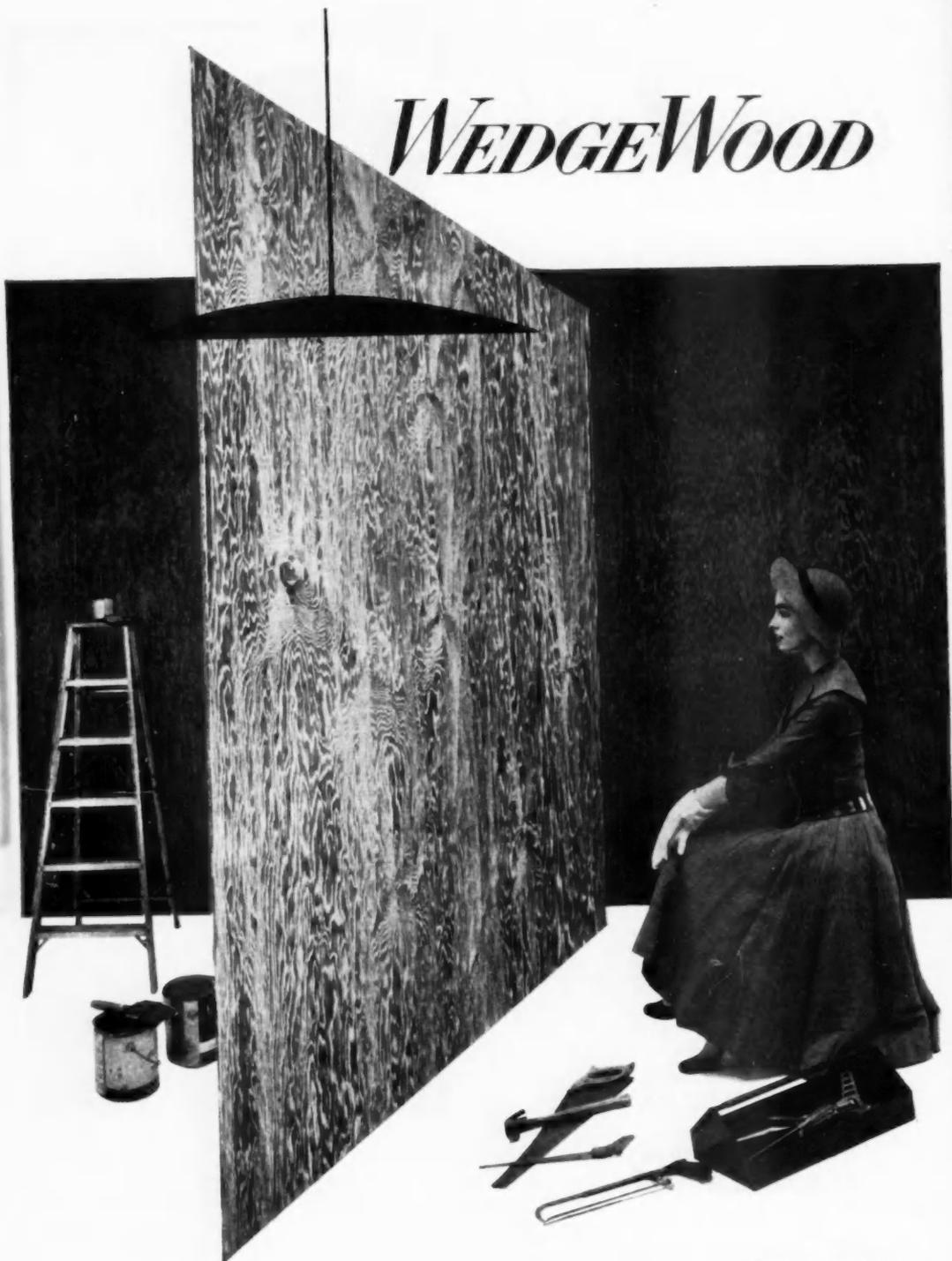
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WedgeWood is produced in two types . . . *Burly* and *Knotty*, each with a distinctive character. The rich texture and character marks create unusual color effects when painted. Subtle or dramatic two-toned effects can be obtained by applying light paints on dark or dark paints on light. Use WedgeWood for dramatic interior styling in homes, offices, stores, cocktail lounges, etc.



See WedgeWood at your lumber dealer's or write on your letterhead for WedgeWood folder. Georgia-Pacific Plywood Company, 617-11B North Capitol Way, Olympia, Wash.



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DOUGLAS FIR PLYWOOD • HARDWOOD PLYWOOD
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WedgeWood *Burly* has a refined, fairly uniform grain with many of nature's character marks and each panel may contain up to four small knots, each no larger than a dime.

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RESIN-SEALED—Comes with a slightly pigmented sealer . . . ready for finishing. When painting, one coat will cover, but two coats in contrasting colors create more dramatic effects.

EASY INSTALLATION—4 by 8 foot panels, 5/16 inch thick, go up fast. Each carton contains complete application and finishing suggestions.

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WedgeWood *Knotty* provides interesting variety in the tight knots and grain swirls that result, plus other natural growth characteristics that help produce dramatic effects when painted.





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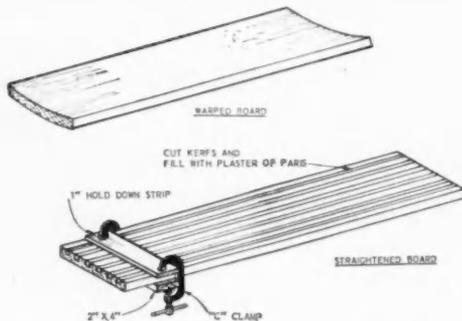
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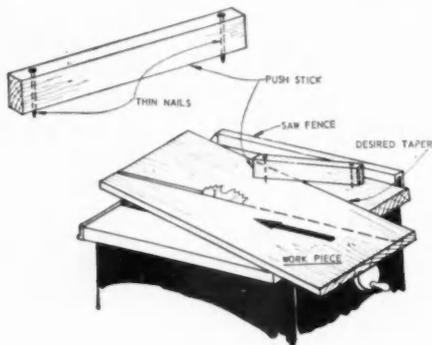
**NATIONAL ASSOCIATION OF HOME BUILDERS
Convention & Exposition Headquarters
111 W. Jackson Blvd., Chicago 4, Ill.**

how would you do it? ideas for the man on the job



warped boards made usable

Warped boards can be made usable by saw kerfing one face to a depth of 1/3 the thickness of the board. Fill the kerfs with plaster of Paris while the board is clamped down with C clamps. A 2x4 and a 1-inch piece hold the strip flat until the plaster sets. This takes about five minutes.—Werner Kraatz, Santa Cruz, Calif.



to duplicate tapers on table saw

To duplicate tapers, cut a pushing stick approximately 1x4x12 inches long. Drive two thin nails through the stick. Cut off the portion of the nails that protrude through the bottom of stick so that the nails extend only 1/4 inch below. File this portion of the nails to a sharp point.

Place the sample piece of taper or wedge alongside the rip fence of table saw. Place the stock or work piece that is to be cut alongside the sample wedge. Set pushing stick down so the prongs will get hold of both pieces.—Werner Kraatz, Santa Cruz, Calif.

WHAT'S YOUR BUILDING PROBLEM?—Insulation? Condensation? Damp basements? Whatever it is, let the Experts help solve it by writing today to "Ask the Experts," American Builder, 79 W. Monroe St., Chicago 3, Ill.

HOME MERCHANDISING



NEAR ARLINGTON, VIRGINIA, a new development known as Vienna Woods has been offering 67 three-bedroom houses in the \$16,000 range. Unusually attractive features indicate the careful sales planning.

SALES FROM VIENNA WOODS

"Westinghouse Kitchens . . . One of the Biggest Selling Factors", Says Builder Yeonas

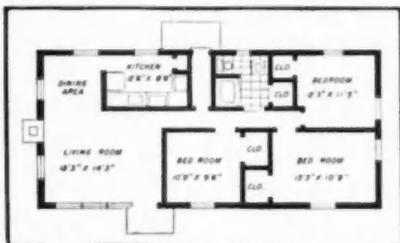
All over the country the building field is seeing a rapidly increasing trend to the sound merchandising of homes. No longer is it profitable to offer merely a house; extras with high "buy appeal" are becoming the order of the day. Indicative of this trend is the statement of Mr. Stephen G. Yeonas, President, Vienna Woods Corporation, "We have found Westinghouse Kitchens add quality and desirability to our homes."

For full details on how you can merchandise your homes with Westinghouse Appliances, call our nearest distributor or write direct.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division • Mansfield, Ohio



SAMENESS IS ELIMINATED by allowing an extensive choice of twenty different exterior designs. Lots, too, are amply sized.



A TYPICAL FLOOR PLAN indicates the importance the builder gives to the kitchen in relation to the balance of the living space.



WESTINGHOUSE APPLIANCES hold the kitchen spotlight: the under-counter dishwasher and refrigerator (shown above) plus the Rancho range and 52-gallon electric water heater.

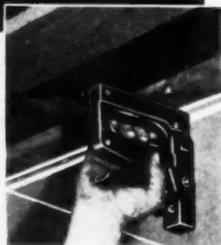
YOU CAN BE SURE... IF IT'S **Westinghouse**

Give your
new men the
speed of
your best men

BOSTITCH T5 TACKER

Speeds up scores of fastening jobs. Manufacturers of ceiling tile recommend Bostitch T5 Tackers, after extensive tests. Builders who use Bostitch T5 report time savings up to 50% over hammer-and-nails.

T5 loads easily with over 80 staples. Powerful action drives staples with leg lengths from $\frac{1}{4}$ " to $\frac{3}{8}$ ". Can place staples within $\frac{1}{8}$ " of inside corners.



BOSTITCH H2B STAPLING HAMMER

For high-speed tacking and light nailing jobs. Three times as fast as hammer-and-tacks. One-hand operation leaves other hand free to hold work.

One blow with H2B drives $\frac{1}{4}$ " or $\frac{3}{8}$ " staples into hard or gummy wood. H2B $\frac{1}{2}$ " drives $\frac{1}{2}$ " staples. Use them to put up insulation, metal lath, cornerite, under-felt or sheathing paper.



Send Coupon for Free Bulletins on T5 Tacker and H2B Stapling Hammer

BOSTITCH®

AND FASTER
fastens it better, with wire

I'm interested in more information about how Bostitch can help me save time and money on applying

- Insulation Paneling Building Paper
 Cornerite Roofing

Name _____

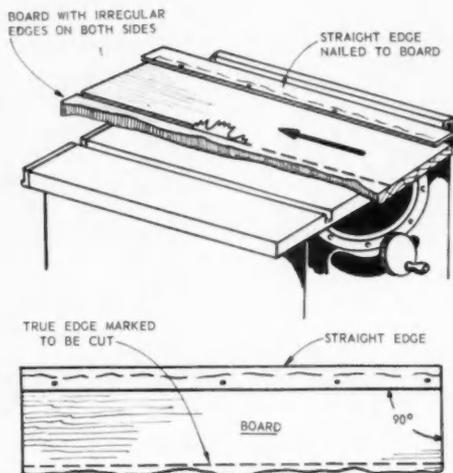
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City _____

BOSTITCH
831 Mechanic Street
Westerly, R. I.

Zone _____ State _____

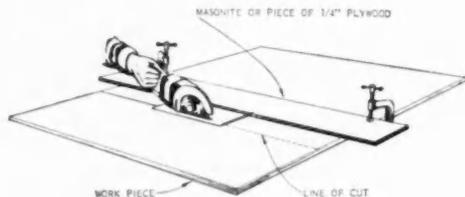
how would you do it? ideas for the man on the job



obtaining straight edge on lumber

To obtain a true, straight edge on lumber when using a table saw, tack a straightedge to the piece of lumber that is to be worked so the straightedge will protrude along the entire length of one side.

Set rip fence to the width of narrowest part of work and run lumber through saw with straightedge guiding the work along fence. When finished remove the straightedge and turn work over to cut the other edge.—Werner Kraatz, Santa Cruz, Calif.



a guide for cutting large panels

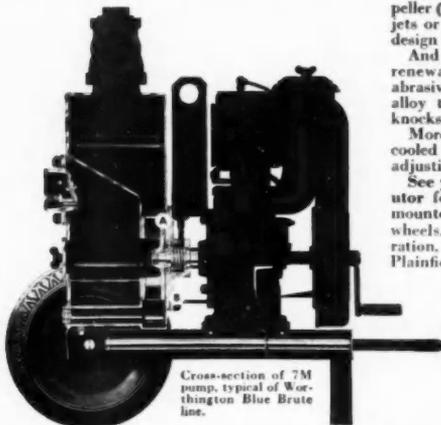
When cutting a large piece of plywood or a similar material, a straight cut can be made with an electric hand saw by clamping a thin piece of plywood or Masonite to the larger piece that is to be cut and using the thin piece as a guide.—R. L. Rogers, New Britain, Conn.

CASH FOR JOB SHORTCUTS—American Builder will pay five dollars (\$5) in cash for each shortcut or job pointer accepted for publication. Send all material to the Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill.

AMERICAN BUILDER

Simplest, sturdiest, most economical contractor's pump ever built

**MADE BY THE WORLD'S
LARGEST PUMP MANUFACTURER**



Cross-section of 7M pump, typical of Worthington Blue Brute line.

It takes Worthington's unequalled experience to give you the most in a self-priming contractor's pump.

Look—only two moving parts, the impeller (A) and shaft seal (B). And no ports, jets or valves to clog. That's the kind of design that keeps you out of trouble.

And look at the materials. Impeller and renewable wear plates made of special abrasive-resisting alloy . . . casing is a steel alloy that defies rust, erosion and hard knocks.

More trouble-savers: easy-starting air-cooled engine . . . fully-enclosed and self-adjusting dual shaft seal.

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Popular Worthington 1M has earned contractors' enthusiastic O.K. on all sorts of jobs. Has fabricated all-steel casing to take roughest service, yet weighs less than 75 lb. Hand carriage also available.

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regardless of weather



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There's no reason why your winter schedules should be upset by bad weather this year. You can keep your jobs moving and your workers more comfortable if you put Herman Nelson Portable Heaters to work for you. These furnaces on wheels provide clean, pure, hot air to warm your workers, protect concrete pours, thaw machinery, dry plaster—do scores of other heating and drying jobs.

The only completely safe portable heater that uses flexible ducts to spot heat where most needed—and remember, only uncontaminated air heaters are absolutely safe!

Contractors all over the country are investing in Herman Nelson Portable Heaters. Many find that these units pay for themselves during the first winter. Investigate how you can beat winter weather on your job. Mail the coupon below for full information.



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HERMAN NELSON

Herman Nelson Division, Dept. 53
American Air Filter Company, Inc., Moline, Illinois

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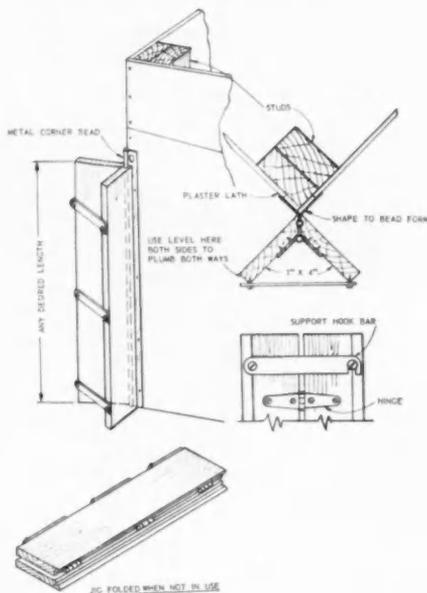
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City _____ State _____

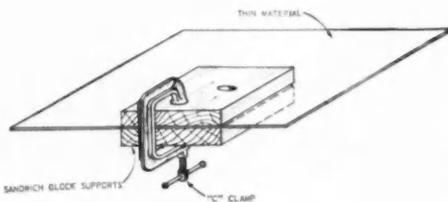
68

how would you do it? ideas for the man on the job



setting metal corner beads

With this jig a corner bead can be set straight and plumb, giving the plasterer a perfect corner to work to. The jig is partially collapsed by releasing the hook bars, slipping the metal bead into the groove provided for it, expanding the sides and then dropping the hooks in place. Push the metal selvage over the corner, plumb it both ways as indicated, and nail it fast. Unhook and slip the jig off the corner bead and the job is expertly and quickly done.—A. G. Gish, Enterprise, Kansas.



boring holes in thin material

When boring holes through thin material such as plywood veneer, place a block of wood on each side, hold the blocks in place with "C" clamps and then bore through blocks. With the veneer in between the blocks the cut by the bit is clean and smooth with no ravel or splinters.—L. E. Myles, Beggs, Okla.

AMERICAN BUILDER



Extra-strong, lightweight coils of Bundyweld Tubing are easily mounted onto ceilings. Lying flat and straight, coils are quickly plastered over, with small chance of damage from rough handling or accidental hammer blows.



Add a new sales clincher to your houses—

Bundyweld Ceiling Radiant Heating

Nowadays, every modern house features an eye-catching tiled bathroom and streamlined kitchen.

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Here's a system that's already a big hit with thousands of enthusiastic users. They've gone on record with praise for this clean, economical and convenient way to heat homes. Just imagine telling your prospect that he can have walls without dirt streaks, even warmth, free-

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That same prospect of yours could well be one of the millions who have already seen Bundy ads in *Better Homes & Gardens* and *American Home*. Those readers have sent in an avalanche of coupons requesting literature—and the names of builders and architects handling Bundyweld Ceiling Radiant Heating in their communities. For more details, mail coupon below.

**Radiant Heating Division
BUNDY TUBING COMPANY
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SIZES UP
TO 1/2" O.D.

Key to Low Cost

Bundyweld is the only tubing double-walled from a single strip, copper-brazed through 360° of wall contact. It's leak-proof, thinner walled, yet stronger. It transmits heat quickly, has high bursting strength. It saves on material costs and installation time.

Standard 20' or 24' lengths of Bundyweld are easily formed into coils in shop or on job site. Expanded ends (furnished when specified) are quickly soldered into leakproof union. Joined, lightweight coils are easily mounted onto ceiling, quickly plastered over.

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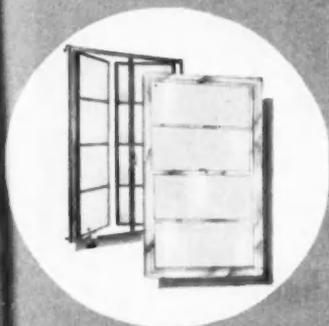
- Send free 20-page nontechnical brochure explaining Bundyweld Ceiling Radiant Heating.
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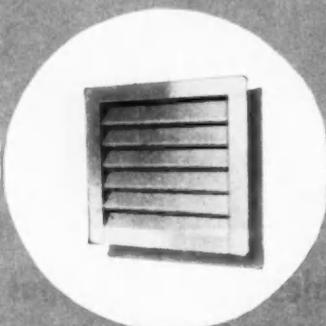
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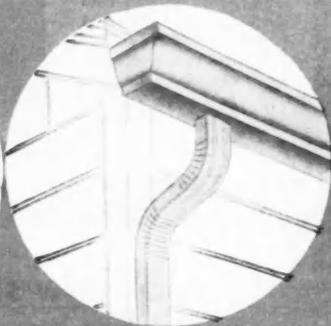
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Ceco windows let dry air in
...moisture out



Ventilators circulate air
...reduce humidity



Rain goods drain roofs
...keep water outside

How CECO products

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"What can I do to stop condensation?"

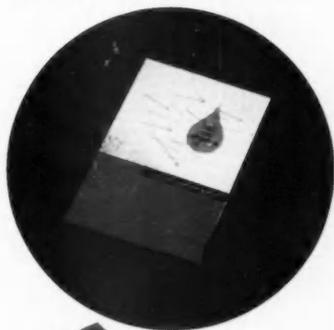
Many times no doubt.

To help you answer this bothersome
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The result . . . a comprehensive booklet
showing 10 ways to reduce excessive moisture vapor.

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living conditions increase humidity.
It shows how Ceko products like metal windows
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by circulating air . . . how rain goods
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10 ways to control condensation



control condensation

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Water, Water, Everywhere.

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City.....

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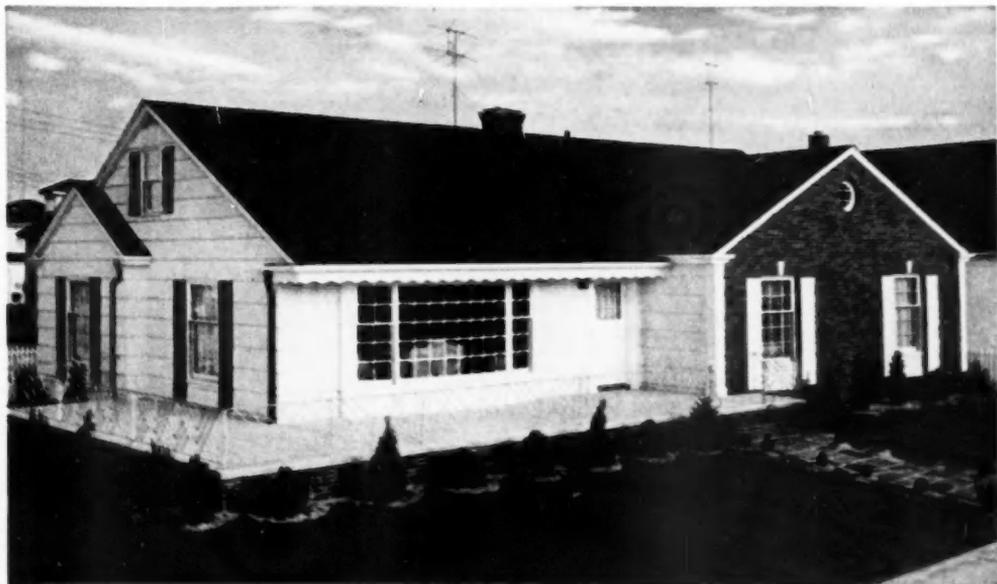
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And to top it off—a WOODTEX roof!



The finest building products in America were selected for this dream home. And to top it off—Woodtex asphalt shingles were chosen from the entire field of roofing materials available.

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Mosaic Clay Tile is the leading feature of House Beautiful Magazine's 1953 "Pacesetter House." This same Mosaic Tile will add value to the houses you build . . . of any size, at any price.

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6229 West Girard Avenue
Phone: Granite 4-7116

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Phone: Fillmore 3717

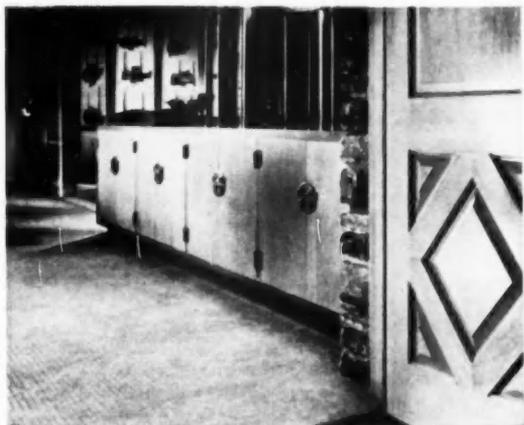
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560 Gale Street
Phone: 9-8285

San Francisco 24, Calif.
245 Loomis Street
Phone: Valencia 6-3924

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538 First Avenue, So.
Phone: Mutual 2213

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Smartly textured Mosaic tiled gallery floor gives utter freedom from wear and care.



Practical velvetex tile barbecue oven, cook bar, dining room and patio. Wipes clean, saves work, delights guests.



Tub or shower, splashing or spilling can't harm this bathroom's Velvetex floor and Mosaic bright glaze tile walls.

PHOTOS BY MAXWELL L. PRINER AND RUDOLPH E. LEFFERT, JR.

Dua-Laps are hewn from nature's greatest insulator.. RED CEDAR.

Millions of tiny air cells in every inch seal out cold and heat, seal in room comfort! Slash fuel bills a third and combine beauty with economy!



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DOUBLE LAP SHINGLES
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Now All Dua-Lap* colors are finished with the infra-red baked-on process for a more durable finish.

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AMERICAN BUILDER

SOLD! SOLD!

Bamboo Trim Accents Upson Panels

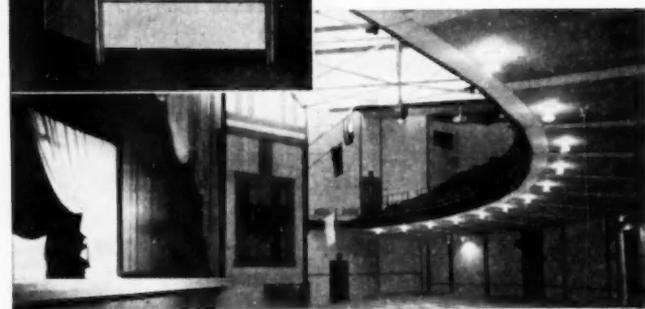
Louisiana Sugar Cane Festival Boasts Giant New Exhibition Building



Visitors to the Louisiana Sugar Cane Festival, an annual celebration held at New Iberia, Louisiana, were greeted this year by a new and modern Exhibition Building featuring an unusual bamboo trimmed interior.

Credit for the impressive structure goes to the architect, Owen James Southwell. For the interior of the building both front and back stage—Mr. Southwell selected Upson Panels because of their beauty, long-wearing qualities and economy.

◀ *The bamboo trim and moldings lend an original accent to the panels.*



75,040 SQUARE FEET of Upson Panels, secured with 40,000 invisible Upson "Floating" Fasteners, were used in the giant exhibition building.

Dealers Enthusiastic about Ceiling Tile, Striated Panels

An ever growing awareness of the sales potential of both Upson Ceiling Tile and Striated Panels is apparently responsible for the marked enthusiasm for these products among dealers and their salesmen.

In the opinion of dealers, the water-proofed and washable features of the ceiling tile is the big selling point; next in importance is the foolproof installation method with matching color pins which prevents sagging. The fast growing trend to more modern interiors—in remodeling and new construction—and the interest in contrasting wall surfaces is causing the accelerated demand for Striated Panels, the dealers say.

Transfer Company Problem Solved With Upson Panels!

The Jasper Transfer Company of Memphis, Tennessee, had an expensive problem. The wardrobe cases which they used for transporting clothing were too flimsy to withstand the hard usage and too expensive to be discarded after each job. The Company had difficulty finding a substitute, however, and the problem remained unsolved until they discovered Upson Panels. Now they make their own wardrobe cases out of Strong-Bilt Panels. The initial cost is less and the wardrobes can be used time and time again.



SSIRCO Says Upson Products Lead the Field

Southern States Iron Roofing Company with General Offices in Savannah, Georgia, is a wholesale distributor of building materials which serves 10,000 retail dealers from sixteen strategically located warehouses in the southeast. By exercising a strict merchandising and



Lee Bartholomew

dealer service policy, Southern States has progressed steadily. Today it stands as one of the foremost suppliers of quality building products.

"Through our thirty-eight years of progress," says Lee Bartholomew, Vice President of Sales for the company, "it has always been our policy to sell only the highest quality building materials. We are proud to offer Upson Panels to the building industry. Customer satisfaction has proven Upson products to be a leader in the field.

"When we began early in our history to broaden our line of new building material products," explains Mr. Bartholomew, "we kept in mind that quality was of the utmost importance. Rigid new standards of quality were established, and modern improved manufacturing methods were adopted. We always have kept, and will continue to keep, our standards high."

Prompt and efficient service for dealers from sixteen strategically located warehouses has sparked the growth and progress of Southern States Iron Roofing Company and won wide respect for the SSIRCO trademark.

THE HONOR ROLL

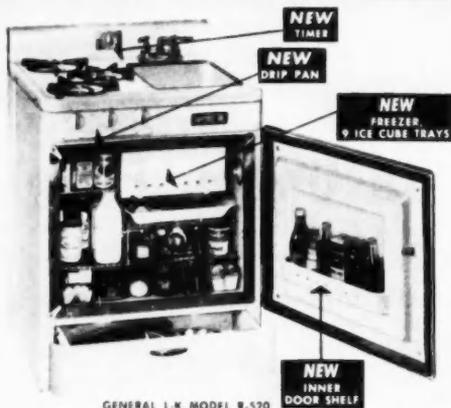
Mr. Don Haines, Manager, the Cedarville Lumber Company, Cedarville, Ohio, adds his name to the list of dealers who have selected Upson Panels for their own new homes.

THE
UPSON
COMPANY



World's Largest Maker
of Fibre Wall Panels

8111 Upson Point, Lockport, New York



GENERAL L.K. MODEL R-520



GENERAL MODEL RS-1004

SAVE DOLLARS... SAVE SPACE with the NEW General Kitchens

A COMPLETE KITCHEN: REFRIGERATOR, COOKING-TOP, SINK
Has horizontal freezer, 9 ice-cube trays, inner door shelf. In 27½" combines refrigerator, sink, storage drawer and 3 gas burners adjustable to natural or bottled gas. Also available with electric burners for 220 v. or 110 v.

COOK ON YOUR REFRIGERATOR. General Chef—now is standard 36" height. Requires only 4.1 sq. ft. of space.

.....
These units advertised in **LIFE**



5 YR. GUARANTEE

Distributors — Dealers — Builders — write:

4538-C E. Dunham St. • Los Angeles 23, Calif.
Chicago Office: Dept. 15, 323 W. Polk St.



**FIRST AGAIN AMWELD® STEEL
KNOCKED-DOWN SLIDING CLOSET DOOR UNIT
NOW AVAILABLE IN**

NEW BIRCH FINISH

PLUS these new features

- NEW** all hardware simply snaps in place.
- NEW** two large non-tarnishing plastic door pulls snap in each panel.
- NEW** lifetime nylon rollers provide easy, silent operation.
- NEW** self-adjusting spring held nylon guide-keepers assure ease of operation and prevent sway and derailing.

(Patent Applied For)

The original AMWELD Knocked-Down Steel Sliding Closet Door Units score again with door panels finished in baked enamel birch grain. No other finishing required. Baked enamel is enduring and so easy to clean and keep clean.

SEND YOUR ORDER TODAY TO INSURE PROMPT SHIPMENT

AMWELD Steel Sliding Closet Door Units are still available with grey baked on prime coat.

Now matches flush birch swing doors—and look at the space you save... 6 to 9 square feet of floor space.

Everything complete in one carton. All hardware snaps easily into position. Easy-to-follow instructions enclosed. Available for 3 ft., 4 ft., 5 ft., and 6 ft. openings—two by-passing panels for each size.

AMWELD BUILDING PRODUCTS DIVISION

THE AMERICAN WELDING & MFG. CO.
310 DIETZ ROAD • WARREN, OHIO



KOHLER PLUMBING FIXTURES

are used in the 1952 House Beautiful

PACE SETTER HOUSE



*Kohler Cosmopolitan Bench Bath in bathroom
off study*

PLUMBING FIXTURES • HEATING

Owners: Mr. & Mrs. Richard A. Hofer

*Architects: Henry L. Eggers and Eugene Schoen
and Sons, New York City*

*Plumbing Contractor: John R. Philip, Inc.,
Scarsdale, New York*



In three bathrooms and a laundry, Kohler plumbing fixtures and fittings contribute to the modern comfort, beauty and convenience of the Pace Setter house featured in the November issues of House Beautiful and American Builder. Fixtures used are the Cosmopolitan Bench Bath, Arrowhead built-in lavatory, Trylon and Placid closets and Elswick laundry tray.

Kohler Co., Kohler, Wisconsin. Established 1873

KOHLER OF KOHLER

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NEW 1/4" DRILL BY PORTER-CABLE

PORTER-CABLE
Guild

Feature for feature this new drill scores highest...

...yet costs only **\$28.50!**



Compare

... This new Guild general-duty Drill with any other quarter-incher in its price range. Built into it are the results of 7 years of nationwide surveys, engineering development and field testing. Everything you drill users want in a drill is included. Compare—add up the score—you'll quickly see why you get more bonus features... more true value for your money!

| | Guild Drill | Other Drills | | |
|---|-------------|--------------|-----|-----|
| | | A | B | C |
| 1 True-centering Jacobs Multicraft Chuck | Yes | Yes | Yes | Yes |
| 2 2200 RPM — most practical for general purpose drilling | Yes | Yes | — | — |
| 3 Non-block Air Vents — never covered by left hand | Yes | — | Yes | — |
| 4 Low-slung housing — permits drilling within 7/8" of vertical surface | Yes | Yes | — | — |
| 5 Trigger Lock under right thumb for instant control | Yes | — | Yes | — |
| 6 Strain Reliever — prevents cord kinking and pulling out | Yes | Yes | Yes | Yes |
| 7 Full Power — drills 1" bar stock in 2 min.; 1" hardwood board in 1 1/4 min. | Yes | Yes | — | — |
| 8 Longer, more comfortable full-hand Pistol Grip | Yes | Yes | — | Yes |
| 9 Easily accessible Quik-Change Brushes | Yes | Yes | Yes | — |
| 10 Convenient chuck key strap included | Yes | — | — | Yes |
| 11 Compound reduction gears | Yes | Yes | — | Yes |
| 12 Spindle ball bearing absorbs radial and thrust load | Yes | — | — | — |

GET YOUR MONEY'S WORTH!

When buying a new drill, score the Guild against all other 1/4" general duty drills. Comparison proves Guild is your better buy! New 1/2" Drill also available.

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• Or, write for free descriptive folder with comparison chart and name of nearest dealer. PORTER-CABLE Machine Co., 7111 N. Salina St., Syracuse 8, New York. In Canada write: Strongridge, Ltd., London, Ont.



What can a builder learn from a two-toed sloth?



THE SLOTH is a slow-moving, exclusively arboreal edentate mammal. It inhabits the tropical forests of South and Central America. Its limbs are long and provided with long curved claws. The ears and the tail are rudimentary. The hair is long, coarse, and crisp, greenish brown or gray in color, closely harmonizing with the moss and foliage in the trees. The sloth hangs from the branches back downward in order to locate choice leaves, fruits and berries on which he feeds to his heart's content.

Yes, the sloth looks *under* the coverage to get at the real value he's after. Builders who look *under* the roof covering they use will also find the meat of an important coconut! Under most types of roof covering, they find that *solid* sheathing is an absolute requirement. Under a cedar shingle roof, sheathing boards are spaced so that only half as much lumber is required.

Yes, the cost of spaced sheathing is only about half as much as solid sheathing. And it costs much less to apply! You can count on saving about \$200 on sheathing and its application when you roof this year's typical house with *cedar* shingles. Normally, you will find that this saving more than makes up for the difference in cost of quality cedar over substitute material.

Now—sharpen your pencil. Figure it out for yourself. Figure the comparative costs of *cedar shingles laid on spaced sheathing* as against *substitute roofing applied on solid sheathing*. You'll find that savings on sheathing make a roof of CERTIGRADE cedar shingles a very economical buy. For your free "Roof Cost Estimating" form, write:

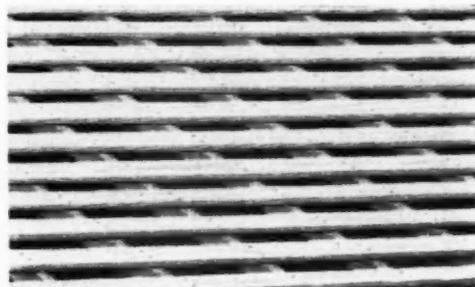
RED CEDAR SHINGLE BUREAU

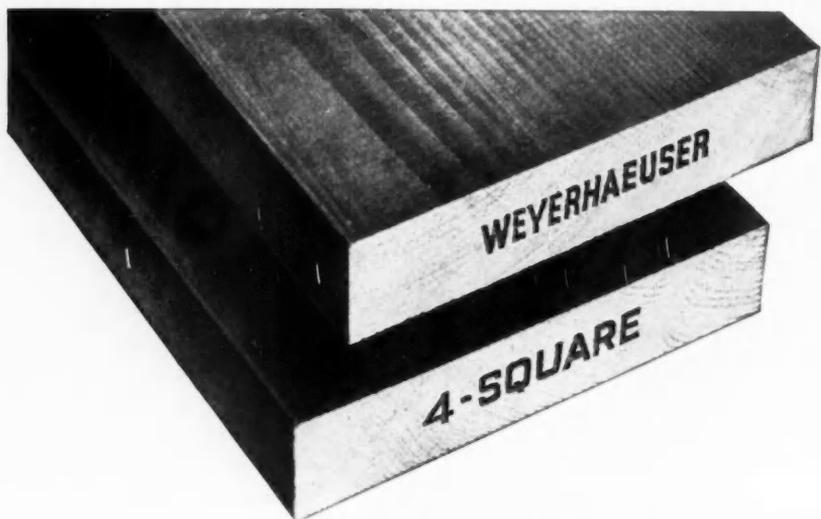
5510 White Building, Seattle 1, Washington

509 Metropolitan Building, Vancouver 1, B. C., Canada



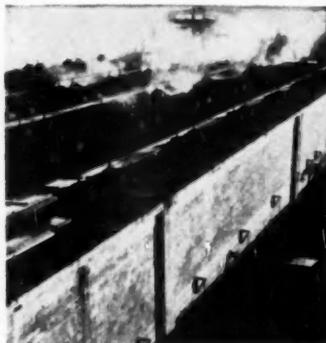
Half the lumber, half the labor — you save when you build roofs with genuine CERTIGRADE red cedar shingles





THIS BRAND NAME ON LUMBER MEANS . . .

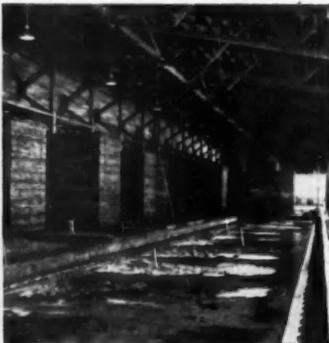




To control the rate of drying, moisture is actually added to air inside these modern kilns.



Sample pieces of wood in kilns are carefully weighed to check moisture content.



Cooling shed at discharge end of kiln battery. Lumber is held here to equalize at normal use temperatures.

Controlled Kiln-Drying...the Key to Lasting Satisfaction

Whenver a construction job is started, the owner will be greatly comforted by positive answers to these questions: Will the lumber hold its size and shape after nailing? Will it have maximum strength, hardness, and stiffness? Will it age handsomely, and not develop stains? Will it take and hold paint?

These are all important factors, if the owner is to enjoy lasting satisfaction from his building. And each one of these factors is closely related to the drying of lumber. Consequently, scientific drying is a controlled step in the manufacture of Weyerhaeuser 4-Square Lumber.

At Weyerhaeuser mills lumber is dried in large, ultra-modern kilns. This method, under accurate control, saves much time, and results in proper and uniform dryness. It also makes possible the lower moisture content essential for many uses of lumber.

Lumber as cut from the log contains a great deal of native moisture. When this is removed the wood cells shrink. Weyerhaeuser controls this shrinkage process through precise kiln seasoning. Weyerhaeuser kiln-drying is regulated with great care and technical skill in

order to resist checking, honeycombing, warping and twisting... thus providing, through means of this important phase of manufacture, lumber products of greater utility.

Look for the Weyerhaeuser 4-Square brand name to be certain that properly seasoned lumber is used in the construction of your building.

One of a series of advertisements defining the important factors contributing to the production of good lumber.



The Everett, Washington Mill. At mills located on the West Coast and Inland Empire, Weyerhaeuser 4-Square Lumber is produced in a range of products from Douglas Fir, Idaho White Pine, Ponderosa Pine, West Coast Hemlock, Western Red Cedar and related species.

Weyerhaeuser 4-Square Lumber and Services

WEYERHAEUSER SALES COMPANY • ST. PAUL 1, MINNESOTA



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USE WINDPROOF BALSAM-WOOL Wind infiltration through Balsam-Wool® in a frame wall is less than .000203 cubic feet per square foot per hour. For complete information about Balsam-Wool application, send for free A.I.A. file folder containing informative data sheets. Wood Conversion Company, Dept. 119-112. First National Bank Building, St. Paul 1, Minnesota.

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NEW

CURTIS Woman-Styled KITCHENS

give the housewife what she wants

IN THE HOMES YOU PLAN AND BUILD!



NEW BEAUTY

Smart, simple and streamlined, the new Curtis kitchens are available with birch drawer and door fronts—ready for popular natural finishes. Or, if desired, cabinets are shipped finished in white, ready for decoration in colors of the owner's choice.



Everybody knows that in the kitchen, woman is the boss. So here's the biggest kitchen news of the year for architects and builders—a complete new line of Curtis wood kitchen cabinet units, styled and designed by women—tested by women—judged and approved by women! Thousands of women homemakers helped name the 53 big features which make the new Curtis kitchens so powerful in their appeal to women. Below are just a few of the many new features which give today's women homemakers what they want and need in kitchens.



No waste space—swing shelves in wall and base units utilize entire storage area. Women will love this feature.



Front row storage—spin shelves in wall and floor corner units bring often-used utensils within easy reach.



Extra large metal bread and cake box, with sliding cover. Easy operating, non-sticking drawers, with hardwood runs.



Base "island" unit with two pass-through drawers, large mixing board, pass-through shelf, space for large utensils.



No "scrambling"—sliding tray—Perma-Brite no-sag sliding wire shelf—deep shelf for roaster, and large utensils.

Full information

on the new Curtis kitchen cabinet units is yours for the asking—mail the coupon.

Curtis Companies Service Bureau
A-B-11 Curtis Building
Clinton, Iowa
Gentlemen:
Please send me booklet on new Curtis woman-styled kitchens.

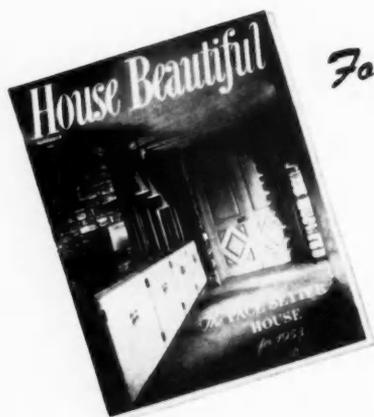
Name.....

Address.....

City..... Zone .. State.....

Curtis makes a complete line of architectural woodwork and Silentite windows for homes of all types and sizes. Make your next home "all Curtis."





For cooling and ventilating

House Beautiful's 1953 Pace Setter House Uses Hunter Attic Fans

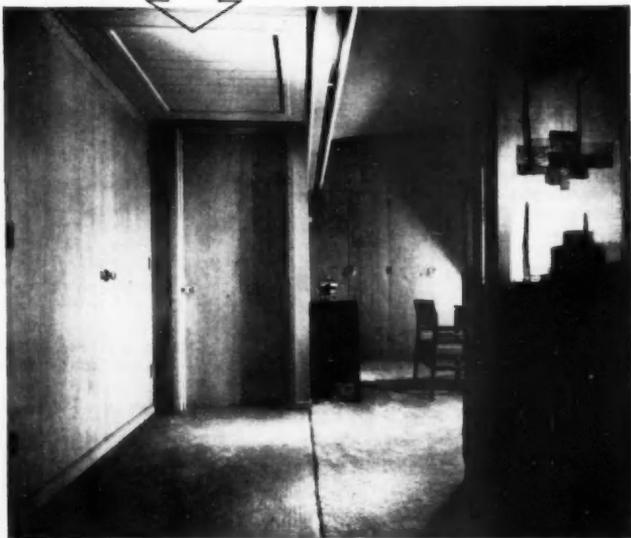
■ One of the many features of this beautiful new home in Bronxville, N. Y. is the use of Hunter Attic Fans for perfect ventilation and cool comfort in hot summer weather. This modern home-cooling system is low in cost and adaptable to any home. You have a choice of 5 sizes (from 4,700 to 16,000 CFM) to fit the home size and the climate. Easily installed fan unit is complete with automatic ceiling shutter and all accessories—no extras to build or buy.

For complete data, write for free copy of "How to Cool for Comfort."

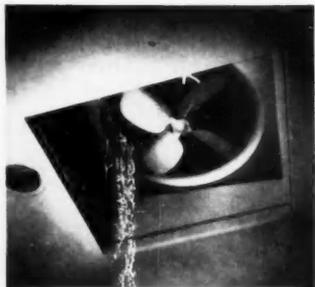


HUNTER FAN AND VENTILATING COMPANY

381 S. Front St., Memphis 2, Tenn.
Exclusive Fan Makers Since 1886



Henry L. Eggers—Architect. Westchester Construction Co., Inc.—House Contractor.



Compact Package Fan rests on attic floor of Pace Setter House. This unit is ideal for homes with low roofs as it requires less than 18" clearance.



Automatic Shutter harmonizes with modern interior of Pace Setter House. Easily installed by screw-fastening metal trim to edges of ceiling opening.



Hot air is exhausted through these louvers. Cool fresh outside air is pulled in through open windows. Result: temperature in house drops 10 to 20°.

Can we put resilient tile flooring over radiant heating?



Of course! I've been working closely with the Kentile Flooring Contractor on all my radiant heating jobs.

You can specify Kentile, Kencork and KenRubber* for most Radiant Heated installations

Specialized flooring problems call for specialized training and experience. And, no man is better qualified to help you solve the problem of selecting and installing specialized flooring than the Kentile Flooring Contractor. His years of working closely with architects and builders have equipped him with the precise knowledge needed to recommend the right floor every time...the one floor

that provides the longest wear at the lowest cost...the greatest maintenance economies.

Even if your problem results from architectural design or construction methods recently developed, the Kentile Flooring Contractor is prepared to give you valuable assistance. For his name, look under FLOORS in the classified phone directory... or write Kentile, Inc., 58 2nd Ave., Brooklyn 15, N. Y.

*"KenRubber can now be installed on grade in contact with the earth when slab is a minimum of 12" above surrounding grade."

THESE "K" FACTORS ARE YOUR GUIDE TO THE CHOICE OF RESILIENT TILE FLOORING FOR USE OVER RADIANT HEATED CONCRETE

| KENTILE | KENCORK | KENRUBBER |
|----------------------------------|----------------------------------|----------------------------------|
| 4.5 BTU/sq. ft./hr./°F/in. thick | 0.7 BTU/sq. ft./hr./°F/in. thick | 4.5 BTU/sq. ft./hr./°F/in. thick |
| 1/8" 36 BTU/sq. ft./hr./°F | 3/16" 3.7 BTU/sq. ft./hr./°F | 1/8" 36 BTU/sq. ft./hr./°F |
| 3/16" 24 BTU/sq. ft./hr./°F | 5/16" 2.2 BTU/sq. ft./hr./°F | 3/16" 24 BTU/sq. ft./hr./°F |
| | 1/2" 1.4 BTU/sq. ft./hr./°F | |

Based on the "K" factors at top of each table, heat transmission rates through the various thicknesses of KENTILE, KENCORK and KENRUBBER are shown. The "F" means that this is the transmission rate when there is 1°F difference between the top and bottom of tile. The heat transmission rate

increases proportionately with an increase in the temperature difference between the top and bottom of the tile; e.g., with 1/8" KENTILE, heat transmission rate would be 180 BTU/sq. ft./hr. if there were 5°F difference between top and bottom of tile.

Write to the nearest office listed below for FREE Folder that summarizes research data prepared to answer your questions about the use of resilient tile flooring over radiant heating.

KENTILE • SPECIAL (Greaseproof) KENTILE • KENRUBBER • KENCORK



KENTILE INC.

KENTILE, INC., 58 Second Avenue, Brooklyn 15, New York • 350 Fifth Avenue, New York 1, N. Y. • 705 Architects Building, 17th and Sanson Streets, Philadelphia 3, Pennsylvania • 1211 NBC Building, Cleveland 14, Ohio • 900 Peachtree Street N.E., Atlanta 3, Georgia • 2020 Walnut Street, Kansas City 8, Missouri • 4522 South Kalin Avenue, Chicago 32, Illinois • 1113 Vine Street, Houston 1, Texas • 4501 Santa Fe Avenue, Los Angeles 38, California • 452 Statler Building, Boston 16, Massachusetts

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*the complete line of sales proven
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Bennett—and only Bennett—offers you a complete line of fast-moving, profit-building fireplace supplies. So, when you standardize on Bennett, you can combine purchases—take advantage of top discounts. And...customer acceptance of Bennett fireplace products is as complete as the line itself. Recognized quality...continuous national advertising... assure that!

Let us tell you why you save money... in larger discounts, lower transportation costs, bigger dollar sales, faster turnover... when you sell Bennett. Write for catalog and complete information to Bennett-Ireland, Inc., 1152 Market Street, Norwich, N.Y.

BENNETT Fireplace Unit

Bennett Simplified Standardized Fireplace is sized for standard brick, with no cutting or fitting. It lets you offer every customer "The Perfect Fireplace." Quicker and easier to build—it's priced within the reach of all. It's a big-volume, high-margin unit—a real profit builder for you. Count on this Bennett—the circulating unit with most sales appeal.



BENNETT Expanslip Throat Damper

Bennett Expanslip Throat Damper is a better damper at low cost. Steep 60° front slope gives sure draft. Structural steel with sturdy slip-joint eliminates breakage in shipping, handling and in use.



BENNETT Cast-Iron Damper

Bennett Cast-Iron Damper—quality at competitive prices. Superior casting facilities in our own foundry enable us to produce this steep 50° slope damper, with inter-changeable Rotary or Hatchet Conted features. With guaranteed steel valve or cast-iron valve.



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BENNETT-IRELAND, INC.

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IDAHO WHITE PINE



from the **WESTERN
PINE
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Genuine White Pine. Straight-grained, soft and even-textured, cuts and works easily and accurately with hand or machine tools, ideal for exteriors and interior trim, siding, paneling, fine cabinetwork. Takes and holds paints, enamels, other finishes beautifully.

This is but one of ten fine softwoods from member mills of the Western Pine Association. All are manufactured, seasoned and graded to exacting Association standards. Lumber dealers, builders, architects and wood users have found them dependable and best for many construction uses.



THESE ARE THE WESTERN PINES

IDAHO WHITE PINE
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THESE ARE THE ASSOCIATED WOODS

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INCENSE CEDAR • RED CEDAR
LODGEPOLE PINE



Write for free
illustrated book about
Idaho White Pine.
Address:
Western Pine Association,
Yeon Building,
Portland 4, Oregon.

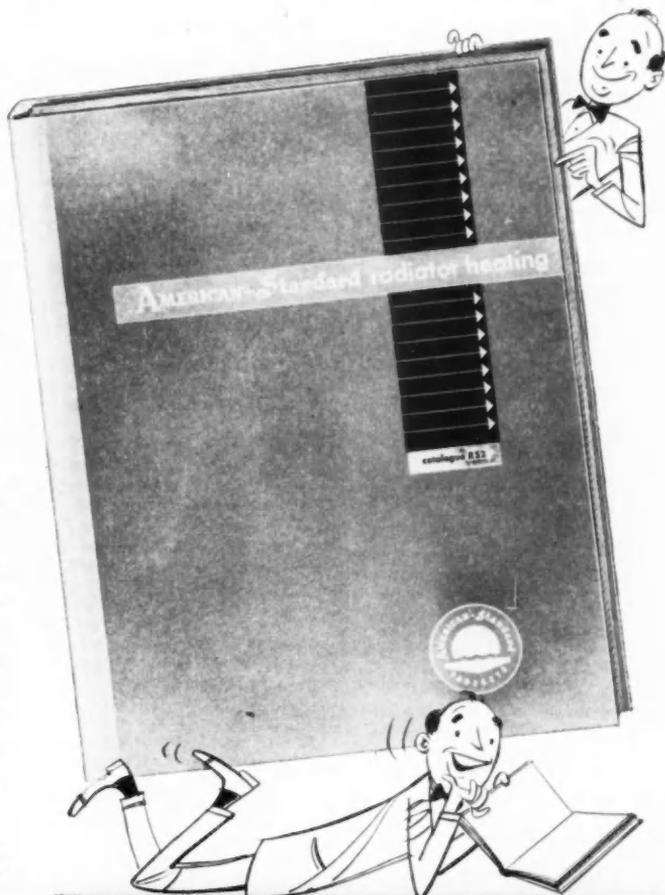
Here's the new AMERICAN-Standard Radiator Heating Catalogue ... the easy way to get accurate product information in a hurry!

THE new 202-page American-Standard Radiator Heating Catalogue R52—companion piece of the award-winning Warm Air Heating Catalogue—is so efficiently arranged that a flick of the finger will disclose full information on any American-Standard radiator heating product.

Since all allied material—such as dimensions, ratings, construction details and illustrations—is always located in the same place on the pages describing respective models, you can compare the models and select the *right* equipment for virtually any job in a matter of seconds.

The compact catalogue contains the latest and most comprehensive information on the complete line of American-Standard boilers, base-board panels, convectors, converter cabinets, radiators, conversion burners, water heaters, heating accessories, and controls. A 24-page engineering section provides useful installation and application data.

For your copy of the new catalogue, and for product information on any American-Standard products, contact the American-Standard sales office serving you . . . soon.



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NOVEMBER 1952



"Ask The Experts"

Got a problem you haven't solved? Can't solve? Haven't the time to solve?

Have you solved a problem with an answer you aren't sure of?

Are you doing some particular job—big or little—in a way that you think might be improved?

Then "ASK THE EXPERTS"—a group of industry authorities—experts in their fields. They'll give you the answer.

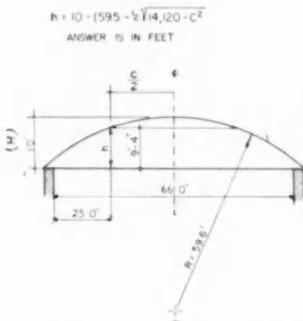
Address your questions to: "Ask The Experts," *American Builder*, 79 West Monroe St., Chicago 3, Ill.

As many questions and answers as space permits will be published monthly in *American Builder*, under the head—"Ask The Experts."

Dome Roof Dimensioning

In constructing a circular building with a dome concrete roof, what is the easiest method for determining the elevation of the dome at various radii?

E. H. R., Wenatchee, Wash.



The dimensions on the drawing are for the specific points on the truss as requested. The formula of $h = \sqrt{R^2 - (\frac{1}{2}R - H)^2}$ will apply to h value for any point along the truss, h—height at any particular point along the top cord of truss.

Church Auditorium Height

I am to start building a church in about ten days. The auditorium is to be 42 feet wide and 52 feet long with a 16-foot elevated concrete floor. How high should the ceiling be with Crustite Celotex for the voice to carry properly?

R. J., Kenton, Tenn.

The height of a church auditorium is not determined by the use of certain acoustical materials that might be used in the ceiling, but rather is determined by the building code in your area. The usual formula indicates that the height is determined

by the number of people to be accommodated.

The floor area of 42x52 totals 2,184 square feet. Allowing approximately six to eight square feet per person, it could be assumed that the capacity of the auditorium would be 364 seats.

The best acoustical performance can be obtained where a volume of 120 to 130 cubic feet is allowed per seat. The code says this should not exceed 150 cubic feet per seat. With a total of 364 seats in the auditorium the grand total would be a volume of 64,600 cubic feet. By dividing the square foot area of 2,184 square feet into the total cubic contents of 64,600, this would give a minimum of 25 feet for the height of the auditorium. This would provide the best acoustical and structural height for the auditorium regardless of the character of the acoustical material that might be applied to the ceiling.

Subdividing Property

Where may I obtain a book on how to put building restrictions on a new subdivision and any other information I could use to help me to subdivide a piece of property I would like to market?

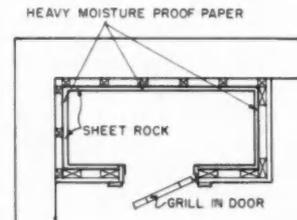
J. F. M., Detroit, Mich.

The Land Planning Division of the National Association of Home Builders, 1028 Connecticut Ave., N.W., Washington 6, D.C. has done a considerable amount of research in connection with subdividing and laying out of new plats. This work is very general in scope but is sound in its application. Another source would be the Building and Zoning Department of the City of Detroit, Mich. They have specific requirements in connection with subdividing. I assume that it would be possible to obtain a manual from them in regard to this type of layout.

Clothes Closet in Cellar

I have a client who wants to build a clothes closet in a cellar which has concrete block walls and a concrete floor and the usual small cellar sash for light and air. My idea is to build a closet in the corner of the foundation by furring the walls with 2x2 and 2x4 inch material and the floor with 2x4 inch floor beams and covering the walls and ceiling with Sheetrock. The Sheetrock and the floor of plywood will be painted. The door will have a small ventilated panel at upper end. Do you think a closet of this type will be safe for clothes, that is, will it prevent dampness and mildew from harming the clothes? Would insulating battens in the wall be better?

J. E. M., Port Jefferson, N. Y.



Your suggestion for installing a clothes closet in the basement is practical providing ample precaution is taken to prevent dampness. To properly seal this area a heavy moisture proof paper should be applied to the studs and floor and ceiling beams before the Sheetrock is installed.

Fixing a Warehouse

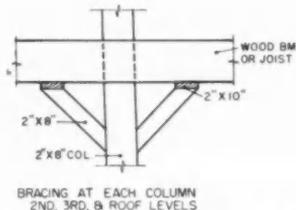
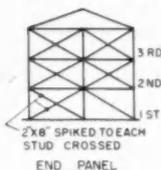
I have a warehouse which has leaned until it is about six inches out of plumb. It is all frame construction, 32x64 feet, 24 feet to the square, three floors. The studs are four by six, 24 feet long, spaced four feet apart. There is a row of posts down the center, 8x8 inches, 24 feet long, spaced 8 feet apart.

The warehouse was formerly used as a dry shed in tile manufacturing. The first floor is now used for storage of building material. The second and third floors are seldom used and only small amounts of material are stored there.

I do not think it would be feasible to try and put the build-

ing back in place, but would like to prevent it from getting worse. Diagonal bracing from the eave to the first floor would no doubt do the job but of course would hinder work on the first floor. However such bracing would not be too inconvenient on the second or third floors. Do you think it would be satisfactory to run the braces from the eave to the second floor? I thought of using 2x8 inch pine, nailing them to the studs and posts and spacing them 8 feet apart. Or would 16 foot spacing be satisfactory? Would there be any advantage in running another set of braces from the opposite side?

L. R. N., Beaverdam, Ohio



The accompanying sketch suggests the type of bracing required for each of the two end wall panels of the warehouse. Bracing at the interior columns of the two upper floors tends to tie the structure securely together.

Concerned about Framing

I am planning on building a house using roof trusses two feet on centers. I plan on using rocklath and plaster on the ceiling and walls. Will it sag on me, or should I use furring strips 16 inches on center?

Also what is your opinion on using studs two feet on centers throughout the house on a one story job?

Another thing I'd like to know, would it be practical to use 3/4x2 inch oak flooring as a single floor in the house?

L. K., Princeton, Ill.

In reply to your first question I would say that this method is acceptable providing No. 2 Douglas fir is used for the framing and 1/2 inch thick rocklath for the finish wall-

board, both on walls and ceiling. There might be a slight deflection in the trusses that may have a tendency to break open the taped joint, which, of course, could be quickly remedied. In the event this possibility is to be avoided, it would be well to use the type of manufactured clip in which the rocklath is placed and literally provide a suspended ceiling, free of actual contact with the studs.

In reply to question No. 3, the answer is a definite "No." It has never been found satisfactory to place the finish floor directly on the joists without having a good substantial subfloor composed of either wide boards, such as 5/8x10 or the normal 1x6 inch subfloor. 1/2 or 5/8 inch thick plywood is also a preferred material. The subfloor not only adds rigidity to the floor structure, but provides adequate nailing surface for the finish floor.

In reply to question No. 2, studs placed two feet on centers have been found acceptable by building codes in most of the large cities for one story houses.

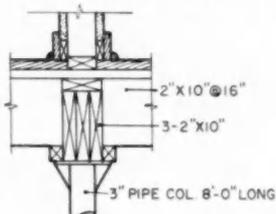
Providing Proper Supports

A one-story house built in 1940 whose exterior dimensions are 28x28 feet with a full basement has one girder running down the center. Ends of girder rest on 8-inch poured concrete walls.

One 3-inch pipe column in the center supports the girder. Built-up girder is of the ledger type made with three pieces of 2x10's dressed and spiked together. Girder is 27 feet 4 inches long. Joists are 2x10's dressed, 16 inches o.c. exposed.

The question is, will the one 3-inch pipe eight feet long continue to be sufficient to carry the load? If not how many should be put in?

W. S. P., Johnson City, Tenn.



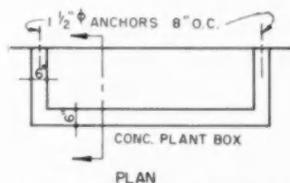
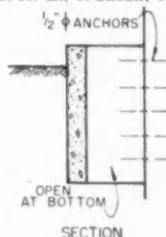
Since a steel column eight feet high will carry about 30,000 pounds, and a patented column of the same specification will carry about 22,000 pounds, the pipe column that you describe will be ample, since with dead and live loads on the floor, the total load is only 10,000 pounds. With roof and perhaps partition loads

coming on the floor the total load should not exceed 18,000. There is a fair margin of safety in the present column.

How to Build a Plant Box

Could you send us information that you may have available on the construction of a flower box to be attached to the house? We want to know how to put the footing in so that it will not freeze in winter and break open.

M. R. L., Wausau, Wisconsin



In the design of a plant box that is built into the wall of the house it would be best to leave the box open at the bottom as shown in the sketch above, and then anchor the end walls of box to the house foundation with 1/2 inch round anchors spaced eight inches apart.

Information on Banks

We would appreciate information on drawings covering small banks. We are interested in remodeling a building approximately 40x100 feet, which will have new fixtures, doors, safety deposit boxes, as well as vaults when finished.

L. W. H., Omaha, Nebr.

I believe the best avenue of approach to the problem of remodeling and re-equipping your bank would be to get in touch with one of the larger bank vault and safe companies. Many of them conduct a design department which is available to customers for just this type of service.

I would suggest Diebold, Inc., 1122 So. Michigan Ave., Chicago, Ill., and the Mosler Safe Co., 228 No. LaSalle St., Chicago 1, Ill. I believe they will give you the necessary information without being obliged to purchase their material.



Harold F. Goetz
Builder



Edward W. Doyle
Mason Contractor

LONG ISLAND BUILDERS' BONANZA:

SCR brick* homes

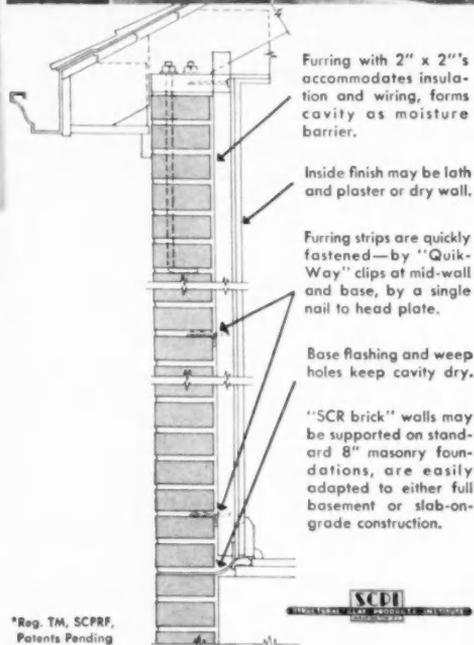
**"75 sold in our first week —
and costs were competitive with frame"**



\$7,790 "SCR brick" home
Bayfair Estates, Bay Shore, N. Y.



"SCR brick"—new THRU-THE-WALL unit developed
by the Structural Clay Products Research Foundation.



Here's what "SCR brick" is doing for these progressive home builders in the scrappy low-cost market:

"We're saving labor. Our masons are building 125 sq. ft. of wall per day—a 125% increase over the local average. Our carpenters take quickly to the system of furring with 'Quik-Way Clips' and 2" x 2" strips. It's faster than conventional construction.

"We're sure of getting a good, dry wall. There's no way for even the hardest rain to get clear through this wall—thanks to the cavity formed by furring. Both hose tests and actual storms have proved this to us.

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*Reg. TM, SCPRF,
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single track for all standard door thicknesses

solid nylon wheel
for by-passing
wardrobe doors



sliding door lifts
in and out
without removing
hardware

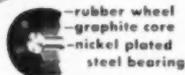


"lift out"
solid nylon
wheel

ACME

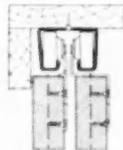
SLIDING DOOR HARDWARE
guaranteed for the life of the building

silent
rubber wheel



it's the wheel that counts

rubber wheel
for by-passing
wardrobe doors



single track for all standard door thicknesses

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*Concrete has
got to fit, too!*

... that's why changes in conditions call for changes in the air entraining concrete you mix.

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But you can't ask for changes in air entraining cement because it's a standardized product—made according to strict Federal and ASTM specifications to fit the "average" job . . . Wise construction men know, however, that different jobs call for different degrees of air entrainment. They know that a multitude of circumstances cause variations in the amount of air actually entrained. Varying conditions and location of each job, variations in the aggregate used, the temperature, even the condition of your mixer blades—all these and more affect air entrainment and often result in uncontrolled physical changes in your concrete.

That's why you'll find the easy answer lies in adding the *required* amount of any well known air entraining agent to regular portland cement at the mixer . . . That way you'll always be *sure* of concrete that's "tailor made" for the job. Remember—use air entraining cement only when you're sure it "fits." And remember, too—air entraining or regular portland, there's no better cement than Marquette!

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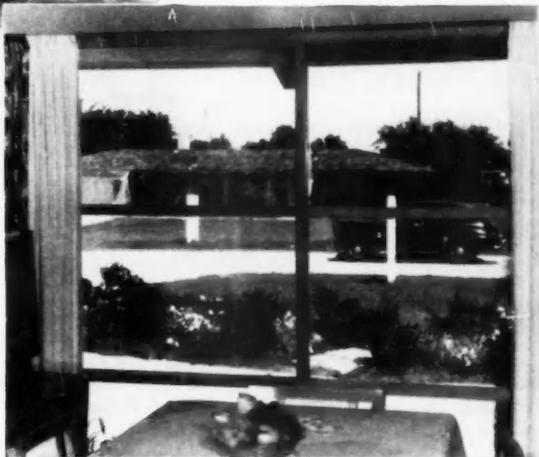
AMERICAN BUILDER



Model A home in Lincolnshire. Note the nine-light panel window of Thermopane insulating glass.

ANOTHER SUCCESS WITH
Thermopane
INSULATING GLASS

This is one of 43 houses featuring *Thermopane** insulating glass in the Lincolnshire development of Scholz Construction Corp., Toledo, Ohio. These homes offer beautiful, sales-appealing window walls of *Thermopane*—in attractive panel window frames.



Dining room in the Model B house which sells for \$17,950. The big six-light window is all *Thermopane*. More comfort, less heat loss and quieter rooms. A big appeal to home buyers.

this house sells for \$14,950

Three bedrooms, hot water radiant heat, fiber glass insulation, fireplace, 90' x 140' landscaped lot . . . and large expanses of floor-to-ceiling windows of *Thermopane*!

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. . .including some at \$17,950. Says Builder Scholz: "They sold so fast that we are starting 25 more at once. Our generous windows were a big sales factor. People were surprised to find that we could use *Thermopane* insulating glass so liberally in houses at these prices. They knew *Thermopane* and wanted it. They're thrilled to get it. We offer the economy of solar heating, which would not be practical without *Thermopane*. By using standard *Thermopane* in panel windows we are able to provide permanent window insulation at the cost of a regular wall with ordinary windows and storm sash."^{*}

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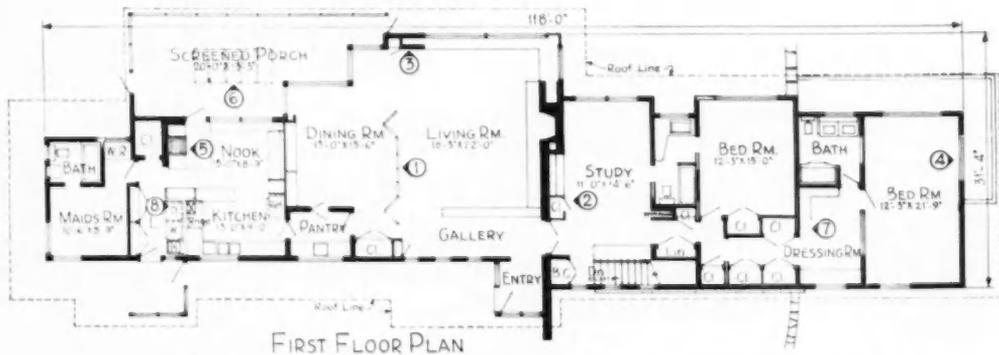
Shaded street side of house and garage against backdrop of tall trees make it hard to realize plot is less than an acre in size

study these advanced design

ARCHITECT: *Henry L. Eggers, Pasadena, Calif.*
 SUPERVISING ARCHITECT: *Lee Schoen, New York, N. Y.*
 BUILDER: *Weschester Construction Co., White Plains, N. Y.*
 HEATING ENGINEER: *Henry L. Wright, N. Y.*
 LIGHTING CONSULTANT: *Thomas S. Kelley, New York, N. Y.*
 INTERIOR DESIGN CONSULTANT: *William Pahlmann, New York, N. Y.*
 LANDSCAPE ARCHITECT: *Thomas D. Church, San Francisco, Calif.*

THE 1953 PACE SETTER HOUSE, pictured on the front cover, has successfully merged product pioneering with time-tested materials to create scores of new ideas for builders.

Latest House Beautiful presentation in an annual parade of super-



Principal floor plan of House Beautiful's 1953 Pace Setter House—118 feet long. Numbers in circles locate eight features especially selected by *American Builder* for detailed description on following pages

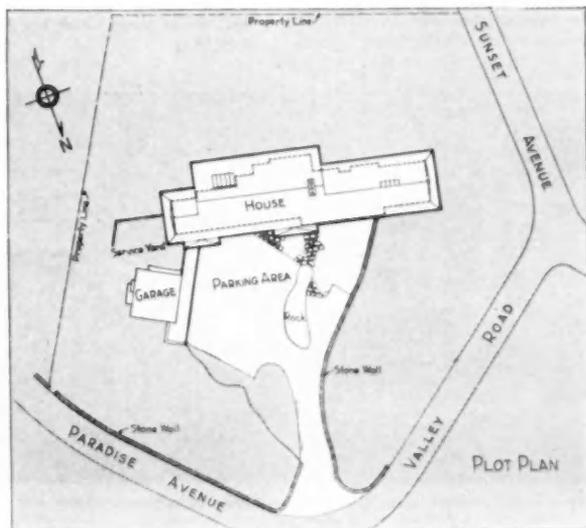
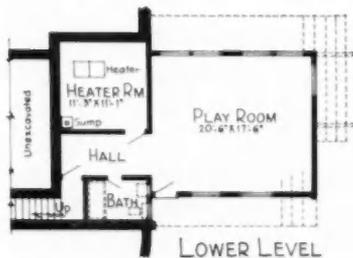


Railed balcony connects terrace with master bedroom beyond retaining wall. Every third course in cedar shingle roof is doubled

features for your 1953 houses

luxury homes, the Pace Setter exemplifies functional design without being too startlingly modern. Rather, it was patterned primarily for comfort.

It would be difficult for any builder, no matter what his price



Plot plan, showing relationship of house to garage and gardens



Open plan utilizes random-width dowels with brass light fixtures suspended among them and a long, low cabinet to separate living room from gallery opposite main entrance. Plate glass doors off gallery are also fitted with roller screens and hinged shutters. Floor tile of gallery matches that of terrace, is flush with height of carpet

range, to inspect this elaborate residence without picking up some extremely valuable tips. Unfortunately, he cannot do this for the house, recently completed in Westchester County, N. Y., is now occupied. *American Builder*, therefore, takes pleasure on these pages in introducing the Pace Setter to all builders.

"There is a definite reason for everything here," points out Henry L. Eggers, California architect of the house. A quick check bears out that, at least, there is a definite place for everything.

"This house," Eggers went on, "is the practical approach to a contemporary home; that is, it's stylish and

yet it in no way offends you. People like it. It has a warm atmosphere."

Here are some of the high points in design which make the Pace Setter deserving of its name:

Tile—

For perhaps the first time in America, mosaic tile is used in large

One of three fitted cabinets in dining room. At lower left are 15 plywood slides for table settings. Narrow shelves at lower right store tablecloths on rollers to avoid creases. This section, five feet deep, passes through wall into kitchen casework



Wood sliding window units dominate three sides of recreation room, principal lower level area. At opposite end, another sliding wood sash extends down to floor level, opens as a door onto stone walk which leads to the tiled terrace



Open wall panel reveals pocket with wide folding door to close off study as a guest room, complete with private closet and bath entrance. Cabinets hide stairway entirely finished in tiny chocolate tiles; steps, walls, ceiling

outside terraces and continued along porch floors to an inside point, thus tying indoor and outdoor sections of the property together (see cover).

The tiny $\frac{3}{4}$ -inch tile squares are also used throughout the kitchen barbecue corner and to surface all sides of a stairwell.

Windows—

There is generous use of a new type of aluminum gliding windows which, in effect, are doors and might well be termed "windors." These sash are double glazed and range up to eight feet in width. They swell the total of outside exits in the house to 17.

Screens—

Gliding windows have matching screens which slide independently. Roller screens four feet wide and a sliding screen door protect the big porch.



Climate control—

A lowered skylight keeps out the sun in summer, admits it in winter. So do soffits of varying lengths.

Master bathroom obtains light from two sides by use of translucent plastic panel in wall adjoining skylight over dressing room ceiling. Another new use of plastic is the inch-thick bar shaped to fit within tiled tub-shower stall. Held firmly by plastic brackets, it doubles as towel bar and hand grip.

Heat, hot water—

Radiant heating in the slab is augmented by small coils under the floor of the master bedroom. Two hot water heaters are installed at opposite ends of the house.

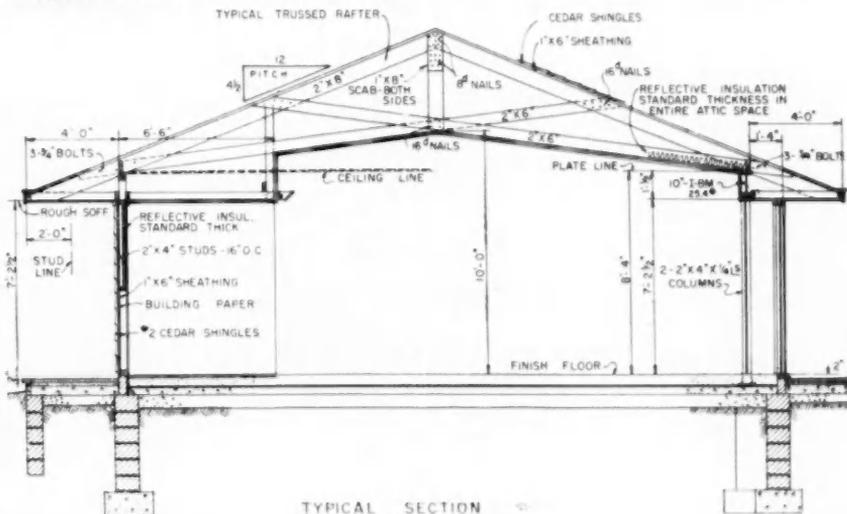
Ventilation—

Working, living and sleeping areas have separate attic fans in the ceiling for efficient and quick cooling. Barbecue vent houses another fan.

Eight unique Pace Setter features will be found on the next seven pages. A ninth is treated elsewhere in this issue as the "Idea of the Month."

BRAND NAMES PRODUCTS USED

| | |
|---|--|
| Accurate Metal weatherstripping | Kimberly-Clark Kimsul insulation |
| American Biltrite Amtico rubber tile | Knappe & Vogt closet fittings |
| Anacosta leaders, gutters | Kohler bath fixtures |
| Anderson wood windows | Kritzer copper coils in ceiling |
| Bennett-Ireland Flexscreen fireplace screen | Libbey-Owens-Ford Thermopane, obscure glass, mirrors |
| Caray Miami medicine cabinets | Lightolier lighting fixtures |
| Chamberlain weatherstripping | Magnovox built-in television-radio-record player unit |
| Corbin-American Hardware locks | Martin-Senour paints |
| Dalmo-Victor intercom system | Minneapolis-Honeywell Meduflow heating controls |
| Darfo sliding door hangers | Modernfold folding door |
| Electramade heater | Mosaic ceramic tile for bathrooms, stairwell, floors, barbecue, terraces |
| Eikay metal sinks | Muefler Climafuel furnace |
| Finland House lighting fixtures | National cabinet hardware |
| Flintkate Tile-Tex vinyl tile | Norman plastic panels |
| General Chrome towel bars | No-Tane bathroom heaters, door chimes |
| General Electric lighting fixtures, Textolite counter top, rotary ironer, washer, dryer, dishwasher, refrigerator, range, freezer, garbage disposer | Overhead Door garage door |
| General Motors Rochester steel tubing in slab | Polystyrene United plastic panels |
| Glide aluminum windows and doors, with screens | Pryco Bio-Fan range fan |
| Hall-Mack towel rings | Red Cedar Shingle Bureau shingles |
| Heattilator fireplace unit | Roddis plywood, lumber |
| Heinley folding shutters | Ralscreen Pella roller screens |
| Hunter attic fans | Sabroco portable barbecue unit |
| Hunter-Douglas Flexalume venetian blinds | Smith Permaglas water heaters |
| Ilg ventilating fan (barbecue) | Somabern silicone waterproofing |
| Kentite Kencork cork tile | Taco Circulators, special control valves |
| | Universal Atlas portland cement |

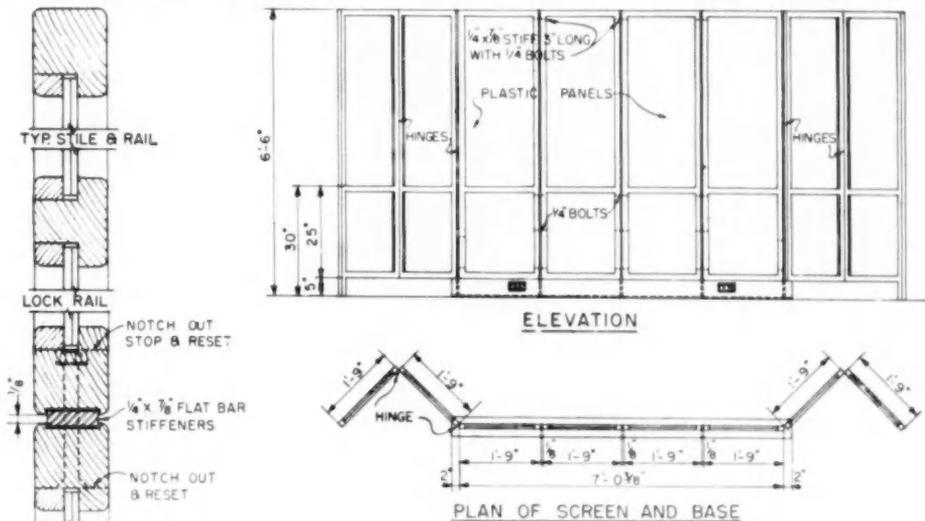
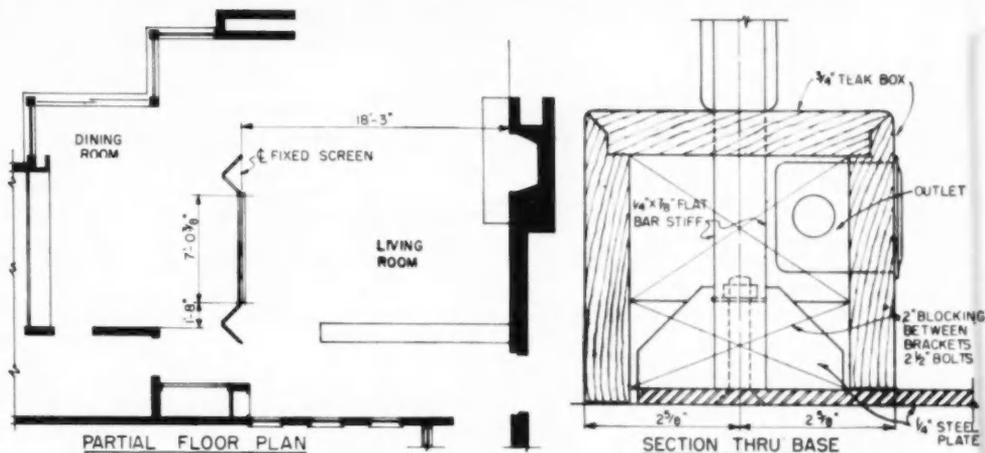




how to build the screen separator that divides living and dining areas

EIGHT-PANEL SCREEN between living and dining rooms serves as a variable partition which, with two simple movements, can either shut off one room from another or pull them together into one big living area. The difference depends on the two outer panels on each side, which are hinged to a fixed four-panel center section and can be folded or extended in any direction. Each panel, 13½ feet wide and 6½ feet high, frames an elaborately embroidered pattern between two plastic sheets laminated together at the edges. Center section is mounted on a base built-up five inches from the floor and fitted with electrical outlets, thus enhancing the possibilities for variety in the furniture arrangement of each room. Open construction, a high ceiling parallel to the inside face of the roof trusses and cove lighting along the entire width of the two rooms contribute to the spacious atmosphere.

View from screen across living room to fireplace built into colorful Westchester granite wall bisecting the home. Fireplace vent and niche for logs are recessed in end of wall. Corner glass panes are carefully mitered to fit. Light supporting post which seems to be in corner consists of two angle irons welded together and is set inside more than a foot away from the windows. Plan of the living room showing location of the screen and details of its construction appears below



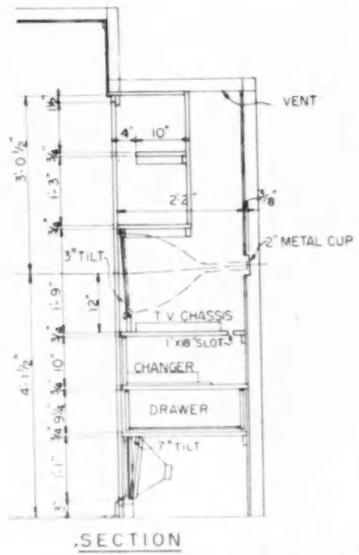
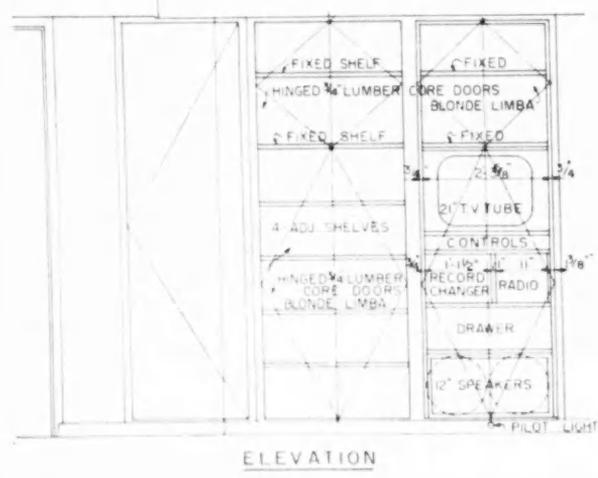
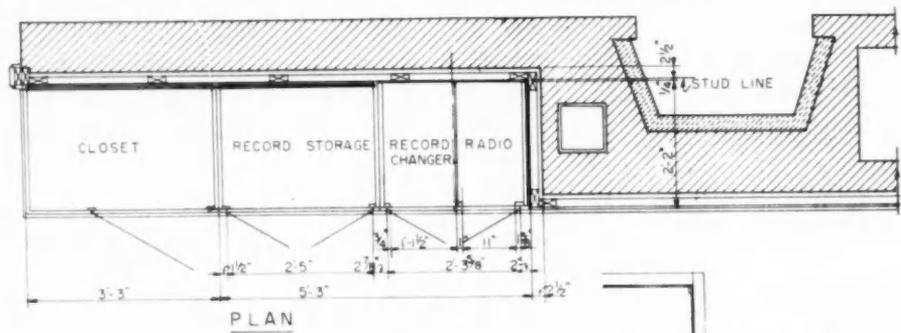
**PAGE SETTER
FEATURE 2**

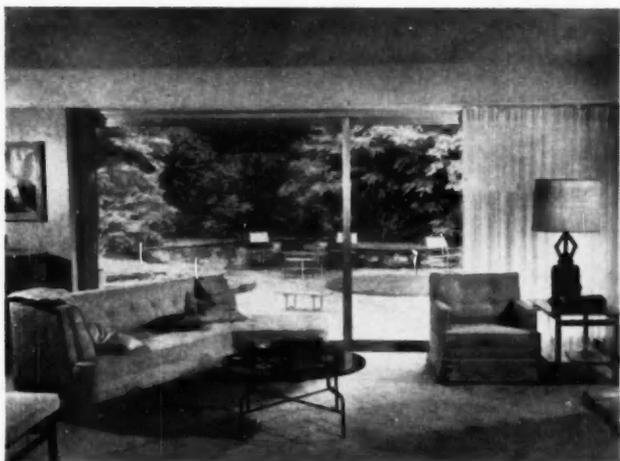
INGENIOUS STUDY has built-in entertainment center in cabinet wall. Shallow cabinet above 21-inch television set provides room in back for vent to keep picture tube from overheating. Below TV controls are a record player, AM-FM radio, drawer and cabinet housing twin 12-inch speakers. Small base light burns red when any appliance is "on." See sketches below for design details.

Vents from the fireplace unit in the living room are faced with 12½-inch Chinese tiles, while a Philippine grass cloth adorns walls. Floor finish is cork tile, while a blond-finish plywood is used for cabinets and ceiling.



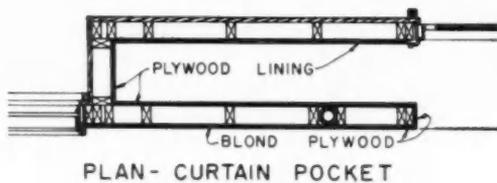
how the built-in entertainment center was planned





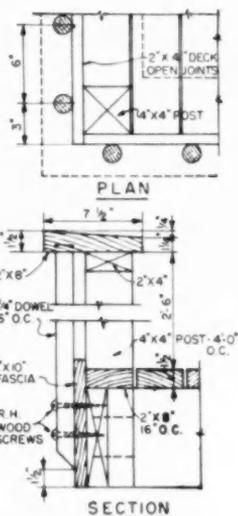
3 PACE SETTER FEATURE

GLIDING WINDOW can be opened its full 8-foot width to merge indoor and outdoor living areas. Five-foot pocket is recessed into wall at left to conceal traverse curtains (note pull cord barely visible at edge of pocket). Slight haze through window at left is caused by gliding screen which slides independently of sash. Plan of the curtain pocket is reproduced below the picture. A similar but smaller pocket was built in the dining room.



this curtain pocket permits clear view

PACE SETTER FEATURE 4



novel balcony rail is sturdy and decorative

MASTER BEDROOM, though on ground floor level, has second floor outlook due to land contour. Full-length gliding aluminum windows in two sides open onto cantilevered balcony

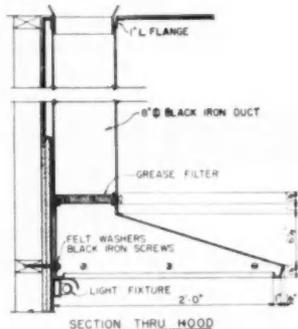
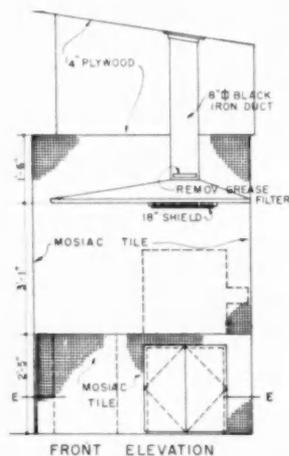
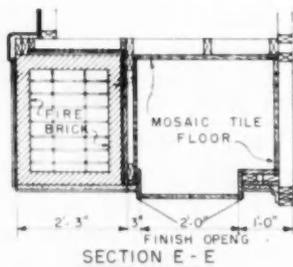
which leads across retaining wall to large tiled terrace. Wide soffit under roof keeps out most sun and covers balcony. Unusual rail construction is detailed at the left.

**PAGE SETTER
FEATURE 5**

**here are details
for tiled
barbecue
with vent hood**

BARBECUE CORNER in kitchen is completely tiled in light green 3/4-inch squares, including top, sides, hearth and adjoining wall area to a height of six feet. Deep, firebricked oven on left leaves sufficient space for portable electric rotisserie, normally kept on aluminum cart on porch in back of the Dutch door. Supply cabinet is built into side. Hood carries off all cooking odors and heat through separate vent, with built-in exhaust fan to speed action.

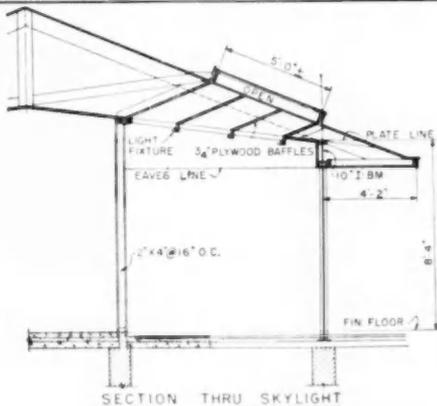
Casework at right has no hardware visible, except hinges. A slight push opens the doors.

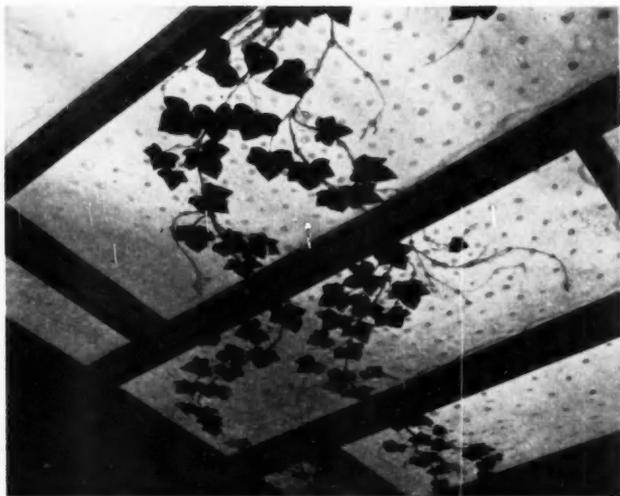


**PAGE SETTER
FEATURE 6**

**porch skylight adds
interest and sunshine**

LOUVERED SKYLIGHT seen in the barbecue picture above and also in the front cover porch scene is a new development in climate control, a study pioneered by House Beautiful. Passing through opaque glass, high-summer sun is deflected and diffused but lower-winter sun is allowed to flood the room. No direct light can reach the porch area. Slimline fluorescent eight-foot long and hidden in metal cove- create an interesting lighting effect at night.



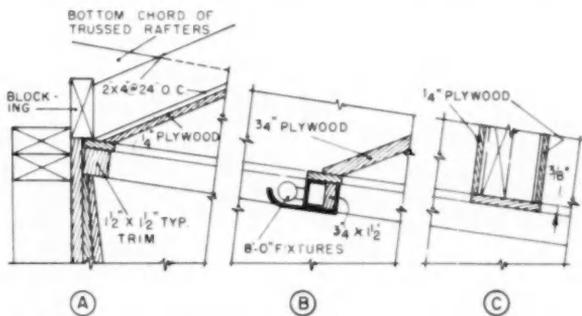
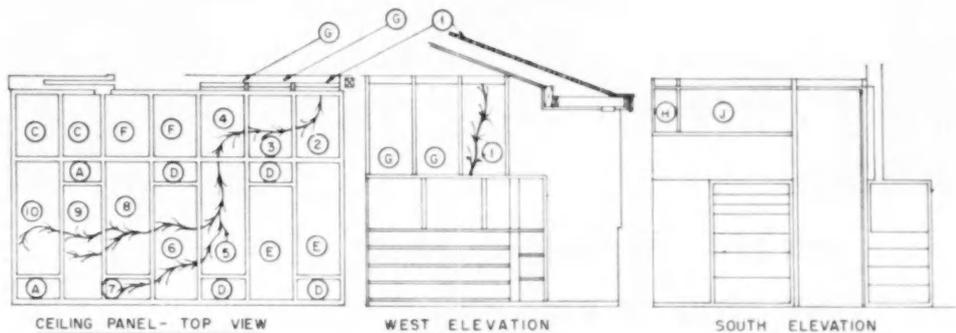


PLASTIC CEILING over dressing room is under a second skylight; gives a feeling of sunlight coming through an ivy trellis. Encased between two quarter-inch-thick plastic sheets fused together, real ivy is expected to retain its appearance and seems to be still growing.

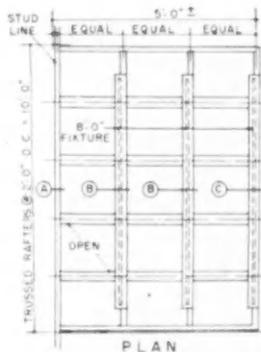
Above the plastic panels but below the skylight are slimline fluorescent tubes which can add to the daylight effect on dark days or extend it into the nighttime. Additional panels on walls admit this light into both master bedroom and bath.

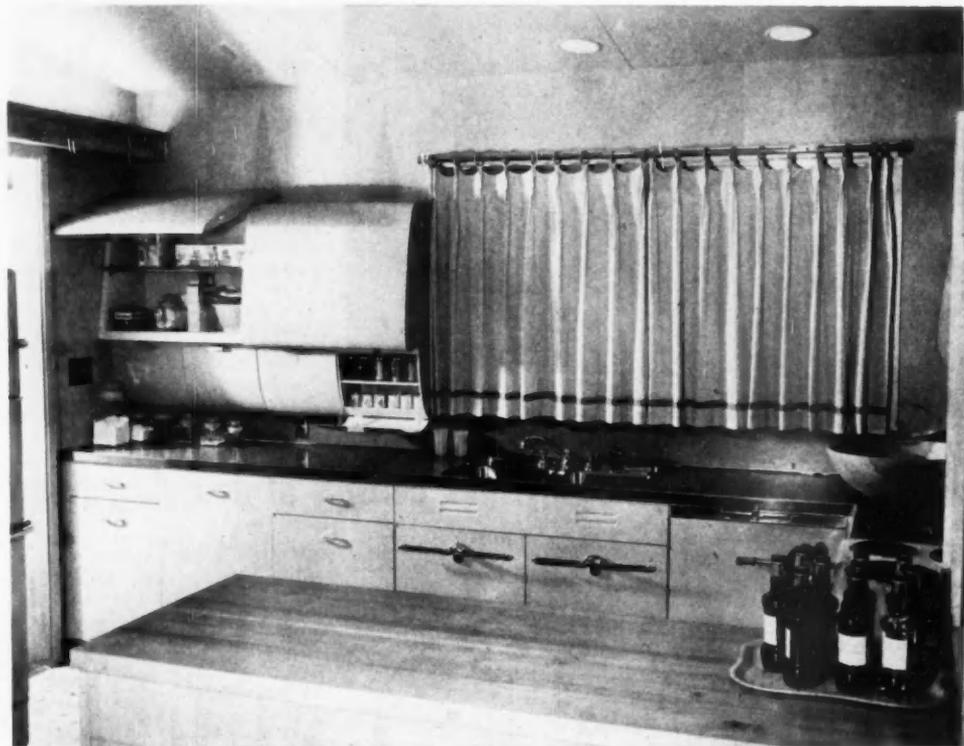
Sketches showing the ceiling panel scheme and how panels are used in walls are reproduced below.

natural ivy highlights daylight ceiling of dressing room



A cross section of the porch skylight appears opposite at the bottom of the preceding page, while additional details are given above. At the right is a reflected plan at the soffit

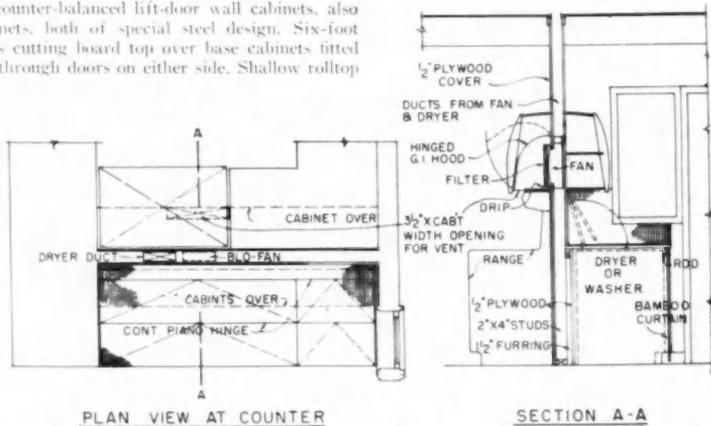




kitchen and laundry sport new ideas in work cabinets

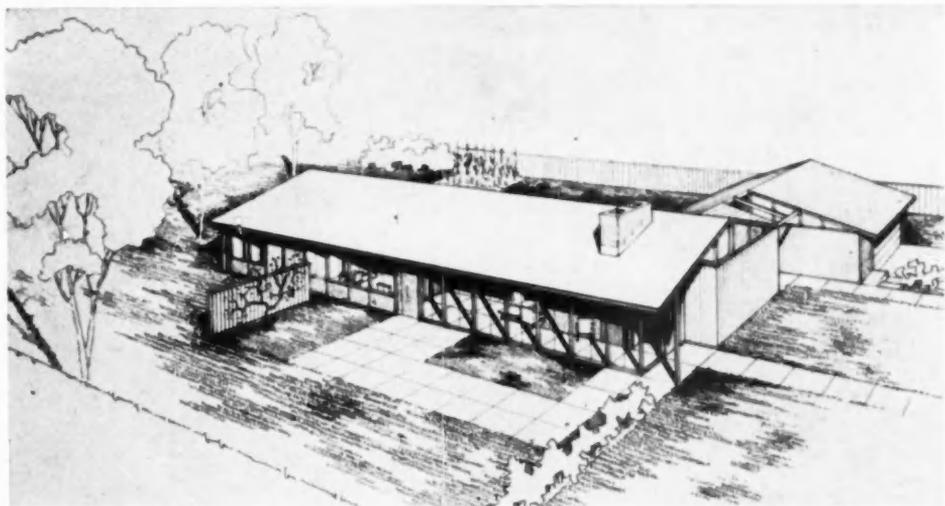
ALL-ELECTRIC KITCHEN has counter-balanced lift-door wall cabinets, also pull-down under-wall cabinets, both of special steel design. Six-foot "peninsula" in foreground has cutting board top over base cabinets fitted with wooden trays removable through doors on either side. Shallow rollout cabinet for spices is built in at end of cutting board. Part of 6-foot cove light can be seen at upper left. Seven ceiling spots are placed over double sink, laundry and breakfast nook.

Plan and section at right show detail of cabinet wall dividing kitchen and laundry. One wall cabinet is camouflage for exhaust fan over range. Worktop covers washer and dryer; is piano-hinged to move back when appliances are to be opened.

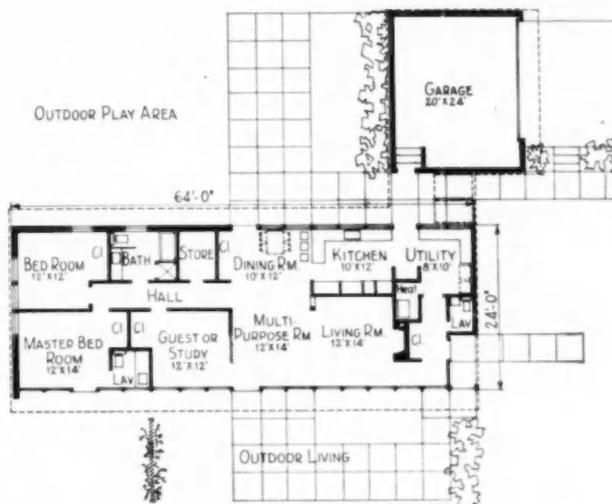


PLAN VIEW AT COUNTER

SECTION A-A



winner of home builders design contest



THE Builders Association of Metropolitan Detroit sponsored a contest recently among students enrolled in architectural courses in schools located in the State of Michigan. The purpose of this contest was to encourage the creation of the best possible house design for use in the 1953 Detroit Builders "Ideal Home" show. The winning design shown here was from a graduate student of the University of Michigan School of Architecture.

The designs submitted were judged according to: (1) Plan arrangement, (2) External appearance, (3) Adequate use of space, (4) Structural practicability, (5) Expandability, (6) Adequacy of equipment, (7) Effective presentation, (8) Suitability as an exhibit enterprise.

Not only does the winning design meet these requirements, but the design can be effectively used in connection with modular coordination.

A unique feature of the plan is the use of folding partitions between the living room, multi-purpose room and guest room which make it possible to convert these three rooms into one room, 36-feet long.

The rectangular design of the house permits the bedrooms to be segregated at one end for privacy, with the living-working areas comprising a compact unit at the opposite end. A covered passage connects the garage and house.

**AMERICAN
BUILDER**
Selected Homes

AMERICAN BUILDER BLUEPRINT HOUSE

a house with four levels

ARCHITECT:

G. W. Brandhorst



This house is designed to be built on a sloping lot. Variations levels are approached from the center hall and stairways, and are easily accessible to each other. This room arrangement provides a definite separation of living, sleeping and service zones.

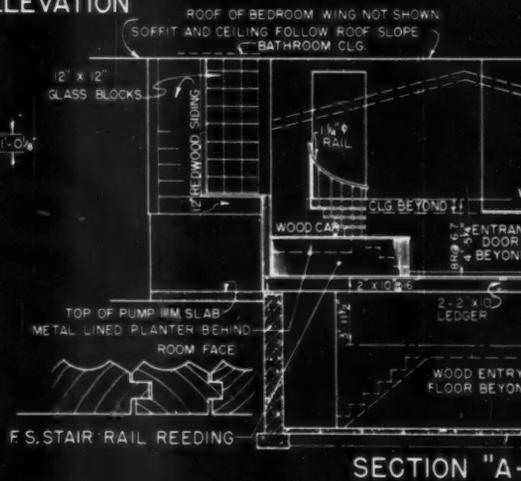
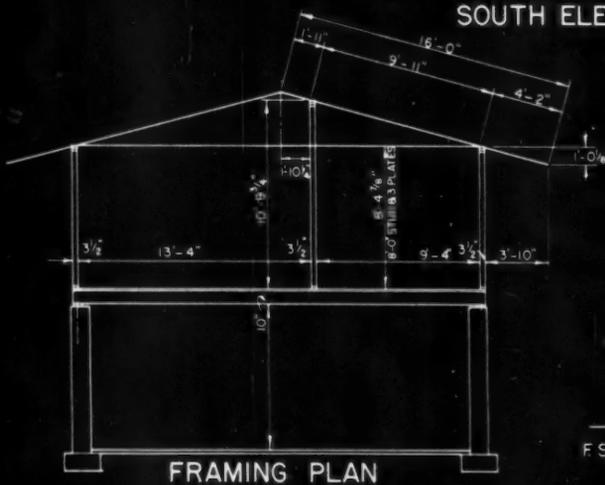
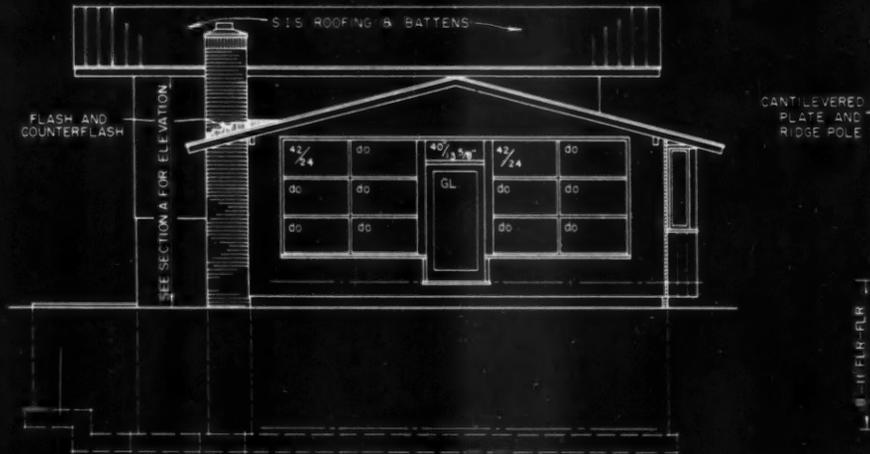
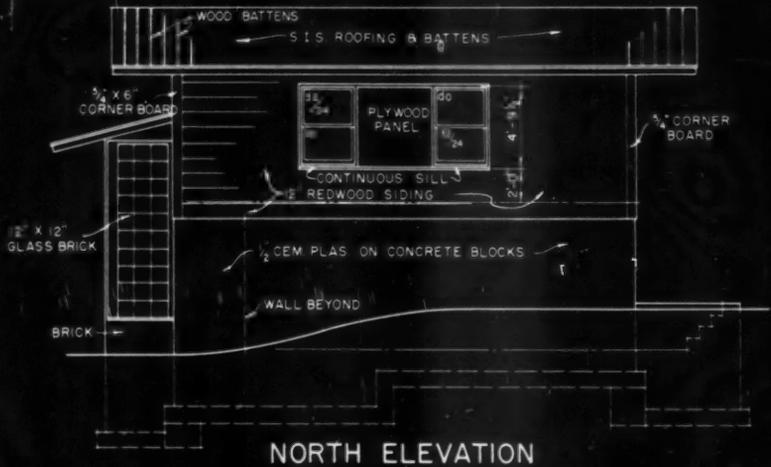
The unusual plan layout gave the architect an opportunity to express the feeling of the house effectively in the exterior treatment. This has been done by delineating each level with a different type of facing: concrete blocks, vertical redwood, horizontal siding, and face brick.

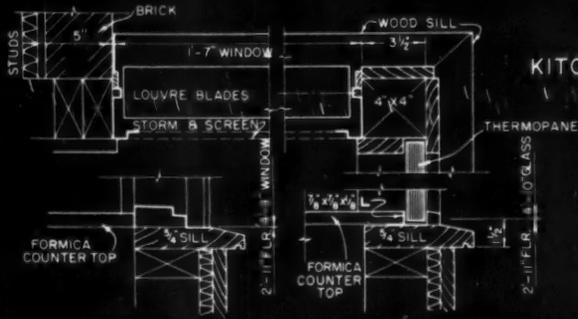
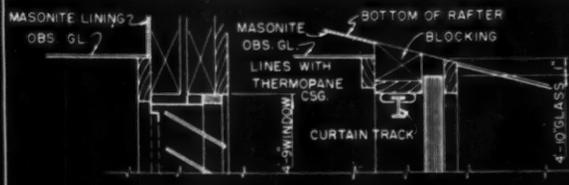
In plan layout, the garage adjoins the front entrance at lower grade. Entry leads to lower basement area on one end and living, dining room and kitchen above at the

other. Another short stair at end of living room leads to two bedrooms and bath over garage area.

House is replete with many features, among which are full length glass block panels on front stair landing and one wall of the bathroom. This provides natural light effectively without glare. Extended bay in kitchen adds to the effectiveness of the working space and also enhances the exterior appearance. Full length awning sash over planter and adjoining stair in living room add much to the appearance of this room. Roof of asphalt roll roofing with wood battens running parallel with roof slope are spaced 24 inches on center. This is an inexpensive way of obtaining an unusual appearance.

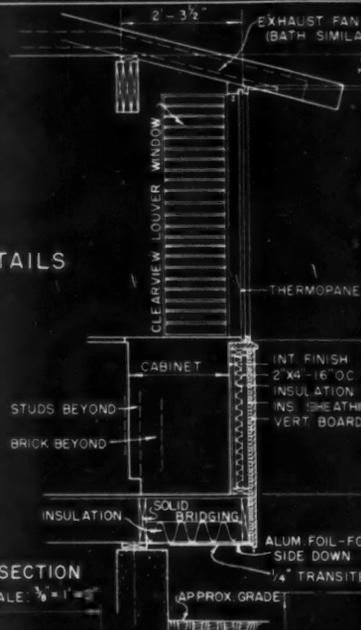
For complete one-quarter inch scale working plans of this house write American Builder Home Plan Service, 30 Church St., New York 7, N. Y.



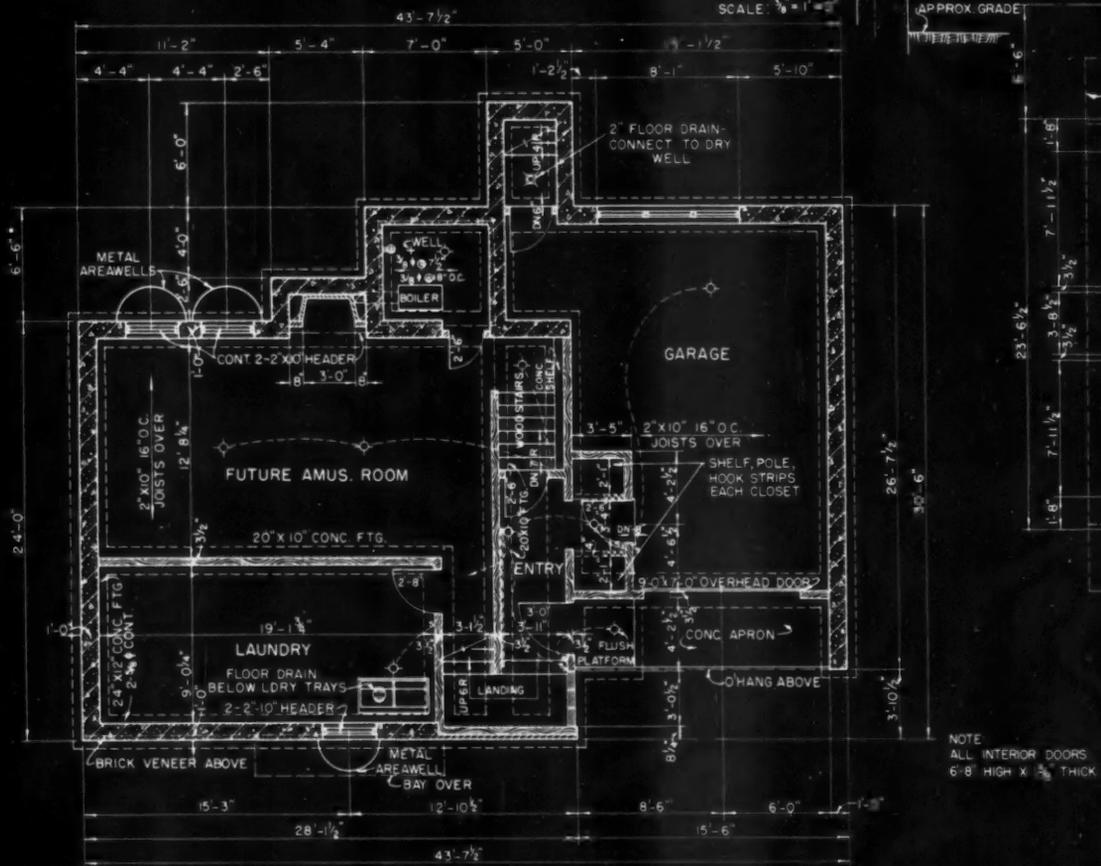


LOUVER WINDOW THERMOPANE
SCALE OF DETAILS: 1/2" = 1'-0"

KITCHEN BAY DETAILS



SECTION
SCALE: 3/8" = 1'-0"



BASEMENT PLAN
SCALE: 1/4" = 1'-0"

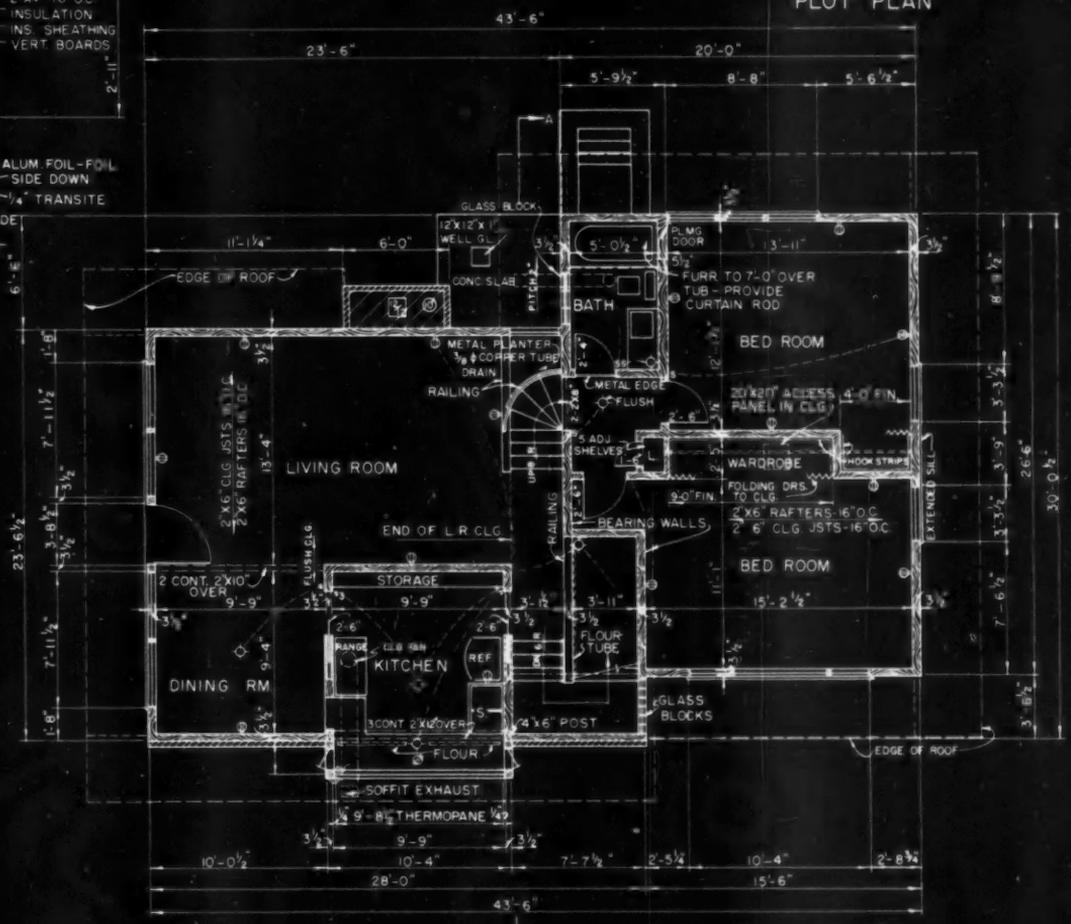
NOTE
ALL INTERIOR DOORS
6'-8" HIGH X 3/4" THICK



UTILITY RM. SLAB
SCALE 1/8" = 1'-0"



PLOT PLAN



FLOOR PLAN
SCALE 1/8" = 1'-0"

DESIGN NO. A.B.185
AMERICAN BUILDER BLUE PRINT SERIES
 Designed By
G. W. Brandhorst Architect
 3332 Kyle Ave. Minneapolis, Minn
 Simmons Boardman Pub. Corp., 79W. Monroe St., Chicago, Ill.

Quantity List of Materials

For American Builder Blueprint House No. AB 185

G. W. Brandhorst, Architect

General Information

| | |
|-----------------------------------|------------------------|
| House — Type | Brick Veneer and Frame |
| Area | 1,300 sq. ft. |
| Cube | 26,000 cu. ft. |
| Height taken for cube was 20 feet | |
| Garage — Area | included above |

Excavating

| | |
|-----------------------------|--------------------------------------|
| Trench for foundation | 162 lin. ft. |
| Chimney and column footings | 1 yd. |
| Excavation for basement | 115 yds. |
| | using 5 ft. average depth into grade |

Cement Work

| | |
|---------------|---|
| Foundations | 1,544 cu. ft. |
| | (1,218 sq. ft. of this amount is wall area shown on plan as conc. block cement painted) |
| Concrete work | 1,021 sq. ft. |
| Thickness | 4" |
| Anchor Bolts | 40— $\frac{1}{2}$ "x10" |
| Waterproofing | 650 sq. ft. |
| Miscellaneous | 50 sq. ft. 8" reinforced slab with membrane waterproofing and rigid insulation |

Masonry

| | |
|-------------------|------------------------------------|
| Type | Brick |
| Walls | 200 sq. ft. of 4" brick veneer |
| Window sills | Wood |
| Glass block | 54—12"x12" |
| Chimney | 272 sq. ft. |
| Flue lining | 18 F.L. 12"x12" 18 F.L. 10"x10" |
| Cap | Brick and cement |
| Fireplace | brick face cement hearth |
| Throat and Damper | 1 |
| Lintels | 1 |

Iron Work

| | |
|---------------|---|
| Miscellaneous | 5—3"x8" Dia. Rods 8' long 10—3"x8" Dia. Rods 7' long |
|---------------|---|

Millwork

| | |
|--|---|
| Windows—Type | Casements D.H. and fixed |
| Windows glazed including trim | D.H. 2—2 ft. 32"x24" 2—2 ft. 28"x24" Casement 2—1 ft. 22"x49" Transom —1 ft. 40"x13- $\frac{1}{2}$ " Awning type —6 ft. 32"x14" Fixed —12—42"x24" Double glazed plate glass —1 —116 $\frac{1}{2}$ "x58" 1 —64 $\frac{1}{2}$ "x50" 1 —28"x51 $\frac{1}{2}$ " Double glazed obscure glass —1 —26"x44" 1 —26"x6" 1 —26"x52" Basement sash 6 —30"x12" 2 Louvre sash—22 blades for 19"x4'9" opening Exterior Doors |
| | slab 1—3'x6'8" glazed 1—2'6"x6'8" 1—3'8 $\frac{1}{2}$ "x6'8" |
| Garage Door | 1—9'x7' upward acting 4 section high x 4 panel wide, 1 row glass |
| Exterior Millwork | |
| Shutter | 1 plywood panel 52"x56" |
| Interior Doors including jambs and trim: | |
| Flush HC doors | 4—2'6"x6'8" 1—2'8"x6'8" 1—2'4"x6'8" 1—2'6"x6'8" |
| Flush HC door, 5X Panel | 1—2'6"x6'8" |

| | |
|---------------------------|---|
| Flush HC door, Sliding | 2—2'6"x6'8" |
| Louvre door | 1—2'6"x6'8" |
| Special Interior Doors | 4 Sets special folding doors for closets |
| Special Interior Millwork | |
| Stairs | 1 set 8 risers, includes winder 1 storage cabinet, 1 set kitchen cases, 1 lavatory console |

Carpentry

| | |
|---------------------|--|
| Beams and Girders | 3—2"x12"x12" 3—2"x10"x12" |
| Ribands | 4—1"x6"x16" 12—2"x6"x16" 16—2"x4"x16" 16—2"x10"x16" 18—2"x10"x14" 18—2"x10"x10" 5—2"x10"x20" 300 LF 1"x3" |
| Studding and Plates | 216 pcs.—2"x4"—8" 26 pcs.—2"x4"—10" 20 pcs.—2"x4"—12" 6 pcs.—2"x4"—14" 10 pcs.—2"x4"—16" 24 pcs.—2"x4"—20" Ceiling Joist |
| | 21 pcs.—2"x4"—24" 16 pcs.—2"x4"—14" 16 pcs.—2"x6"—10" 52 pcs.—2"x6"—14" 50 pcs.—2"x6"—16" 8—2"x6"—12" 2—2"x6"—10" |
| Subfloor | 1,300 b.f. 1" boards |
| Roof Sheathing | 2,000 b.f. 1" boards 80 pcs.—2"x2"—16" 90 pcs.—2"x2"—14" |
| Side Wall Sheathing | 1,700 b.f. 1" boards |
| Side Wall Materials | 75 b.f. Redwood V joint boards 1,200 b.f. 1" Redwood bevel siding |
| Carpenter Stairs | 3 sets |
| Flooring | Hardwood—1,200 sq. ft. area to cover Softwood—130 sq. ft. area to cover |

| | |
|-------------------|--|
| Exterior Material | |
| Soffits | Exposed sheathing and rafters |
| Eaves | Exposed sheathing and rafters |
| Insulation | 1,300 sq. ft. 4" bats for ceiling; extent of insulation not shown |

Sheet Metal

| | |
|---------------|-----------------------------------|
| Flashing | At chimney and all sash |
| Miscellaneous | One special planters box at stair |

Roofing

| | |
|------------------|--------------------|
| Type: Black Felt | 1,600 sq. ft. area |
|------------------|--------------------|

Interior Walls and Ceilings

| | |
|--------------------|---------------|
| Area to be covered | 4,500 sq. ft. |
|--------------------|---------------|

● This quantity list will be subject to variation depending on the common practices in various sections and municipalities of the country, the techniques of individual builders, the types of materials available locally and cost factors. The list published here is a suggested one, complete enough so that it can be used in arriving at a reasonably accurate estimate of the quantities and cost of materials that will be required to complete the structure. It was prepared by experts at the Edward Hines Lumber Co., Chicago.

tested features turn lookers to BUYERS



Full size, full width driveway is another Swanson extra. Area walls are raised two-inches to keep out surface water

Not one or two, but several plus features produce sales for C. Harry Swanson, South Bend, Indiana builder. He incorporates into his units only those tested ideas that turn lookers to buyers. Swanson advocates construction extras and quality materials in place of high pressure selling or power house advertising. That his \$18,000 to \$20,000 units are selling, proves his theory to be correct.

To the basic two or three bedroom plan, Swanson adds a garage, breezeway, concrete drives, aluminum windows and storm doors, block flooring, and tile kitchens and baths. All houses are thoroughly cleaned before owners take possession. Brand name merchandise is used exclusively.

1. GARAGE: The over-size 14 x 20-foot garage has a unique two level floor. Recessed four inches into the floor is a six foot wide car pit. Passengers alight from the car and step off onto the higher floor. The walkway remains clean; dirt brought in with the car remains in the car pit.

2. BREEZEWAY: the breezeway is the trademark for Swanson's houses. Over-all area is 12 x 12-feet with a four-inch concrete floor. Ceiling is plastered; walls enclosed with storm doors.

3. BRAND NAME MATERIALS: Swanson stated that buyers are aware of brand name products and their quality and do not look with favor on substitutions. As a result, he does not use an unknown product in place of a brand name product even to effect a saving.

4. CONCRETE DRIVES: A full concrete drive is laid and serves a dual purpose as garage entry and walkway to the back door. Area walls have been placed around basement windows. These are two inches higher than the surrounding cement to keep out ground water.

5. BASEMENTS: The basement area is divided into two large rooms. A concrete bearing wall is used instead of posts and steel beams. All utilities, heating plant and work area can be placed in one room while the other can be a rumpus room.

6. ALUMINUM STORM DOORS AND ALUMINUM WINDOWS: The aluminum storm door is finding favor among Swanson's customers. Windows in the house are D. H. aluminum.

7. BLOCK FLOORING: The builder believes that block flooring sells houses for him. According to Swanson, this flooring would be left out as an economy measure, if the buyers were custom building. Since Swanson includes the flooring, he feels the buyers are convinced they are receiving an extra.

8. CLEANLINESS: The houses are turned over to the buyers clean as a new car. The home owner need only arrange his furniture. No back breaking labors on his part are required before he can start living in the new house. Swanson pays \$18 per house for this cleaning. He feels the money is well spent.

9. LOCATION: Proximity of churches, schools, shopping areas, transportation, and recreation facilities are known selling points. These are prerequisites for land purchased by Swanson. Buyers are aware that these factors up land costs, but they help sales.

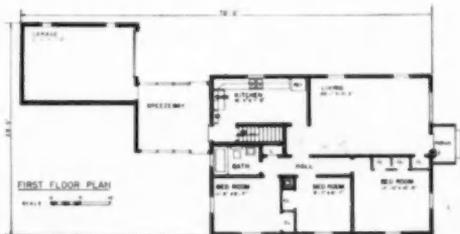
10. TILE KITCHEN AND BATH: Plastic tile is installed in the bathroom and kitchen. The dual installation spells quality, Swanson reports, and stimulates word of mouth advertising. Ad copywriters cannot compete with the housewife.



House on narrow lot has ten plus features that promote sales. Pictured are aluminum storm door and windows. Sheltered entrance and decorative columns add to the design of the structure

BRAND NAME PRODUCTS USED

Alwintite aluminum windows
 Braan exhaust fan
 Philip Carey shingles
 Celotex wall sheathing
 Crawford garage door
 Dexter hardware
 Everhot hot water heater
 Fries and Son bathroom cabinet
 Kentile asphalt tile
 Libbey-Owens-Ford Thermopane windows
 Minneapolis-Honeywell heating controls
 National plumbing fixtures
 O'Brien paints
 Seal-tite insulation
 United States Gypsum lath and building paper
 United States Radiator furnace
 Youngstown kitchen cabinets



House contains 1,064 square feet plus garage and breezeway. The house is designed for a 50-foot lot



Breezeway and over-size garage are two other features. Three-foot storm doors enclose the breezeway. Garage floor has a four-inch recessed car pit. Pit confines dirt carried in by car



Builder claims block flooring sells houses. Women are proud of these floors. Walls and ceilings throughout the house are plastered. Bookshelf in the hallway is another plus touch



Branded kitchen cabinetry and wall tile are good sales extras. The well known items are familiar to the buyers. Dishwasher sink as pictured is an additional cost item



LOCATION
Salem, Oregon
ARCHITECT
Lowell F. Joseph
BUILDER
E. T. Reid

take advantage of that sloping lot

From the front, this house has hidden livability by virtue of its hillside site. Full advantage has been taken of the basement level as a floor for living purposes. The basement includes not only heating and laundry equipment, but also a recreation room or playroom for children, with fireplace, a sunny bedroom and bath. This floor opens onto a terrace with a mountain view.



BASEMENT PLAN

Plan for the basement level



FLOOR PLAN

SCALE: 0" 5" 10"

Main floor plan. Sliding glass panels throw living and dining rooms open to a balcony with a view

Matched Beauty

with Unmatched Performance

...that's what Ro-Way offers you!



When you specify Ro-Way garage doors for any commercial or industrial installation, you *know* their good looks will blend perfectly with the building itself. See, for example, how the clean, simple Ro-Way lines actually complement the design of this commercial garage.

You can be sure, too, that Ro-Way offers unmatched performance. With friction-reducing Taper-Tite track, Seal-A-Matic hinges, ball bearing Double-Thick Tread rollers, and Power-Metered springs . . . smooth, quiet operation is built right in.

In fact, every pace-setting feature of Ro-Way doors is designed, engineered and built for *matched beauty with unmatched performance*.

To be sure of such quality, be sure to specify Ro-Way Overhead Type Doors.



ROWE MANUFACTURING CO., 715 Holton St., Galesburg, Ill.

Nationwide sales and installation service. See your classified telephone directory for nearest Ro-Way distributor.



there's a Ro-Way for every Doorway!





Don't be a Door-Keeper!

**... SPECIFY DOORS YOUR CUSTOMERS WANT
... DOORS WITH THESE 2 FAMOUS NAMES**

Don't get stuck with doors you can't use to build your reputation...and to help sell your houses quickly at a profit.

Feature the doors with the famous **Weldwood®** and **Mengel** names... doors that represent highest quality at rockbottom prices.

Both come in a broad range of sizes... in a wide variety of fine decorative hardwood faces, including birch, oak, Korina® and Mahogany.

The Weldwood Staved Lumber Core Door is beautiful in appearance...and is extremely durable.

Its convenient, easy-working features make it a cinch to hang from either side...and it is especially adaptable to custom-

made lights and louvres. All hardware goes on it quickly, easily, permanently.

All bonding is done with 100% waterproof phenolic glue, so that it is always safe to install Weldwood Staved Lumber Core Doors for either exterior or interior use.

The Mengel Hollow Core Door is another well-known favorite... using a construction tested by years of service. It has proven itself on hundreds of thousands of installations... meeting every demand for a beautiful, durable interior flush door that meets budget prices. Remember, too, you can buy genuine African Mahogany Mengel Doors at less than the price of birch!

Recommend *either* door for satisfied customers.

United States Plywood Corporation carries the most complete line of flush doors on the market, including the famous Weldwood Fire Doors, Weldwood Stay-Stroke Doors, Weldwood Staved Lumber Core Flush Doors and Mengel Solid Core and Hollow Core Flush Doors. 1 1/2" and 1 3/4" with a variety of both foreign and domestic face veneers.

WELDWOOD® FLUSH DOORS

Manufactured and distributed by

UNITED STATES PLYWOOD CORPORATION

World's Largest Plywood Organization

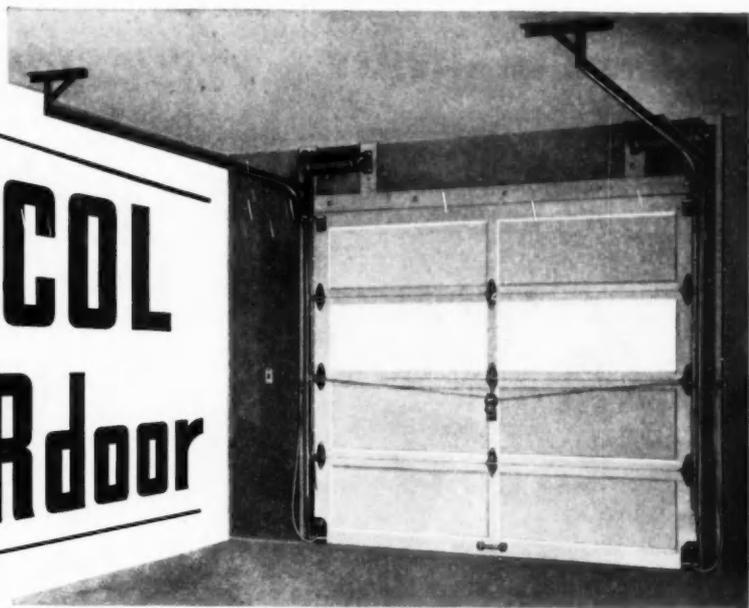
55 West 44th Street, New York 36, N. Y.

Branches in Principal Cities • Distributing Units in Chief Trading Areas
Dealers Everywhere

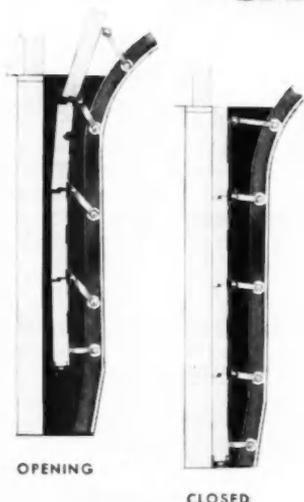


ONLY the

BARCOL OVERdoor



has this exclusive CAM CLOSING ACTION



OPENING

CLOSED

The pictures at the left show, schematically, the exclusive Barcol Cam Closing Action. This arrangement provides *rapid* approach to, and release from, the jamb — so rapid that ordinary swelling of wood sections, which is certain to occur in wet weather, will not cause the door to stick or drag. When the door is opening, it is 1/2" or more away from the jamb at all points. When it is within 4" of closed, the rollers stop moving down the tracks. As the door continues downward, the arms rotate to press it evenly against the jamb. With this feature the Barcol OVERdoor has the distinctive ability to be TIGHT-CLOSING yet EASY-WORKING. Ask your Barcol representative to *show* you. Other features include . . .

- TAILORED TWIN SPRINGS
- CONTINUOUS TRACK BRACKETS
- AUTOMATIC LATCHING
- ANTI-FRICTION ROLLERS
- SPECIAL DESIGN PANELS



FACTORY-TRAINED SALES AND SERVICE REPRESENTATIVES IN PRINCIPAL CITIES

BARBER-COLMAN COMPANY
104 MILL STREET, ROCKFORD, ILLINOIS

JOHNS-MANVILLE

Asbestos Flexboard

**offers advantages
never before combined
in one building
material.**



One man can handle the big sheets



Easy to nail



Easy to handle



Strong and tough

Asbestos Flexboard answers a thousand building needs
for the home, for the factory, for the farm!

IT'S DIFFICULT to appreciate the many advantages of Asbestos Flexboard until you have used it. It wears like stone, it's light in weight, and it can be flexed to fit curved surfaces. On the job, ordinary hand tools are used to work Flexboard and customary construction methods are followed.

It can be applied horizontally or vertically, and can be nailed close to the edge without drilling.

Made of asbestos and cement, Flexboard is fireproof, won't rot, rust or corrode, resists rats and termites. Large 4' x 8' Flexboard sheets come in 3 thicknesses— $\frac{1}{8}$ ", $\frac{3}{16}$ ", and $\frac{1}{4}$ ".

Flexboard has an attractive stone-grey color with a smooth hard surface that needs no other finish. As soon as it is in place, it is ready for years of maintenance-free service.

For more information about Asbestos Flexboard, write Johns-Manville, Box 60, New York 16, N.Y.



Johns-Manville

5 sure ways to a woman's heart!



LOW COST *Leigh*
HOME CONVENIENCES
HELP SELL
MRS. HOMEBUYER!

Show Mrs. Prospect a home with such practical yet attractive conveniences as Leigh Clothes Chute Doors, Built-in Shoe Racks, milk and package receivers, Swing-Away Garbage Containers, and Aristocrat Mail Boxes (to name a few) and you create a desire to own that home all out of proportion to the small cost of Leigh accessories.

And it's understandable. Every Leigh unit is designed and built to fill a definite need in the most efficient and attractive way. Each has proved its value in thousands and thousands of homes both new and remodeled. Yet mass production in a modern factory brings you Leigh quality built building products at costs that save you money.

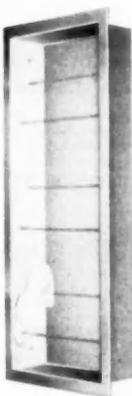
See your Leigh jobber or write direct for beautifully illustrated catalog 52-L describing in detail the complete Leigh line including those shown here as well as Leigh metal awnings, canopies, shutters, flower boxes, screen and storm door scrolls, dust chutes, etc., and the industry's most complete line of ventilators.



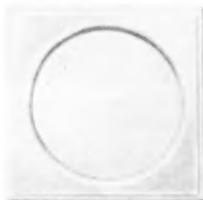
Leigh Milk &
Package Receiver



Leigh Swing-Away
Garbage Container



Leigh Recessed
Shoe Rack



Leigh Clothes
Chute Door



Leigh Aristocrat
Mail Box



LEIGH BUILDING PRODUCTS DIVISION

Home Avenue

AIR CONTROL PRODUCTS, INC.

Coopersville, Michigan

2 MILLION ROOMS ARE MISSING!

Gold Bond offers Big Rewards to Builders!



Experts say at least two million new rooms—plus laundry, dining, kitchen and play areas—are urgently needed in existing American homes. There's plenty of profit for you in finding these missing rooms... and building them!



Gold Bond helps you with its big "Add-A-Room" campaign. November advertising features Gold Bond Insulation Plank and Tile in the above magazines—with two-page, full-color ads in *The American Home* and *Better Homes*.



Tie in... and profit! Show the homeowners how they can have a brand new bedroom... insulated and decorated in one operation with Gold Bond Insulation Plank and Tile!



SEE Gold Bond Insulation Plank and Tile—in a handsome variegated blend—at your Gold Bond lumber and building material dealer. Needs no decoration. All three styles—large panels, plank and tile—also come in ivory color. New Gold Bond Duplex Insulation Tile goes up "two-at-a-time"! Interlocking edges hide nails or staples. Write for your copy of "Interiors by Gold Bond"—packed with remodeling ideas.

ADD-A-ROOM NOW!
with **Gold Bond**

NATIONAL GYPSUM COMPANY • BUFFALO 2, N. Y.

Lath, Plaster, Lime, Sheathing, Gypsum Roof Decks, Wall Paints, Textures, Masonry Paints, Rock Wool Insulation, Metal Lath, Sound Control Products, Fireproof Wallboards, and Decorative Insulation Boards.



Power precutting on the job is no handicap. Lighter oil is used in all power equipment during cold weather.

here are some useful tips on **WINTER BUILDING**

Cold weather need not be a handicap for today's builder. Val Zimmermann, president of Consolidated Homes, Milwaukee, Wisconsin uses the latest technical information in his winter operation. This is how he sums up his reasons for building when the snow flies. "It costs us more money. As a result our profits are lower, but we solve two problems: First, we can keep our good men. That's important for a fast early start. Secondly, seasonal shortages slow us down. If we want to keep our production up we must continue in the cold weather."

Normally Zimmermann will try to have 100 basements poured and capped ready for winter building.

However, shortages of cement and block in late summer and fall make it necessary to build in the dead of winter. Cold weather in the Milwaukee area threatens construction from late November to early April. Low temperatures for the six month period can hover around zero. Lowest temperature during 1951 was a -10 degrees. The average temperature for January, 1952 was 14 degrees. Fifty inches of snow fell during the 1951-52 winter with as much as three feet on the ground at one time.

Planning Needed for Winter Excavations

With proper prior planning, basements can be excavated in Novem-

ber and December. Hay or straw is spread on the ground late in the fall before it is frozen. Excavating contractors tackle the job when the ground is frozen only a few inches. Zimmermann stated that his excavating subcontractor charges no over-ride for the winter digging.

In rare cases where excavations must be made in the height of the cold weather, special heating methods must be employed to thaw the ground. One Milwaukee builder kept an oil fire burning on the ground, 24 hours a day, for seven days, before he could dig.

Keep Frost From Excavations

In cold weather where tempera-



Operators deliver the mix warm and add calcium chloride if the builder requests it. After the footing is poured, straw will be placed over the concrete to protect it from freezing.

Photo courtesy Jaeger Machine Co.



Salamander heats brick that surrounds it. Heated brick is a must when temperature is near zero. Masons in the Milwaukee area are reluctant to start house jobs when the thermometer nears 20 degrees

tures are freezing or threatening, the Consolidated concern puts straw inside the excavation to keep out the frost. The straw is removed immediately prior to pouring the footings and replaced to insure proper curing of the concrete. Furnace footings are poured at the same time so that the heating plant can be placed in operation soon after the house is enclosed. High early-strength concrete is used when the thermometer is below 40 degrees.

Care for Block Foundations

Consolidated's foundations are concrete block. They use only thoroughly cured blocks with a moisture content of about 20 per cent. Masons are instructed not to use blocks that have ice on them. Dry blocks permit mortar to set faster. These precautionary measures lessen frost damage. Blocks are stored on plank pallets not in contact with the ground. They are covered to keep out moisture. Mortar for the block construction is prepared from warm aggregates when temperatures are below 32 degrees. The mortar is prepared in small batches and kept warm until it is used. Blocks are warmed when temperatures dip below 18 degrees. Masonry enclosures are recommended during sustained sub-zero weather. Masonry subcontractors in the Milwaukee area are reluctant to start home building jobs when temperatures are under 20 degrees.



Framing costs very little more in winter than in summer. Builder uses pre-cut framing members, insulated sheathing, and plenty of winter building know-how

Photo courtesy Insulation Board Institute

Ready Mix for Winter Concreting

During the winter ready-mixed concrete is finding favor among the builders. The mix is delivered to the job pre-heated. Many operators add calcium chloride only at the builder's request. In placing floor slabs, builders support tarpaulins on horses or other framework closely following the placing of the concrete. Only a few feet of the finished slab is exposed to the outside. Heated air can be circulated freely on the slab in near zero temperatures. Straw coverings are sufficient in near freezing temperatures.

Basement floors are poured after the house is under roof and the heating plant is in operation. Contrary to most operations, Consolidated pours stoops in the dead of winter. They build an enclosed canvas canopy around the form and attach it to the house. They then open the door and heat the area by directing heat from a portable unit set in the doorway.

Brick Work Continues in the Winter

The Milwaukee firm uses brick veneer construction and continues to lay brick on mild winter days. Ample precautions are taken to keep the brick dry. Bricks are heated when the temperature is below 18 degrees. Special care must be given mortar during cold weather. When temperatures are under 40 degrees, water is



Power shovel excavates when a few inches of frost are in the ground. Shovel subcontractor charges Milwaukee builder no over-ride for winter digging



Photo courtesy Portland Cement Association

Straw covering aids curing of the concrete footing in cold weather. Straw is also placed on excavated ground to reduce frost penetration

Block work in freezing weather needs heated mortar. Brick furnace burning scrap wood or coal heats mortar in the mixing boxes



Photo courtesy Portland Cement Association

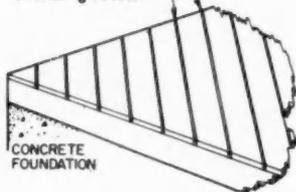


On many days a heater on the concrete mixer is sufficient



Temporary doors and windows add to the costs of winter building. Builder figures cost can amount to \$20 per house

SUB-FLOOR BOARDS
SPACED $\frac{1}{2}$ " APART



Subflooring is spaced $\frac{1}{2}$ inch apart to reduce tendency of the cap to expand. This construction method reduced expanding caps from 15 to five per cent

heated not over 160 degrees and not under 70 degrees. Below freezing temperatures, require the sand and water to be heated. Scorched sand is never used. When the thermometer ranges from 18 to 25 degrees, one and a half to two pounds of calcium chloride per bag of cement is added to the mix. Enclosures are used in zero weather.

Hints on Capping the Foundation

Zimmerman found that 15 per

cent of caps standing during the winter expanded to such a degree they had to be repaired. The loss was reduced to 5 per cent by leaving an air space between the subfloor boards. A temporary trap door can be made by laying the subfloor over the entire joist area, leaving no provision for the basement stairwell. Carpenters then nail 1x4's to the subfloor, outlining the stairwell. They cut around the 1x4's with a hand power saw, add hinges to make the temporary trap door.

Framing Presents No Problem

Framing members are pre-cut on the job and carpenters nail them into place. Window frames are purchased k.d. and assembled at the builder's warehouse. The inside work on the window frames is saved for bad weather. The house is sheathed with $\frac{25}{32}$ -inch insulated material. Asphalt roofing material is handled carefully in the cold weather. It is spaced to allow for summer expansion.

Temporary Heat Speeds Inside Construction

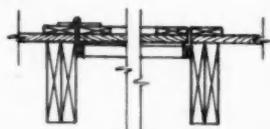
Before heat is furnished the structure, storm windows are set in place. A small opening is left at the top for ventilation. The builder uses a forced, oil fired, portable unit capable of delivering up to 168,000 B.T.U.'s. The unit is used until the furnace can be placed in operation. Then it is moved to the next job.

Heating allows the interior work to continue as in the summer months.

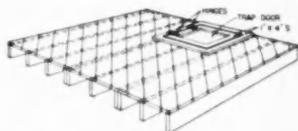
Plastering waits until the furnace is in operation. The heating plant then operates at top efficiency until the plaster is dry. Some builders are using dehumidifiers to lessen the plaster drying time. Many coke and kerosene portable heating units are



Consolidated Homes specializes in two-story expandables. Most have brick veneer exteriors. The attractive 800-square-foot-house has plastered walls and full basement



SECT. THRU TRAP DOOR



Subfloor is nailed over the entire joist area. 1x4's are then nailed around basement stairwell. Carpenters saw around 1x4 frame, add hinges, for a winter trap door

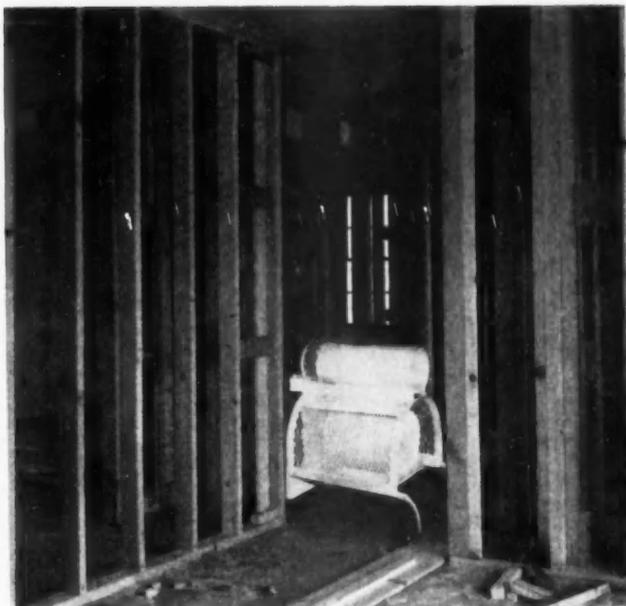


Photo courtesy Silent Glow Oil Burner Corp.

Before furnace installation, heat is furnished by portable forced oil-fired unit. When furnace is placed in operation, the unit is moved to the next job. Builder sets unit in the doorway to dry concrete stoops built under tarpaulins

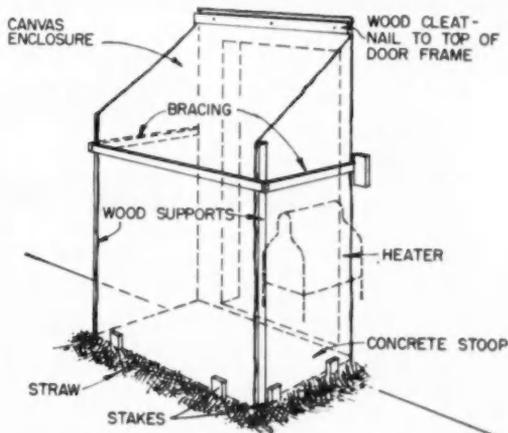
not used to dry plaster as they need constant watching. If they are not manned and carefully adjusted there is danger from smoke and fumes. Greater ventilated openings are needed when drying plaster.

Consolidated Homes estimates

that it costs \$330 to \$350 more to build an 800-square-foot house in the winter than in summer. Biggest expense factor is heating and financial costs due to the longer time under construction. Temporary door and window coverings are another ex-

pense. Mr. Zimmermann believes that carpentry, masonry and labor costs varied little in winter from summer. The additional winter building costs are not added to the price of the house but absorbed by the building concern.

| Winter Building Raises These Costs | |
|------------------------------------|--------------|
| Carpentry Labor | \$ 50 |
| Masonry Labor—Brick | 35 |
| Masonry Labor—Block | 10 |
| Heating | 100 |
| Financial Costs | 110 |
| Snow Removal | 15 |
| Clean-up | 10 |
| Winter Door and Window Coverings | 20 |
| TOTAL | \$350 |



Portable heater placed in the doorway protects stoop when poured in winter. Canvas canopy is placed around form and attached to doorway



CIRCULAR CLOCK and the name are yellow, ringed with neon tubes

LOCATION:
Los Angeles

ARCHITECT:
Armet & Davis

BUILDER:
Pallis, Gaard & Wilson

striking design for a triangular site

THE architects chose the triangle as their theme for this unusual restaurant located in the Westchester section of Los Angeles. Westchester is the huge development created by builder Fritz Burns in the years since the war.

The lot is triangular in shape; so is the building, the novel sign, and placement of the 4x8's used as mullions. This arrangement of the mullions not only adds to the design effect but contributes bracing strength.

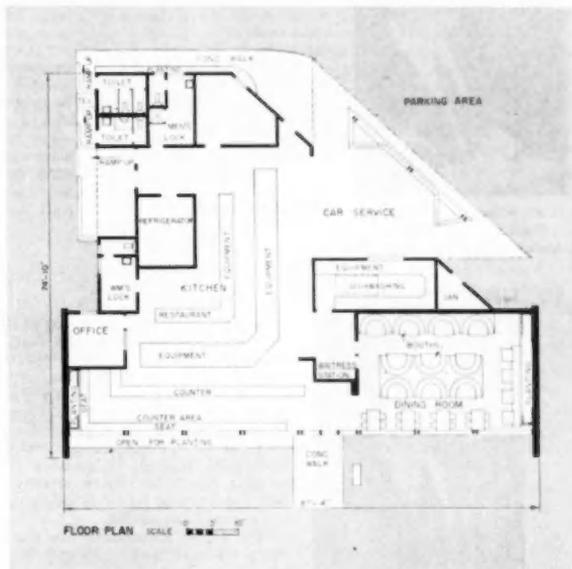
The sloping end walls of the building are white stucco. They protrude out about four feet. The wainscot is painted dark gray, as are the mullions. To the left of the entrance the mullions divide glass panels. To the right are two "V's" of stucco, painted yellow.

The building which cost \$85,000, is owned by Kaiser Community Homes and leased to the Clock restaurant.



TABLE, COUNTER and CURB SERVICE.
Counter seats 20, the restaurant 80. The counter is Formica, the ceiling is Acousti-Celotex, the floor is asphalt tile. Stools and benches are upholstered in yellow

PARKING AREA. on the longest side of the building, can accommodate 80 cars



V-SHAPED PYLON is placed to the right of the entrance, which also is an inverted V. The pylon is metal, in a dark red



speaking of modular

experts comment at meeting of american standards association in chicago

THE ENGINEER



Col. Willard T. Chevalier
Executive Vice-president
McGraw-Hill Publishing Co.

"The Modular Coordination Office of the American Institute of Architects tells me that most of the brick and hollow tile, most of the concrete block and all the glass block being made in this country today are modular in size. Both wood and metal windows, clay flue linings, wallboards, medicine cabinets, insulation batts and many other products are widely available in modular sizes. And in the same period, the architectural profession has commenced converting to the modular method.

"Builders need modular. It is a tool which they would use effectively if it were more broadly used by the designer and the manufacturer than it is at the present time, and if its results were available.

"The builder recognizes the importance of standardization, but is by himself incapable of bringing about the necessary changes involved. In a business which has been dominated by a cut-and-fit technique, a dime store folding ruler, and the 2 by 4, he has done the best he could under the circumstances."

THE BUILDER



Arthur Bohlen
J. L. Simmons Co., Inc.

THE RESEARCHER



William H. Scheick
Executive Director
Building Research Advisory
Board

"Why is modular so hard to sell? I've even heard some of the believers wondering whether the name is too complicated. But no one simplified the names of the antibiotics; and radio and TV have served up some fancy words, all of which the public has taken in stride.

"What it will take to convert the hard-boiled heathen is evidence that modular pays! Can this be proved? It hasn't been proved yet to my satisfaction, but it should be possible.

"The claims for modular are that it saves materials and manpower. Let's add a third saving—technical manpower. I am not completely convinced of the significance of material savings per job. I feel very sure that manpower savings of both kinds can be proved and should be proved.

"I keep hearing fears about modular layout and the tolerances of building materials. Is there any real trouble here? Enough modular buildings have been built to find out.

"Most of the objections to modular sound like alibis and excuses by the heathens.

"Most of the reasons sound like faith and trust by the believers.

"In retrospect we find that a very considerable amount of time, effort and money (about \$300,000) has been spent on various kinds of research for modular coordination. No small part has been spent to produce "educational" material. Before more money is spent on similar studies, I urge adequate support of every tangible proof of modular savings, and a clean-up of technical problems."

THE MANUFACTURER



F. M. Hauserman
President
E. F. Hauserman Co.

"We recently compared two jobs, one of which was planned on a thorough modular basis and the other being a set of drawings without modular coordination. The modular job took approximately 20 per cent less time to get to the shop.

"We note that the modular job has fewer special parts. A much greater percentage of the job is in stock material.

"Now stock items are always cheaper because they are not stocked unless there is the volume to justify them. The whole process of putting an item on a stock basis tends to clean it up and iron out the bugs."

"The greatest modular progress to date has been in the field of clay and concrete masonry unit work. I firmly believe that the inherent weaknesses of modular coordination as we see them right now—weaknesses stemming from design office drawing and detail technical deficiencies, and those charged to suppliers being caught in the middle of a standards transition period—can and will be taken care of.

"To me, the idea of the module is the most logical transition medium to bridge the gap between paper architecture and occupied building space."

THE ARCHITECT



William S. Kinne, Jr.
Professor of Architecture
University of Illinois

MODULAR PRINCIPLES

In Half-story Construction

Chapter II—Quick Assembly of Non-rectangular Wall Sections

By Griffith S. Clark

ANY ANALYSIS of half-story construction must first consider two basic features in roof design—the raised plate and the dropped plate. Elevation of the house determines which should be used. Once the desired detail has been selected, it will be quite easy to calculate the various wall conditions which will occur above the floor level and along the lower edge of the rafters.

How do these basic factors differ? (See Figure 1.)

1. **Raised plate detail:** the level cut of the rafters rests on a 2x4 plate placed upon the rough flooring. This is used whenever additional height is wanted.
2. **Dropped plate detail:** the level cut of the rafters rests upon the continuous plate below ceiling joists. This is used whenever a long, low appearance is wanted.

Contractors who must conserve time whenever possible in order to compete successfully have been finding out that precutting is essential, even in strictly conventional work. In many instances where this has not been done, two carpenters actually climbed to the second floor to measure or scribe a member to fit. This done, one of them either returned it to the saw on the ground or else sawed it by hand on the spot. But with sawhorses rarely available, such hand cuts were seldom accurate.

Days of Field Labor Saved

In place of this hit-or-miss procedure, a few hours' work on the drafting table should save days of expensive field labor. If not possible to obtain the necessary details in advance, the next best procedure is to lay out the plate and rafter condition on the universal jig table and determine the member lengths without aid of science or theory. Construction of a universal jig was explained in the September article of this series.

While easy to calculate the varying measurements required by half-story conditions, the "why" and "how" behind the method is difficult

to describe before the relationship of the four inch control to roof conditions is explained—a future subject in this modular series. Thus, the remainder of this installment will be confined to use of the universal jig for layout and assembly.

Non-Rectangular Wall Sections

The 13 basic non-rectangular wall sections are shown in Figure 2. Each bears a particular designation such as NR-1, NR-2, etc., using the initials of "non-rectangular" for easy reference. It should be remembered that in the design for all wall conditions, the control point is the nominal interior wall surface and rafter line. This is the interior modular line of the exterior wall.

All raised plate conditions will conform to the modular plate lengths of rectangular sections described in the chapter on first story walls in the August *American Builder*. These sections originate from the nominal interior wall reference line. They will terminate either on the opposite interior wall reference line or in some four inch multiple thereof. The gable triangle section (NR-2) will have a plate in four inch increments.

A dropped plate condition will vary with the joist dimensions and roof pitch. Such a section must be laid out on the jig to find out the correct length, which will depend on the thickness of the ceiling joists and the pitch of the rafters to arrive at a starting point. Starting at the zero end of the jig, lay out the exact condition which occurs, beginning with the top plate of the first-story wall section. The continuous plates are laid on the front and rear walls and interior partitions, but the bottom plate usually is the continuous plate on the gable end. However, when the starting ceiling joist rests on the continuous plate, the condition is similar to that shown in Figure 3.

When a dropped plate condition (such as an NR-1) occurs, scribe on a straight 2x6 piece of rafter stock and make the plumb and level cuts of the rafter at the eaves end, being sure to use the pitch designated. The level cut should be $3\frac{15}{16}$ inches long, equal to the actual width of the 2x4 continuous plate on which it will bear. Knee wall height will determine the height of NR-1.

Fit the plumb and level cut of the rafter into the zero end of the jig.

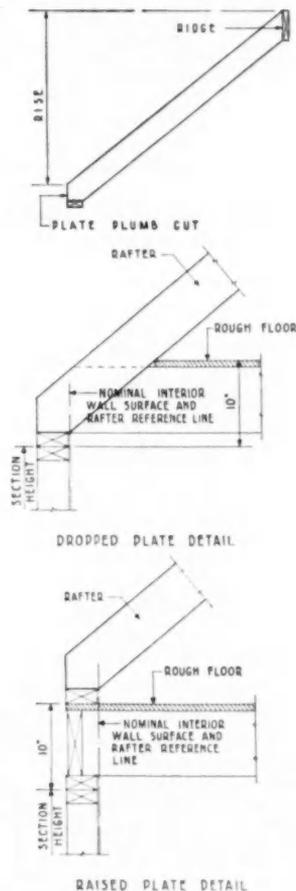


FIG. 1—Dropped and Raised plates

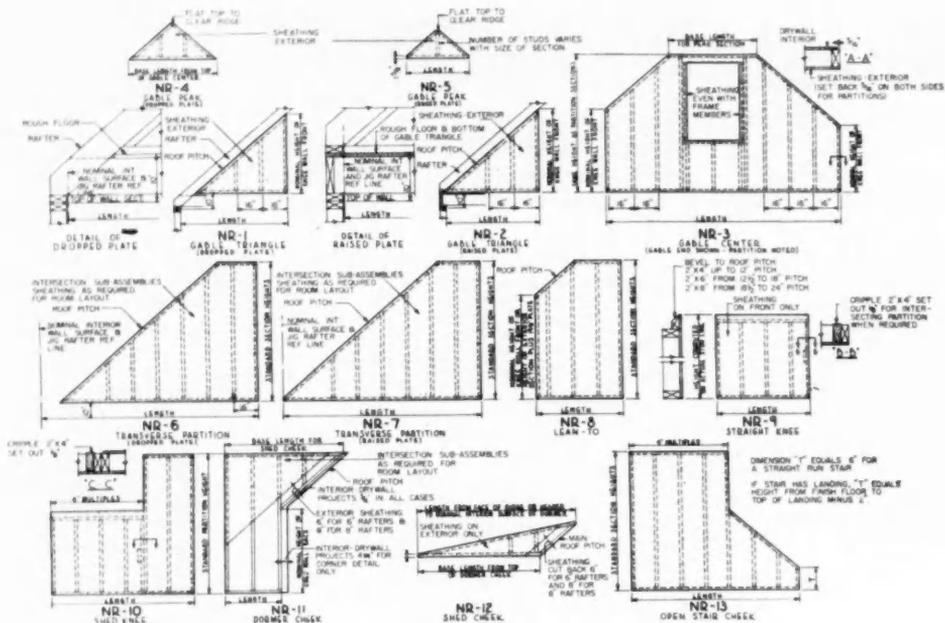


FIG. 2—Standard non-rectangular wall sections

Divide the rise in inches per foot by two. The answer will be the amount of rise in feet at the six foot line on the jig. Mark this distance up perpendicularly at the six foot line and lay the guide rafter so that its outside face will be this distance up at the six foot line, plus the length of the plumb cut at the starting point. Nail securely to the soft wood nailers.

Do the same thing at the other end of the jig, using width of the house as length of the plate. At the apex of the triangle, make the ridge cut so that the ridge fits in snugly.

The condition in the field is now duplicated for the rafter cuts. Lay in material the depth of the floor joists plus thickness of the subfloor to get the outline of each angular member required. Distance from the site may determine the economy of fabricating this condition as one section; also how the section should be broken down into more easily handled pieces.

Height of the center section (NR-3) is determined by the second-story ceiling height. Since the jig is eight feet eight inches wide in the clear, the guide rafters will extend beyond the jig, so they should be trimmed to fit within the jig after a rafter template is made. Forms for sections NR-1 and NR-3 are now ready.

The gable peak section (NR-4) is

formed in the triangle in which NR-1 is shaped. Its base will be the same length as the top of the NR-3 center section.

Choice Goes to Raised Plate

Raised plate details differ because their starting point is the nominal interior wall surface line and not the intersecting joint of the bottom edge of the rafter with the subfloor surface, as described for the dropped plate detail. For this reason, plate lengths and the increment or rise are assigned. The layout will conform to the reference details. Because it is easier to coordinate shop and field conditions, the raised plate detail is used wherever possible.

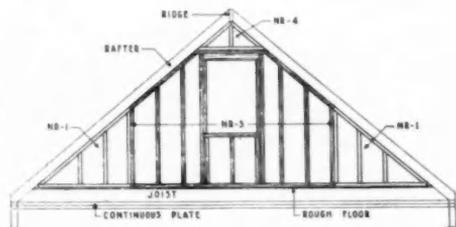
When additional height is required for the elevation, a dwarf wall may be used to replace a raised plate rest-

ing on the subfloor. This will vary in height to meet the design requirement. The level cut of the rafter will rest on the top plate of the dwarf wall exactly as it would rest on the continuous plate. This is the usual solution when additional knee wall and ceiling heights are required for half-story occupancy without changing the assigned pitch.

Gable peak sections similar to NR-4 and NR-5 are fabricated within the same outline jig, as previously described. The plate length is established by the length of the top plate of the NR-3 section.

Transverse non-rectangular sections are framed exactly as shown (NR-6 and NR-7) within the same jig. Again the plate condition has the same effect as outlined. The raised plate section (NR-7) will

FIG. 3—Bottom plate of gable end sections is placed on starter ceiling joist if the latter rests on continuous plate



| | | RISE | | | | | | | | | | | | |
|--------|-------|------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|-----|
| | | 6" | 6½" | 7" | 7½" | 8" | 8½" | 9" | 9½" | 10" | 10½" | 11" | 11½" | 12" |
| RUN | 2'-0" | 13½ | 14½ | 15½ | 16½ | 17½ | 18½ | 19½ | 20½ | 21½ | 22½ | 23½ | 24½ | 25½ |
| | 2'-4" | 15½ | 16½ | 17½ | 19 | 20½ | 21½ | 22½ | 23½ | 24½ | 26 | 27½ | 28½ | 29½ |
| | 2'-8" | 17½ | 18½ | 20½ | 21½ | 22½ | 24 | 25½ | 26½ | 28½ | 29½ | 30½ | 32½ | 33½ |
| | 3'-0" | 19½ | 21 | 22½ | 24 | 25½ | 27 | 28½ | 30 | 31½ | 33 | 34½ | 36 | 37½ |
| | 3'-4" | 21½ | 23½ | 24½ | 26½ | 28½ | 29½ | 31½ | 33½ | 34½ | 36½ | 38½ | 39½ | 41½ |
| | 3'-8" | 23½ | 25½ | 27½ | 29 | 30½ | 32½ | 34½ | 36½ | 38½ | 40 | 41½ | 43½ | 45½ |
| | 4'-0" | 25½ | 27½ | 29½ | 31½ | 33½ | 35½ | 37½ | 39½ | 41½ | 43½ | 45½ | 47½ | 49½ |
| | 4'-4" | 27½ | 29½ | 31½ | 34 | 36½ | 38½ | 40½ | 42½ | 44½ | 47 | 49½ | 51½ | 53½ |
| | 4'-8" | 29½ | 31½ | 34½ | 36½ | 38½ | 41½ | 43½ | 45½ | 48½ | 50½ | 52½ | 55½ | 57½ |
| | 5'-0" | 31½ | 34 | 36½ | 39 | 41½ | 44 | 46½ | 49 | 51½ | 54 | 56½ | 59 | 61½ |
| 5'-4" | 33½ | 36½ | 38½ | 41½ | 44½ | 46½ | 49½ | 52½ | 54½ | 57½ | 60½ | 62½ | 65½ | |
| 5'-8" | 35½ | 38½ | 41½ | 44 | 46½ | 49½ | 52½ | 55½ | 58½ | 61 | 63½ | 66½ | 69½ | |
| 6'-0" | 37½ | 40½ | 43½ | 46½ | 49½ | 52½ | 55½ | 58½ | 61½ | 64½ | 67½ | 70½ | 73½ | |
| 6'-4" | 39½ | 42½ | 45½ | 49 | 52½ | 55½ | 58½ | 61½ | 64½ | 68 | 71½ | 74½ | 77½ | |
| 6'-8" | 41½ | 44½ | 48½ | 51½ | 54½ | 58½ | 61½ | 64½ | 68½ | 71½ | 74½ | 78½ | 81½ | |
| 7'-0" | 43½ | 47 | 50½ | 54 | 57½ | 61 | 64½ | 68 | 71½ | 75 | 78½ | 82 | 85½ | |
| 7'-4" | 45½ | 49½ | 52½ | 56½ | 60½ | 63½ | 67½ | 71½ | 74½ | 78½ | 82½ | 85½ | 89½ | |
| 7'-8" | 47½ | 51½ | 55½ | 59 | 62½ | 66½ | 70½ | 74½ | 78½ | 82 | 85½ | 89½ | 93½ | |
| 8'-0" | 49½ | 53½ | 57½ | 61½ | 65½ | 69½ | 73½ | 77½ | 81½ | 85½ | 89½ | 93½ | 97½ | |
| 8'-4" | 51½ | 55½ | 59½ | 64 | 68½ | 72½ | 76½ | 80½ | 84½ | 89 | 93½ | 97½ | 101½ | |
| 8'-8" | 53½ | 57½ | 62½ | 66½ | 70½ | 75 | 79½ | 83½ | 88½ | 92½ | 96½ | 101½ | 105½ | |
| 9'-0" | 55½ | 60 | 64½ | 69 | 73½ | 78 | 82½ | 87 | 91½ | 96 | 100½ | 105 | 109½ | |
| 9'-4" | 57½ | 62½ | 66½ | 71½ | 76½ | 80½ | 85½ | 90½ | 94½ | 99½ | 104½ | 108½ | 113½ | |
| 9'-8" | 59½ | 64½ | 69½ | 74 | 78½ | 83½ | 88½ | 93½ | 98½ | 103 | 107½ | 112½ | 117½ | |
| 10'-0" | 61½ | 66½ | 71½ | 76½ | 81½ | 86½ | 91½ | 96½ | 101½ | 106½ | 111½ | 116½ | 121½ | |

FIG. 5—Knee wall heights for raised plate conditions. Rise is given in inches per foot; setback in modular increments

have a plate, modular in length, starting at the nominal interior wall surface line. The dropped plate section (NR-6) will start at the intersection of the under side of the rafter and top of the subfloor.

Lean-to sections such as NR-8 depend upon knee wall heights. Knee walls should be framed in rectangular fashion as shown in NR-9 and in Figure 4, with a beveled purlin ripped to insure a snug fit below the bottom edge of the rafter. Note in Figure 4 that the height (H) of the knee wall is the combined height of the rectangular frame section plus the inside edge of the beveled purlin.

Finding Knee Wall Heights

Minimum knee wall heights are usually established by code authority (FHA, local building codes, etc.), as are minimum heights for the flat area of the ceiling and minimum percentage of livable floor area which must be covered with flat ceilings. For these reasons, knee walls should be designed so that the setback from the nominal interior wall surface line will be in 4-inch increments. The knee wall section height can then be taken directly from established tables.

Part of these tables, covering both raised and dropped plate conditions where the rise or pitch of the roof ranged from six to 12 inches per foot, is presented on these pages. Note that the assigned setback or run (distance between starting point of raised or dropped plate section and the inside face of the knee wall section) appears in 4-inch increments in the bold-face vertical column at the left of each table. Rate of rise per foot appears in the bold-face row across the top of each table.

If run and rise are given, a quick check will reveal what the exact height of the knee wall will be. Just as quickly, the table will show what setback will be required, if rise and height are assigned.

With this information, it is a simple matter to arrange the design so that code requirements are met and the necessary livable space is available.

The shed knee section (NR-10) is actually an NR-9 knee wall jointed to a frame section of standard parti-

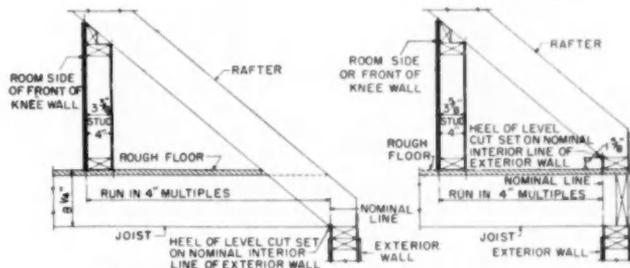


FIG. 4—Section through knee wall in dropped plate condition (left) and with raised plate. Knee wall height (H) is the combined height of knee wall section plus inside face of the beveled purlin above it

| | | RISE | | | | | | | | | | | | |
|-------------|-------|------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|-----|
| | | 6" | 6½" | 7" | 7½" | 8" | 8½" | 9" | 9½" | 10" | 10½" | 11" | 11½" | 12" |
| R U N | 2'-0" | 3% | 4% | 5% | 6% | 7% | 8% | 9% | 10% | 11% | 12% | 13% | 14% | 15% |
| | 2'-4" | 5% | 6% | 7½ | 9% | 10% | 11½ | 12% | 13% | 14½ | 16% | 17% | 18½ | 19% |
| | 2'-8" | 7% | 8½ | 10% | 11% | 12½ | 14% | 15% | 16½ | 18% | 19% | 20½ | 21½ | 23% |
| | 3'-0" | 9% | 11% | 12% | 14% | 15% | 17% | 18% | 20% | 21% | 23% | 24% | 26% | 27% |
| | 3'-4" | 11% | 13% | 14½ | 16% | 18% | 19½ | 21% | 23% | 24½ | 26% | 28% | 29½ | 31% |
| | 3'-8" | 13% | 15½ | 17% | 19% | 20½ | 22% | 24% | 25½ | 28% | 30% | 31½ | 33% | 35% |
| | 4'-0" | 15% | 17% | 19% | 21% | 23% | 25% | 27% | 29% | 31% | 33% | 35% | 37% | 39% |
| | 4'-4" | 17% | 19% | 21½ | 24% | 26% | 28½ | 30% | 32% | 34½ | 37% | 39% | 41½ | 43% |
| | 4'-8" | 19% | 21½ | 24% | 26% | 28½ | 31% | 33% | 35½ | 38% | 40% | 42½ | 44% | 47% |
| | 5'-0" | 21% | 24% | 26% | 29% | 31% | 34% | 36% | 39% | 41% | 44% | 46% | 49% | 51% |
| | 5'-4" | 23% | 26% | 28½ | 31% | 34% | 36½ | 39% | 42% | 44½ | 47% | 50% | 52½ | 55% |
| | 5'-8" | 25% | 28½ | 31% | 34% | 36½ | 39% | 42% | 45½ | 48% | 51% | 53½ | 56% | 59% |
| | 6'-0" | 27% | 30% | 33% | 36% | 39% | 42% | 45% | 48% | 51% | 54% | 57% | 60% | 63% |
| | 6'-4" | 29% | 32% | 35½ | 39% | 42% | 45½ | 48% | 51% | 54½ | 58% | 61% | 64½ | 67% |
| | 6'-8" | 31% | 34½ | 38% | 41% | 44½ | 48% | 51% | 54½ | 58% | 61% | 64½ | 67% | 71% |
| | 7'-0" | 33% | 37% | 40% | 44% | 47% | 51% | 54% | 58% | 61% | 65% | 68% | 72% | 75% |
| | 7'-4" | 35% | 39% | 42½ | 46% | 50% | 53½ | 57% | 61% | 64½ | 68% | 72% | 75½ | 79% |
| | 7'-8" | 37% | 41½ | 45% | 49% | 52½ | 56% | 60% | 64½ | 68% | 72% | 75½ | 79% | 83% |
| | 8'-0" | 39% | 43% | 47% | 51% | 55% | 59% | 63% | 67% | 71% | 75% | 79% | 83% | 87% |
| | 8'-4" | 41% | 45% | 49½ | 54% | 58% | 62½ | 66% | 70% | 74½ | 79% | 83% | 87½ | 91% |
| 8'-8" | 43% | 47½ | 52% | 56% | 60½ | 65% | 69% | 73½ | 78% | 82% | 86½ | 90% | 95% | |
| 9'-0" | 45% | 50% | 54% | 59% | 63% | 68% | 72% | 77% | 81% | 86% | 90% | 95% | 99% | |
| 9'-4" | 47% | 52% | 56½ | 61% | 66% | 70½ | 75% | 80% | 84½ | 89% | 94% | 98½ | 103% | |
| 9'-8" | 49% | 54½ | 59% | 64% | 68½ | 73% | 78% | 83½ | 88% | 93% | 97½ | 102% | 107% | |
| 10'-0" | 51% | 56% | 61% | 66% | 71% | 76% | 81% | 86% | 91% | 96% | 101% | 106% | 111% | |

FIG. 6—Knee wall heights for dropped plate conditions

tion height and covered with one piece of material as inside surfacing.

Laying Out a Dormer Cheek

The dormer cheek (NR-11) should have the length of its bottom plate assigned in 4-inch multiples, and nominal height of the knee wall will have been determined previously from the tables. Its distance from the front of the building must be assigned. With this information, this section can be laid out on the universal jig. Use a long 2x4 member for the top plate. Lay out the guide rafter so that its position is that of the rafter in field conditions, then frame as outlined.

The combined length of the top plate plus the level cut of the rake piece (diagonal member) will then become the base length of the shed cheek section (NR-12). There is no problem to lay out this latter section once its base length is known, providing the pitch of the shed rafter is assigned. This pitch can be given if the shed rafters terminate in a header. However, if they end at the ridge, there can be no assigned pitch, because the wall section height and ridge position determine the pitch of the rafter. This condition can be

calculated and then set aside until roof conditions are analyzed.

The open stair cheek (NR-13) is laid out in a manner similar to a rectangular section. Length of the top plate is assigned in 4-inch multiples. The bottom plate should be long enough to reach the floor line intersection of the rise and tread assigned. Distance "L" is established at the lower point of the stair plate. Using a framing square, lay out the rake piece to coincide with the rise and run of the stair.

Strapped Ceilings

Strapped ceilings are 1x2 framing, spaced 12 inches on centers and joined to intermediate strapping with corrugated fasteners. Finish material for dry wall construction is applied directly to the strapping to reinforce the section for field erection.

When the strapped ceilings occur between vertical walls of standard height, all of their dimensions are in 4-inch multiples and are equal to the nominal dimensions between walls because the collar beams or ceiling joists rest on the continuous 2x4 plate. The wall covering stops at the section height and the nominal

2x4's actual thickness of 1½ inches is greater than the total thickness of the ¾-inch strapping and ½-inch covering material.

Dimensions parallel to the ridge but sloping between gables and transverse partitions equal the nominal dimensions between walls, minus one inch. This is so because the strapped ceiling is supported by 2x4 blocking centered on the gable rake plate for backing, and the inside covering extends to top of the section while ceiling fits within covering.

Dimensions for the sloping areas transverse to the direction of the ridge should be calculated, but may be arrived at on the universal jig from the outline already made for the non-rectangular sections.

NEXT MONTH'S ARTICLE

will be the first of several chapters on adapting modular control to roof construction to make precutting accurate and easy. It will present typical roof plans, possible conditions for ridge members and some orderly methods of design.



The labor-saving potential of modular construction counts heavily in the planning of the two demonstration houses being built in Champaign, Ill.

demonstration houses show value of modular coordination

THE UNIVERSITY OF ILLINOIS Small Homes Council and the Housing and Home Finance Agency are co-operating in the building of two demonstration houses designed on the modular principle. Object of the project is to show builders how to take full advantage of the time- and material-saving techniques which housing research has worked out.

In order to present such details in the clearest manner possible, the conventional order of working drawings has been abandoned and replaced by a series of plans, elevations and details arranged in a chronological order of construction. These are supplemented by perspective drawings, assembly instruction and specifications.

The demonstration plan—the same for both houses—uses roof trusses and non-load-bearing partitions. The partitions are tipped into place after



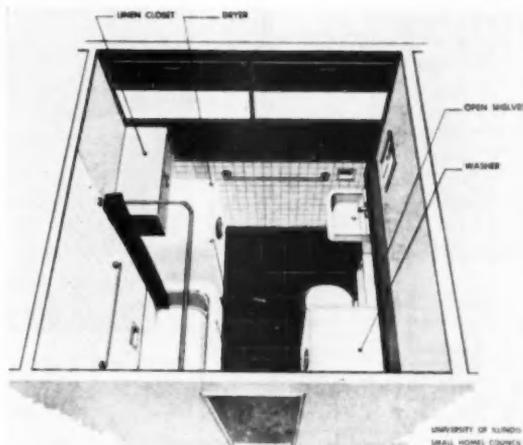
The houses take full advantage of the open planning principle. There is no clear-cut separation of areas except for the bedrooms and the bathroom. The kitchen is concealed from the living room only by a baffle partition. The play area—an important innovation—is defined by a storage partition which stops short of the ceiling.

the floor, ceiling and wall-finish materials are applied. These finish materials can be applied without interruption and with a minimum of cutting and fitting of sheet materials. The shape and size of the plan, a simple rectangle 30 by 34 feet, makes for economy and easy placement on the site, and is considered adequate for five people.

The area for traffic paths within the house is kept below the recommended maximum of 15 per cent of the total floor area. Traffic does not pass through activity areas. A double circulation path is provided between the kitchen and bathroom.

The play area occupies a central position and is easily accessible from all parts of the house. It can be used for general activities as well as for children's play. There is a fully enclosed garage which will have storage space for bulky articles.

Identical in plan and detail, the second house is serving as a check on the first from the standpoint of determining ways of making additional savings through operational improvements which repetition brings to light. The two houses are being privately financed, the HHFA grant being used only for research in connection with the demonstration.



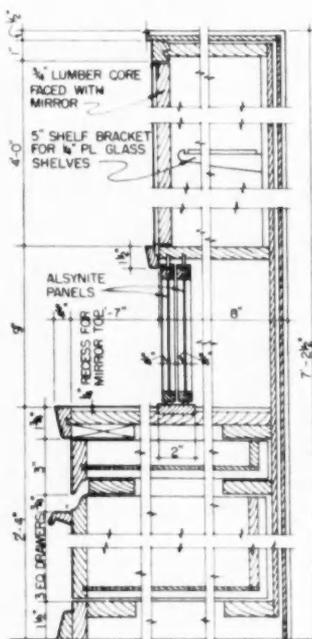
The laundry-bath combination is a new idea which seems to be gaining headway. The Small Homes Council is installing laundry equipment in the bathroom, on the theory that in small homes most laundry is stored and used in the bedroom bathroom area. An electric dryer takes the place of the space-consuming indoor drying room.

IDEA of the month

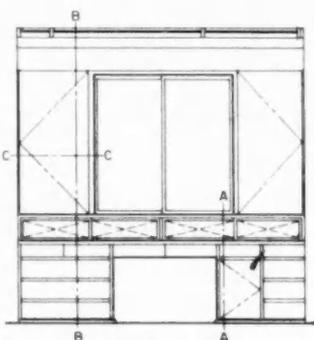
from the Pace Setter

how to build in a dressing table

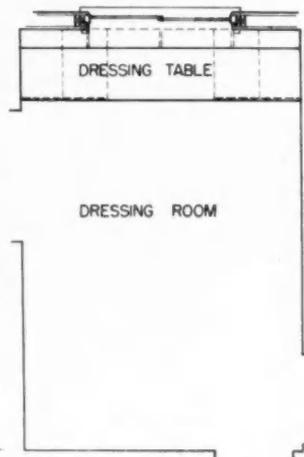
A FEATURE of the dressing room is the built-in table which occupies one entire wall. This table provides for every convenience. Deep drawers and cupboards are arranged on each side of open space under the counter top. A shallow storage area is provided across the entire width of the table between counter top and window sill. Four narrow sliding doors enclose this space. The area on each side of the windows over to the walls is filled in with cupboards, the doors of which are faced with plate glass mirrors over the entire surface. The bottom of all drawers are undercut to provide for a hand-hold, in this way eliminating all surface hardware. Extended wood lip is provided at top of bottom drawer for hand-hold. Counter top is of $\frac{1}{4}$ -inch plate glass with wood edge mould.



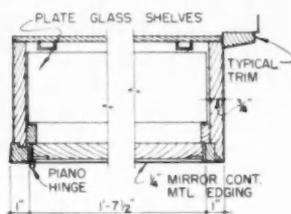
SECTION B B



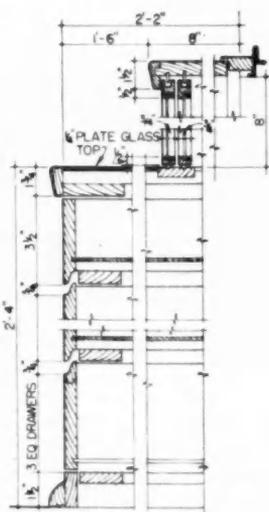
NORTH ELEVATION



PLAN

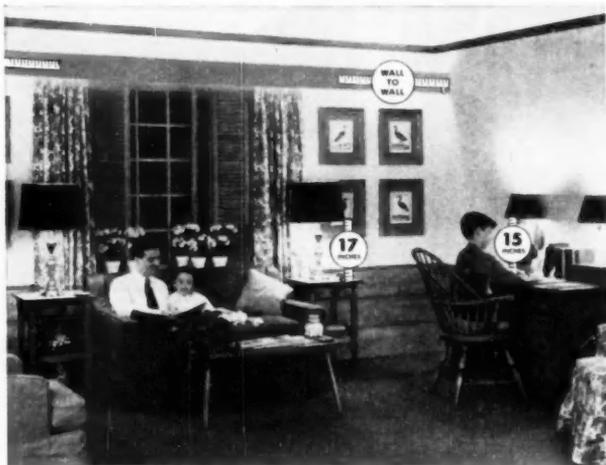


SECTION C C



SECTION A A

Builders see new sales opportunity in General Electric Light Conditioning!



G-E Light Conditioning recipe for living rooms. The wall-to-wall valance lighting adds a feeling of spaciousness to the room.



Typical Light Conditioning recipe built around a specific seeing task. It shows by actual measurement how to provide the right lighting for sewing.

HOME builders who are Light Conditioning their homes find that it gives them a three-way sales advantage.

First, it offers customers easier, more comfortable seeing, with lighting that's scientifically correct. Second, it shows off every feature of the home to its best advantage—flatters colors, makes the most of design, even makes small rooms seem larger. Third, because a Light Conditioned home looks its best at night, it makes evening sales hours more productive.

Based on scientific lighting recipes

Light conditioning means the right lamp bulbs in the right fixtures in the right locations to give the kind of lighting that experts agree is best. There are G-E Light Conditioning recipes for every room in the house. Two typical examples are shown at left.

Gets favorable comments from builders

Reaction of builders who are using Light Conditioning is enthusiastic.

These comments are typical:

"Light Conditioning brought out the real beauty and individuality . . . especially at night. From now on, I want my houses to be Light Conditioned all the way through. It's a real selling advantage."

"I noticed that Light Conditioning stopped the visitors to our home. In past years, frankly, nobody even looked at the lighting. Light Conditioning, especially lighted valances, will certainly be in the plans for my future homes."

Free Recipe Booklet

Learn how to Light Condition your homes. Write General Electric for full information and a free copy of the Light Conditioning Recipe Book. Lamp Division, General Electric, Nela Park, Cleveland 12, Ohio.

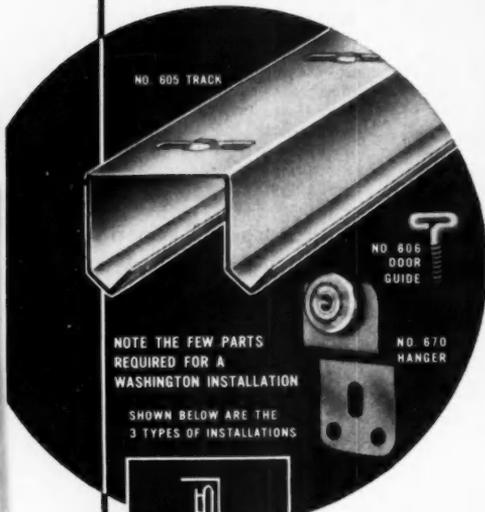
You can put your confidence in—

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**FEWER PARTS
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WASHINGTON LINE

**RESIDENTIAL
ROLLING DOOR HARDWARE**

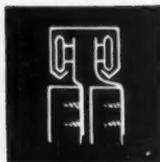


NOTE THE FEW PARTS
REQUIRED FOR A
WASHINGTON INSTALLATION

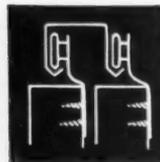
SHOWN BELOW ARE THE
3 TYPES OF INSTALLATIONS



FOR SINGLE DOORS
NO. 600 TRACK
IN COMBINATION
WITH NO. 660 HANGERS



FOR 3/4" BY-PASSING DOORS
NO. 604 TRACK IN
COMBINATION WITH NO. 662
AND NO. 664 HANGERS



FOR 1" TO 1 1/2"
BY-PASSING DOORS
NO. 605 TRACK
IN COMBINATION
WITH NO. 670 HANGERS

3 TYPES OF WHEELS AVAILABLE
ON ALL HANGERS: BALL BEARING
NYLON, BALL BEARING STEEL,
OR AXLE BEARING NYLON



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under FHA specifications and have
just started 191 more... Gates Form
Ties have proved economical..."
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Denver, Colo.

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the construction industry by storm in
Dayton."
FOREMAN BROTHERS COMPANY
Distributor in Dayton, Ohio

"We have now used your 'Form Ties'
in one thousand homes and intend to
use them in all our building opera-
tions."
CHARLES T. GORE
National Director of NAHB

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267 HOMES ANCHORED with **DRIVE-IT**



Kenbo Corp., builder of Rancho Monterey homes near Los Angeles, uses Drive-It "400" to fasten 2"x4" sleepers to the concrete floor slabs. Superintendents Walter Johnson and L. B. Swann, Drive-It users three years, say Drive-It fastenings are quick, dependable, economical.



split-second fastening to **concrete steel**

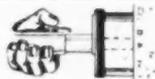
Drive-It uses a small powder load to drive hardened steel pins into concrete or steel. No power lines! No drilling!



DRIVE-IT, the first powder actuated tool approved by Underwriters' Laboratory.



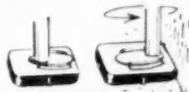
DRIVE-IT cannot be discharged accidentally due to the push and turn sequence. This, plus the large safety pad makes **DRIVE-IT** triple safe.



Exclusive Automatic Barrel Extension for fastenings inside junction boxes or other recesses.



DRIVE-IT is the only powder-actuated tool which requires but one standard power load regardless of penetration desired.



Exclusive Swivel Safety Pad easily rotated for getting into close quarter work.

DRIVE-IT "300", lowest cost fastening tool. Low original cost and low operating cost.



a drive-pin for every job

OVER 50 TYPES AND SIZES

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SELL, PROFIT ALL YEAR. Most P & H builders push fall sales and start their basement, slab or crawl space foundations before the ground freezes. Thus they can build all winter, and keep crews working, sales and profits climbing all year. And their site construction time is slashed because most of the work is done at the P & H factory.

SELL TO ANY OR ALL MARKETS. The attractive buyer-pleasing P & H Homes—with models designed to sell from \$7,000 to \$12,000—assure you faster sales, bigger profits—the year around.

Write today for details on the P & H low cost Enterprise or luxury Capitaline Homes. Ask about the amazing \$2,750 home package. It's America's most complete home package—priced to sell in the \$7,000 range—anywhere.

P & H dealerships are still available east of the Rockies. The 10-25 home per year builder will find our P & H profit plan particularly attractive.

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P & H 2-Bedroom Home Package

- gas or oil-fired furnace
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- prefitted fir panel doors
- rugged room-size wall panels
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NOW THERE IS A WAY you can ventilate Insulux Glass Block® panels without disrupting the symmetry of panel design. It's with the Insulux Panel-Vent.

Want more information? Our new folder gives complete details. Write for your copy and be ready with the answer when your customers ask how to combine the beauty and practicality of Insulux Glass Block with concealed ventilation. Address: Insulux Glass Block Division, Kimble Glass Company, Department AB-11, Box 1035, Toledo 1, Ohio.



KIMBLE GLASS COMPANY

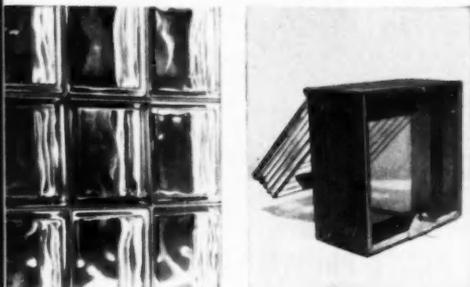
Subsidiary of Owens-Illinois Glass Company

Toledo 1, Ohio



INSULUX PANEL-VENT and how it works

The *new* Insulux PANEL-VENT is a hinged, aluminum-framed half section of an eight-inch Insulux Glass Block. It is mortared into a panel in much the same manner as glass block.



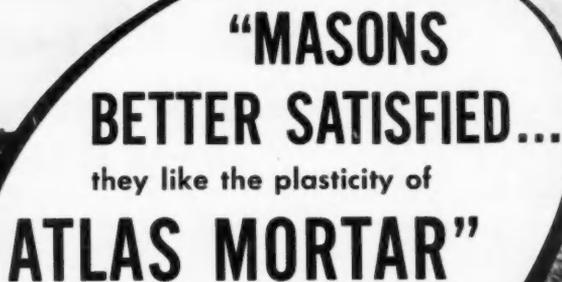
Because the PANEL-VENT uses an actual half Insulux Glass Block, it fits and matches the panel into which it is set perfectly. Half blocks in any of six face designs are available. No special installation tools are needed.

PANEL-VENT is operated from within by a stainless steel rod. When closed, it is completely weathertight. An aluminum screen keeps out insects.



Use PANEL-VENT in existing block panels. Build it into new panel construction. Or, use it alone with concrete, brick or other materials.





"MASONS BETTER SATISFIED... they like the plasticity of ATLAS MORTAR"

says **DONALD RICHARDSON**

*project manager for the huge new
Daystrom, Inc., brick and block building
shown below at Eynon, Pa. He's
sold on "the way Atlas Mortar spreads
under the trowel," is "especially
pleased with the color."*



"I HAVE been mixing mortar for many years," notes Vito Nepa, Sr., "but with Atlas I feel that I am really mixing mortar as it should be." Job required 1,150 barrels of buttery-smooth Atlas Mortar.

AND A TEST PANEL PROVES HE'S RIGHT!

Bill Lenzer, bricklayer's foreman (upper left), wielded the trowel in an architect's test of Atlas Mortar and five other leading brands at the job site. He had never used Atlas Mortar before. But he picked it over all others. Now that the job is complete, he says, "It will be Atlas Mortar with me from here on out. It is highly plastic and there has never been a mortar that spreads like Atlas."



ATLAS MORTAR has proved itself on the job and in the laboratory. Complies with ASTM and Federal Specifications. For more information, write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N. Y.

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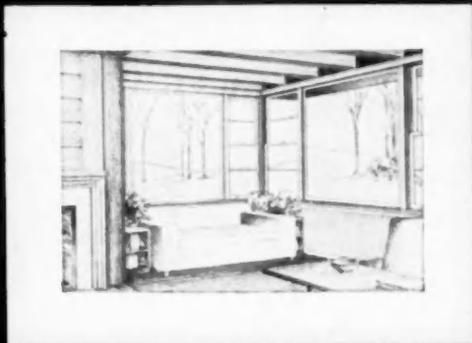
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Fresh, modern, practical ideas for using Ponderosa Pine windows—illustrated with detailed drawings—are yours for the asking in this handsome window booklet "The New Outlook." Here are interesting new ways to bring convenience, comfort and sales appeal to the homes you plan. Send today for your free copy!



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Chicago 3, Illinois

Please send me your new illustrated idea booklet "The New Outlook."

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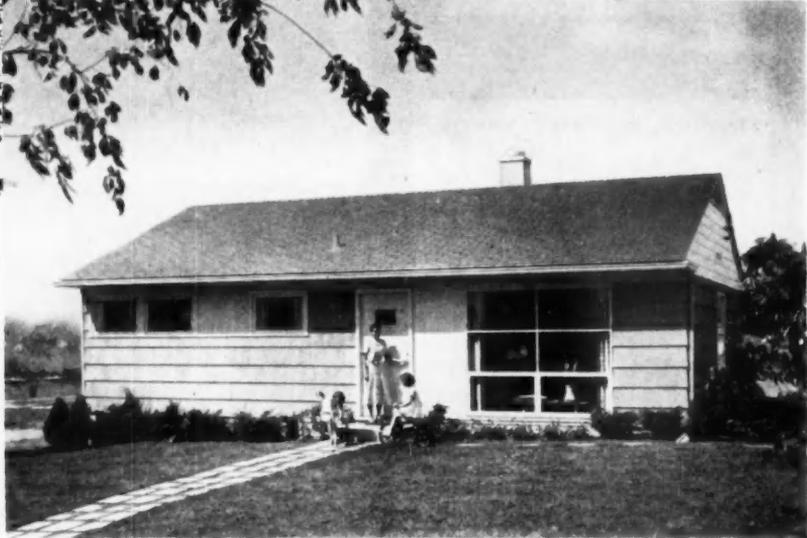
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NATIONAL HOMES CORPORATION SCOOPS ENTIRE BUILDING FIELD WITH EXCITING NEW 1953 MODELS

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National does it again! The all-new 1953 National Homes scoop the entire building field in beauty, convenience, sales-making features. More than ever, National is THE line to sell. Some excellent territories are available . . . write today for details.



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| <i>McCall's</i> , Nov. | <i>This Week Magazine</i> , Oct. 26 |
| <i>Better Living</i> , Nov. | <i>Saturday Evening Post</i> , Nov. 1 |
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| | <i>Life</i> , Oct. 27 |

NATION'S LARGEST PRODUCERS OF QUALITY HOMES AT THRIFT PRICES

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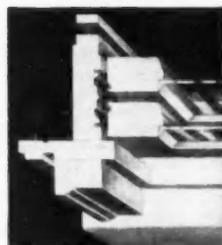
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SUPERIOR unit wood windows

When you specify Superior Windows you are getting the finest! No other window offers more complete weathertightness and continual ease of operation! Superior's exclusive jamb-liner weatherstrip is flexible and compensates for dimensional variations due to climatic changes—it assures smooth, quiet sliding the year 'round. In addition, Superior Windows are perfectly counter-balanced, and adjustable to wall thicknesses and various standard types of construction.

Superior windows are made of kiln-dried Ponderosa Pine and are chemically-treated in strict accordance with NWMA standards.

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Here's a list of the Bilt-Well line

Superior Unit • Wood Windows • Nu-Style & Multiple-Use Cabinets • Carr-dor Garage Doors • Combination Doors • Screens & Storm Sash • Basement Unit Windows • Shutters • Exterior Doors • Interior Doors • Entrances • Louvers & Gable Sash • Corner China Cabinets • Ironing Board Cabinets • Mantels • Telephone Cabinets • Stair Parts



the second round of

ALAN BROCKBANK.
NAHB President.
Salt Lake City, Utah

FIRST TRADE SECRET HOUSE—More house for the money, our costs were lowered by utilizing trade secret information. The two and three bedroom houses sell for \$9,250 and \$10,500. All houses have patios, storage walls, and good architecture.



THOMAS P. COOGAN.
Past President, NAHB.
New York and Miami, Fla.

MORE MORTGAGE MONEY—There will be more VA money if the government will approve a 100-per cent guarantee. Legislators are looking for the VA mortgage answer. Higher interest rates is not that answer. Higher rates if advocated by the builders will be bad publicity, especially when it won't go through. Clarification of the present regulations on VA money will also

strengthen the picture. Large buyers will take their share. Now, they don't know where they stand.



ALBERT BALCH.
Seattle, Wash.

LAND COSTS—Codes of city, county, and state are lowering land preparation costs. Modern wider lots cannot pay for city services, yet they cost more per front foot. Will the trend be back to smaller lots and a more densely populated area to raise enough tax money?



FLOYD KIMBROUGH.
Jackson, Miss.

DESIGN—Good architecture keeps our sales up. It costs very little when spread out over the mortgage life of the house. Buyers want to pay the slight difference. Architect's fees of \$50 a house is one of our best investments. We still are producing when half of Jackson's builders have gone out of business.

TOM FOORE.
Midwest City, Okla.

FHA VALUATIONS—Builders need greater FHA valuations for good design, quality materials, and careful building. To date, 103 per cent is the greatest valuation that can be had while stock plans, average materials, and normal construction can get 100 per cent evaluation. Better builders are being penalized.

Cost saving procedures, raising land costs, and mortgage money were discussed at the first of the second series of trade secrets meetings held July 28, 29, and 30 in Chicago and Madison, Wisconsin. NAHB president, Alan Brockbank, called the meeting, furthering the work started by NAHB's past president, W. P. "Bill" Atkinson.

Included in the three day affair were field trips through two midwest laboratories. Monday, July 28, the group convened at the Portland Cement Association's Chicago offices and inspected concrete masonry construction. Later in the day, the builders toured the association's Skokie, Illinois, laboratory. Tuesday, in Madison, the group were guests of the Forest Products Laboratory, Forest Service Division of the United States Department of Agriculture. At both institutions the builders were shown the latest research experiments and attended lectures prepared by the research staffs.

The second round of "Operation, Trade Secrets," will be nationwide with over twenty meetings scheduled in seven regional areas. The climax of the 1952 series will be a summary meeting at the January NAHB convention in Chicago. Co-chairmen of the Chicago Secrets affair will be Martin Bartling, Jr. of Knoxville, Tenn.; Ned Cole, of Austin, Texas; Andy Place of South Bend, Ind.; and Dave Slipper of Kaiser Homes, Los Angeles, Calif.

Culled for the *American Builder* reader are many important developments brought forth in this latest trade secret session.

MARTIN BARTLING, JR.
Knoxville, Tenn.

TERRAZZO FLOORS—We install terrazzo floors at the same cost as asphalt tile. We pour the terrazzo mix on the green slab. Then grind and polish the floor ourselves. After polishing, we use an abrasive wheel in a power hand saw to score the terrazzo. The floor has good sales appeal.



FRANK ROBERTSON.
San Antonio, Texas

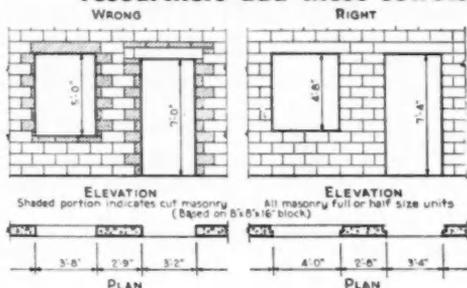
FLEXIBLE HOUSES—Design is flexible to meet the needs of the family throughout their lives. Movable storage walls enable the owner to make 1, 2, 3, 4 bedroom houses or a two bedroom unit with an efficiency apartment. These changes can be made by the owner in a couple of hours. House sells in the \$16,000 bracket. Bath and kitchen have the only fixed interior walls in the house.

ANDY PLACE.
South Bend, Ind.

LAND DEVELOPMENT SAVINGS—We use smaller storm sewers as we made a pond on low land in our new 200 acre subdivision. During heavy rains water fills the pond. An 8-inch outlet drains the pond. What difference does it make if it takes a week to drain off. This method does not overload the city's storm sewer.

OPERATION TRADE SECRETS gets under way

researchers add these secrets



1 Right and wrong methods of planning concrete block masonry walls. The correct method utilizes full size units. The mason does no cutting. Savings can result for the builder

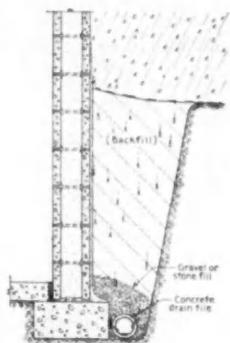


2 A new source is now thought responsible for much of the paint failure previously blamed on cold weather condensation. Rainwater works its way under the siding causing dampness in back of the board

3 **PLASTER BOARD NAIL POPPING**—Two methods were advocated by the Forest Products people for nail popping in plaster board. Moisture in the framing member at the time of installa-

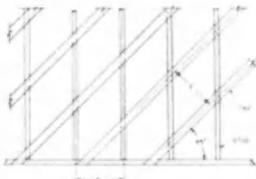
tion dries out and there is a movement of the nail to the center of the board. If the framing member was too dry the board swells, and moves outward, causing a dimple. Framing lumber should have 12

per cent moisture content. Cement coated nails as used by many builders are designed for greater holding power for short periods of time. Then they are easy to pull out



4 Dry basements start with surface and subsurface drainage. Note full mortar bedding on the foundation wall and the back plastering. Drain tile should be at the side of the foundation footing, not above it

5 A new wall framing method developed by the Forest Products Laboratory has studs two feet on center. The wall is strengthened by 1 x 4's nailed to the studs at a 45 degree angle, two feet on center. Either horizontal or vertical siding can be used. If horizontal siding is used it must be cut and nailed on the angle



DAVE SLIPHER,
Kaiser Homes,
Los Angeles, Calif.

PRE-FAB PANELS—Door manufacturers are the logical source of a mass produced panel for the home building industry. Builders can reduce costs of exterior walls. We have built a 20x20-foot experimental unit using 3x7-foot, 1 3/4-inch exterior, solid core doors for weight bearing panels. Our wall-cost has been lowered to 57 cents per square foot.



NED COLE,
Austin, Texas

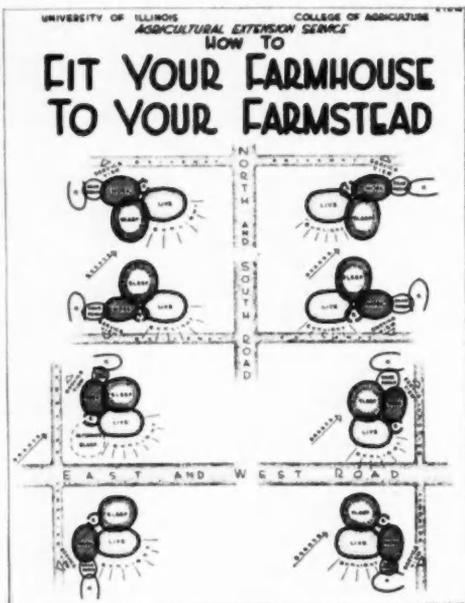
DESIGN—Too little research is being done in architectural design. Students are not being trained in housing. They produce beautiful facades with little interior thinking. There is a need for more complete house planning. Buyers are demanding more.

FRANK A. COLLINS,
Chester, Pa.

LAND DEVELOPMENT—We divide land into industrial, commercial, and residential areas. Land costs are higher for the industrial and residential parcels. The residential land can be sold with a normal mark-up or for cost if the builder gets stuck. Communities want industrial and commercial projects as they pay a greater percentage of the tax load.

FRANK BURNS,
Denver, Colo.

MORTGAGE MONEY—Denver is the financial fore-runner of the country. Home and loan institutions are now paying 3 1/2 per cent on insured savings. This factor makes 4 per cent mortgage money tight.

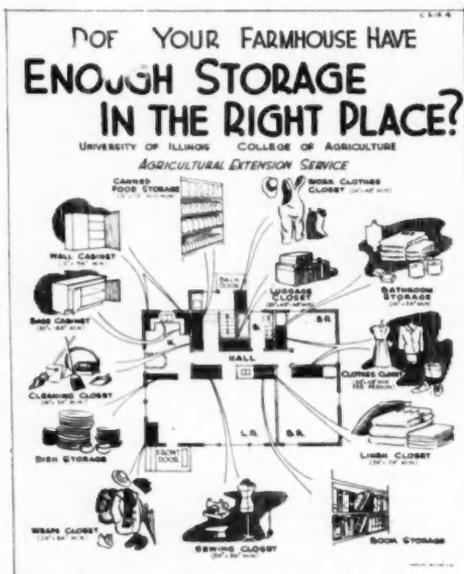


part 1 . . its requirements

part 2 . . its plan

part 3 . . its fireproof construction

this modern farm house SERVES TODAY'S FARM NEEDS



1 - authoritative requirements*

UNIVERSITY of Illinois authorities have formulated requirements for the floor plan and orientation of a modern farm home. The farm dwelling differs from its city cousin in that it must serve a greater number of needs for the farm family. Areas are needed for office space, food processing, storage, and clean-up facilities.

Advantages, too, are on the farmer's side. He has an unlimited amount of land in which to orient his house. The farm structure can take advantage of view, sunlight, and prevailing summer breezes.

Below are requirements for site and plan suggested by the university experts:

SITE—The farmhouse must be located in proper relation to the other farm buildings. Usually the house is near the road. However, it should be set back at least 100 feet. The same 100 feet is to be maintained between the house and the other farm buildings. It is not wise to locate cattle and hog yards southwest of the house. Prevailing summer winds will carry the odors.

PLAN—Five basic principles included in plan are:

1. Driveway view from the kitchen.
2. Living room with a south or east exposure.
3. Bedrooms located to intercept prevailing summer winds.
4. Entrances located toward the driveway and protected from the winter winds.
5. Greater amounts of storage space.

2 - here is how the requirements were met

THE farm home of Charles H. Anderson of Newman, Illinois meets the requirements of leading agriculture housing authorities. The three bedroom home, built of fire resistant materials, combines good site orientation with a good floor plan to meet the needs of the modern farm family.

Orientation of the house is in relationship to the driveway and other farm buildings. It follows the five basic principles outlined in part I of this article.

1. The kitchen, at the rear of the house, faces the driveway and other farm buildings.

2. Both morning and afternoon sunlight enter the 10-foot living room projection. The projection provides the living room with both a south and west exposure.

3. Bedrooms located to the right rear of the house intercept prevailing southwest summer winds.

4. Entrances are in close proximity to the driveway. A greater emphasis was placed on the front entrance to encourage its use. Most farm structures have convenient rear entrances.



FIRST FLOOR PLAN

SCALE 0 5' 10'

The T-shaped plan separates the house into three areas: kitchen-dining, living, and bedrooms. The bath is close to all rooms. Ample closet space has been provided



Bedford stone veneer and asbestos roofing are combined. Sunlight enters the projected living room through the east and west windows. The kitchen at the rear right of the house overlooks the driveway and other farm buildings

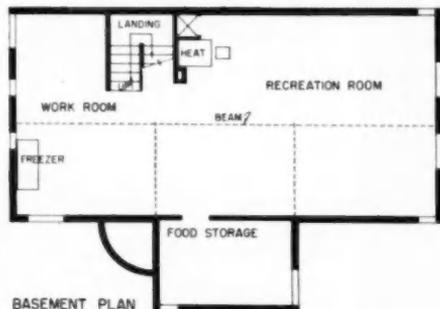
5. Storage facilities in both the living and basement areas adequately accommodate the family's needs.

Livability is one of the main features of the structure. In its 1,300 square feet of floor area are included three bedrooms, bath, living room, dining room, and kitchen. A full basement provides facilities for a shower, heating, fuel supply, clothes closet and food storage.

The traffic pattern, another important feature, utilizes a central hallway that has access to each room without cross traffic through any one room. The front and rear entrances lead to the center hall.

Special working areas needed for farm living are provided in the plan. The dining room is also used as office space. Good utilization of the room is possible as most meals are served in the kitchen. Canning chores are done in the basement work area. Space for a freezer and canned food storage is also in the basement.

Clean-up facilities, one of the farmer's main chores, and a definite planning factor in farm house construction, have been provided. A sink in the basement work room plus a shower stall and work-clothes closet make this farmer's home the ultimate in farm house planning.



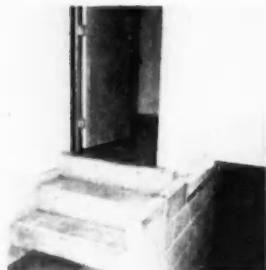
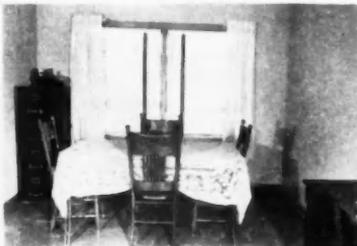
BASEMENT PLAN

Basement plan includes work room, clean-up areas, food storage, and future recreation room



Birch cabinets are used in the modern U-shaped kitchen. Family eats most of its meals here; large canning chores are done in the basement workroom

Dining-office combination makes full use of the otherwise little used dining room. Farmer's file and desk are in room



Enclosed rear entrance leads to both first floor and basement



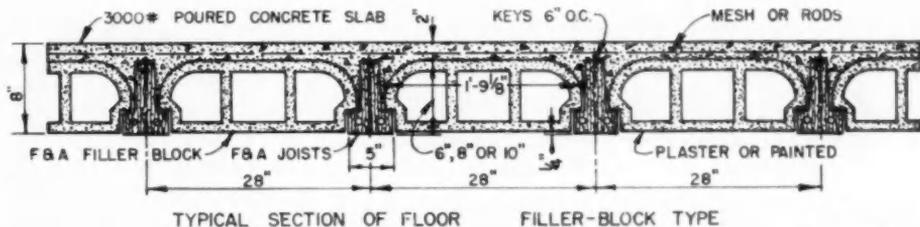
Traffic to all parts of the house channels through the central rear hall. All rooms and entrances lead to this hall



Basement storage closet for work clothes and shower are musts for the farm home. Shower is at extreme right behind patterned curtain. Heating plant is oil fired hot water, for radiant heated ceiling



Canning and freezing of foods is done in this basement work area. Sink can be used by the farmer in cleaning-up. Floor is concrete block

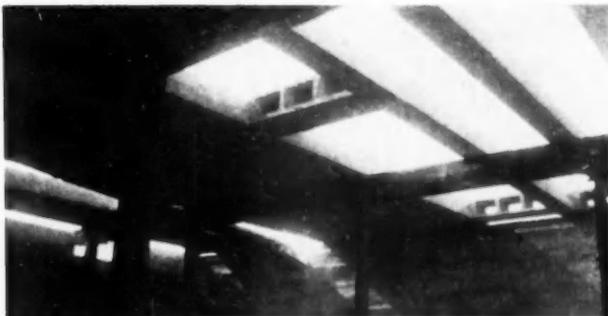


Section details block and joist construction. Construction is called "F & A" floor system

3 - farm home is also fireproof

FIRE, age old enemy of the farmer, was considered when specifications for this farm house were written. The exterior walls are Bedford stone veneer. Roof is asbestos shingle. The interior is plaster over gypsum lath.

The floor joist system is fire resistant construction. Filler blocks set on reinforced concrete joists are topped with a two-inch concrete slab. The two-inch reinforced concrete slab bonds to the joists producing a "T" beam type of construction. Floor is asphalt tile laid over the concrete.



Reinforced concrete joists span 14 feet 6 inches. Concrete blocks are keyed to rest on the joist. Blocks are cast in various lengths to fit joist spacing from one to two feet

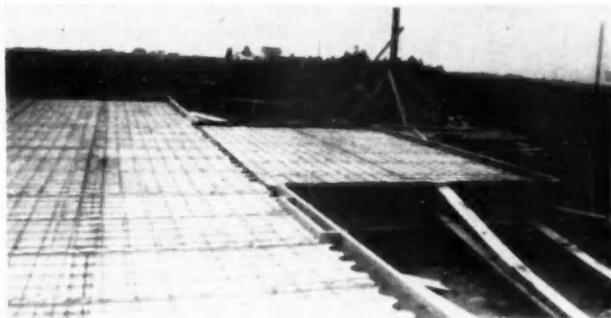


Workmen are setting keyed blocks in place for the first floor deck. Joists rest on foundation wall and eight-inch W. F. beam

* Data courtesy of Small Homes Council, University of Illinois and Kieth Hinchcliff, Professor of Farm Structures, University of Illinois

BRAND NAME PRODUCTS USED

- Andersen windows
- A. O. Smith hot water heater
- Carey exhaust fan
- Dexter hardware
- Fermica counter tops
- Johns-Manville sheathing, insulation, and asphalt tile
- Kehler plumbing fixtures
- Minneapolis-Honeywell heating controls
- Triad furnace
- United States Gypsum lath



Reinforcing mesh is laid over the blocks prior to pouring the two-inch finished concrete slab. Flooring system is rated to withstand a four-hour fire and water test

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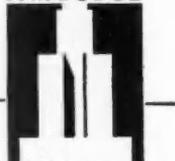
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**SLIDING DOOR
HARDWARE**

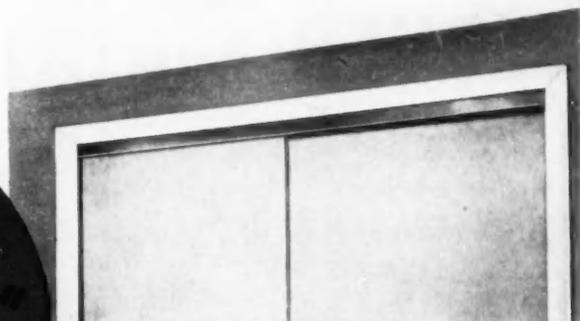


the space-saving,
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selling easier

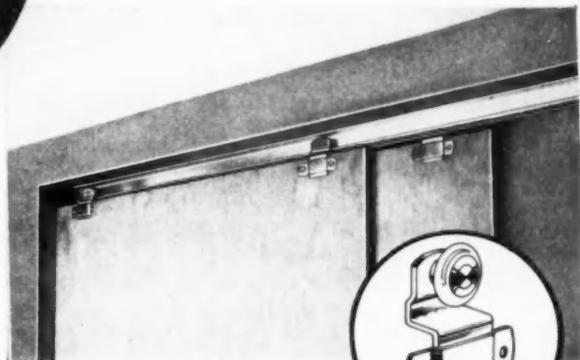
Where living space is needed most—in today's small homes—you can now offer home-buyers the many space-saving advantages of sliding doors with Stanley's new "Budgeteer".

The "Budgeteer" combines in one complete, budget-priced package all the quality features of more expensive sliding door hardware—sturdy one-piece, double-V aluminum track (cuts friction to the minimum), nylon rimmed ball bearing wheels (for smooth, *whisper-quiet* door operation), plus a simplified device for providing easy, perfect fit.

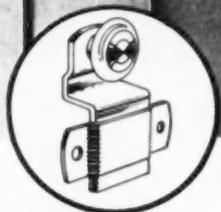
Here is a low-cost way to make your homes more desirable and easier to sell. Write for full details on the new Stanley "Budgeteer" No. 2692-D Sliding Door Hardware.



Note metal header trim in this typical installation. Saves installation time and material. Ideal for dry wall construction.



From inside closet or wardrobe, track and hangers look like this. New Stanley-designed "Micro-Just" Hanger (inset) provides for quicker, easier adjustment of sliding doors to desired fit.



The Stanley Works, New Britain, Conn.

STANLEY

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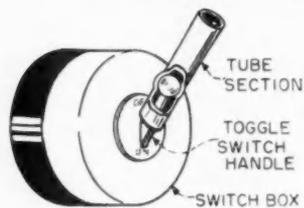
fireplace and
corner window

The details of fireplace and adjoining windows, shown on opposite page, are taken from a small medical building located in the residential area of Toledo, Ohio. In keeping with the residential character of the location, the design of both the exterior and the interior was made to conform.

The waiting room shown in photograph is an example of good architecture in a simplified form. The brickwork of fireplace at one end of room extends to ceiling and over to the adjoining sidewall, thus making a very impressive wall treatment of the masonry. The brick is laid up in a stack pattern with overmantel extending three inches beyond the face of the fireplace. (See section on drawing.) An enclosed area alongside of fireplace opening is used for storage of logs.

The large fixed and hinged window units on front and side walls offer the maximum of light and ventilation for waiting room. The details indicate the construction methods of both types. Note the inclusion of curtain pocket in the head section of both types of window assembly.

how to
extend a toggle switch



Some power tools have toggle switches with such short handles and the switches are so placed on the tool that they are hard to get at to turn off and on easily and quickly. To remedy this, the toggle switch handle may be lengthened by taking a short section of stiff tubing and slipping it tightly over the toggle switch handle, thus lengthening the handle and making it easier to get at it. Either plastic or stiff rubber tubing may be used.—Warren W. Howe, Long View, Wash.

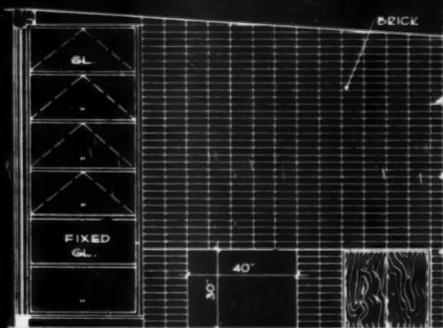
AMERICAN BUILDER

AMERICAN BUILDER'S BETTER DETAIL PLATE

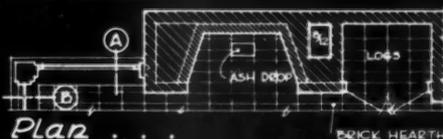
Designed by Karl Buckingham Hoke A.I.A. Toledo, Ohio

Detailed by E. Roderick O'Neal A.I.A. for American Builder

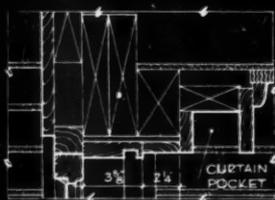
NO. D-96 FIREPLACE & CORNER WINDOW



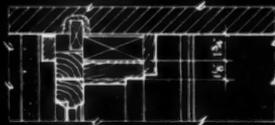
Elevation



Plan



HEAD



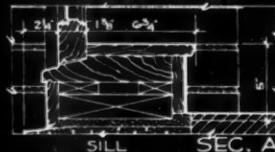
JAMB



FIXED UNIT
RAISED OPERATOR

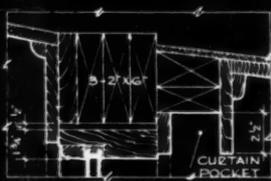


FIXED UNIT
HORIZONTAL BAR

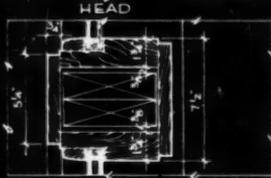


SILL SEC. A

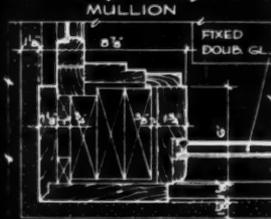
Window Sections



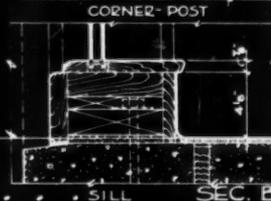
HEAD



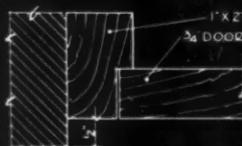
MULLION



CORNER-POST



SILL SEC. B



HEAD & JAMB
LOG STORAGE DOOR



Fireplace Section

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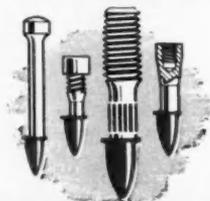
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No. G-37

store front remodeling

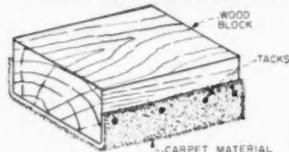
The problem in connection with this remodeling was to take an old warehouse building and transform it into an attractive retail store front and sales building. Through the use of modern materials and methods a distinctive and pleasing exterior design was produced. In addition, an excellent background for sign and advertising display was created.

The large flat wall surface which extends from the top of the canopy over the show windows to the coping line at roof consists of rectangular terra cotta blocks laid up in a stack design. This surface also provides a background for the lighting effect. The terra cotta surface is framed with a wide band of granite on both sides and over the top. Granite is repeated at the sill and on the two pylons at each side of the entrance.

The neon lettering on the terra cotta is given additional lighting by the use of floods concealed in the canopy. This concealed lighting also affords a background for the lettering mounted upon the canopy.

The canopy extending the entire width of the show window is framed with wood and covered with metal trim. The ceiling of the canopy is ribbed metal. Other ceiling inside of the show window is metal lath and plaster with an open wood egg-crate canopy extending over the show window area on a line with the entrance door. Standard store front trim is used throughout except for the wood frame enclosing the glass window at the rear of the show window. In the back of this window is a metal lined planter, finished in plywood for the display of flowers.

screen paint applicator



In painting screens, rub the paint on the screen with a wood block (2x4x4 inches long) covered with a piece of carpet material. The carpet is stretched against one flat side of the block and part way up on the adjoining sides where it is fastened at the edges with tacks. The nap of the carpet should face out. The use of block makes screen painting easy and does not clog pores of screen.—Warren W. Howe, Long View, Wash.



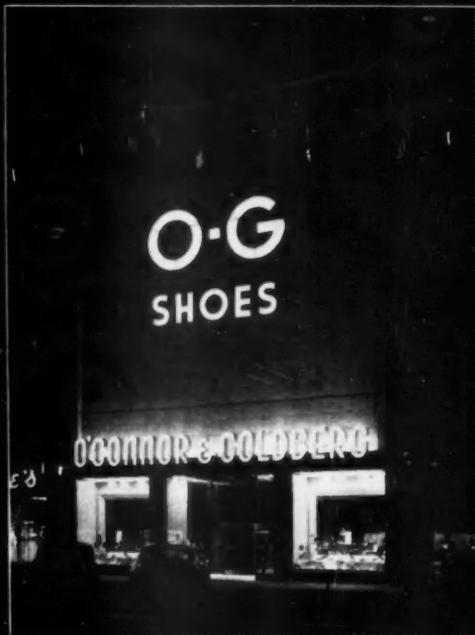
AMERICAN BUILDER'S STORE FRONT DETAILS

Designed by Sidney C. Finck, A.I.A. Chicago, Ill.

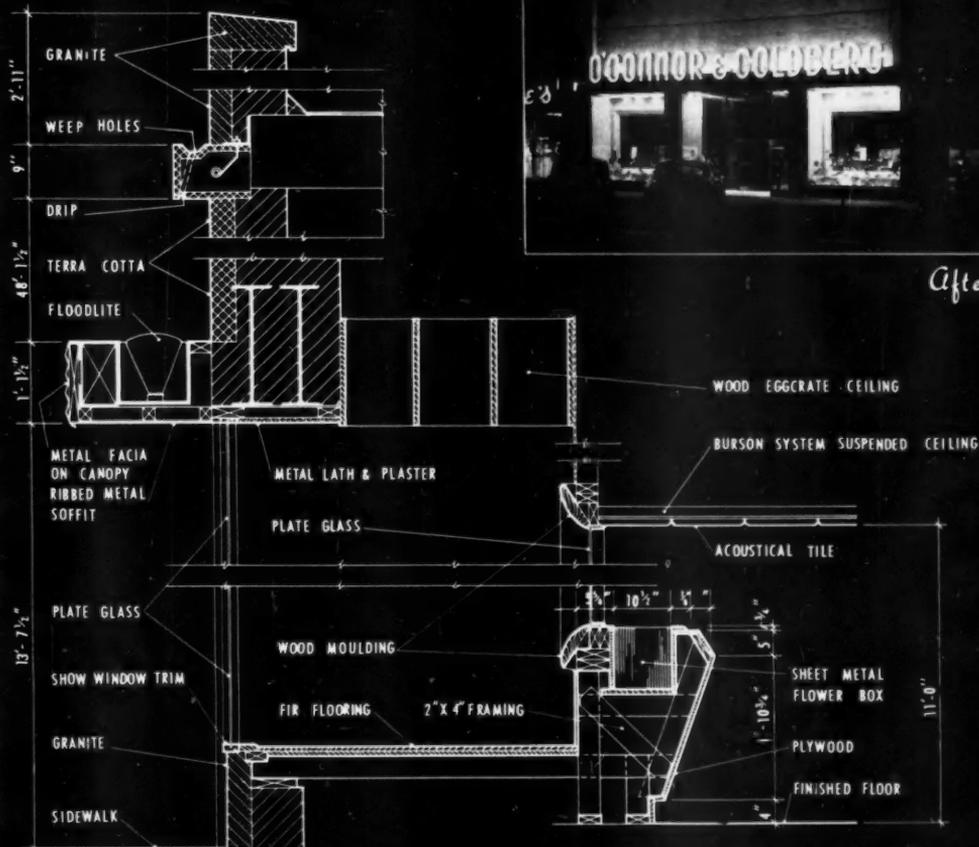
Detailed by K. Roderick O'Neal, A.I.A. for American Builder.

NO. G-37 STORE FRONT REMODELING

Before



After



Section Thru Front Wall & Show Window

new products

offered by manufacturers



WEATHERPROOF LAMP HOLDER

AB115221

This unit employs a high temperature, silicon rubber cushion-seal that hugs the neck of the lamp in a weather-proof grip that is reported to withstand the highest heat to which the lamp could be subjected, as well as the most adverse outdoor weather conditions. By sealing the lamp low at its neck and by exposing its hot area to open air cooling, lamps are stated to burn cooler and longer than their normal rated life testing. Cradling the lamp in a rubber cushion grip helps protect it against vibration, pole sway, and shock. The holder is made of cast aluminum with a glazed porcelain heatproof socket. Lead wires extend beyond an adjustable swivel arm threaded $\frac{1}{2}$ inch IPS for mounting to pipe, bracket or accessories. Unit carries Underwriters Laboratories and CSA approval. Stanca Electric Products Co., Dept. AB, 333 Monroe Ave., Kenilworth, N. J.



PORTABLE GAS HEATER

AB115215

A portable heater utilizing the principle of heating with propane or butane gas is stated to be useful for winter construction jobs, for inside work such as plastering, for farming, ranching, and other fields. The unit, rated at 500,000 B.T.U.'s provides instant, safe, economical heat. Called the "Chinook Wind" Portable Heater and All Purpose Crop Dryer, it is mounted on rubber-tired semi-pneumatic wheels. The heating unit is a cast iron torch with a motor driven fan, delivering a maximum capacity of 3,500 c.f.m. at 250 degrees. Using either propane or butane gas in standard bottles furnished by local L.P. gas distributors, the heater is free from smoke, soot, and carbon monoxide, and may be used under any conditions, inside or outside of buildings, according to the maker, International Manufacturing Co., Dept. AB, 2249 S. Delaware St., Denver, Colo.



PRE-FAB HOMES

AB115219

Due to a unique interlocking system of tongued and grooved planks, these "Pre-Cut" homes can be erected on pier or solid wall foundations in record time. Smaller cottages can be put up in one day. The precision interlocking affords considerable rigidity; the horizontally laid 2x8 inch planks withstand great wind pressure. Siding planks, floor joists and boards, purlins and roof boards, windows and doors and trim are all precision cut in advance. Hardware on all doors is factory fitted. A simple numbering system facilitates rapid erection.

Eight different style homes are available, ranging from an 11x14 foot unit to the "Forest Hills" model, illustrated, measuring 41 feet 8 inches by 24 feet, overall. It contains three bedrooms, screened porch and ample closet space. Separate one and two car garages are also available. Narge Cottages, Inc., Dept. AB, 21 West St., New York, N. Y.



SQUARE BATH

AB115209

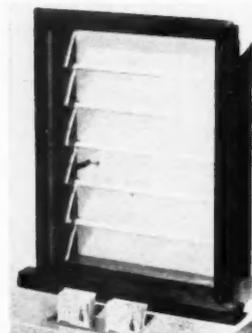
A compact square-type bath, 42 inches long, 36 inches wide at the center and 34 inches wide at the ends, conserves space in the modern small home or apartment. It is an all-purpose bath for the entire family, since it is roomy enough for showering or seated bathing. The low front, 14 inches off the floor, makes the unit suitable as a bath for young children. The area of the flat bottom is approximately 35x26 inches. The bench rim is five inches wide. The enamel is fused to non-flexing iron, cast for rigidity. The Standish bath occupies only 1.512 square inches of floor area, a saving of 17 per cent over the 1,800 square inches occupied by the standard 60x30 inch bath, enabling it to fit well into an alcove or recess. Kohler Co., Dept. AB, 44 High St., Kohler, Wis.



EXTERIOR WALL "BREATHERS"

AB115201

A wall ventilating device, made of fireproof, non-corrosive aluminum, exhales wall moisture which has been generated within the building and trapped inside the outside paint film. The unit, called "X-Haler Moisture Ventube," is designed to meet all conditions of weather and installations, including empty wall, wall already insulated, or a wall into which insulation might be poured or blown later. The tubes, measuring $\frac{3}{4}$ inch in diameter by 3 $\frac{1}{2}$ inches long, are inserted into holes drilled at right angles through the siding and sheathing of the house, about 1 $\frac{1}{2}$ inches beneath the lap. An average size clapboard house will utilize about fifty of the tubes. The overhang of the louvers shields the inside of the tube from driving rain or snow, as well as from insects. Moisture vents on the bottom permit moist air inside the walls to exhale naturally through the louvers. Cornwall & Co., Dept. AB, 1408 E. 222nd St., Cleveland 17, Ohio.



HARDWARE FOR LOUVERED WINDOWS

AB115212

A new type of hardware for louvered windows, known as Louvre Leaders, has been announced. These devices will fit all standard windows and can be arranged to fit any size. They are said to be completely adaptable for replacements without remodeling as well as for original installations. The manufacturer points out that an ordinary window can be removed and Louvre Leaders can be installed with a minimum of effort by an amateur or professional. The operating handle does not protrude into the room. The entire mechanism of the product is stainless steel. Trinity Manufacturing Corp., Dept. AB, 1045 Richmond St., Los Angeles 33, Calif.

(Continued on page 160)

DEXTER

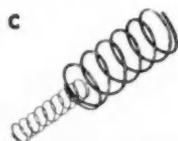
*The Lock with
a Million Friends*



FRENCH SHANK



FINGER TIP
POSITIVE LOCK



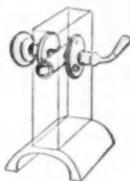
2 SPRINGS, FEATHER
TOUCH ACTION



STAY-TITE
SET SCREW



"JEWELER'S" FINISH



TRANSPARENT
DISPLAYS



**FOR SCREEN AND
COMBINATION DOORS**

Easier to install —

just bore two 3/8" diameter holes.



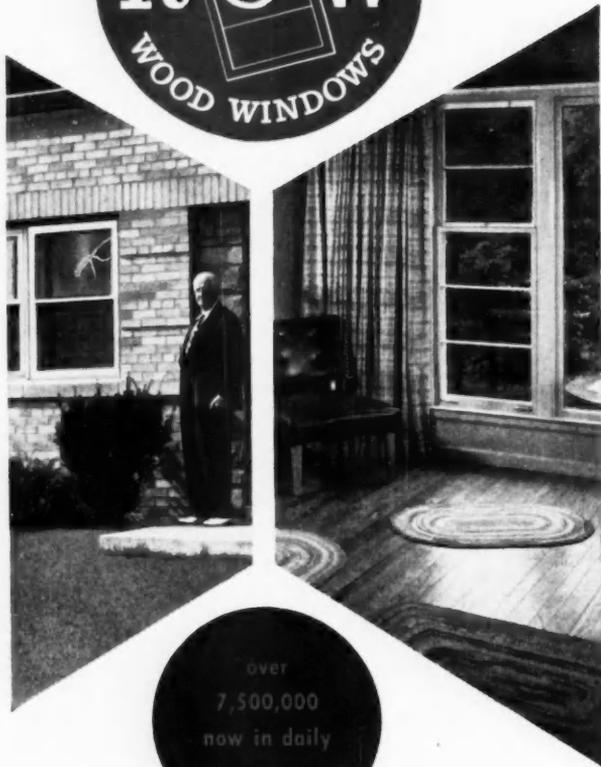
DEXTER LOCK COMPANY
GRAND RAPIDS, MICHIGAN

A SUBSIDIARY OF NATIONAL BRASS COMPANY

Manufacturers of America's Original Tubular Locks

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

AMERICA'S FAVORITE
REMOVABLE
R·O·W
WOOD WINDOWS



over
7,500,000
now in daily
use

Builders and home buyers prefer R·O·Ws by 2 to 1

Popular acceptance has been built over a period of 12 years. Lumber dealers and builders recommend them for the time-tested removable feature. Users praise their convenience, appearance and snug-fit.

Homes with R·O·Ws sell faster than those offering only conventional windows. R·O·Ws are built better—look better—fit better—and last longer.

R·O·W SALES COMPANY 1342-66 ACADEMY AVENUE • FERDALE 20, MICHIGAN

new products

(Continued from page 158)



ALUMINUM WINDOW AB115216

A double hung aluminum window has been designed primarily for use in low-cost residential construction of any type or style of architecture. Controlled ventilation, said to be a new idea in window design and construction, has been engineered into this unit. With one easy operation, the window opens equally and simultaneously from top and bottom, providing controlled ventilation for each room. The windows are made from satin finish aluminum extrusions and double strength glass. Factory glazing with weather resisting Ever-seal and stainless steel weatherstripping give the windows outstanding weather protection. Units are available in 16 modular sizes and two styles—1/1 and 2/2. Storm windows and full tension screens are available to fit the windows. Per-Fit Products Corp., Dept. AB, 1200 E. 52nd St., Indianapolis, Ind.



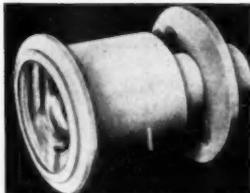
BOILER FOR SMALL HOMES AB115223

This cast iron hot water boiler is designed for use in the small homes market. It is available in two sizes—465 and 645 square feet water—and will be shipped with boiler sections already drawn-up for more rapid installation. Casings have rounded corners and come in two sizes—46 1/2 inches high, 24 inches wide, and 33 inches deep, extended to conceal all controls and the oil burner, or 46 1/4 x 24 x 17 inches, enclosing boiler sections only. Extra heat extracting surfaces of boiler sections are designed to assure maximum heat from minimum fuel. Staggered flue travel operates under low draft resistance. Either a tankless or tank-type heater with the unit furnishes a plentiful supply of hot water. Thatcher Furnace Co., Dept. AB, Center St., Garwood, N. J.

(Continued on page 161)

new products

(Continued from page 160)



ONE-WAY DOOR VIEWER AB115217

An unusual safeguard for the home is this one-way door viewer, which allows a full view observation of anyone on the opposite side of the door. Made completely of plastic, the viewer fits easily into any door up to two inches thick. It is held with two screws, and is 1 1/4 inch in diameter. The device is fitted with a shatterproof lens, especially designed to provide magnified and extra-wide angle vision. It is suitable for door installation where unobserved outside observation is desired prior to opening the door. It also is useful in doctors' and dentists' offices, permitting summoning patients without opening the door. Sales Associates, Dept. AB, 11 Hill St., Newark, N. J.



STORM-SCREEN DOOR AB115213

An all aluminum combination storm and screen door consists of a strong, hollow aluminum frame, upper and lower storm sash, and upper and lower screen panels. The materials are No. 635TS extruded aluminum and Alclad screen cloth. With the interchangeable units, the homeowner or building manager is given the choice of all storm protection, all screen, or part screen and part storm at the same time.

The door is provided with a special heavy aluminum jamb, installed over the building door frame, assuring a custom fit for every installation; annual refitting is thus eliminated. Since all parts are of aluminum, no maintenance or painting is required. The door cannot warp, rust, check, swell, or shrink, nor does it need to be re-hung. Heavy rigid corner angles combined with hollow aluminum construction reduce vibration and shock in both home and commercial installations. Alumatic Corporation of America, Dept. AB, 2081 S. 56th St., Milwaukee, Wis.

(Continued on page 162)

NOVEMBER 1952

WORTH A LOT MORE
REMOVABLE
R·O·W
WOOD WINDOWS



extra
convenience
at no extra
cost

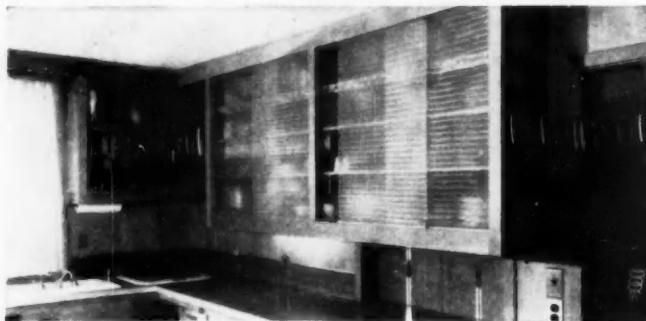
Don't forget the big plus feature that closes sales

Buyers of modern homes want the convenience and safety of the prime windows that lift out from inside for washing or painting. They want the beauty of wood, too, and the "snug-glide" performance.

The world's fastest selling windows are the first choice with every group that decides on brand name — architects — lumber dealers — builders — and owners.

R·O·W SALES COMPANY 1342-66 ACADEMY AVENUE • FERDALE 20, MICHIGAN

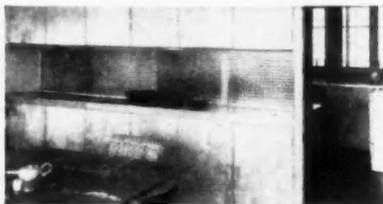
GLAMORIZE YOUR KITCHENS WITH PATTERNED GLASS!



CUPBOARD DOORS decorate this kitchen. They're sliding panels of Blue Ridge *Patterned Glass*. Women like the easy cleaning of this translucent glass. Architect: George A. Letts, Cleveland, Ohio.



DIVIDES THE ROOM, shares the light. Flutex Glass hides the kitchen from the dinette and decorates both rooms. Steam can't harm the glass. And dirt wipes right off. Architect: G. W. Mayhew, San Francisco, Calif.



SLIDING PANELS of Doublex Glass are used in the pass-through between the dining room and kitchen. The sparkling pattern adds a decorative touch to both rooms. Architect: Robert Boyd Picking, Chicago.

Blue Ridge *Patterned Glass* gives homes *extra* benefits that women like—brightness, beauty, easy cleaning and a look of modern smartness. There are dozens of places in a home where you can use this lovely glass to put more salability into houses. Choose from linear, checkered and over-all patterns—in plain, textured and *Satinol** finishes. Your L-O-F Distributor or Dealer can show you samples.

BOOK OF 42 DECORATING IDEAS. "New Adventures in Decorating" shows how leading architects and decorators have used this lovely glass to add light and distinction to home interiors. Send coupon for free copy.

Libbey-Owens-Ford Glass Company
Patterned & Wire Glass Sales
8-1112 Nicholas Building, Toledo 3, Ohio

Please send me my free copy of "New Adventures in Decorating."

Name (please print) _____

Address _____

City _____

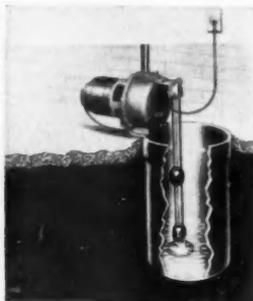
State _____

BLUE RIDGE
Patterned GLASS



new products

(Continued from page 161)



CELLER DRAINER

AB115224

A close-coupled type horizontal cellar drainer is stated to provide positive protection from flooded cellars without the limitations of conventional vertical submerged-type drainers. According to the manufacturer, this pump unit is never subject to binding or clogging due to accumulated silt, coal dust, or ashes in the sump, since the pump itself is not in the pit. Thus it cannot be exposed to the hazard of silt accumulation which leads to burned-out motors, inoperative pumps and flooded cellars. The sump and strainer are easily cleaned without the need for disconnecting discharge piping. The motor is not subject to vapor or moisture from the sump, as it is not over the sump. The unit can be set as far as eight feet from the sump, a useful feature in close quarters. Goulds Pumps, Inc., Dept. AB, 75 Fall St., Seneca Falls, N. Y.



ATTACHMENT FOR POWER DRILLS

AB115204

A high speed punch-type cutter attachment for electric power drills is represented in a new device called a "Nibbler." This tool is ideal for artistic metal cutting, scalloping, and similar intricate jobs, according to its manufacturers. It is designed for cutting all kinds of thin metals, such as sheet steel, brass, copper, or fibre, up to 19 gauge thickness. Its width of cut is $\frac{1}{8}$ inch, and it can handle close detail work. Use of the "Nibbler" assures precision in metal cutting with minimum effort. It operates with any $\frac{1}{8}$ inch capacity standard or heavy-duty electric drill, at speeds of from 800 to 3,500 r.p.m. The tool is designed for metal shop requirements as well as the needs of the hobbyist. Mall Tool Co., Dept. AB, 7740 South Chicago Ave., Chicago 19, Ill.

(Continued on page 164)

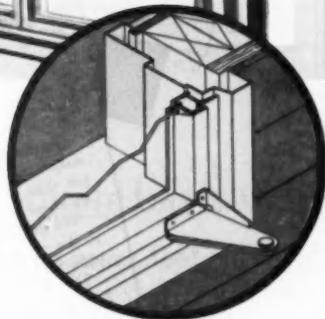
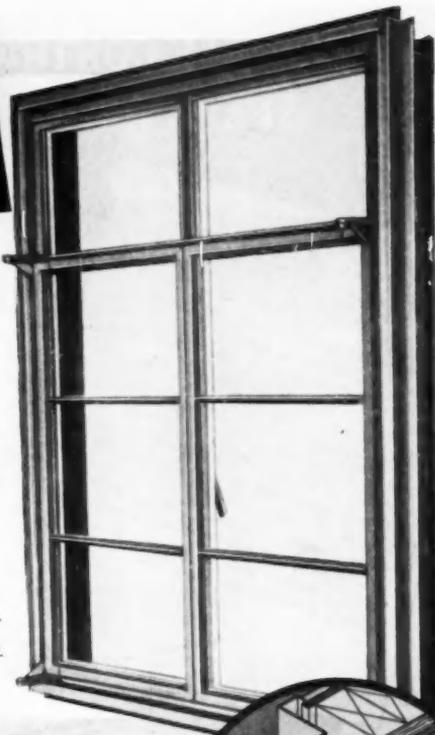
HOW TO CASE A WINDOW

with **STEELCRAFT**

UniTrim

(Complete Inside-Outside Trim)

The Right Combination for Low-Cost,
Attractive Window Openings



Here's one of the biggest time and money-saving developments to enter the building field in years. Think of it! Using only a hammer and nails, you can install UniTrim in just a few minutes. The installed cost of UniTrim and casement window is considerably less than the multiple piece window frames and trim. UniTrim is a complete inside-outside window trim and is designed especially for use with wood construction although a complete range of sizes and types is available for other types of construction.

Here is the new modern method of installing and casing a window. Get the cost-cutting, money - saving facts about Steelcraft UniTrim today.



STEELCRAFT

MANUFACTURING COMPANY

ROSSMOYNE, OHIO (IN GREATER CINCINNATI)

No extras to buy . . . the window sill, the window stool, the inside moulding and the outside trim, the inside trim, the fins, the flashing—everything it takes to trim a window. It's all galvanized and bonderized with a baked-on coat of paint for long-lasting protection.

THE STEELCRAFT MANUFACTURING CO., Dept. AB-1152
9017 Blue Ash Rd., Rossmoyne, Ohio (In Greater Cincinnati)

Please send me complete information on Steelcraft UniTrim in combination with Steelcraft steel casement windows.

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

TWO SEATTLE CONTRACTORS SPEAK ABOUT

KAY-TITE

Waterproofing Co.
SEATTLE, WASHINGTON

February 27th, 1952
Gentlemen:
After many years of specializing in masonry water proofing, using various products we found Kay-Tite by far the most outstanding. Results on every satisfactory.

Our contracts cover all kinds of buildings, residential, government and commercial. We do work on all types of masonry, inside, out, side and above and below grade. All work is covered by bond and guaranteed.

We always recommend Kay-Tite and are most happy to attest to the dependable quality of your product as it has enabled us to give a long term guarantee on all jobs.

Very sincerely yours,
Alco Waterproofing Co.

SEATTLE WATERPROOFING CO.
ALL TYPES OF WATERPROOFING
4121 AVENUE 24
SEATTLE 8, WASH.

Gentlemen:

February 20, 1952
We have been using Kay-Tite for over five (5) years now with the utmost success. We have used it in conditions of extreme hydrostatic pressure and we find that it does a better job than any other product of its type that we know of.

We guarantee and stand behind our work so the choice of the proper material is quite important to us.

The pleasant experience we have had with Kay-Tite the past five years enables us to highly recommend its use either below or above grade and under any type of climatic conditions.

Yours truly,
R. W. Lyman

KAY-TITE

PROTECTS MASONRY
AGAINST
WATER SEEPAGE

FOR
BRICK
STUCCO
CINDER BLOCK
ROUGH MASONRY
UNGLAZED TILE

WHITE
and
GREEN
CREAM
BLUE
GRAY
YELLOW
BLACK
MARSH BUD
BRICK RED
COLORS

KAY-TITE COMPANY

WEST ORANGE NEW JERSEY

ELLEN FAR WESTERN STATES CONTACT KAY-TITE COMPANY
1717 WESTLAKE AVENUE, NORTH, SEATTLE 9, WASHINGTON

More than 20 years of satisfactory performance

new products

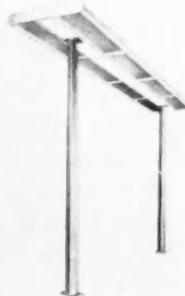
(Continued from page 162)



REINFORCED MASONRY BLADES

AB115203

Edge and grooving cuts, as well as grinding-type cuts, impossible to make with conventional type abrasive blades can be made in complete safety with "Tuffie" masonry blades. Reinforced internally with layers of fabric, and further protected by a "safety web" molded into the blade surface, these blades can withstand severe strains and binds. They are recommended particularly for cutting of concrete or cinder block, most common brick, and the softer ranges of stone. Blade sizes range from 12 to 18 inch in diameter for masonry saws and 6 to 8 inch in diameter for hand power saws. Due to their toughness, these blades are not recommended for cutting hard, vitreous materials, which are best cut with wet or dry abrasive blades made by the same manufacturer. Eveready Brikaw Co., Dept. AB, 1509 S. Michigan Blvd., Chicago 5, Ill.



FLUORESCENTS FOR OUTSIDE AB115206

Weatherproof continuous horizontal fluorescent "T" lights, consisting of two basic 30 inch wide fixtures, one 4 feet in length, the other 8 feet, are designed to be installed separately or with a coupling device. The fixtures can be arranged in various combinations to form continuous rows in lengths of 12, 16, or 20 feet to meet individual requirements. The units can be fitted to existing uprights, or are available with the manufacturers' specially designed 9 or 12 foot tapered octagon standards. The lights are furnished complete with slim-line fluorescent lamps, are wired ready for installation, and listed by Underwriters' Laboratories, Inc., for outdoor use. Extruded aluminum glass frames have airplane type cow latches. The glass is Pentacir, ribbed for proper light diffusion. Knockouts are provided to permit a variety of mounting centers and for installation of spot or flood lampholders. Guardian Light Co., Dept. AB, 301 Lake St., Oak Park, Ill.

(Continued on page 166)

AMERICAN BUILDER



TEXAS
Report No. 11270



E. W. Sides
Roy Mathes Lumber & Supply
Amarillo, Texas

6½ ft. F-1 Pickup is one of the biggest in the half-ton field. And only Ford gives you an engine choice of Six or V-8!

"I pay **Only 12½¢** a mile to run my Ford Pickup"

says E. W. Sides, Amarillo, Texas

"Ford's fast getaway is a time and money saver in work like mine," says Mr. Sides. "Practically all my driving is in town traffic and my Ford handles easier than any other truck I've driven." During the Economy Run, Mr. Sides' F-1 traveled 4,777 miles. Running expenses for gas, oil and service (but not including fixed expenses, such as taxes, license, depreciation, etc.) totaled \$78.20 . . . or just 1⅓ cents a mile!



Two years of testing show how well the new Ford Low-FRICTION engines perform under the most severe conditions. They passed scores of 100-hour "destruction" tests. One model alone ran as much as 50,000 dynamometer test-hours, over 500,000 vehicle test-miles.

DON'T GUESS! See how little it can cost to run a truck in your kind of work. See the cost figures in this 144-page book showing results from the 50-million-mile Ford Truck Economy Run. See it at your Ford Dealer's!

Availability of equipment, accessories and trim as illustrated is dependent on material supply conditions.



FORD TRUCKING COSTS LESS
... FORD TRUCKS LAST LONGER!

Using latest registration data on 8,069,000 trucks, life insurance experts prove Ford Trucks last longer!

Now! Up to **14% more Gas Savings** and more Speed Hauling power, too!

New Low-FRICTION design in three Ford Truck engines means more miles per gallon. New direct-breathing OVERHEAD VALVES give more efficient fuel-feeding. New HIGH COMPRESSION offers more power on regular gas. Choose from 5 great engines: new 101-h.p. COST CLIPPER SIX; famous 106-h.p. V-8; proved 112-h.p. BIG SIX; two new CARGO KING V-8's developing 145 h.p. and 155 h.p.

FREE! MAIL THIS COUPON NOW!

FORD Division of FORD MOTOR COMPANY
3269 Schaefer Rd., Dearborn, Mich.

Please send me without charge or obligation, complete details on the new Ford Trucks for '52 and the five great Ford Truck engines!

PULL LINE HEAVY-DUTY MODELS
LIGHT MODELS EXTRA HEAVY-DUTY MODELS

Name _____ (PLEASE PRINT PLAINLY)

Address _____

City _____ State _____

Check here if student



GALVANIZED SHEETS

For PROTECTION

Only galvanized sheets give you the strength of steel... the rust protection of zinc. Both are important in providing a strong, sound, leak-proof roof that double-guards valuable crops, livestock and machinery against damage and destruction for years and years. It's the first choice of farmers.

For STAYABILITY

Galvanized roofing holds at the nail holes... stays leak-proof and solid year after year with a minimum of maintenance. Farmers say it cuts down overhead by staying "overhead"—often for the life of the building.

For ECONOMY

Consider the economy of any roofing material with these three long-time cost factors in mind: (1) original price; (2) repair and upkeep; (3) years of serviceable life. Galvanized sheets are first choice of farmers because they know that the roof that gives them the longest, trouble-free service is the cheapest in the long run.

DON'T FORGET

Proper care pays! Material shortages are limiting new construction and replacement. Careful maintenance of present structures is more essential now than ever before. Expanding production of zinc and steel means ample supplies of galvanized sheets with the return of more normal conditions. In the meantime, a few simple steps with very little labor can extend the useful life of your galvanized roofing. The valuable booklets described below will tell you how.



AMERICAN ZINC INSTITUTE

33 E. Wacker Drive, Room 2005
Chicago 1, Illinois

Without cost or obligation, send the illustrated booklets I have checked.

- Facts About Galvanized Sheets
- List of Metallic Zinc Paint Mfgs.
- Directions for applying Galvanized Sheets
- Repair Manual on Galvanized Roofing and Siding
- Use Metallic Zinc Paint to Protect Metal Surfaces

NAME _____

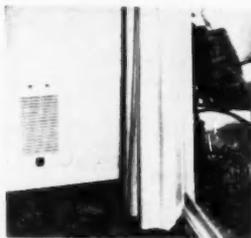
ADDRESS _____

TOWN AND STATE _____

Send for FREE Booklets

new products

(Continued from page 164)



ELECTRIC ROOM HEATER AB115220

A self-contained electric room heater available with outputs of 2,500, 3,500 and 4,500 watts features a redesigned grille and top located switches for easier control. A small neon indicator light shows when the unit is turned on, and an accessible oil duct simplifies maintenance. These units eliminate the need for flues, ducting or central heating plants, thus providing complete flexibility of location. Each has its own thermostat for independent temperature control in every room. Each has its own circulating fan which directs heat downward into the living zone and quickly brings a room to the desired temperature. The quiet fan used alone provides cooling air circulation during summer months. Heaters operate on 230 volts, a.c. Since the entire unit is 16 inches wide and 22½ inches high, it fits between standard 16-inch O.C. studs. Thermador Electrical Manufacturing Co., Dept. AB, 5119 District Blvd., Los Angeles, Calif.



GUN-TYPE STAPLER AB115214

A special model gun-type stapling tacker, adapted for installing the new parallel wire used in the installation of telephones, has a grooved-out nose which enables the tool to fit snugly over flat wire, holding it firmly against the wood. When the handle of the machine is squeezed, a staple is driven into the wood, straddling the wire and holding it firmly. Because of the precise grooving in the nose of the tacker, the staple will not damage the wire, according to the manufacturer. The device permits considerable savings in time and labor in the installation of flat wire. One-hand operated, it drives more than 80 staples without reloading. The tacker works easily in confined spaces where it would be difficult to swing a hammer, using brads or nails, as in installing public address systems, and the like. Bostitch, Inc., Dept. AB, 887 Mechanic St., Westerly, R. I.

(Continued on page 168)

HERE'S

A SPACE SAVER



FHA
APPROVED

STRONG
EFFICIENT
SAFE

DISAPPEARING STAIRWAY

When drawing up plans for homes, utilize the wasted attic space which can be used as storage space, a playroom or an extra bedroom by specifying a Wel-Bilt FoldAway Disappearing Attic Stair. It can be folded up in the ceiling when not in use; thus utilizing valuable space in the house that a permanent stair would occupy. Wel-Bilt FoldAway Stairs can be installed in bedrooms, in kitchens and in small homes at a very nominal cost.

Ask your lumber
dealer or
write to:

WEL-BILT PRODUCTS COMPANY

P. O. Box 95

Memphis, Tennessee

AMERICAN BUILDER

REZTOR'S *New Versatile* "PAC"

ALL-PURPOSE UNIT/CENTRAL
GAS, FORCED WARM AIR HEATER

- UNUSUALLY COMPACT
- SPACE SAVING
- EFFICIENT
- DE LUXE APPEARANCE
- EASY INSTALLATION

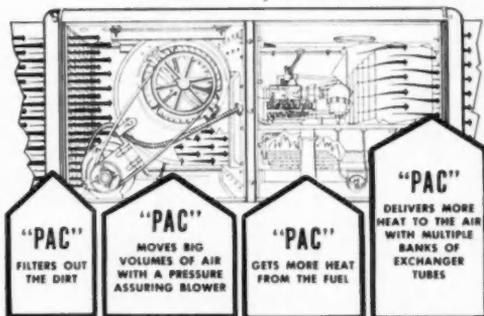


• PAC is designed to implement the contemporary building objective of providing the greatest efficiency in the smallest possible space. This Reznor unit confines a remarkably efficient and top quality heating machine (including controls) within a trim, highly-finished casing. PAC can be either suspended or base mounted. Flanges on front and back are fitted with either standard Reznor louver frames or connected to duct systems.

REZTOR

"PAC" Provides Packaged Automatic Comfort with ...

- Engineered coordination of heat production and air movement for maximum efficiency. PAC provides automatic temperature maintenance with balanced, synchronized control.



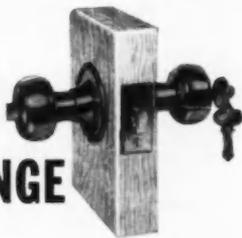
• DATA — 100,000 BTU capacity; 22" x 22 1/2" x 47" long; centrifugal blower; standard size filter; individually adjustable louvers; Reznor "airform" heat exchanger; interchangeable (top or side) flue connection; two removable doors on one side for easy access to all parts; tube oiling of back blower bearing; tapped, mounting sockets on top and bottom; Reznor burners for use with natural, manufactured, mixed or LP gases.

SEE SWEET'S CATALOG FILE

REZTOR MANUFACTURING COMPANY
42 UNION ST. - MERCER, PENNA.

*Manufacturers of the World's
Largest-Selling Gas Unit Heater*

NEW SAGER & BARROWS WITH NEW EXCLUSIVE SPEED-CHANGE CYLINDER



*It's amazing! Change
cylinder in 29 seconds!*

Think of the hours and money this engineering achievement will save! Even a child can switch cylinders in seconds with the new Sager & Barrows! What's more, it's an especially rugged lockset, easy to install and has new beauty that will complement good architectural design. Ask your distributor for a demonstration of this truly remarkable new lockset, today.

plus 6 other big
improvements for greater
security... greater dependability!

NEW PRECISION MOLD
high tensile nylon cam cradles the turn button to give positive locking action to the lockset.

EXCLUSIVE MACERATED FIBER

lining between the drawback plate and the retractor prevents metal from riding on metal.

NEW CONTOUR GRIP

is better looking and more roomy, more comfortable to hold. No scraping of knuckles here!

SHOCK-PROOF SPINDLE

has special indexing to prevent jamming or binding of parts despite severest of blows applied to knob.

PRY-PROOF TRIGGER BOLT

rides in a track in the large bolt... impossible to insert any instrument between them to force the lock.

TURN-BUTTON DESIGNED

to click into position. This creates a positive locking action which eliminates the need of pushing.

SAGER & BARROWS

The Sager Lock Works and The Barrows Lock Works: Divisions of
The Yale & Towne Mfg. Co., Berrien Springs, Mich.

MARMET

*Aluminum
Windows*



**for all types
of construction**

For...

**GLASS BLOCK
CONSTRUCTION**

- DELUXE AND STANDARD RIBBON WINDOWS
- GLASS BLOCK VENTILATORS
- MONUMENTAL WINDOWS

For...

**GENERAL
CONSTRUCTION**

- CASEMENT AND PROJECTED WINDOWS
- RESIDENTIAL PICTURE WINDOWS
- CUSTOM WINDOWS

An exclusive feature of MARMET Aluminum Windows is the Slimline Mullion between the sash $\frac{1}{2}$ of an inch thick, achieving a neat trim appearance. MARMET Deluxe Ribbon Aluminum Windows are featured in four types—Inward projected sash, outward projected sash, casement sash and double acting sash; for example half inward or outward and half inward, outward or fixed. An additional feature of the double acting sash is the elimination of the meeting rail—the sash close upon each other again resulting in a neat trim appearance. MARMET Aluminum Windows are supplied with or without screens as desired and in a choice of three finishes. MARMET Deluxe Ribbon Aluminum Windows for glass block construction are designed to carry 120 square feet of glass block or a maximum panel of 20 feet long and 6 feet high. MARMET Deluxe Ribbon Aluminum Windows are available in any length up to a maximum of 20 feet long and 3 feet high.

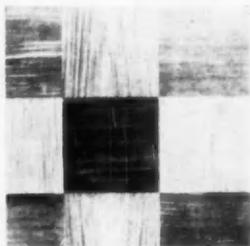
Write for catalog No. 60 . . . complete information and installation drawings.

MARMET

Wausau
Wisconsin

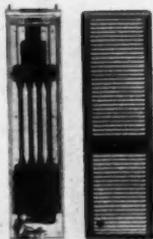
new products

(Continued from page 166)



CHECKERBOARD HARDWOOD PLYWOOD AB115202

Checkerboard-patterned hardwood plywood is now available in panels of five-ply construction, measuring 48x96 inches. This material offers architects, builders, and manufacturers an effective solution to checkerboard effects in wall paneling, displays and furniture. The unusual effect is created by using 14-inch squares of veneer with the grain of each square set at right angles to the one next to it. The panels are supplied in many favorite woods, including African mahogany and Korina. United States Plywood Corp., Dept. AB, 55 W. 44th St., New York 36, N. Y.

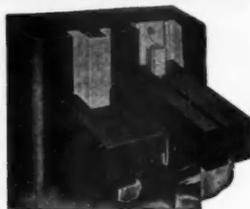


DUAL ROOM HEATER AB115218

An enclosed, fully vented, recessed wall heater engineered for all gases (natural, manufactured, mixed or l. p.), has been approved by the A.G.A. in accordance with latest central heating requirements. This dual room "Brilliant Fire" heater comprises two burners, two heating sections, two safety pilots, two sets of controls, yet requires only one gas line and flue outlet. A single unit provides full heat control to adjoining rooms. The heater is adjustable to meet variations in wall thickness, regardless of material. In cross section, this heater is a network of sheet metal inner liners which provide multiple channels for "free air" circulation throughout the wallbox; separation of channel walls is assured by employing sheet-embossed in a staggered pattern. Hazard of overheated walls is eliminated and marring of wall finish is also prevented. Heating section of the unit is 100 per cent welded, making it leak-proof, gas tight from burner to flue, and therefore odor proof. Embossed port type burner is designed for fullest combustion efficiency. Ohio Foundry & Manufacturing Co., Dept. AB, Steubenville, Ohio.

(Continued on page 170)

*The Milwaukee
Combination*
**SASH BALANCE
and
WEATHERSTRIP**



Available with or without bronze covers that completely hide spring, as shown above.

**PERMITS REMOVAL OF
SASH WEIGHTS, INSULA-
TION OF MULLIONS.**

Slash Labor Costs

Simple installation allows one man to easily install 50 or more windows in 8 hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cost . . . higher profit!

Tops in Operation!

Smooth, positive action; accurate balance; finger-tip control plus the perfect seal against draft, dust, moisture. No wood-to-wood contact. Prevents sticking windows and window rattle.

EFFICIENT

LOW

COST

**TESTED...
APPROVED...
ACCEPTED!**

FOR OLD

OR NEW

BUILDING

**ATTENTION MILLS AND LUMBER YARDS
IDEAL FOR PRE-FIT WINDOWS**

Can Also Be Sold in Single Unit Packages

Mail this coupon today!

Milwaukee Strip Service, Inc.
4621-23 W. Lisbon Ave.
Milwaukee 8, Wisconsin

Please rush me folder A-10 and price list of Milwaukee Combination Sash Balance Weatherstrip.

Name

Address

City

I am (please check) Building Contractor
 Lumber Yard Installer

AMERICAN BUILDER

**"A
FAST-MOVING
MONEY-MAKER!"**



BERMICO®

**The Modern Root-Proof Pipe for
Outdoor, Underground, Non-Pressure Use**

"Moves Better!" Bermico doesn't gather dust in slow-moving inventory. It turns over fast—returns you a profit quickly. Easy to stock and stack. Strong, cellulose fibre structure, pitch-impregnated, absorbs jars and jolts without damage.

"Lays Better!" Bermico is simple and easy to install. Convenient 8-foot lengths and a complete line of bends and couplings make it a sweetheart to handle. No cement, leading or joining compound needed. A few hammer taps seal joints tight.

"Serves Better!" Bermico seals out roots—puts an end to drainage problems—gives users a lifetime of dependable, trouble-free service. Non-corroding, resistant to acids, alkalis, sewage. Ideal for house-to-sewer connections, septic tank disposal, downspouting, farm drains.

Write Dept. MB-11 at our Boston office for information.

BROWN



**COMPANY, Berlin, New Hampshire
CORPORATION, La Tuque, Quebec**

*General Sales Offices: 150 Causeway Street, Boston 14, Mass.
Dominion Square Building, Montreal, Quebec*

BOLKA & CELLULOSE PULPERS • SOUKA-FLOC • NITROCEL PAPERS • NITROCEL TOWELS • NITROCEL
KOWTOWELS • BERMICO SEWER PIPE, CONDUIT & CORES • GINCO INSOLES • CHEMICALS

NOVEMBER 1952

CROSSETT TIMBERS ARE ENGINEERED MATERIAL



Under the pressure of "guns and butter" restrictions, structural timbers are meeting the crucial

need for heavy and light construction, *promptly*.

Timber construction is dependable, flexible, resists combustion, saves erection time, costs less. Augmented with Teco ring connectors and grids, residential roof trusses and commercial structure load bearings provide excess safety factors.

Crossett timbers of dense structural, as well as lighter classifications, are engineered to specified stress values for timbered or laminated truss and arch designs. Available in untreated, Wolmanized* treated and Creosoted stock, they qualify under Southern Pine Inspection Bureau standards and Federal Specifications MM-L-751b.

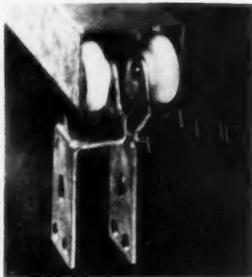
* Reg. U. S. Pat. Office.

For data and information address:

CROSSETT LUMBER COMPANY
CROSSETT, ARKANSAS

new products

(Continued from page 168)



SLIDING DOOR HARDWARE AB115205

An innovation in sliding door hardware, used for by-passing wardrobe doors, has wheels made from wear-resistant nylon requiring no lubrication. Since these nylon wheels are larger than conventional type wheels used for this purpose, door sliding is stated to be smoother and easier. The track is rust resistant heavy gauge steel, precision made; one size can be used for all door thicknesses. A new development allows for easy lifting out of the sliding door from the track without the time-consuming necessity of removing the hardware. Simplicity of installation is stressed. Acme Appliance Manufacturing Co., Dept. AB, 35 S. Raymond Ave., Pasadena 1, Calif.



TORCH BURNS L. P. GAS AB115211

Stressing convenience and economy for home or shop use, a new automatic torch features a long-lasting replaceable cylinder of liquefied petroleum gas with a burning time of up to 15 hours and interchangeable burners. The torch lights instantly without pre-heating or priming, and operates in any weather down to 30 degrees below zero. Flame is adjustable by turning the valve from pin point to 8 inches. Fabricated from steel, the device is stated to be hotter than a gasoline torch, burning in any position at 2300 degrees F. The torch's versatility will appeal to artisans in a variety of trades. Accessories, including flame spreader, paint burning attachment, choice of pencil flame or general utility type burner, eliminate the need for multiple tools. Uses include tinning, copper sweat fitting, freeing frozen nuts and bolts, radio and television work, cable splicing, and many others. Otto Bernz Co., Inc., Dept. AB, 280 Lyell Ave., Rochester 6, N. Y.

170



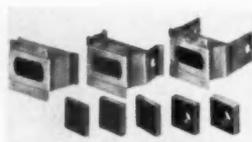
PLASTIC TILE AB115210

Plastic tile, a relative newcomer to the field of wall covering materials, has found acceptance among home owners who like its appearance and feel. The variety of color schemes offered make it useful for remodeling or new home construction. The built-in quality of the colors make them long-lasting; marbledized tones are also available. Surveys indicate that dealers are handling increasing quantities of plastic wall tile over other type wall coverings, due to its appearance, long service, easy installation and negligible maintenance. The product is available in either a deep beveled edge tile or rounded edge type. Exacting standards of accuracy, comfort, color fastness and wear resistance must be met. New Plastic Corp., Dept. NT, 1040 N. Orange Drive, Los Angeles 38, Calif.



TUBULAR TYPE DOOR LATCH AB115207

Designed for screen, storm or combination doors, this tubular type latch is provided with a bolt throw of 7/16 inch which allows for greater door shrinkage while giving positive latching action. The short knob action requires only a 45 degree turn to operate the latch. Mechanism is of all-steel construction (no die castings) providing a latch that will withstand hard usage. The latch is adjustable for door thicknesses from 1/4 inch to 1 1/4 inch, and is easily installed by inserting the whole inside latch assembly into the holes drilled according to template and instructions included. Wright Products, Inc., Dept. AB, St. Paul Park, Minn.



ADJUSTABLE INSERTS FOR CONCRETE AB115222

A fully adjustable insert for use in concrete helps cut down time-consuming "fishing" to get a bolt started in a nut after the nut has been placed in the insert. The combination of the elongated hole in the face of the insert and the off-set hole in the nut makes it possible to start the nut on the bolt before placing it in the insert, then to adjust it in any direction. The device will support a load of from 1,500 to 2,400 pounds; V-shaped notches in the face and center grooves on the side simplify alignment of the insert on concrete forms; small holes permit placing the insert on dowel pins or reinforcing rods. Inserts are made for bolt sizes of from 1/4 to 3/4 inches. Super-Grip Anchor Bolt Co., Inc., Dept. AB, 3333 N. 22nd St., Philadelphia 40, Pa.



WOOD BLOCK FLOOR SEALER AB115208

A cold adhesive compound known as Blockset for resetting and repairing wood block floors is said by the manufacturer to seal block floors tightly and form a smooth surface which withstands heavy plant traffic. It does not require heating and is said to be superior to present block resetting compounds, since it eliminates danger from fire and fumes. The material dries quickly, and when dusted over with silica sand, can be trucked over immediately after application. Being waterproof, it prevents moisture from penetrating cracks, thereby prolonging floor life. The Monroe Company, Inc., Dept. AB, 10703 Quebec Ave., Cleveland 6, Ohio.

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Save Time—Just Insert Key Numbers and Mail To:
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AD-11-52

NOVEMBER 1952

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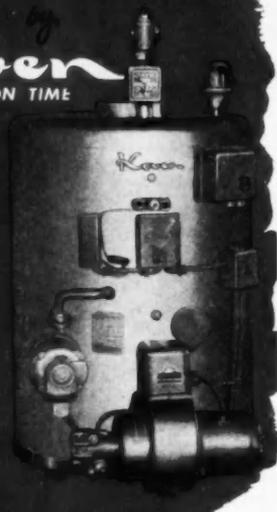
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Of American Builder published monthly at Bristol, Connecticut for November, 1952

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CONRAD J. WAGEMAN, Business Manager.

Sworn to and subscribed before me this 18th day of September, 1952.

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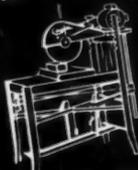
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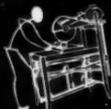


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- 4 Place it in tracks and you can cut large stone slabs or transite sheets



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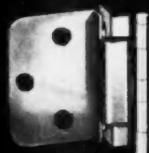


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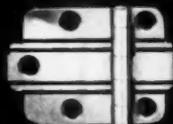
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Catalogs — and Manufacturers Literature

299—**HOW TO CHOOSE YOUR VENETIAN BLINDS**—an attractive 20-page, full color catalog, giving suggestions to homeowners on the selection, durability, operating mechanism, and other features of Venetian blind selection. Four tests illustrate the product's advantages. Manufactured of Flexalum, these blinds are applicable to single or double doors, picture windows, high or narrow windows, kitchen windows, etc. A color guide is included. Hunter Douglas Corp., Dept. AB, 150 Broadway, New York 7, N. Y.



300—**DRY WALL FINISHING SYSTEMS**—three complete methods for interior finishes on dry walls—smooth, stipple or sand—are described in pictorial-text form. Systems utilize four new products especially developed for this type of construction. Advantages and suggestions are covered. The Sherwin-Williams Co., Dept. AB, 101 Prospect Ave., Cleveland 1, Ohio.



301—**PHILIPPINE MAHOGANY**—its use in residential construction is outlined in this attractive 6-page folder; paneling, fixtures and trim, siding, remodeling, and finishing are each discussed in the light of their application to the product. Five full-color photographs of residential uses of this wood are included. Free copies are available upon request. Philippine Mahogany Association, Inc., Dept. AB, 111 W. Seventh St., Los Angeles 14, Calif.



302 — **KITCHEN CABINETS**—a 28-page catalog introducing the company's complete line of kitchen cabinets, related accessories, disposers, sinks, and combination units contains illustrations, complete specifications, and many suggestions on "personalizing" the kitchen. The problem of storage space arrangement is also discussed. Convertibility of units adds to their efficiency in kitchens of different dimensions. American Radiator & Standard Sanitary Corp., Dept. AB, P.O. Box 1226, Pittsburgh 30, Pa.



(Continued on page 178)



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WAY DOWN!



Use VMP flush steel doors between garage and house. Fireproof!



Use VMP flush steel doors for utility heating rooms. Fireproof!

VMP all-in-one piece steel frames require no on-the-site assembly

Pre-welded into complete one-piece assembly with butt hinges welded into the frame. Tack welded spreader channels maintain shape during shipment. Buck shapes for all wall construction.

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1112 First National Bank Building
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NOVEMBER 1952

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For floors that make happy home owners, wax and polish with HOLT floor machines.



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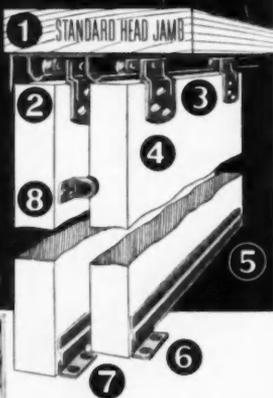
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177

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Catalogs

(Continued from page 176)

303—**ELECTRIC HEATING FOLDER**—a file folder containing specification sheets on all heaters in the manufacturer's line is offered free upon request. Divided into sections covering domestic, industrial and farm heaters, ranging from 1,320 to 45,000 watts, the folder contains heater illustrations, typical installations and suggested uses. Small room portable, heavy duty automatic, and wall-type heaters are shown for a variety of home applications. Electromode Corporation, Dept. AB, 45 Crouch St., Rochester 3, N. Y.



304—**DECORATIVE PLASTIC LAMINATES**—for furniture, work surfaces, and paneling, are illustrated in this 4-color folder; various applications of Pionite plastic in homes are suggested; the material's resistance qualities, patterns and standard specifications, including five colors and a selection of wood grains are all delineated. Pioneer Plastics Corp., Dept. AB, Salem, Mass.



305 — **PLUMBING FIXTURES**—this comprehensive catalog, covering 92 pages, describes the manufacturer's complete line of vitreous china and enameled cast iron units; bathtubs, lavatories, water closets, kitchen sinks, and commercial and institutional equipment are included. Well-arranged, with many illustrations, this loose-leaf catalog presents its contents in easy-to-refer-to fashion, with specifications and detailed explanations. Richmond Radiator Co., Dept. AB, 19 E. 47th St., New York 17, N.Y.



306—**ON PENTA WOOD PRESERVATION** — a 40-page booklet containing detailed answers to questions frequently asked about pentachlorophenol, a chemical widely used to protect wood against decay and insect attack. The 51 questions answered are those which company representatives have been asked most often by lumber dealers, architects, contractors and home owners. Monsanto Chemical Co., Dept. AB, 1700 S. Second St., St. Louis 4, Mo.



(Continued on page 180)

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Kitchen Hostess

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NOOKS



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By eliminating load-bearing partitions, TECO Trussed Rafters provide clear span roof construction that affords flexibility of interior design and speeds up building schedules.

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Please send **FREE** copy of "Wood Frame TECO Trussed Rafters."

Name

Company

Street

City Zone State AB

Catalogs (Continued from page 178)

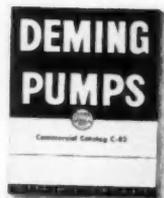
307—FLINTKOTE INDUSTRIAL PRODUCTS DIGEST—a 24-page, pocket-size booklet, briefly describes many of the firm's industrial products. It serves as a guide to asphalt emulsions and cutbacks, as well as adhesives, coatings, and sealers. Various protective floor coverings, underlayings, sound deadening and insulating compounds, packaging specialties, are given mention. The Flintkote Company, Industrial Products Division, Dept. AB, 30 Rockefeller Plaza, New York 20, N. Y.



308 — REGISTERS, GRILLES, DIFFUSERS—a 40-page catalog, No. 52 a.c., complete with many illustrations in full color, lists the company's entire line of air control equipment. Allied material, including dampers, damper control sets, ventilators, and air intakes are also discussed. Complete engineering data, sizes and prices are included. Air Control Products, Inc., Dept. AB, Glade St. at Larch, Coopersville, Mich.



309—PUMPS AND ACCESSORIES—an 88-page catalog for dealers contains details of pump construction, views of complete pumps and water systems, selection tables, tables of water requirements for domestic service, pipe friction tables, wiring diagrams and related data. Complete line of 12 different water systems is covered, giving capacities for all requirements for shallow and deep well service. Centrifugal, hydraulic pumps, and accessories are included. The Deming Company, Dept. AB, 42 Broadway, Salem, Ohio.



SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department
American Builder
79 W. Monroe St., Chicago 3, Ill.

November, 1952

Please send me additional information on the following product items, or catalogs, listed in this department:

Numbers

Name

Street

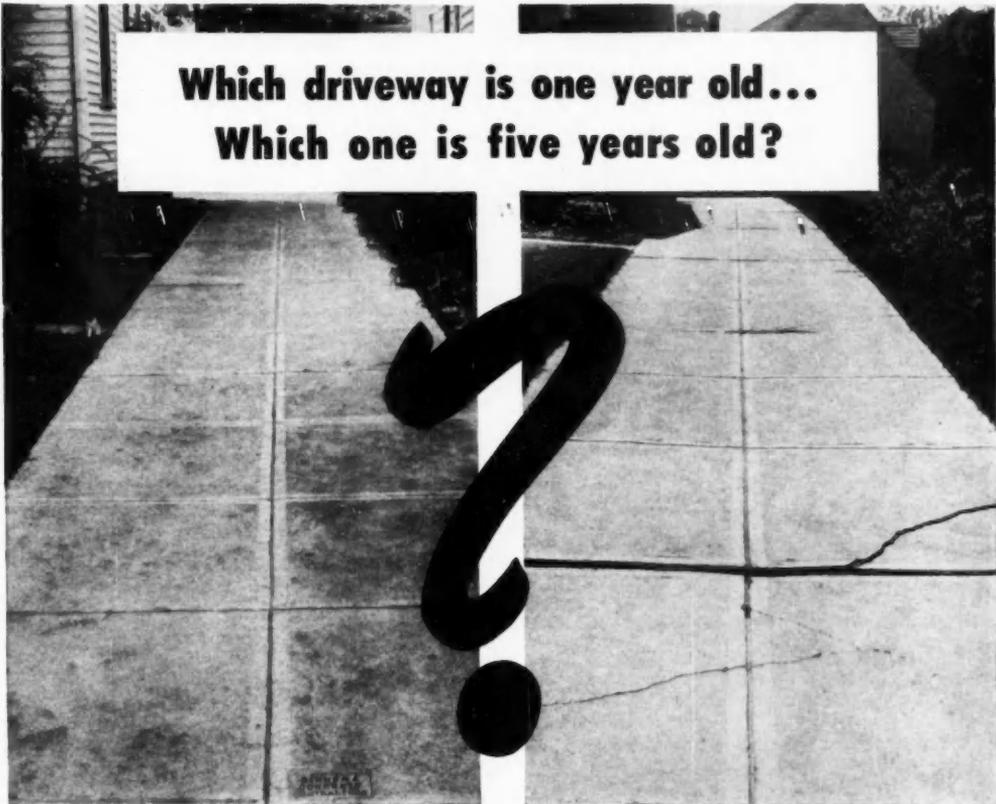
City State

OCCUPATION*

*Please note that occupation must be stated if full service is given.

AMERICAN BUILDER

**Which driveway is one year old...
Which one is five years old?**



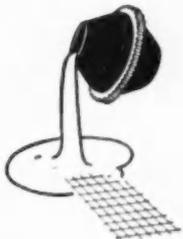
BOTH driveways are located in the same city, and subject to the same climate conditions. You would expect that the cracked and broken driveway had been built five years ago, and that the one with unbroken paving had been built recently. Actually the reverse is true. The one on the left was constructed five years ago *with American Welded Wire Fabric* reinforcement; the one on the right was built a year ago *without* reinforcement.

Here is dramatic proof in pictures of the value of welded wire fabric. In driveways, foundations, sidewalks, terraces—in any concrete construction which goes into building a house—the proportionately small cost of American Welded Wire Fabric reinforcement pays off big dividends in *long-lasting* service and good looks. American Welded Wire Fabric's small, evenly-spaced steel members bind foundations, walls and floors into a solid unit . . . eliminate the common causes of cracked plaster,

warped floors, sagging baseboards and other damages which detract from the dollar value of a home.

Now, more than ever, prospective home-buyers are demanding real value for their money. That's why the use of American Welded Wire Fabric can do much to assure quicker sales and satisfied buyers. It is easily handled, quickly laid. You can get U-S-S American Welded Wire Fabric in every locality from jobbers' and dealers' stocks.

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four top "musts" in any builder's kit **STANLEY TOOLS**

On almost any job you can think of you'll need these basic tools. And like all Stanley Tools, they're designed to help you do a *better* job. You'll find them in the tool kits of builders everywhere. See the complete line at your dealer's.

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Stanley No. 51 1/2 Nail Hammer. Most popular of all Stanley hammers. Super-heat-treated head for toughness. Uniformly beveled claws pull even headless nails.

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STEEL • WELDED • TOOLS

how to use and care for

As important to painting as the actual paint material are the tools and accessories needed to do the job right, both inside and out. First of all, the painter needs quality brushes. Get the expensive ones. A cheap brush will not hold as much paint, will shed bristle, will drip and spatter, and even with excellent care won't hold up well in service. A 4 1/2- to 5-inch brush is generally advisable for painting large areas (for siding, a 4-inch brush of the long bristle, full stock type, is often recommended). For trim, use a 1 1/2- to 2-inch type (3-inch is often used for varnish work), and use a sash brush on narrow strips such as those in windows. In addition to these basic brushes, the well-equipped painter needs a duster brush and one for stippling (or a roller stippler).

In using a brush, apply the paint from the ends, not the sides of the bristle. Start in the upper left-hand corner of a surface and work to the right, using a smooth, back-and-forth stroke which will brush the paint into the surface. When working on siding, always paint edges first, then the flat surfaces. Use the brush flat even when painting under-edge of the siding.

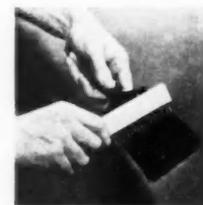
Highly important is the proper care of brushes, and this technique is described in general in the accompanying photographs. Special points are these:

If nylon brushes are used for shellac, or come into contact with alcohol, they will soften. If this happens, put the bristle portion in boiling water for 30 minutes and hang the brush up to dry overnight. In cleaning brushes used for a rubber-base paint, a quick rinse in soapy water will generally do the job.

When paint and varnish brushes are being used frequently suspend them in raw linseed oil (never in water). Put the varnish brushes in a separate container. Keep brushes free from the bottom of the container by at least two inches, and to a depth of at least an inch above the bottom of the ferrule. This practice is correct for both bristle or nylon brushes. Adding a little turpentine or other thinner now and then will keep the oil from getting "fatty."

If the job is a small one, and no container is handy for holding the brushes between times, work as much paint out of the brush as possible and then lay it on a flat surface and wrap it in paper, being careful not to bend the bristles.

(Continued on page 184)



HOW TO PREPARE A NEW BRUSH FOR USE

- (1) Twirl the handle between your palms to remove any loose bristle.
- (2) Suspend animal bristle brushes in linseed oil for at least 12 hours before using. This facilitates cleaning.
- (3) To remove oil before using brush, press a wooden stick heavily across the bristle. Start with the ferrule and work toward the tip.
- (4) To remove additional oil, twirl brush in a container and then straighten bristle with a brushcomb. Never dip more than one-third of the bristle into the paint.

painting tools

CLEANING THE BRUSH AFTER PAINTING

(1) After soaking in proper thinner, work the brush against the bottom of the container, to release paint. (2) Squeeze bristle between thumb and forefinger to loosen paint in center of the brush. Or press with a wooden stick. Rinse again in thinner. If necessary, wash brush in mild soap suds, rinse in clear water. Press out water with a stick. (3) Twirl brush carefully. (4) Wrap in heavy paper, and include moth-repelling flakes. Store flat. Never let a brush stand on its bristle.



Photos and drawings by National Paint, Varnish and Lacquer Assn.

NOVEMBER 1952



1 ANCHOR WINDOW — Pella Windows are completely assembled when they arrive. Just set the unit in the opening and anchor it firmly at the head and sill. Flange screws are furnished for this purpose.



2 ATTACH OUTSIDE FINIS — Next, attach metal fins at jambs. The grooved edge of the fin fits over the edge of the steel frame. The flat surface of the fin is nailed to the sheathing. Exterior trim can now be applied.

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INSTALLATION
USE

Pella

CASEMENT WINDOWS

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3 ATTACH INSIDE FINIS — To complete the installation, apply the inside metal fins at head, sill and jambs. Fins fit under the lip of the steel frame and are nailed to the studding. This insures a tight weathereal all the way around the window.

Write Today for the Pella Installation Instructions and full size Casement Details.

ROLSCREEN COMPANY, Dept. D-51, Pella, Iowa

Without obligation, send me "PELLA CASEMENT Installation Instructions in Full Size Casement Details No. 1050M."

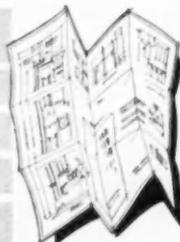
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RECLAIMING A PAINT-HARDENED BRUSH

(1) Suspend brush in liquid brush cleaner, and soak until soft. Work bristle occasionally with fingers. (2) Use scraper and comb for removing paint. Soak in soapy hot water. (3) Sprinkle soap powder on a wash-board, adding sand if necessary. Keep rubbing brush across board until bristle is clean.

(Continued from page 182)

Varnish brushes on the job can be suspended in the varnish in which they are being used, but be sure the bristle does not rest on the bottom of the container.

Duster brushes must be kept clean. The ones that are vulcanized in rubber can be easily cleaned in benzine or other solvents, or they may be washed in soap and water. A pitch-set brush should not be cleaned with a paint solvent or with hot water.

Painting can be done as durably with spray gun and roller coater as with brushes. In using the spray gun, hold it six to ten inches from the surface and move it across the surface with steady strokes made with a free arm motion. The gun should be kept perpendicular to, and at an equal distance from the surface. The gun can be kept clean by spraying solvent through it.



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PAINTING WITH SPRAY GUN. Finger-tip adjustment control quickly provides a wide selection of spray patterns for various types of jobs and paint materials.

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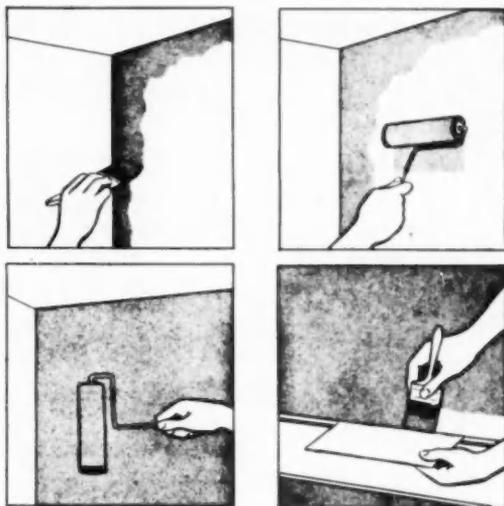
5059 RAVENSWOOD AVE., CHICAGO 40, ILL.



Roller coaters are of two types. One is self-feeding, with a drum inside the roller to contain the paint. The other type is dipped in paint poured into a special tray. Lengths of rollers vary from two to nine inches, the 7-inch type being widely popular. Various types of covers for the rollers are available to give different textures to the wall finish. Break in a new roller by washing the cover in warm soapsuds and rinsing it well to remove lint or dust. Let the cover dry if the paint to be used is an oil-base paint; a water-mixed paint needs a wet roller. Clean the roller by putting it in a glass jar with the proper solvent for the paint used. Shake the solvent through the roller, then roll it out on newspapers to remove the liquid. Next step is to wash the roller in warm suds and rinse.

In addition to the applicator tools, the painter's kit should include plenty of drop cloths, which must be kept clean and in good condition; extension ladders; sandpaper (2/0 garnet paper for sanding new wood, 5/0 for sanding shellac, and 6/0 or 7/0 for sanding varnish); paint thinner (or turpentine); extra cans; strainers; paddles for mixing the paint materials; steel wool for burnishing out rust spots; a broad knife for scraping large areas; a wire brush for removing loose paint and dirt, especially on concrete or cement; putty and putty knife for filling cracks, nail holes, and glazing (patching plaster is also handy for sealing wall cracks); raw linseed oil; a caulking gun and compound for filling large exterior openings such as open joints in window sash or siding; wiping rags, and a detergent cleanser for washing old coatings over easily noticed areas such as front doors and shutters, before repainting.

NOVEMBER 1952



USING A ROLLER COATER. (1) First, brush a strip of color just below the ceiling line for a width of two feet. Also paint next to corner at left—from ceiling to floor. (2) With a newly loaded roller, always begin by rolling upward. Start a short distance from finished area and work toward it. (3) After an area of about two feet wide and three feet deep has been coated with up and down strokes, roll the coater back and forth. (4) At bottom of the wall, brush the paint onto areas the roller couldn't reach. Use a cardboard guard when brushing next to woodwork.

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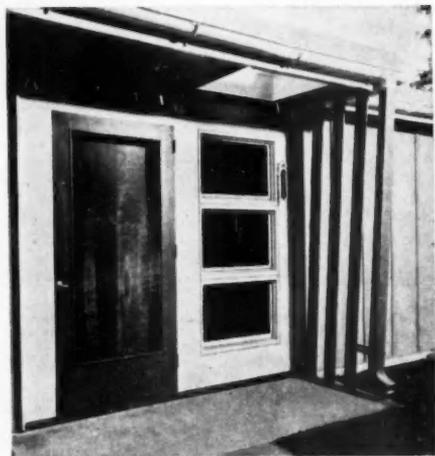
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VIKON TILE CORP. WASHINGTON, N. J.

versatile NEW WINDOW serves



Flexivent unit in stack arrangement, as part of front entrance design

THE Andersen Corporation of Bayport, Minn., is out with a new all-purpose window unit which can be arranged in a number of effective ways to solve window design problems all over the house. This new unit is a simple, panel-style window called Flexivent. In addition to fixed sash, it offers three types of ventilation—outswinging awning, inswinging hopper, and outswinging casement.

Flexivent sash operation is a standard system. It includes friction hinges, the lock, the closing action against frame, and weatherstripping on all four sides. Head, jamb and sill members are designed to function interchangeably.

Sash are assembled around the

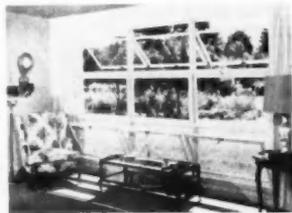
glass and completely embedded in waterproof glazing compound. The frame is set up, weatherstrip applied and sash hung at the factory. Sash open nearly 90 degrees for easy cleaning.

A choice of wood frame screens with aluminum wire cloth or all-aluminum screens are offered as optional. Screens are applied with self-locating hinges, and are on the inside for awning or casement operation, on the outside for hopper operation.

Double glazing panels are also optional, and are held in a rabbet in the sash by small plastic clips. They are applied to the outside of the sash whether the window is in awning or in hopper position.



A picture window corner installation. Most of the units have fixed sash. Lower row opens for hopper-type ventilation



Here the top three units are placed in awning position. Center has fixed sash. Bottom windows have hopper opening

the whole house



Flexivent units installed on end in casement position. Double glazing panel fits on outside of sash



Three units in stack arrangement. with sash in awning position

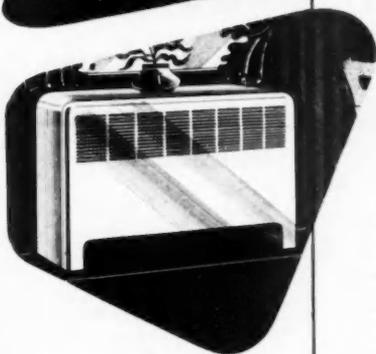
more on page 188 ➔



The ribbon arrangement provides excellent light for kitchen counter work space. Sash open outwards, in awning position

NOVEMBER, 1952

For warmth...and Beauty



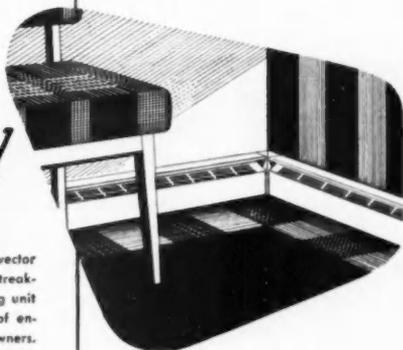
Rounded corner cabinets (prime coated) blend with any construction, any interior design. Elements for steam or hot water. Units from 18 to 64 inches long, 4 to 19 inches deep, 20 to 32 inches high.

Bush Convectors

Modern heating at its best! Builders have discovered the many advantages of the Bush line of convectors. . . . Recessed convectors maintain clean, unbroken lines of modern rooms, preserve free floor space. Aluminum and copper finned elements promote quicker response to heat needs, mean greater economy of operation. Placed under windows, these units diffuse a blanket of heat at such "cold spots". They insure draft-free as well as dust-free heating.

Bush Baseboard Radiation

Bush Baseboard, like Bush Convector radiation, eliminates "wall streaking". Here is a modern heating unit built to satisfy the demands of engineers, builders and homeowners. Aluminum and copper finned tube elements mean economy of operation, quick response to heat needs. Uniform heat spread along the outside walls eliminates concentrated blasts of heat and consequent drafts and dust.



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new window

(Continued from page 187)



These units are installed well out in the wall, permitting bedroom ventilation without opening sash past the drapery line. They occupy the space of two double-hung windows.

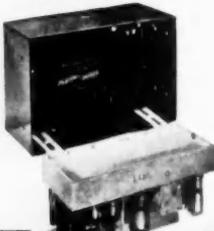


Ribbon arrangement for a bedroom



Single Flexivent unit, with hopper ventilation, serves bathrooms, also basements. Available with obscure glass.

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FLUSH-WALL appeals to prospective home buyers—it's novel and saves valuable space.

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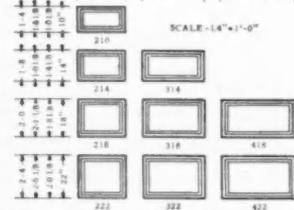
FLUSH-WALL

RADIO COMPANY

Dept. AS, 1012 Cleveland Street, Clearwater, Florida



| | | | |
|---------------|-----------|----------|----------|
| Overall Size | 2-15 1/2" | 3-5" | 4-1" |
| Rght Stud Ovg | 2-5 1/8" | 3-5 1/2" | 4-1 1/2" |
| Sash Ovg | 2-4 5/8" | 3-2" | 3-10" |
| Glass Size | 27" | 36 3/8" | 44 3/8" |



There are nine stock sizes and layouts for Flexivent units

When you deliver Basic Value in the homes you build... profits follow

Roddiscraft Hardwood Paneling and Roddiscraft Flush Doors... A Mark of Quality in the "House Beautiful" 1953 Pace Setter Home, Bronxville, N. Y.



HANDSOME flush walls with the warm natural beauty of Roddiscraft Hardwood Paneling — walls that require neither paper, paint, or patch; Roddiscraft Flush Doors that double as doors and decoration — perfectly match the walls with round-the-room beauty — and built for the years with high resistance to warping or abuse — these are marks of quality in a house that a prospective home-buyer can see and evaluate.

Selling is simpler — profits sure to follow — when you set the standard of quality in the homes you build with Roddiscraft Hardwood Paneling and Roddiscraft Flush Doors.



1 Beauty round-the-room with Roddiscraft — dining room paneled with Roddiscraft Blonde Limba plywood, Roddiscraft Flush Doors match the walls.



2 The dining nook carries out the interior theme with beautiful Roddiscraft Birch paneling. Foreground shows part of work surface in G-E Textolite's exclusive Green Mansions.



3 Dressing room has built-ins of Blonde Limba. Finger pull drawers eliminate knobs and preserve smooth flush appearance and horizontal lines.

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how to use 'SCR BRICK' on foundation walls

Six months after its introduction into the home building field, the "SCR brick" (Reg. TM. SCPRF, patents pending) seems to be here to stay. Demand for the new six-inch, through-the-wall, clay product has exceeded supply from the day of its introduction on May 1, 1952. Since then, 200 homes have been built in various parts of the country, and a million units will have been produced by the first part of 1953.

As with every new product, application of the new brick has run into how-to-do-it problems. Structural Clay Products Institute has made a

continuing study of these problems, and with this article, the *American Builder* begins a service in interpreting the Institute's findings to the home building industry.

The following recommendations and details are given in answer to questions raised by builders in starting the "SCR brick" wall.

How do I put an "SCR brick" wall on an eight-inch foundation wall when there is a sloping site and a considerable portion of the foundation wall must be exposed? I want the exposed portion of the foundation wall to have the same

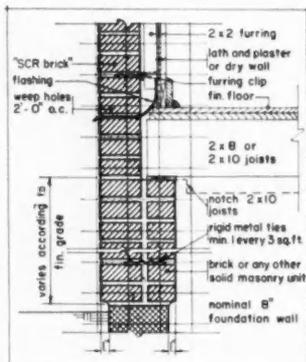


FIG. 1
Ways of putting "SCR brick" on an 8-inch foundation wall where there is a sloping

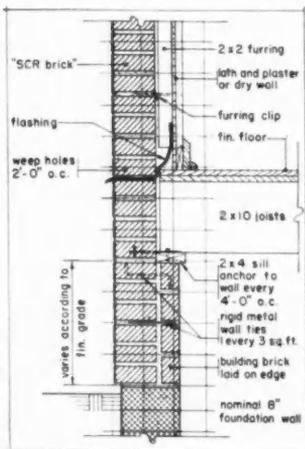


FIG. 2
FIG. 3

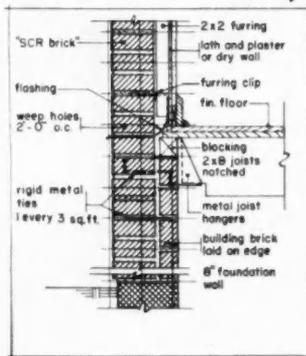
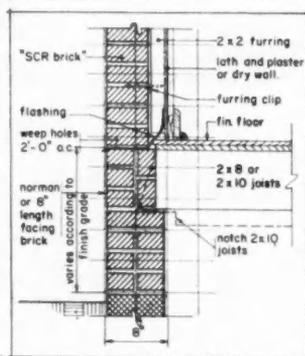


FIG. 4



Beginning a series of solutions to building problems encountered in using the new "SCR brick" on the job

appearance as the "SCR brick" wall above.

There are a number of ways to handle a situation such as this, as shown in figures 1-5 inclusive. Figure 1 illustrates one of the simplest ways in which this problem may be solved. In order to provide suitable masonry bearing for the floor joists and to permit the "SCR brick" to be continued to the top of the eight-inch foundation or to finish grade, the "SCR brick" are backed up with four inches of other masonry units from the joist-bearing level to the top of the foundation wall. This section of the

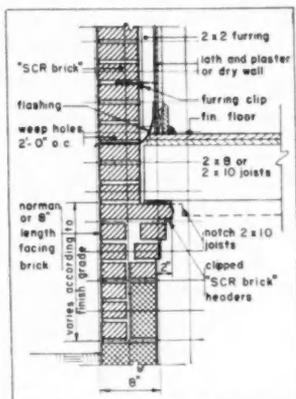


FIG. 5

becomes, then, nominally ten inches in thickness. In order to eliminate the necessity for corbelling a total of two inches on one side of the wall, to which some builders object, this wall section of increased width is centered over the eight-inch wall below—projecting $\frac{1}{2}$ to one inch beyond the faces of the foundation wall on both sides. Although building brick are shown backing up the "SCR brick" in Figure 1, these units may be any load-bearing unit with a four-inch nominal thickness. It is recommended, however, that at least the top and bottom four inches of this section of wall be built with solid units. (Solid masonry units are units whose net

(Continued on page 192)

NOVEMBER 1952



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SCR BRICK

(Continued from page 191)

cross-sectional area in every plane parallel to the bearing surface is 75 per cent or more of the gross cross-sectional area measured in the same plane.) The six-inch and four-inch sections or wythes of this wall should be bonded together with rigid metal ties spaced not more than 16 inches o.c. vertically of 24 inches o.c. horizontally in order that they may act together in resisting loads. "Z" ties, 3/16 inch in diameter, as are used for cavity wall construction, are recommended.

In Figure 2 is shown another simple solution to this problem. Here again, the "SCR brick" may be continued on down to the grade line. Below the joist-bearing level to the top of the eight-inch foundation wall the "SCR brick" are backed up with brick laid on edge or as rowlock stretchers. The 1/2-inch collar joint between the two tiers of masonry should be filled solid with mortar, and rigid metal ties used to bond the two tiers together. The interior face of this portion of the wall should be aligned with the interior face of the nominal eight-inch foundation wall below. The Uniform Code and other recognized building codes permit a minimum of 1 1/2 inches of bearing for wood joists on wood. Therefore, the 2x4 sill anchored to the wall as shown in Figure 2 will provide sufficient bearing for the 2x8 or 2x10 floor joists.

The detail shown in Figure 3 is similar to that shown in Figure 2, except that metal joist hangers are used to support the ends of the wood floor joists.

The details shown in Figures 1, 2 and 3 eliminate the need for any facing material other than the "SCR brick," thus simplifying the ordering of materials and construction. If, however, the supplier of the "SCR brick" produces norman brick with matching colors and textures, the details illustrated in Figures 4 and 5 may be used.

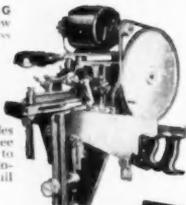
In Figure 4, the eight-inch foundation wall extends up to the level of joist bearing. The exterior *exposed* portion of this wall above grade is faced with norman brick having the same face dimensions, color and texture of the "SCR brick" in the wall above. The backing material may be building brick or other suitable four-inch thick masonry units. In this de-

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SCR BRICK

(Continued from page 193)
work out on foundation walls ten inches and 12 inches thick?

There are local building codes which, due to certain unusual soil conditions, require ten- or even 12-inch thick foundation walls. Figures 6 and 7 show two typical details for the use of "SCR brick" walls on ten-inch and 12-inch foundation walls. In each case the "SCR brick" may continue on down to the finish grade line, thus eliminating the need for any other size of facing unit. In the case of the ten-inch foundation wall, the "SCR brick" are backed up with four-inch-thick masonry units above the grade line to the level of joist bearing.

In the 12-inch wall construction, these units may be six inches thick where such are available, or from grade line to joist bearing they may be four-inch units, if the two-inch "shelf" thus provided on the interior of the foundation wall at grade line is not objectionable from the standpoint of appearance. In these details, as in all others where the walls are two units in thickness, the two tiers of masonry should be bonded to-

gether with rigid metal ties, such as those used in cavity wall construction.

It should also be pointed out that the limiting height of nine feet for the six-inch masonry wall used in one-story residential construction is measured from the point where the exterior masonry wall becomes a nominal six inches thick. In other words, even though the "SCR brick" may continue down to finish grade line and, due to a sloping site, as much as 12 feet or more of "SCR brick" wall is exposed, the portion of the wall that is backed up with other units properly bonded to it is not included in the nine-foot limitation, since it will be eight inches or more in nominal thickness.

who can buy \$20,000 house?

The assumption that there is a considerable market for new, ultra modern houses at \$20,000 and up is contrary to fact. According to the Bureau of Census, an annual income of \$10,000 is required to justify the purchase of a \$20,000 house. Of the 39,800,000 families in the United States, only 1,300,000 have incomes above \$10,000, and the greater percentage of this group is already suitably housed.

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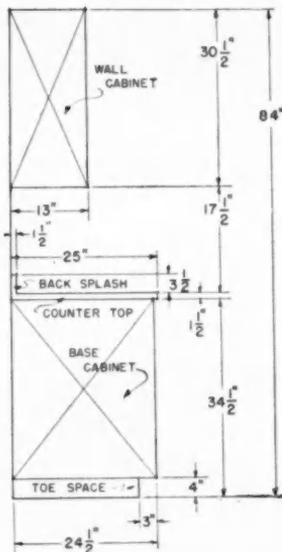
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how to arrange wall and base cabinets

An efficient method of arranging a wall and base cabinet in kitchen utility room, or similar space is illustrated in the diagram. Given a standard room height of 7 feet (84-inches), a wall cabinet 13 inches wide and 30½ inches high can be abutted



flush to wall and ceiling, occupying a negligible amount of space, yet within easy reach, since the bottom shelf of the cabinet is only 53½ inches from the floor. The problem of head room is offset by the location of the base cabinet beneath.

As may be seen, a base cabinet 24½ inches wide, with a ½ inch overhang at the counter top may be located advantageously beneath the wall cabinet, since at standard counter height (36 inches) there still remains a 17½ inch space between the counter top and the bottom of the wall cabinet. Another useful feature is the allowance of a toe space, 4 inches high and 3 inches deep, providing for closer approach to the working space in front of the base cabinet. A back splash plate at the back of the base cabinet, 1½ inches from the wall, as high as necessity demands, is an optional feature.

NOVEMBER 1952



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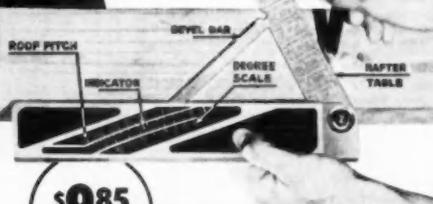
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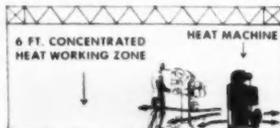
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A 6064



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a metal corner that

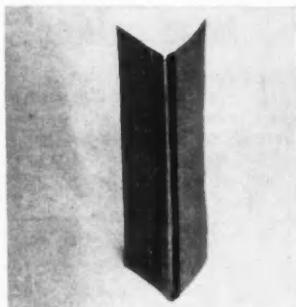
A new method for reinforcing outside corners, uncased door and window openings, pilasters, beams and soffits has been made possible by the introduction of Perf-A-Bead, a new product of United States Gypsum Company. It consists of a metal bead to protect the corner, with Perf-A-Tape wings or flanges on each side.

The new Perf-A-Bead is available in eight-foot lengths, packed in 125-piece and 25-piece cartons. It is applied using standard Perf-A-Tape cement by the following method:

1. The workman mixes Perf-A-Tape cement according to manufacturer's directions, spreading it onto both sides of the corner over the entire area which is to be covered by the Perf-A-Bead.

2. Holding the Perf-A-Bead in a vertical position, the workman spreads the wings of the material at the top and presses tightly against the top of the corner at the ceiling.

3. With Perf-A-Bead held in place at the top of the corner, the workman pulls the bottom outward; this



Photos by Hedrich-Blesing

Vertical strip of Perf-A-Bead before installation, showing metal corner angle and perforated paper flanges

springs the metal slightly and forces the paper flanges to open up. Now laying the Perf-A-Bead against the corner, it is fitted into place, working from the top down. As this is done, paper flanges position themselves.

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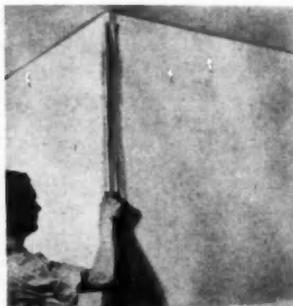
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protects wallboard



Cement is spread on each side of the corner and Perf-A-Bead is placed in position by holding one end near the top of the corner and pulling the bottom end slightly away from the corner.



Perf-A-Bead is even seated by running the hand up and down the outside nose of the corner. Applying pressure to both sides of the paper flanges forces out excess cement at the sides.

4. The material is then seated completely by running the hand up and down the outside point of the corner, applying pressure with the fingers to both sides of the paper flanges.

5. The paper flanges are next em-

bedded by drawing a broad knife down each side of the corner. The excess cement which is forced out from under the flanges is used later in filling. The metal corner angle is held in place during the embedding process.

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After the material is completely embedded, using the metal corner angle as a screed, cover the paper flanges with a cement fill, allow sufficient drying time, sand the surface.

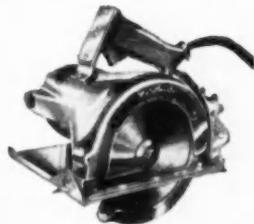
6. After the Perf-A-Bead is completely embedded, the workman covers both the paper flanges with a smooth cement fill, 3 or 4 inches wide, using the metal corner angle as a screed. This should be allowed to dry from 12 to 24 hours; if drying conditions are slow, more time should be allowed. The surface is then sanded.

7. Applying a second and third coat of cement, the edges are then feathered two or three inches beyond the first coat, sanding after each coat, and removing any jagged particles from the metal angle so that the corner presents a completely smooth appearance when it is finished.

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Both informative and entertaining, the new 29 minute movie dramatizes what "Light Conditioning" can do for a home. It demonstrates how modern lighting brings such benefits as: easier, safer, and faster seeing; greater eye comfort and protection;



Another scene from the movie. Finishing touches put on the valance lighting in living room

improved home charm and beauty; and, above all, happier home life.

"Bright Future," beamed at the millions of American families who have yet to try Home Light Conditioning, is based on the experience of the many who have already applied the 22 simple lighting recipes developed by G.E. residential lighting specialists. The film's sponsors



Typical scene before shooting a sequence of G.E.'s new movie, "Bright Future"

point out that now, for the first time, millions can actually see in full color what light conditioning can do to bring out the beauty of furniture, draperies, and rugs.

In addition to being designed for



Another method of living room valance lighting shown in G.E.'s new movie

showings before home makers everywhere, G.E.'s "Bright Future" is intended for use by groups such as home builders, contractors, retailers, wholesalers, electric utilities, manufacturers, schools, and service and women's clubs. The film is made available at once through the 25 sales districts of G.E.'s Lamp Division.

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NOVEMBER 1952

**cameron & co. officers
succeed to new posts**

Following the sudden death of G. H. Zimmerman, three employees of Wm. Cameron & Co., Waco, Texas, succeeded to top posts with this Southwestern lumber firm. The appointments were made public following a Board of Directors meeting held Sept. 2, 1952.

F. Ruel Weddington was named president of the company, succeeding Mr. Zimmerman. He has been vice president in charge of wholesale and



New officers of Cameron & Co., Waco, Texas (left to right): F. Ruel Weddington, president; Coleman L. Dever, general manager of the wholesale division; and J. R. Byford, sales manager

manufacturing operations since May, 1951. Beginning his career with Cameron & Co. in 1919, he gradually moved up through various departments until in 1937 he was named sales manager of the wholesale division, holding that position until Feb., 1951 when he was made general manager of that division.

E. Y. Boynton was chosen by the Board of Directors to be board chairman. He was a member of a Waco law firm until 1949 when he became a vice president and board member. His company affiliation goes back to 1925 when his firm assigned him to legal work of Wm. Cameron & Co.

Coleman L. Dever has succeeded to the position of general manager of the wholesale division, replacing Weddington. Dever has served the Cameron Co. since 1923, when he began as a bookkeeper at Willow, Okla. He served on the sales staff until 1937 when he was appointed assistant sales manager. His nearly 30 years in various phases of company operations, including membership on the Board of Directors will be of great value in his new connection.

J. R. Byford has been appointed to succeed Dever as sales manager of Coleman & Co. He began with the firm in 1936 and transferred to the wholesale division shortly after. After serving in the armed forces, Byford was given a sales territory in late 1943. In March, 1951 he was promoted to products manager.

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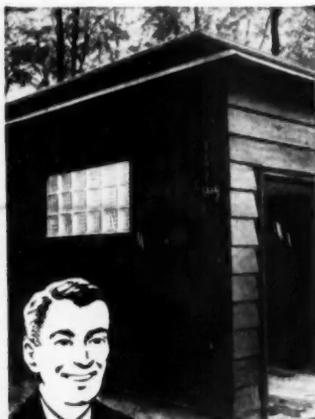
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"Glass block panels for garages are standard with us"
says a typical builder

"When we put in a panel of Insulux Glass Block®, we know it will give a lifetime of trouble-free service. We know the garage will be lighter and more private . . . that outsiders can never tell what's stored inside."

Light and privacy are only two of the many advantages of glass block. A panel can't rust or rot; never needs repainting or repainting. Insulux panels are sound, weathertight, insulating; make a difficult entry for thieves.

Supplies of Insulux Glass Block and all of the installation materials needed are non-critical and immediately available in quantity. Installation is simple and quick—in new construction or old—requires only ordinary mason's tools.

Get the details about this use of Insulux Glass Block. Just write: Insulux Glass Block Division, Kimble Glass Company, Dept. AB11, Box 1055, Toledo 1, Ohio.



KIMBLE GLASS COMPANY

Subsidiary of Owens-Illinois Glass Company
Toledo 1, Ohio

Association News

(Continued from page 32)

1000 Homes on Display in Metropolitan Detroit

With formal proclamations issued by Governor Mennen Williams and Detroit's Mayor Cobo, Michigan's and the Motor City's participation in National Home Week got off to a flying start. Detroit and its suburbs offered a major contribution to the 1952 Parade of Homes by giving home-seekers the opportunity of inspecting 1,000 homes.

Sponsored locally by the Builders Association of Metropolitan Detroit, the local National Home Week comprised a wide selection, ranging from houses in the modest income bracket to luxurious homes completely equipped with the latest devices for home comfort and convenience. In many of the homes of all price brackets, appliance manufacturers displayed their newest refrigerators, ranges, washers, and other equipment. Home designs varied from Cape Cod to Colonial types, as well as ranch type and other contemporary styles.

According to a statement made by Edward W. Pratt, president of BAMD, it would be possible to secure an education in light construction equal to a four year college course by closely examining the homes on display. Said Pratt, "All the intricacies of the highly complex home building profession—from initial excavation to the finished home—will be hared for all to see."

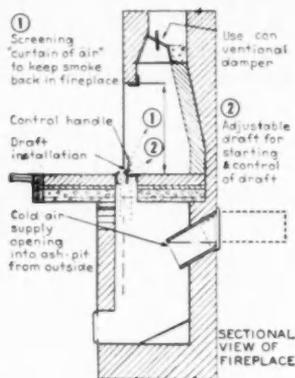
One of the most unusual demonstrations on display was the "cut-away" house constructed by John D. Harrison. Similar in principle to a cut-away automobile, it demonstrated the various stages of building construction. A completed house of the same type was also open for inspection on an adjoining lot for purposes of comparison.

Columbus Parade of Homes Swamped by 150,000 Visitors

The overwhelming success of the 1952 National Home Week in Columbus, Ohio, is attested to by the lines of potential home-buyers extending down the sidewalks. Under the sponsorship of the Columbus Home Builders Association, the Parade of Homes in Ohio's capital city attracted such crowds that by the week's end it was estimated that 150,000 people had inspected the homes on display.

Miss Lillian Tupes, executive secretary of the Columbus HBA stated in a telephone interview, "By the middle of the week, we found it no longer necessary to advertise the show. We just didn't need to, because word of mouth advertising on the part of the general public was enough!"

WONDERDRAFT



WONDERDRAFT stops fireplaces from smeking because of "too air-tight" modern houses. Starts fires quickly with practically no kindling.

You can control your fire to burn hotter or slower. Increases fireplace efficiency. Stops fireplace from pulling all the warm air out of your house. Doubles the pleasure of an open fire. (See diagram)

Send for free descriptive circular.

Carter Engineering Co.

Warrenton, Virginia

PERFECTLY ACCURATE ONE-MAN LEVEL

— UP TO 30 FEET OR MORE —

LEVELALL

FASTER THAN \$100 ENGINEER INSTRUMENTS!

\$7⁴⁵

New and improved! The most inexpensive water level giving perfect level with easy one-man operation. Ideal for footings, foundation forms, sills, floors, road gradings, drainage, all general construction normally needing \$100 instruments. Simple, accurate, foolproof! Fast, weather-hardy, sturdy! 50-foot best quality transparent vinyl polychloride tube, filled with red Level-Flu liquid. 2 heavy steel brackets for easy 1-man use. Musky carrying case.

THE DELUXE LEVELALL is also offered with 75' of tubing — an extra supply of Level-Flu fluid — and a Handsome Deluxe Carrying Case.

DEALER INQUIRIES INVITED.

LEVELALL

85A Webster St., Rockland, Mass.
Mail me _____ Levelall instruments at \$7.45.
Mail me _____ Deluxe Levelall at \$12.45.
You guarantee satisfaction or money back upon return at Levelall within ten days.

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ADDRESS _____

CITY _____

ZONE _____

STATE _____

Send C.O.D. I will pay postman full purchase price plus delivery charge on arrival.
 Full purchase price is enclosed. Send postpaid.

annular-threaded linoleum underlay drive screws



To make your linoleum underlays hold tightly and lie flat permanently, secure them with Hassall annular-threaded linoleum underlay drive screws. They are cement-coated for maximum gripping power. Heads are flat countersunk type. Size: 1 1/4" x #3 gauge. State quantity when writing for prices to:

JOHN HASSALL, INC.

152 Clay Street
Brooklyn 22, N. Y.
Established 1850



YOUR PAINT DEPARTMENT
WILL GROW

around a
Red Devil
paint conditioner

It allows you to sell more than just a can of paint—you offer your customers factory fresh paint at no extra charge. And no stirring is required. The live-action of this patented conditioner as it puts pigment back to work is a regular traffic-stopper, so feature related Red Devil items near it and watch paint profits soar. Also your standard equipment for blending "store-mixed" paints.

Display this two-color decal to identify yourself with Red Devil's national advertising — the sign of fresh conditioned paint.

NO. 30 PAINT CONDITIONER

Red Devil's exclusive patented eccentric-action develops 700 vigorous shakes a minute. Thoroughly freshens paint in less than 2 minutes. Complete with automatic timer. 7 3/4". See Your Jobber

PRODUCT OF
Red Devil Tools.
Irvington 11, N. J., U. S. A.

NOVEMBER 1952

California Group Establishes Research Institute

General Contractors Association of Contra Costa County, Walnut Creek, California, have recently established a Home Builders Research Institute to cover the various phases of the complex process of home building. Because of the scope of the Institute's program, its aims should prove of interest to member chapters of the N.A.H.B. Its purposes include:

1. Stimulation of new housing research through the identification of problems through conferences and meetings, such as "Operation Trade Secrets" and through the work of committees.
2. The correlation of housing research through day by day contact with research planning, operations and results.
3. Field trial of ideas tested and proven in the laboratory but not yet developed to the point of general application in the field.
4. Guidance of housing research into more effective operations through advisory services to research organizations, industry and government.
5. Dissemination of knowledge and the encouragement of the use of the results of research by publication in available media.

200 Attend NBMDA Meeting in Chicago

An estimated 200 building material distributors from all parts of the country were present at the recent annual meeting of the National Building Material Distributors Association held at the LaSalle Hotel, Chicago.

A symposium of manufacturers of building materials was one of the meeting's highlights. Prior to the gathering, John P. Ashton, NBMDA president, announced the participation of the following firms: Armstrong Cork Co., Masonite Corporation, United States Gypsum Co., Wood Conversion Co., Flintkote Company, Insulate Division of M & O Paper Co., Ruberoid Company, National Gypsum Co.

Pertinent subjects discussed at this meeting included Dealer Meeting, Display Advertising, Manufacturer-Dealer Cooperation, How to Use Manufacturers' Literature and Other Sales Tools, Proper Use of Samples, Capitalizing on Brand Names, and Advertising Plans for 1953.

Home Guarantee Kit

The Home Builders Association of Metropolitan Pittsburgh has recently introduced a Home Guarantee Kit which is furnished to all buyers of homes from bonded HBA builders in this area. The kit comprises a home purchaser's bond, a service policy, and a 16-page booklet on home care.

The Saws You Want



at the prices you
want to PAY!

RETAIL SELLING PRICES Per Rip, Cut-Off, Easy-Cut
and Combination Saws

| | | |
|-------------|-------------|--------------|
| 6" - \$1.75 | 8" - \$2.15 | 10" - \$3.15 |
| 7" - 2.00 | 9" - 2.45 | 12" - 4.35 |

Supplied with Round or Special Shape Holes



As listed in Simonds Catalog "B"

SIMONDS SI-CLONE SAWS

Best buy in years for home-workshoppers, contractors, and schools... these guaranteed saws of Simonds famous quality. 13 types, including carbide-tipped, dado heads, and metal-cutting saws, up to 12" diameter, with round or special-shaped center holes for all electric hand saws. Look at these prices... and try to beat them at Simonds quality level! Drop in on your hardware dealer today... tell him you "want to see Simonds SI-CLONE line."

Guarantee
Made of SIMONDS
STEEL fully guaranteed against any defect in material or workmanship.



SIMONDS
SAW AND STEEL CO.

FITCHBURG, MASS.

Factory Branches in Boston, Chicago, San Francisco, and Portland, Ore. Canadian Factory in Montreal, Que.



national plan service moves to new home

National Plan Service, Inc., producers of a complete merchandising service for retail lumber dealers, is now located in a new, modern office building at 1700 West Hubbard Street, Chicago 22, Ill.

R. V. Winters, president of National Plan Service, Inc., stated, "Our new building, of brick and concrete fireproof construction, gives us over twice the area of the old location. This additional space permits larger offices and provides more efficient production."

"It has been the patronage of thousands of retail lumber dealers during our 40 years of continuous service that has not only made this expansion possible but necessary to maintain up-to-the-minute service. We feel this move enables us to better serve the retail lumber industry."

continued high level in home financing predicted for 1953

Home financing institutions can expect excellent business conditions well into 1953, according to a savings and loan spokesman.

Raleigh W. Greene, president of the National Savings and Loan League, reporting on a seasonal summary of economic developments, based his prediction on these factors:

(1) Heavy demand for home financing funds from savings associations throughout the country, (2) Continued high level of new housing starts monthly since late February, (3) Especially heavy requests made to the Veterans Administration for appraisals on new veterans' homes.

He also pointed out that residential construction has been holding steady for several months at an 11 billion dollar annual rate.

NOVEMBER 1952



Practical . . .

Made of rust-proof cast grey iron, the HART Damper with Worm Gear Rotary Control is designed to give permanently efficient operation. Consists of only three parts—frame or throat, door, and control. Sturdy construction, simplicity of maintenance provide lifetime, trouble-free performance.

And Ornamental!

The solid cast-brass andirons shown below are typical of HART craftsmanship. Highly polished and painstakingly lacquered, they complement any fireplace, anywhere. 16 1/2" high. Matching fireset also available.



HART CAST-BRASS
ANDIRONS

HART PRODUCTS DIVISION
STRATTON & TERSTEGGE CO.
INCORPORATED
P. O. BOX 311 NEW ALBANY, IND.



New BEVIL DEVIL Insulation Board Set

ALL-PURPOSE SET . . . the tools you need for insulation board job. Sharp, strong, specially ground blades cut through toughest insulation boards leaving clean, smooth edges. Three tools—five blades.

All for \$5.85

Sent postage paid anywhere in U.S.A.

Extra Bevil-Devil Blades, of selected steel, ground to cut insulation board—package of 100 for \$4.00, postage paid.



**KIMBALL MANUFACTURING
COMPANY, INC.**
1629 SYCAMORE ROYAL OAK, MICH.

more meshes per sheet with *Bostwick*
Diamond Mesh Metal Lath

Call a Bostwick Dealer

- When you get down to details, check with your dealer on Bostwick metal lath, corner bead, casings and accessories. They have, as you would expect, been used on the nation's finest structures . . . large and small. Send for data—we will answer quickly. There are no better metal lath products made.

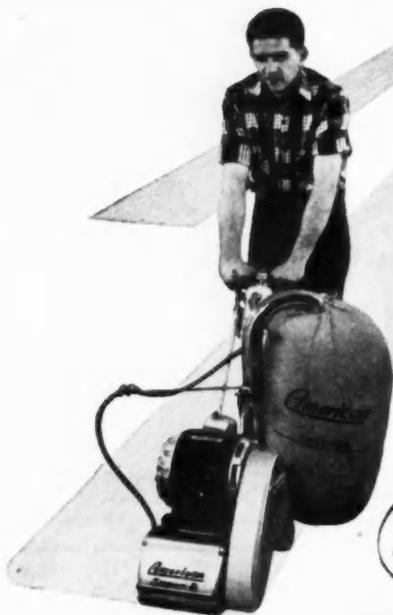
Bostwick

103 HEATON AVE.
NILES, OHIO

THE BOSTWICK STEEL LATH COMPANY

Sand Floors nearly Twice as Fast with

AMERICAN SUPER 8



SAVE LABOR
WITH THESE
"PLUS" FEATURES!

Shift into high gear in your floor sanding operations . . . *step up production* with the sensational American Super 8 . . . *increase your profits!*

Contractors say "It's tops!"—because the Super 8 meets their needs today . . . *saves time and labor . . . reduces costs!* Check these American Super 8 features that mean high production . . . low upkeep . . . long-life dependability! Powerful 2 H.P. motor . . . drum driven by vari-speed transmission . . . drum speed range from 1600 to 2800 r.p.m. for greatest efficiency under varying conditions . . . drum speeds easily selected by "dialing" Drum Pulley . . . great range of drum pressures selected by variable control—52 lb. to 103 lb.—to meet all conditions in floors. Operates efficiently with low voltage! Has double volume dust pick-up . . . low center of gravity . . . many more *plus* features!

AMERICAN
FLOOR MACHINES • PORTABLE TOOLS

The American Floor Surfacing Machine Co.
511 So. St. Clair St., Toledo 3, Ohio

Please send free description and prices on the new American Super 8 Floor Sander. No obligation.

Name.....

Street.....

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Send
Coupon!



Powerful 2 H.P. motor starts under a "no load" condition due to automatic take-up of motor pulley.



American Sustaining Device provides variable control of drum pressure to meet all conditions in floors.

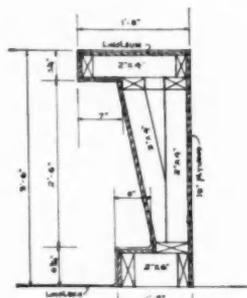


Single adjustment quickly changes drum speed . . . range 1600 to 2800 r.p.m.

how to build a breakfast bar

A breakfast bar is a useful addition to a modern compact home. This bar is only 20 inches wide. The amount of wall space it occupies in length is optional. It stands three feet six inches high overall, and the table top is one foot eight inches wide.

A sheet of 1/2-inch plywood forms the backing for the entire construction. Each end of the bar is supported on a platform made of two 2x6's placed on their two-inch face, parallel to the wall, and extending the



DETAIL OF BREAKFAST BAR

END VIEW of the breakfast bar. Note final surfacing of linoleum over the plywood which forms the table top, and the "step" forming the bar's foot rail

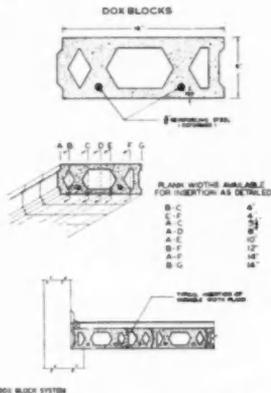
length of the bar, forming its base. A ten-inch length of 2x6 is placed between the parallel units to strengthen each end. Above this base a third 2x6 is laid, on the six-inch side. This forms the support of two 2x4's, each 27 1/2 inches long; one of these stands vertically, with the two-inch side toward the end of the bar; the other goes flush against it at the bottom, extending obliquely upward so as to form an angle of 15 degrees.

Two more 2x4's are placed on top of the two uprights, on their flat, or four-inch sides, each extending the length of the bar. On top of these parallels, two more 2x4's are placed on edge, one flush against the plywood backing, the other 15 1/2 inches in front of it, joined by a 15 1/2-inch length of 2x4, which serves as the end of the bar top.

A surfacing of 1/2-inch plywood covers all visible planes of the breakfast bar, hiding all rough edges. Linoleum covers the face and floor of the 2x6 forming the front of the base, as well as the table top.

cinder blocks as heat conductors

An unusual heating installation, said to combine the outstanding features of three other systems—radiant, perimeter and conventional forced air—has been developed successfully by The Penn-Rich Co., contractors of Mount Clemens, Mich. Dox Flooring, planks made of cinder blocks, reinforced by steel rods,



Scale drawing of a standard Dox Block, indicating $\frac{5}{8}$ inch dia. holes for steel reinforcing rods, and hexagonal space used as heating conduit

through which a five-inch hexagonal hole runs transversely, is frequently used in residential building in this region. The contractor is using this flooring as a factor in providing cold weather comfort with forced warm air furnaces.

In concrete houses where the "Dox Blocks" have been used, the contractor has been installing a Superflex Oil Furnace. The duct work is installed at right angles to the planks of the Dox Floor. The ducts, made in the shape of a "U," have a one-inch flange on either side, and an opening in the top. This break-through in the top of the cinder block is used for the heating line.

The flooring is laid in sections of these hollow-cast, lightweight blocks, bonded together by a layer of reinforced concrete into one continuous unit. The length of the beam depends upon the number of blocks used, and is tailored to plan. Block sizes, rod diameters and spacing between rods are all constant, simplifying architects' and contractors' plans.

The joined units of blocks, called "planks," 16 inches wide, are chalk-lined on the ceiling of the basement side. A hole is broken through the

webbing of the plank into the five-inch hole running transversely through the blocks which make up the planks. The heating trunk line is nailed over these holes, using cement shafts through the flange.

The holes act as conduits to transfer heat from the heating trunk line to the perimeter walls of the structure. Since the holes occur every 12 inches, a considerable amount of warm air is supplied to heat the floors, utilizing the radiant heat principle.

A continuous line of registers is used at both sides of the structure. These are of the cold air return type, without louvers to allow the air which is not absorbed in the planks to flow into the rooms. Cold air returns are taken back to the furnace from the ends of the house, completing the circulation cycle.

Installation costs run about 25 per cent less than with conventional materials, since there are virtually no fittings. Tests indicated a temperature difference of not more than two degrees between floor and ceiling levels.

GET HIGH EARLY STRENGTH CONCRETE with Standard Cement plus Solvay Calcium Chloride

- Lowers Your Costs
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NEVER REQUIRE CENTER SUPPORT!!

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away from noise
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THE **Kings-Way** HOTEL

offering St. Louis' finest
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1900-1930
BATH

Dorflo

floating action door hangers



for RECESSED DOORS

the *Modern* way

DORFLO is a new concept of door function and design . . . a simple, fool-proof, scissor-like mechanism, cantilevered from within the wall. DORFLO makes sliding doors literally float in and out of their pockets with just a gentle pressure of the finger-tips . . . so easy even a child can operate it.

- No complicated overhead tracks
- No noisy floor runners to clog and jam
- Simple installation
- Available in:
 - F. D. wall sections
 - Packaged hardware
 - Ready-Unit sections—completely assembled wall sections including all hardware, finished split jamb, with built in steel rollers.

Write for name of Nearest distributor

EZ-WAY SALES, INC.

Dept. 5, Box 300

St. Paul Park, Minn.

small homes feature radiant heat

Prospective home owners inspecting one of the 500 new homes under construction in the Des Plaines Villas housing project in suburban Chicago will look twice before they discover the heating system. There are no visible radiators or registers, and the only indications of heating equipment are the narrow openings in the radiant perimeter baseboards.

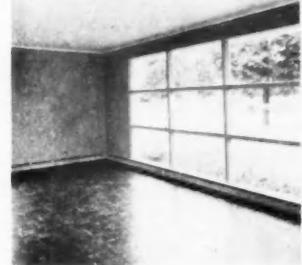
Its advantages to home owners include economical operation, cleanliness, comfortable living space free from drafts, and an attractive appearance. The system occupies a comparatively small space, and the fuel tank is underground in the back yard.

A compact utility closet houses the complete heating unit in each home of the Illinois project. A booster pump circulates the hot water from the boiler through the baseboards, a relief valve and compression tank.

This radiant perimeter baseboard heating provides uniform heat throughout the entire area of a room because it maintains warm exterior wall and window surfaces, according to heating engineers. A person stand-

ing anywhere in the room will feel the same degree of heat, they explain, whereas he would feel a temperature drop as he moved away from the heat emanating from a conventional register.

The engineering station of the University of Illinois recently conducted



Greater utility of space features this living room in one of the homes in the Des Plaines housing project. Radiant baseboards provide uniform, draft-free heat for the entire room, while warming surfaces of exterior walls and windows

Today's Best Buy!

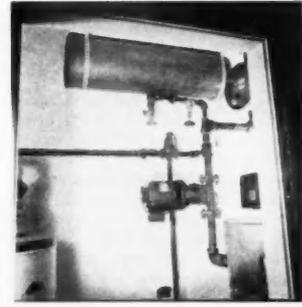
FOR SUBFLOORING

Look beyond the bill of materials for the full story on subfloor costs. It's the *applied* costs that count. Inexpensive PlyScord® grade fir plywood cuts labor costs in half . . . saves on nailing . . . cuts expensive waste . . . speeds application of finish flooring. Plywood subfloors are firm, solid! Won't cup or squeak. Ideal for underlayment, too. Remember, dollar for dollar, practical plywood out-values them all.

® Douglas Fir Plywood Assn., Tacoma, Wash.

Douglas Fir Plywood

AMERICA'S BUSIEST BUILDING MATERIAL



Compact arrangement of all the apparatus required to provide hot water radiant baseboard heating fits into this small utility room in the Des Plaines Villas homes. Heart of the system is the booster pump which circulates the hot water from the boiler through the baseboards

a series of tests of radiant perimeter baseboard heating. Among the findings disclosed were that:

By heating the entire outer perimeter of a room, warmer floor temperatures are maintained.

No drafts across the floor are produced because warm exterior wall surfaces prevent down drafts.

The hot water heating systems used in the experiments were found to respond quickly and maintain a constant room air temperature, even when weather changed rapidly.

remodeling gets lion's share of incomes

Modernizing, repairing and enlarging the home is a basic factor in present day American economic life. This has been revealed in a market study just completed by National Family Opinion, Inc., Toledo, an organization specializing in national consumer market research. The report discloses that in the six-month period covered by the study, more than 16 per cent of all American families spending \$100 or more on a single purchase used the money for building materials, remodeling or repairs. This, with other items directly associated with the home, consumed by far the larger part of all major purchases, not excepting automobiles and television sets.

During the first phase of this study, the organization conferred with families made up from a pool of 35,000 certified households representing every size, type and kind of family in the country. These families were asked whether they anticipated making a major purchase—one costing \$100 or more—within the next six months. At that time, approximately half of the families said that they did; the other half stated they did not. Six months later, these same families were interviewed to learn what major purchases they had made during the period. This second contact revealed that only about half of those who anticipated making such a purchase actually made it, while half of those who previously stated they had not anticipated making such a purchase did so.

The tabulation of the second report shows that 18 per cent of those who made anticipated purchases bought building materials, remodeling and repairs, and that 14.7 per cent of those who made unanticipated purchases also bought these items. To this expenditure for the home must be added extra spending for heating equipment, household appliances, floor coverings, furniture and home furnishings. The total indicates that home maintenance and improvement occupy an outstanding position in the family budget at all times.

The most significant factor which this survey has disclosed is that impulse buying is practically the same both in constancy and in volume as planned buying.

What these families bought is re-

vealing of the character of American home life. The home itself takes precedence over every other factor in the household budget. More than twice as much is spent improving and beautifying the home than for all other purchases costing \$100 or more. No items bought exclusively for one member of the family except clothing were mentioned, unless automobiles, television sets, musical instruments and electric sewing machines can be so considered. The large amounts were spent for household appliances

(constituting the largest single group), furniture, home remodeling and repairing, floor coverings, heating plants, and miscellaneous items such as draperies, slip covers, venetian blinds, etc.

Among the many statistics uncovered by the National Family Opinion survey, the composite "best customer" would be a farm family, living in the North Central area, under 34 years of age, having an income of over \$3,000, owning their own home, with children under 18 years of age.

Build COOLER Homes Without Exterior Louvers! COOK "Chimney Style" ATTIC FAN[®] with Automatic Dampers

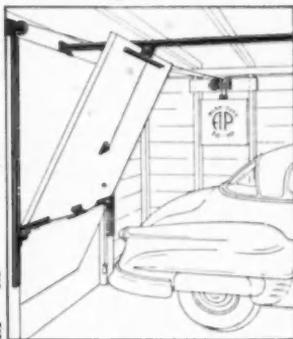


- A fan housed in a steel chimney! Pressure from direct drive fan opens dampers—no exterior louvers needed. Cools homes fast as air flows unimpeded through vinylite coated steel chimney. Two speed. Enclosed, rubber-mounted ball bearing motor.
- Unit is self-flushing, has double drains. Easy to install over standard roof rafter opening. Available in three sizes.

Write for booklet — Loren Cook Co.
Dept. AB, 664 Front St., Berea, Ohio

ALLITH
50-50
PUSH-OVER
GARAGE
DOOR
HARDWARE

Easy to Install ...
Lasting Satisfaction



Combine the expertly-designed Allith garage door hardware with your own or any standard door. Result . . . a rugged, easily-operated overhead door that gives full and lasting customer satisfaction.

Quickly installed, standard set fits any opening up to 9' wide x 7' 6" high when doors do not exceed 276 lbs. Other sets available for openings up to 10' wide x 10' high.

ALLITH
-PROUTY, INC
DANVILLE, ILLINOIS
IN AMERICAN BUILDER for Forty-Five Years

Here's how saves \$107 per home

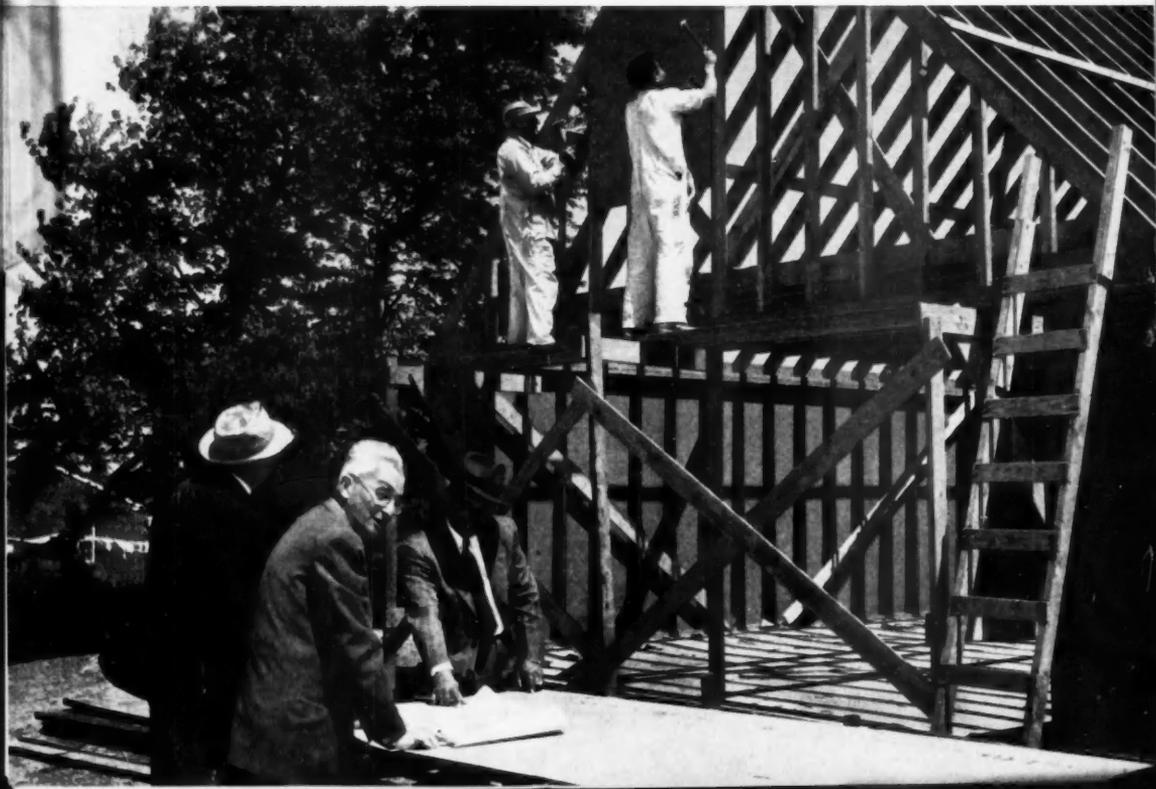
"We cut sheathing time nearly 30%, eliminated corner-bracing, reduced the amount of temporary bracing and added extra insulation value to this home by simply using Bildrite Sheathing and Shingle-Backer instead of wood. Net result: better construction and a saving of \$107!"



A. TOLL, builder,
Whitemarsh Downs, Inc., Philadelphia

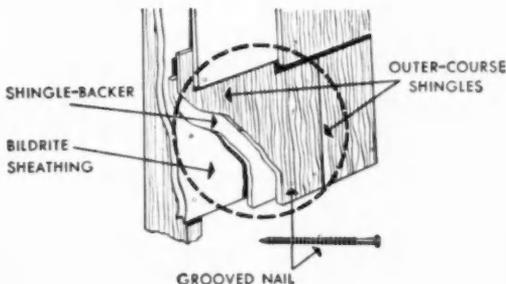


Get Twice the Bracing Strength of horizontally-applied wood sheathing with 4-foot Bildrite. Save corner-bracing. Reduce the amount of temporary bracing. Eliminate excessive racking. Eliminate building paper too, because Bildrite is completely waterproofed by an integral asphalt treatment. Won't warp or buckle . . . store it anywhere in any weather.



Philadelphia builder with Insulite.

One Carpenter Can Sheath 1,000 sq. ft. in 8 hours or less with Bildrite Sheathing . . . cuts your sheathing time as much as 43%. What's more, carpenters like to work with Bildrite because it's clean and easy to handle, cut and apply. Comes in wide range of sizes . . . 2' x 8' and 4' x 8', 9', 10' and 12'. Practically no waste either (as compared to average 12% waste with wood sheathing).



Speed Shingle Application with Shingle-Backer, the new insulating under-course developed by Insulite. Handy 4-foot panel applies far faster and easier than old-fashioned wood under-course shingles . . . cuts application time in half. Produces smooth, deep shadow-line. Practically eliminates waste. Has tremendous holding power. Wall tested at University of Minnesota resisted winds beyond 250 m.p.h.!

FREE Kit for Builders tells in detail, how Bildrite Sheathing and Shingle-Backer can help you save on your next job. Write Insulite, Minneapolis 2, Minnesota.



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Build and insulate with double-duty

INSULITE



Made of hardy Northern wood



INSULITE DIVISION
Minnesota and Ontario Paper Company
Minneapolis 2, Minnesota

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- Lower On-the-Job Application Cost . . .
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- More Years of Service . . .
- The Beauty of a Genuine Plastic Laminate . . .

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LAMIDALL
DECORATIVE PLASTIC LAMINATE

IN EASY-TO-APPLY 1/8" THICK PANELS

for **WALLS** and **TOP SURFACES**



Lamidall is structurally strong—easy to handle, cut and apply. Notice how one man can easily handle a large panel.

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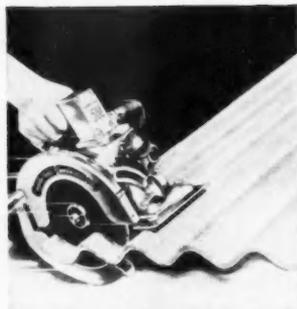
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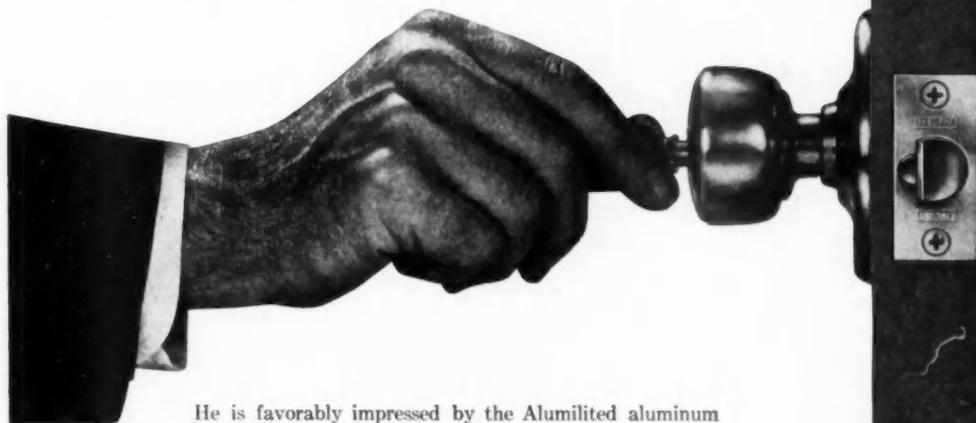
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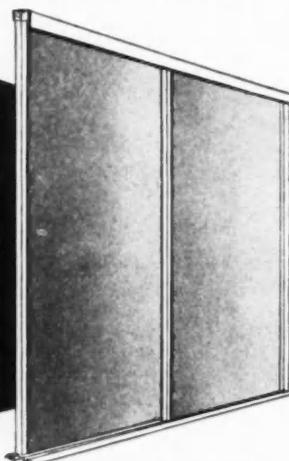
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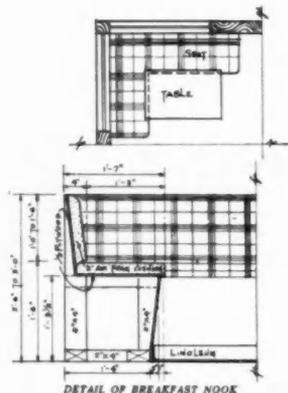
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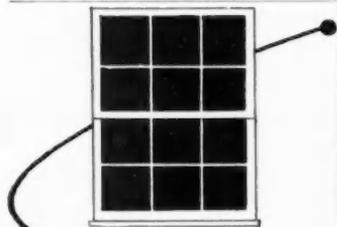
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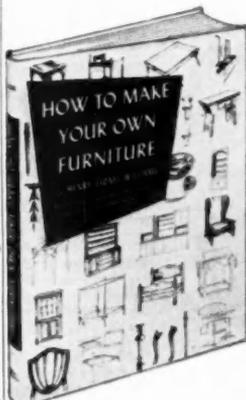
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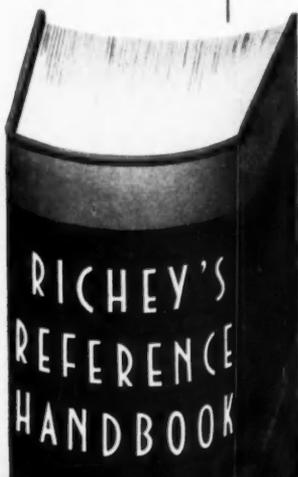
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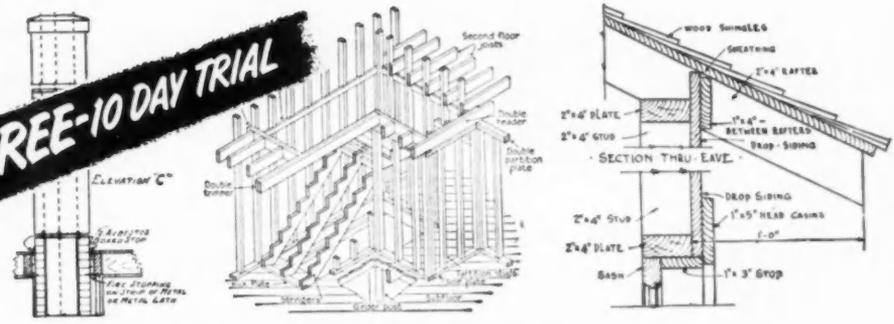
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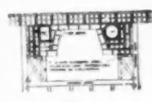
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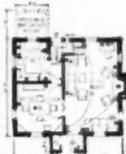
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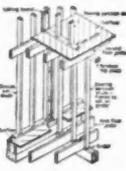
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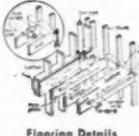


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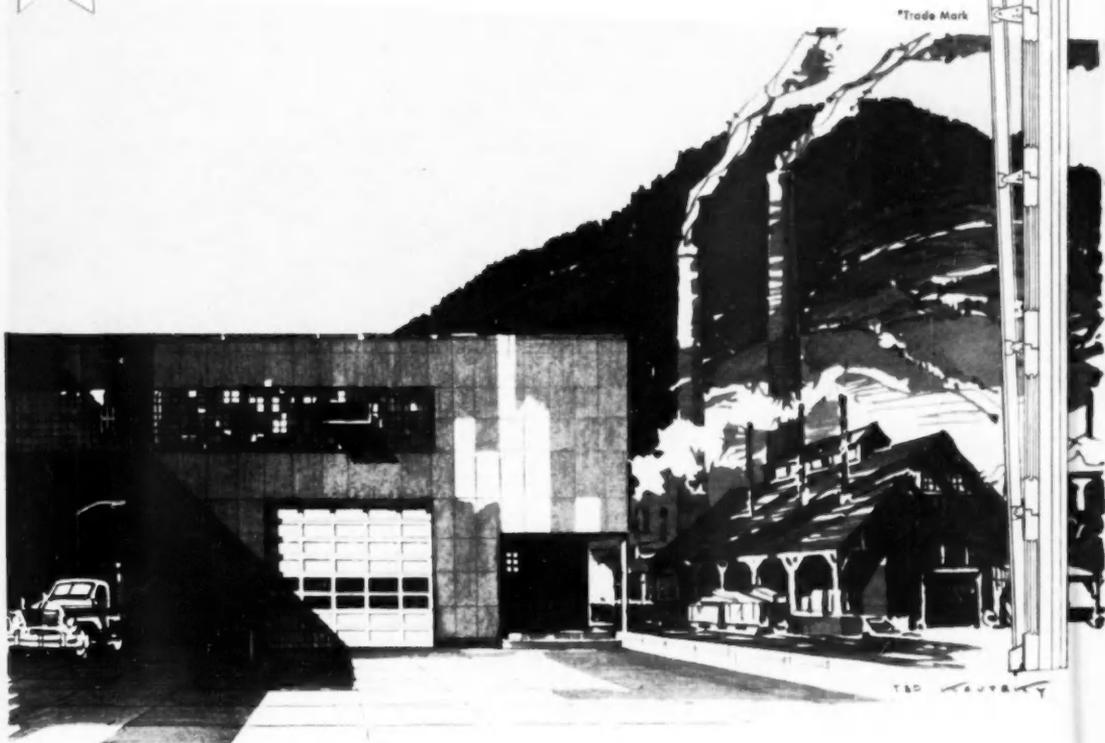
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C. 199 Brown-Graves & Co. 19 Bruce Co., E. L. 68 Bundy Tubing Company 69 Bush Manufacturing Co., The 187</p> <p>C</p> <p>California Redwood Association 46 Carr, Adams & Collier Co. 145 Carter Engineering Co. 200 Cevo Steel Products Corporation 70, 71 Certain-Teed Products Corporation 73 Chevrolet Division 72 Chicago Metal Strip Co. 213 Cluwer Manufacturing Company 173 Coffman Co., Inc., R. G. 60 Colorado Fuel & Iron Co. 50, 51 Connor Lumber and Land Co. 67 Cook Co., Loren 207 Crosley Division 167 Crossett Lumber Company 169 Curtis Companies Service Bureau 85</p> <p>D</p> <p>Daniel Incorporated, C. R. 193 Dearborn Motors Corporation 14 Delta Power Tool Division 39 Detroit Steel Prod. Co. 3 DeWalt, Inc. 172 Dexter Lock Company 152 Dodge Reports 152 Douglas Fir Plywood Association 185, 194, 196, 206</p> <p>E</p> <p>Eljer Co. 34 EZ-Way Sales, Inc. 206</p> <p>F</p> <p>Fagrol Heat 196 Fenestra 3 Flush Wall Radio Company 188 Foley Mfg. 159 Ford Motor Company 165</p> | <p>G</p> <p>Gates & Sons, Inc. 138 General Air Conditioning Corp. 78 General Electric Company 137 Georgia-Pacific Plywood Company 62, 63 Gunnison Homes, Inc. 10</p> <p>H</p> <p>Hager & Sons Hinge Mfg. Co., C. 8 Hansen Mfg. Co., A. L. 184 Harnischfeger Corp. 140 Hart Products Division 203 Haskell Manufacturing Corp. 119 Hassall, Inc., John 201 Heatilator, Inc. 6 Hoenschet Fine Foods 194 Hult Manufacturing Co. 177 Homasote Company 40 House Beautiful 8, 9 Hunter Fan & Ventilating Co. 86</p> <p>I</p> <p>Infra Insulation, Inc. 57 Inland Steel Products Company 48, 49 Insulite Division 208, 209</p> <p>J</p> <p>Jaeger Machine Company, The 195 Johns-Manville 120</p> <p>K</p> <p>Kay-Tite Company 164 Kentile Incorporated 87 Keystone Steel & Wire Co. 15 Kimball Mfg. Co. 203 Kimble Glass Co. 141, 200 Kings-Way Hotel, The 205 Kohler Co. 172 Koven & Bros., Inc., L. O. 172 Kwikset Sales & Service 2</p> <p>L</p> <p>Levelall 200 Leigh Building Products Division 121 Libbey-Owens-Ford Glass Company 95, 162 Louisville Cement Company, Inc. 45</p> <p>M</p> <p>Macklanburg Duncan Co. 12, 13 Marmet Corporation 168 Marquette Cement Manufacturing Co. 94 Mastic Tile Corporation of America 7 Mengel Company, The 35 Metal Products Corporation 53 Milwaukee Electric Tool Corp. 52 Milwaukee Strip Service, Inc. 168 Minnesota & Ontario Paper Co. 208, 209 Mosaic Tile Company, The 74, 75 Mueller Furnace Co., L. J. 54 Muller Machinery Company, Inc. 197</p> <p>N</p> <p>National Association of Home Builders 68 National Brass Company 159 National Electric Products Corp. 176 National Electrical Manufacturers Assn. 61 National Gypsum Company 122 National Homes Corporation 144 National Lock Company 174, 175 National Manufacturing Company 4th Cover Nelson Division, Herman 64 Norge Cottages, Inc. 24 Nova Sales 34</p> | <p>O</p> <p>Overhead Door Corporation 3rd Cover</p> <p>P</p> <p>Ponderosa Pine Woodwork 143 Porter-Cable Machine Co. 80 Powder Power Tool Corporation 159 Pre Fab Home 154 Price Fireplace Heater & Tank Corp. 190</p> <p>R</p> <p>R-O-W Sales Company 160, 161 Ramset Fasteners, Inc. 156 Readybuilt Products Company, The 81 Red Cedar Shingle Bureau 201 Red Devil Tools 201 Reznor Manufacturing Co. 167 Richmond Radiator Company 39 Rockwell Manufacturing Company 189 Roddis Plywood Corporation 185 Rolseren Company 117 Rowe Manufacturing Co. 117</p> <p>S</p> <p>Safway Steel Products, Inc. 198 Sager Lock Works, The Division of The Vale & Towne Mfg. Co. 167 Sargent & Company 214 Sharps Manufacturing Company 195 Shepherd Manufacturing Company 201 Simonds Saw & Steel Co. 201 Simmons-Boardman Pub. Corp. 179, 214, 215 Skalkraft Co., The 192 Solvay Process Division 205 Standard Dry Wall Products 9 Stanley Tools 182 Stanley Works, The 153 Steel Scaffolding Company, Inc., The 183 Steelscraft Manufacturing Co., The 163 Sterling Hardware Mfg. Co. 178 Stewart Manufacturing Co. 194 Strand Garage Door Division 23 Structural Clay Products Institute 92</p> <p>T</p> <p>Texas Co. 41 Timber Engineering Co. 180</p> <p>U</p> <p>United States Plywood Corp. 118 United States Steel Corporation 181 Universal Atlas Cement Company 143 Upon Company, The 77</p> <p>V</p> <p>Vikon Tile Corp. 186 Virginia Metal Products Corporation 177 Vulcan Radiator Company, The 192</p> <p>W</p> <p>Washington Steel Products, Inc. 138 Waterlim Boilers, Inc., A Div. of L. O. Koven & Bros., Inc. 172 Wel-Bilt Products Company 166 Western Fine Association 88 Western Reserve Mfg. Co. 203 Westinghouse Electric Corporation 65, 171 White Company, Divid 44 Wickwire Spencer Steel Division 50, 51 Wiremold Company, The 199 Wood Conversion Company 84 Woodall Industries 210, 212 Worthington Corporation 67 Wright Manufacturing Company 191</p> |
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Hillside, New Jersey
Nashua, New Hampshire

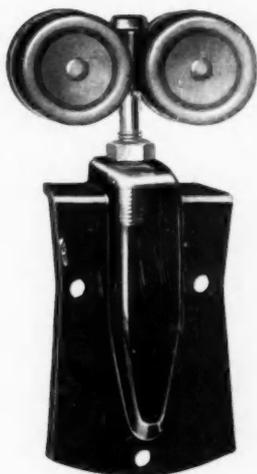
Cortland, New York
Lewistown, Pennsylvania

Dallas, Texas
Oklahoma City, Oklahoma

Portland, Oregon
Glendale, California

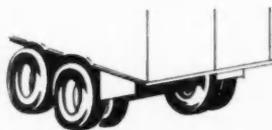
No. 50. TROLLEY DOOR HANGER

For use with National No. 51 Trolley Rail. Wheels are of pressed steel, 2 $\frac{1}{8}$ inches in diameter, and have large roller bearings. Japanned or hot galvanized finish.

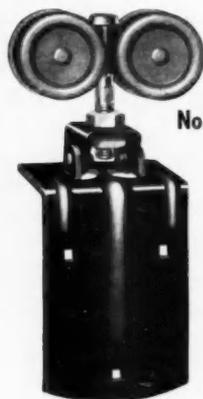


SMOOTH...
SECURE

FOUR wheels support the
load on each hanger



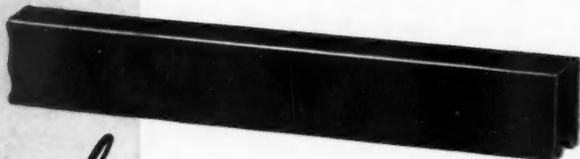
Like the big 4-wheelers that carry heavy loads down the highway, National Trolley Door Hangers distribute the load of the doors evenly. These Hangers are of heavy-gauge steel, very deeply embossed for greater rigidity. Connecting bolt is of automobile steel with 50% greater tensile strength than common bolt stock. Both lateral and vertical adjustments may be made with wrench which is furnished with hanger.



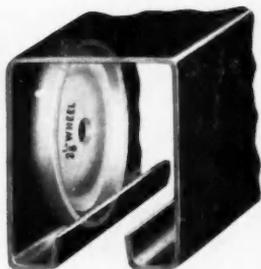
No. 52. FLEXIBLE TROLLEY DOOR HANGER

For use with National No. 51 Trolley Rail. Just like No. 50 Trolley Hanger except that it has an exclusive type of flexible hinge-joint. This allows it to swing out, should anything bump against the door. Japanned or hot galvanized finish.

No. 51. TROLLEY RAIL



Heavy gauge steel, carefully formed to give an even, perfect tread for the hanger wheels. See your National Dealer for information on Rail Brackets, other types of Hangers, etc.



National

MANUFACTURING CO.
STERLING ILLINOIS

A NATIONAL HANGER FOR EVERY TYPE OF DOOR