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

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

"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

Produced by Audience Tested Productions, Los Angeles, 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 11/4" deep with interior bars continuous and rigidly interlocked . . . ample strength for large window openings. Available from warehouse stocks in two sizes—6'-31/2" wide by 6'-41/2" high (six lights) and 9'-41/2" wide by 6'-41/2" 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 211/2".

Call your Fenestra Representative or write today to Detroit Steel Products Company, Dept. AB-11, 2260 East Grand Blvd., Detroit 11, Michigan.
NOW! Here's a real finish sander from Black & Decker!

4 Exclusive Features that mean better work!

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.

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

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 5 1/2 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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"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.
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 ¼" 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. 2-11

MASTIC TILE CORPORATION OF AMERICA
Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.
Manufacturers whose products are in the 1953 Pace Setter

UNIVERSAL ATLAS CEMENT CO.
RODDIS PLYWOOD CORP.
RED CEDAR SHINGLE BUREAU
C. W. STOKEWELL CO.
MURALS INC.
ANACONDA SALES CO.
GLIDE WINDOWS, INC.
ANDERSEN CORPORATION
LIBBEY-OWENS-FORD GLASS CO.
SEMIN 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.
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AMERICAN BILTRITE RUBBER CO., INC.
THE SPONGE RUBBER PRODUCTS CO.
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A. O. SMITH CORP.
KRITZER RADIANT COILS
ROCHESTER PRODUCTS DIVISION
General Motors Corp.
TACO HEATERS, INC.
HUNTER FAN & VENTILATING CO.
PRYNE & CO.
ILG ELECTRIC VENTILATING CO.
KIMBERLY-CLARK CORP.
OWENS-CORNING FIBERGLAS CORP.
BENNED-Ireland INC.
GENERAL ELECTRIC CO.
LIGHTOLIER, INC.
FINLAND HOUSE
DALMO-VICTOR CO.
MAGNAVOX CORP.
PRECISION PARTS CORP.
R. D. WEBER 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 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.

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.
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.

Write today for complete catalog. Sold through established wholesalers.
For 30 Years America's

Numetal
WEATHER STRIP
for windows and doors

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!

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.

![Image of weather strips]

**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 chafing rug or carpet every time door opens. NuGARD 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.

**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**
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!
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
Keymesh-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
Keymesh-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. Keymesh 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

HAGER HINGES

AMERICAN BUILDER
A NEW SURFACE!
A BEAUTIFUL THOROSEAL SURFACE!

PILGRIM BADGE BUILDING
BOSTON, MASS.

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.

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.

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

Standard Dry 40th Wall Products
NEW EAGLE PENNSYLVANIA

NOVEMBER 1952
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 Deco-rator 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.
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.
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, CMF 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:

<table>
<thead>
<tr>
<th>Sales Price Up to</th>
<th>New Down Payments</th>
<th>Former Down Payments</th>
</tr>
</thead>
<tbody>
<tr>
<td>$7,000</td>
<td>Closing Costs</td>
<td>Closing Costs</td>
</tr>
<tr>
<td>8,000</td>
<td>$ 450</td>
<td>$ 380</td>
</tr>
<tr>
<td>9,000</td>
<td>500</td>
<td>480</td>
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<td>10,000</td>
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<td>4,810</td>
</tr>
<tr>
<td>20,000</td>
<td></td>
<td>5,380</td>
</tr>
</tbody>
</table>

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.

NOVEMBER 1952
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 shrunken 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.

HOW'S BUSINESS?

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*N.C. = No Change
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.
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."

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.
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.

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

BROWN-GRAVES CO., Dept. AB-105
Akron 1, 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 3 1/2-million families who read BH&G undertake nearly 14-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 BUYological 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 (75%) 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
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 Flexivent 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, versatile
JUST THINK!

3 sash operations from just one unit!

1. outswinging awning sash

2. inswinging hopper sash

3. outswinging casement sash

Statile FLEXIVENT window is th
**FLEXIBLE** is the word for the amazing **FLEXIBLE! FLEXIVENT**
as singles

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 44½" 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 a treatment with toxic preservative and water repellent. Advanced engineering and precise manufacture produced an easy-to-operate window that's 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 embling it into stacks, ribbons or groups, building site or in the shops of Andersen jobbers.

**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 slide open from side to side.

**ANDERSEN PRESSURE SEAL WINDOW UNIT**
double hung window with sash that lift right out.
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.

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.

HIGHLY WEATHERTIGHT

Note that sash makes double contact with frame and Metal- one panel is on outside of wash in Ser ae ee.

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
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.
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.
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 2-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 cooperation 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 W. 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. Mallin, reported that the first-day attendance of the homes greatly exceeded expectations.

St. Louis National Home Week Under Way

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 (1. to r.) are Elmer J. Wieben, Frigidaire Sales Corp.; and Builder Ray Talbott, chairman of the committee. Standing (1. to r.) are Builders D. P. Dexter, Robert J. Cassilly and Carl F. Hummelshen, Sr.; Leon J. Paschal, Union Electric Co., and John Eckl, Ladelle Gas Co.

St. Louis National Home Week Under Way

OFFICIAL PROCLAMATION is signed for National Home Week. Seated (1. 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 (1. to r.) Larry Winn, Jr., Winn-Rau Corporation; H. G. Morgan, chairman of the Home Week Committee and builder; and Leo D. Mallin, executive vice president of Home Builders Association.

Home Sales Stimulated By NHW in Grand Rapids

More than 28 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 Dealer’s 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...
Dealers' 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 business men, including retail lumber dealers and home builders, would 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 1954) which attracted 139 entries. That was more than before, but nevertheless a comparatively small number for so large a group of business men. 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. NRRLDA 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 depletes the membership of his organization of the lift they would get from 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.

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. Russman, St. Louis builder; Leon Goldberg, Al Heckelman, Union Electric Co.; and Bidel Harold Kressel. Goldberg served as committee chairman.

Kansas City Flood Victims Get
New Housing Development

Less than a year after the disastrous flood which swept through the Kansas City area, a local building firm was in the process of constructing 500 completely finished, four-room 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 flood 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 at cost. Winn-Rau was granted 500 homes 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.
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 15 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 instead, housing for a selected few. It should properly be called privileged housing.

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.

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 taxpaying 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.

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 ugly 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 Richard J. Daley. The official proclamation stated, in part, that this annual observance has now become an important part of the local economic and industrial program. Since Chicago is one of the nation’s leading centers in the manufacturing, 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 homes, 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 box price category, some in the high, and most in the medium and high-medium brackets.

The Chicagoland Festival is an excellent demonstration of what architects and builders can accomplish in cooperative effort 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.”

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 Tippet, 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. Fair, 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 handing 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 E. 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 people 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.”
Do your basic building jobs faster

Make added profits—DO MOST OF YOUR OWN MILLWORK

with a DELTA SAW-JOINTER

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.

S P E C I F I C A T I O N S

JOINTER:
Capacity . . . . 6' width
Rabbet . . . . . 1/2" deep
Fence tilts 45° right and left
Adjustable stops at 45, 90 and 135 degrees
Cutter head has 3 knives
Lubricated-for-life ball bearings
Overall Dimensions . . 371/2" deep x 60" wide x 38" high

SAW:
Blade . . . . . 10" diameter
Rips stock . . . . 3 3/4" thick
Cuts to center of 50" panel
Table . . . . . 20" x 27"
Table tilts 45° to right
Arbor . . . . . 1/4" diameter
Lubricated-for-life ball bearings

DELTA POWER TOOLS

Another Rockwell Product

DELTA POWFR TOOL DIVISION

53 MACHINES • 246 MODELS • MORE THAN 1300 ACCESSORIES

Rockwell MANUFACTURING COMPANY
646 M NORTH LEXINGTON AVENUE • PITTSBURGH 8, PA.

Please send me the name of my nearest Delta dealer

Name
Company
Address
City. Zone State

Please send me the new Delta AR-52 catalog

DELTA MILWAUKEE

NOVEMBER 1952
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\(\frac{1}{2}\) 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.

Free planning service. We offer 48-hour service to any architect—or builder—providing detailed specifications for any given area in either new construction or modernization.

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 1\(\frac{1}{2}\) lbs. of 8d galvanized nails are required per square.

Let us send you fully illustrated and detailed literature.
THIS is what you are selling!

LONG TERM INSURANCE AGAINST WEATHER, WIND and FIRE

...WHEN YOU OFFER TEX-LOK INTERLOCKING ASPHALT SHINGLES

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

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 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.

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.

NOVEMBER 1952
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.

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!
"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 ___________________________________________

City __________________________ Zone ______ State ___________________________

CROSLEY DIVISION AVCO Better Products for Happier Living

NOVEMBER 1952
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 5000 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 $1889, complete with tripod. See your dealer, or write DAVID WHITE COMPANY, 311 W. Court Street, Milwaukee 12, Wisconsin.

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, Launderomat Clothes Washer, Clothes Dryer, Water Heater, Unitaire Air Conditioner, Precipitron Air Cleaner, and Mecarta 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.


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. Dwyer
Permco 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)
GOOD BRICKWORK = GOOD DESIGN + GOOD WORKMANSHIP + GOOD MATERIALS

"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.
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 perennially 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.

(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

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. • Whit's Redwood Products Co.

AMERICAN BUILDER
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.

Richmond Radiator Company
10 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.
50 Years of helping America.
build better with STEEL!

Milcor
50th Anniversary

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

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

Inland Steel Company's Indiana Harbor plant.

Housing Bead for use with solid-plaster or wallboard partitions, forres or masonry walls.

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

Complete line of Metal Casings, solid and expanded wing.

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

Milcor Metal Lath for every plastering need.
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.
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 home 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 of 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 Texas. 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 GARRISON, 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 Pittsburg 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)
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 PELL 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

Soft-lubricating leather bearings...no maintenance ever!

Durable NYLON Rollers

Sturdy ribbed-steel hangers, center mounted ADJUSTABLE, for quick, accurate hanging

RUSTPROOF ALUMINUM TRACK

(least quality extruded ALUMINUM)

Top mounted for easy installation—no more creaking!

V-groove design prevents ‘chattering’ of roller

...and many more advantages!!

 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!

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

FOR SINGLE POCKET OR BI-PARTING DOORS

¾”—1¾”
Top-mounted hanger 70-1N and ALUMINUM single track 70-1T

FOR ¾” BY-PASSING CLOSET DOORS

Top-mounted adjustable hanger 70-2N and ALUMINUM double track 70-2T

FOR 1½” BY-PASSING CLOSET DOORS

Side-mounted adjustable hanger 70-3H and ALUMINUM double track 70-3T

Metall Products Corporation

807 NW 20th St.
Miami, Fla.

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

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 untouchable 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 in Los Angeles for 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...

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
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 weather-stripping 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 require 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)

AMERICAN BUILDER
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 Jr.

INFRA THERMAL FACTORS. TYPE 6

| Up-Heat | C.089, R 11.23 = 4 11/16" dry rockwool |
| Wall-Heat | C.073, R 13.69 = 5 5/8" dry rockwool |
| Down-Heat | C.044, R 22.72 = 9" dry rockwool |

NOVEMBER 1952
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 windows is also dependent upon the wind velocity. The impact pressure of the wind causes a pressure drop across the window; 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—1/16-inch edge clearance and 1/4-inch face clearance.
- Average Fitted—1/32-inch edge clearance and 3/4-inch face clearance.
- Poorly Fitted—3/32-inch edge clearance and 1/4-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 weather-stripped 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)**

<table>
<thead>
<tr>
<th>Type of Fit</th>
<th>Par infiltration, cft/ft of Crack</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well</td>
<td>61</td>
<td>0.59</td>
</tr>
<tr>
<td>Average</td>
<td>104</td>
<td>1.00</td>
</tr>
<tr>
<td>Poorly</td>
<td>163</td>
<td>1.37</td>
</tr>
</tbody>
</table>

* 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)**

<table>
<thead>
<tr>
<th>Type of Fit</th>
<th>Par infiltration, cft/ft of Crack</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well</td>
<td>14.2</td>
<td>0.33</td>
</tr>
<tr>
<td>Average</td>
<td>16.7</td>
<td>1.00</td>
</tr>
<tr>
<td>Poorly</td>
<td>23.8</td>
<td>1.43</td>
</tr>
</tbody>
</table>

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

NOVEMBER 1952
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.
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!

"We put a placard on the Electric Range in each model house to show that it's included in all our new houses," says 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
new low-cost plywood panel captures all of nature’s rustic beauty

Now...you can bring the exciting untamed beauty of the great outdoors to interior walls and paneled surfaces everywhere. For WedgeWood glorifies the infinite variations of grain and texture found only in Upland Western Hemlock, capitalizing on its natural growth characteristics, such as knots, bark pockets, radial checks and streaks. Georgia-Pacific makes this exciting new decorative plywood by a special process that brings the grain into feathery textured relief. The result is a wood wall paneling of enduring beauty, resin-sealed at the factory.

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.

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.

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

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, 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.
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.

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Electric Appliance Division  •  Mansfield, Ohio

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

NOVEMBER 1952
Give your new men the speed of your best men

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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 1/4" to 5/8". Can place staples within 1/8" of inside corners.

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One blow with H2B drives 5/16" or 3/8" staples into hard or gummy wood. H2B drives 5/16" staples. Use them to put up insulation, metal lath, cornerite, underfelt or sheathing paper.

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**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.

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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.
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Atlanta, Georgia:
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Phone: Elgin 6754

Boston, Massachusetts:
390 Main Street, Waltham 54
Phone: Waltham 5-7202

Chicago, Illinois:
3720 Louisiana Street
Phone Capital 5-5120

Denver, Colorado:
1325 16th Avenue
Phone Alpine 5239

Detroit, Michigan:
70030 Sherwood
Phone: Twombly 2-4754

Hollywood, California:
85 North Highland Avenue
Phone: Hilda 4218

Little Rock, Arkansas:
1709 East 9th Street
Phone: 5-7251

Miami, Florida:
7250 N. E. 4th Court
Phone: 84-9535

Minneapolis, Minnesota
2700 N. 4th University Ave.
Phone: Sterling 19901

New York, New York:
101 Park Avenue
Phone: Murray Hill 5-2768

Philadelphia, Penna.
6229 West Grand Avenue
Phone: Granite 4-7116

Portland, Oregon:
316 S. E. Salmon Street
Phone: Fillmore 3172

Salt Lake City, Utah
560 Gables Street
Phone: 6-6285

San Francisco, Calif.
265 Loomis Street
Phone: Valencia 4-3924

Seattle, Washington:
538 First Avenue, S.
Phone: Mutual 2213

Tampa, Florida:
339 N. Newport Ave.
Phone: 8-5314

Washington, D.C.
P.O. Box 32, Fairfax, Va.
Phone: Crescent 144

Smartly featured Mosaic tiled gallery floor gives after freedom from wear and care.

Practical Velvetex tile barbecue serves snack bar dining room and patio. Washes clean, lasts work. Delights guests.

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

PHOTOS BY WILLIAM G. FINKER AND ROGER E. CUMMINGS, 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!

SPECIFY Dua-Laps® ON YOUR NEXT JOB

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

The American Stained Shingle Co.
General Offices: Spruce and Dennison Ave., Columbus 8, Ohio

*Reg. U.S. Trade Mark
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 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.

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 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.

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 waterproofed 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.

THE UPSON COMPANY

World’s Largest Maker of Fire Wall Panels

8111 Upson Point, Lockport, New York
SAVE DOLLARS...SAVE SPACE

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

NEW FREEZER 9 ICE CUBE TRAYS

with the NEW General Kitchens

5 YR. GUARANTEE

Distributors — Dealers — Builders — write:

4538-C E. Dunham St. • Los Angeles 23, Calif.
Chicago Office: Dept. 13, 323 W. Polk St.

FIRST AGAIN AMWELD® STEEL

KNOCKED-DOWN SLIDING CLOSET DOOR UNIT

NOW AVAILABLE IN BIRCH FINISH

PLUS these new features

all hardware simply snaps in place.

two large non-tarnishing plastic door pulls snap in each panel.
lifetime nylon rollers provide easy, silent operation.
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.

THE AMERICAN WELDING & MFG. CO.
310 DIETZ ROAD • WARREN, OHIO
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.
NEW ¼ DRILL BY PORTER-CABLE

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!

<table>
<thead>
<tr>
<th>Feature</th>
<th>Guild Drill</th>
<th>Other Drills A</th>
<th>Other Drills B</th>
<th>Other Drills C</th>
</tr>
</thead>
<tbody>
<tr>
<td>True-centering Jacobs Multicraft Chuck</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>2200 RPM — most practical for general purpose drilling</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Non-block Air Vents — never covered by left hand</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Low-slung housing — permits drilling within 7/8&quot; of vertical surface</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Trigger Lock under right thumb for instant control</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Strain Reliever — prevents cord kinking and pulling out</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Full Power — drills 1&quot; bar stock in 2 min.; 1&quot; hardwood board in 1½ min.</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Longer, more comfortable full-hand Pistol Grip</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Easily accessible Quik-Change Brushes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Convenient chuck key strap included</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Compound reduction gears</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Spindle ball bearing absorbs radial and thrust load</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

When buying a new drill, score the Guild against all other ¼" general duty drills. Comparison proves Guild is your better buy! New ¼" Drill also available.

AT YOUR PORTER-CABLE DEALER'S

* Or, write for free descriptive folder with comparison chart and name of nearest dealer.

AMERICAN BUILDER

80
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...
Controlled Kiln-Drying...the Key to Lasting Satisfaction

Whenever 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.

Weyerhaeuser 4-Square Lumber and Services

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.
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.

balsam-wool
Sealed Insulation — A Product of Weyerhaeuser
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 finish painted 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.

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

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

**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 louver. 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 1/2" above surrounding grade.

**These "K" factors are your guide to the choice of resilient tile flooring for use over radiant heated concrete**

<table>
<thead>
<tr>
<th>KENTILE</th>
<th>KENCORK</th>
<th>KENRUBBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 BTU/sq. ft./hr./°F/in. thick</td>
<td>0.7 BTU/sq. ft./hr./°F/in. thick</td>
<td>4.5 BTU/sq. ft./hr./°F/in. thick</td>
</tr>
<tr>
<td>1/8&quot; 36 BTU/sq. ft./hr./°F</td>
<td>3/16&quot; 3.7 BTU/sq. ft./hr./°F</td>
<td>1/8&quot; 36 BTU/sq. ft./hr./°F</td>
</tr>
<tr>
<td>3/16&quot; 24 BTU/sq. ft./hr./°F</td>
<td>5/16&quot; 2.2 BTU/sq. ft./hr./°F</td>
<td>3/16&quot; 24 BTU/sq. ft./hr./°F</td>
</tr>
<tr>
<td>1/2&quot; 1.4 BTU/sq. ft./hr./°F</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 INC.

KENTILE, INC., 58 Second Avenue, Brooklyn 15, New York • 250 Fifth Avenue, New York 1, N. Y. • 705 Architects Building, 17th and Sansom Streets, Philadelphia 3, Pennsylvania • 1211 NBC Building, Cleveland 14, Ohio • 900 Peachtree Street N.E., Atlanta 8, Georgia • 2022 Walnut Street, Kansas City 8, Missouri • 4322 South Kedzie Avenue, Chicago 32, Illinois • 1112 West Main Street, Houston 1, Texas • 4201 Santa Fe Avenue, Los Angeles 16, California • 452 Stetler Building, Boston 16, Massachusetts

NOVEMBER 1952 87
Larger discount  
Faster turnover  
Greater profits  
when you sell  
BENNETT  
the complete line of sales proven  
fireplace supplies  

Bennett—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 mortising or lifting. 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 revolving 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 60° slope damper, with interchangeable Rotary or Rotary Control feature. With guaranteed steel valve or cast iron valve.

BENNETT — One great profit source  
for all your fireplace supplies  
• Warm-Aire Fireplaces  
• Explanslip Throat Dampers  
• Cast-Iron Dampers  
• Deep Seat Ash Dumps  
• Cast-Iron Clean-out Doors  
• Grates and Log Dogs  
• Fluescreen  

THESE ARE THE WESTERN PINES  
IDAHO WHITE PINE  
PONDEROSA PINE • SUGAR PINE  

THESE ARE THE ASSOCIATED WOODS  
LARCH • DOUGLAS FIR  
WHITE FIR • ENGELMANN SPRUCE  
INCENSE CEDAR • RED CEDAR  
LODGEPOLE PINE  

Write for free illustrated book about Idaho White Pine.  
Address:  
Western Pine Association,  
Year 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, baseboard panels, convectors, convector 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.
"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, III.

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 \( h = \sqrt{R^2 - (\frac{1}{2})^2} \) R-H 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 Crustile 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 42×52 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, 1029 Connecticut Ave., N.W., Washington 6, D.C. has done a considerable amount of research in connection with subdividing and laying out of new lots. 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 turing 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 batts 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 second 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

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 accepted in the framing industry. Douglas fir is used for the framing and 1 1/2 inch thick rocklath for the finish wallboard, 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 3/4x10 or the normal 1x6 inch subfloor. 1/2 or 3/8 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 homes.

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 load 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 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, III. I believe they will give you the necessary information without being obligated to purchase their material.
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.

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.

"'SCR brick' sells this house—buyers know that they're getting permanence, big maintenance savings, lower fire insurance and sure weather protection. They're amazed that we can give them all this, plus an attached garage and full equipment for $7,790."

free booklet "HOW TO BUILD BRICK HOMES THAT SELL WITH THE SCR BRICK" gives full construction details. To get one, just write us on your own letterhead. Address: Dept. AB-11.
acme bi-rail series 5000
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

rubber wheel
for by-passing wardrobe doors

it's the wheel that counts

ACME SLIDING DOOR HARDWARE
guaranteed for the life of the building

single track for all standard door thicknesses

acme bi-rail series 3000

acme appliance manufacturing co.
35 south raymond ave., pasadena 1, calif.
... that's why changes in conditions call for changes in the air entraining concrete you mix.

Today more and more construction men are joining the parade of those who know that to insure the best of quality on their concrete jobs... they must fit their materials to suit the circumstances!

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!

If you have any problems or questions on the use and mixing of air-entrained concrete, the Marquette Service Engineer will be glad to help and advise you—contact any Marquette office.
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.

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!

43 sold in 9 days!

...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."

Mail the coupon
for facts and detail sheets

We'll send you full information on the panel window system, types and sizes of many kinds of sash for Thermopane, and a list of Thermopane standard sizes for economical double glazing.

Libbey-Owens-Ford Glass Company
3112 Nicholas Building, Toledo 3, Ohio
Please send me complete information on low-cost windows of Thermopane.

Name: ........................................ (Please Print)
Address: ......................................................
City: ........................................ Zone: ............... State: ...............
study these advanced design

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.
Every third course in cedar shingle roof is doubled.

Railed balcony connects terrace with master bedroom beyond retaining wall.

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

NOVEMBER 1952
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. Eggens, California architect of the house. A quick check bears out that, at least, there is a definite place for everything.

"This house," Eggens 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....
out-side terraces and continued along porch floors to an inside point, thus tying indoor and outdoor sections of the property together (see cover).

The tiny 1/2-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 sliding windows which, in effect, are doors and might well be termed “windows.” 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 louvred skylight keeps out the sun in summer, admits it in winter. So do softs of varying lengths.

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 “Ideal of the Month.”
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, 13\(\frac{1}{2}\) feet wide and 6\(\frac{1}{2}\) feet high, frames an elaborately embroiled 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 furni-ture 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 and 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.
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 121/2-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
Gilding 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.

the curtain pocket permits clear view

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 sofit under roof keeps sun out most sun and covers balcony. Unusual rail construction is detailed at the left.
here are details for tiled barbecue with vent hood

BARBECUE CORNER in kitchen is completely tiled in light green 3-inch squares, including top, sides, hearth and adjoining wall area to a height of six feet. Deep, firebrick oven on left leaves sufficient space for portable electric rotisseurie, 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.

PORCH SKYLIGHT adds interest and sunshine

LOWED 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 fluorescents eight feet long and hidden in metal cover 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
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 rolltop cabinet for spices is built-in at end of cutting board. Part of 6-foot cover 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.
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.
This house is designed to be built on a sloping lot. Various 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 defining 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.
108 FURNACE FLUE:

- Run felt vertically.
- Cover joints with 2" x 2" wood battens set 8" o.c., bedded in cement.

WEST ELEVATION:

- Corner board and flashing.
- Redwood siding.
- Saddle beyond.

EAST ELEVATION:

- Wood stops.
- Brick veneer.
- Thermopane.

SECTION "B-B":

- All height dimensions taken from top of plywood floor.
- Scale of sections: \( \frac{1}{4} \) = 1'-0".
# Quantity List of Materials

## For American Builder Blueprint House No. AB 185

G. W. Brandhorst, Architect

## General Information

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>House — Type</td>
<td>Brick Veneer and Frame</td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>1,300 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Cube</td>
<td>26,000 cu. ft.</td>
<td></td>
</tr>
<tr>
<td>Height taken for cube</td>
<td>was 20 feet</td>
<td></td>
</tr>
<tr>
<td>Garage — Area</td>
<td>included above</td>
<td></td>
</tr>
</tbody>
</table>

## Excavating

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trench for foundation</td>
<td>162 lin. ft.</td>
<td></td>
</tr>
<tr>
<td>Chimney and column footings</td>
<td>1 yd.</td>
<td></td>
</tr>
<tr>
<td>Excavation for basement</td>
<td>115 yd. using 5 ft. average depth into grade</td>
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</tr>
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</table>

## Cement Work

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations</td>
<td>1,544 cu. ft.</td>
<td></td>
</tr>
<tr>
<td>(1,218 sq. ft. of this amount is wall area shown on plan as conc. block cement painted)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concrete work</td>
<td>1,021 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>4&quot;</td>
<td></td>
</tr>
<tr>
<td>Anchor Bolts</td>
<td>40-1/8&quot; x 10&quot;</td>
<td></td>
</tr>
<tr>
<td>Waterproothing</td>
<td>650 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>60 sq. ft.</td>
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## Masonry

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<thead>
<tr>
<th>Item</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Brick Walls</td>
<td>200 sq. ft. of 4&quot; brick veneer</td>
<td></td>
</tr>
<tr>
<td>Window sills</td>
<td>Wood</td>
<td></td>
</tr>
<tr>
<td>Glass block</td>
<td>54-1/8&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>Chimney</td>
<td>272 sq. ft.</td>
<td></td>
</tr>
<tr>
<td>Flue lining</td>
<td>16 F.L. 12&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>Cap</td>
<td>18 F.L. 10&quot; x 10&quot;</td>
<td></td>
</tr>
<tr>
<td>Fireplace</td>
<td>brick face cement hearth</td>
<td></td>
</tr>
<tr>
<td>Throat and Damper</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Lintels</td>
<td>1</td>
<td></td>
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## Iron Work

<table>
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<tr>
<th>Item</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous</td>
<td>5-3&quot; x 8&quot; Dia. Rods 8' long</td>
<td></td>
</tr>
<tr>
<td>10-3&quot; x 8&quot; Dia. Rods 7' long</td>
<td></td>
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</tr>
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## Millwork

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows—Type</td>
<td>Casements D.H. and fixed</td>
<td></td>
</tr>
<tr>
<td>Windows glazed including trim</td>
<td>D.H. 2-2 ft. 32&quot; x 24&quot;</td>
<td></td>
</tr>
<tr>
<td>Casement 2-1 ft. 22&quot; x 49&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transom 1 ft. 40&quot; x 13-1/2&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awning type</td>
<td>4 ft. 32&quot; x 14&quot;</td>
<td></td>
</tr>
<tr>
<td>Fixed</td>
<td>12-42&quot; x 24&quot;</td>
<td></td>
</tr>
<tr>
<td>Double glazed plate glass</td>
<td>11-165/8&quot; x 38&quot;</td>
<td></td>
</tr>
<tr>
<td>1-64&quot; x 35&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-28&quot; x 53-1/2&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Double glazed obscure glass</td>
<td>1-26&quot; x 46&quot;</td>
<td></td>
</tr>
<tr>
<td>1-26&quot; x 46&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-26&quot; x 52&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basement sash</td>
<td>6-30&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>2 Louvre sash—22 blades for 19&quot; x 49&quot; opening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior Doors</td>
<td>glazed 1-26&quot; x 6&quot; 8&quot;</td>
<td></td>
</tr>
<tr>
<td>1-38 3/8&quot; x 6&quot; 8&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Garage Door</td>
<td>4-26&quot; x 6&quot; 8&quot;</td>
<td></td>
</tr>
<tr>
<td>Exterior Millwork</td>
<td>1 plywood panel 52&quot; x 56&quot;</td>
<td></td>
</tr>
<tr>
<td>Shutters</td>
<td>1 plywood panel 52&quot; x 56&quot;</td>
<td></td>
</tr>
<tr>
<td>Indoor Doors including jams and trim:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flush HC doors</td>
<td>4-26&quot; x 6&quot; 8&quot;</td>
<td></td>
</tr>
<tr>
<td>1-4-28&quot; x 6&quot; 8&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flush HC door, SX Panel</td>
<td>1-26&quot; x 6&quot; 8&quot;</td>
<td></td>
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</tbody>
</table>

## Carpenter

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beams and Gliders</td>
<td>3-2&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>Ribands</td>
<td>4-1&quot; x 6&quot; x 16&quot;</td>
<td></td>
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<tr>
<td>Foundation Plates</td>
<td>12-2&quot; x 6&quot; x 16&quot;</td>
<td></td>
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<tr>
<td>Joists</td>
<td>16-2&quot; x 4&quot; x 16&quot;</td>
<td></td>
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<tr>
<td>Joists</td>
<td>16-2&quot; x 10&quot; x 16&quot;</td>
<td></td>
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<tr>
<td>Joists</td>
<td>16-2&quot; x 10&quot; x 14&quot;</td>
<td></td>
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<tr>
<td>Joists</td>
<td>5-2&quot; x 10&quot; x 20&quot;</td>
<td></td>
</tr>
<tr>
<td>Bridging</td>
<td>300 LF 1&quot; x 3&quot;</td>
<td></td>
</tr>
<tr>
<td>Studding and Plates</td>
<td>216 pces. 2&quot; x 4&quot;</td>
<td></td>
</tr>
<tr>
<td>26 pcs. 2&quot; x 4&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 pcs. 2&quot; x 4&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 pcs. 2&quot; x 4&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof Rafter</td>
<td>16-2&quot; x 8&quot; x 16&quot;</td>
<td></td>
</tr>
<tr>
<td>Framing Lintels</td>
<td>8-2&quot; x 8&quot; x 12&quot;</td>
<td></td>
</tr>
<tr>
<td>Subfloor</td>
<td>8-2&quot; x 10&quot;</td>
<td></td>
</tr>
<tr>
<td>Roof Sheathing</td>
<td>2,000 b.f. 1&quot; boards</td>
<td></td>
</tr>
<tr>
<td>Side Wall Sheathing</td>
<td>1,700 b.f. 1&quot; boards</td>
<td></td>
</tr>
<tr>
<td>Side Wall Materials</td>
<td>75 b.f. Redwood V joint boards</td>
<td></td>
</tr>
<tr>
<td>Carpenter Stairs</td>
<td>1,200 b.f.</td>
<td></td>
</tr>
<tr>
<td>Exterior Material</td>
<td>3 sets</td>
<td></td>
</tr>
<tr>
<td>Millwork</td>
<td>1,300 sq. ft. 4&quot; b.h. bats for ceiling; extent of insulation not shown</td>
<td></td>
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## Roofing

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<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shingles</td>
<td>Black Felt</td>
<td>1,600 sq. ft.</td>
</tr>
<tr>
<td>Interior Walls and Ceilings</td>
<td></td>
<td>4,500 sq. ft.</td>
</tr>
</tbody>
</table>

## Sheet Metal

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashing</td>
<td>At chimney and all sash</td>
<td></td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>One special planters box at stair</td>
<td></td>
</tr>
</tbody>
</table>

## Miscellaneous

- 1 plywood panel 52" x 56"
tested features
turn lookers
to BUYERS

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.

Full size, full width driveway is another Swanson extra. Area walls are raised two-inches to keep out surface water.
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
- Broan 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 points
- Seal-tite insulation
- United States Gypsum lath and building paper
- United States Radiator furnace
- Youngstown kitchen cabinets

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.

**NOVEMBER 1952**

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.
from the front, this house has hidden livability by virtue of its hill-side 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.

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


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.
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 rock-bottom 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.

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

United States Plywood Corporation carries the most complete line of flush doors on the market, including the famous Weldwood Fire Doors, Weldwood Stay-Strake Doors, Weldwood Staved Lumber Core Flush Doors and Mengel Solid Core and Hollow Core Flush Doors. 1½" and 1¾" with a variety of both foreign and domestic face veneers.
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

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offers advantages never before combined in one building material.

One man can handle the big sheets

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—1/6", 3/16", and 3/4".

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.
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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.
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!


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.


122 AMERICAN BUILDER
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 November 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-
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.

Framing costs very little more in winter than in summer. Builder uses precut framing members, insulated sheathing, and plenty of winter building know-how.

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.
**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 framewoik 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.*

*Straw covering aids curing of the concrete footing in cold weather. Straw is also placed on excavated ground to reduce frost penetration.*

*On many days a heater on the concrete mixer is sufficient.*

*Photo courtesy Portland Cement Association*
SUB-FLOOR BOARDS SPACED 1/2 INCH APART

Subflooring is spaced 1/2 inch apart to reduce tendency of the cap to expand. This construction method reduces expanding caps from 15 to five per cent.

CONCRETE FOUNDATION

Temporary doors and windows add to the costs of winter building. Builder figures cost can amount to $20 per house.

Temporary heat speeds inside construction.

Framing presents no problem

Framing members are precut 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 25/32-inch insulated material. Asphalt roofing material is handled carefully in the cold weather. It is spaced to allow for summer expansion.

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.

Framed homes specializes in two-story expandables. Most have brick veneer exteriors. The attractive 800-square-foot house has plastered walls and full basement.
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.

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.

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 expense. 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.

<table>
<thead>
<tr>
<th>Winter Building Raises These Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpentry Labor</td>
</tr>
<tr>
<td>Masonry Labor—Brick</td>
</tr>
<tr>
<td>Masonry Labor—Block</td>
</tr>
<tr>
<td>Heating</td>
</tr>
<tr>
<td>Financial Costs</td>
</tr>
<tr>
<td>Snow Removal</td>
</tr>
<tr>
<td>Clean-up</td>
</tr>
<tr>
<td>Winter Door and Window Coverings</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

Portable heater placed in the doorway protects stoop when poured in winter. Canvas canopy is placed around form and attached to doorway.
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

"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."

Col. Willard T. Chevalier
Executive Vice-president

THE RESEARCHER

"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."

William H. Scheick
Executive Director
Building Research Advisory Board

THE MANUFACTURER

"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."

F. M. Hauserman
President
E. F. Hauserman Co.

THE ARCHITECT

"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 drafting 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."

William S. Kinne, Jr.
Professor of Architecture
University of Illinois

THE ARCHITECT
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

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 reference 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 surface line. They will terminate either on the opposite interior wall surface 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 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 2x4 piece of rafter stock and make the plum and level cuts of the rafter at the coves end, being sure to use the pitch designated. The level cut should be 35\(\frac{3}{4}\) 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 plum and level cut of the rafter into the zero end of the jig.
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 section 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 plumb cut so that the ridge fits snugly.

The condition is 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 rafter 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 point 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 resting 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**
have a plate, modular in length, starting at the nominal interior wall surface line. The dropped plate section (NX-6) will start at the intersection of the under side of the rafter and top of the subfloor.

Lean-to sections such as NX-8 depend on knee wall heights. Knee walls should be framed in rectangular fashion as shown in NX-9 and in Figure 4, with a beveled purlin. Part of these tables, covering both raised and dropped plate conditions where the run is pitch, are given in inches per foot; setback in modular increments.

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.

The knee wall section (NX-10) is actually an NX-9 knee wall jointed to a frame section of standard parti...
### FIG. 6—Knee wall heights for dropped plate conditions

<table>
<thead>
<tr>
<th>Rise</th>
<th>6”</th>
<th>6½”</th>
<th>7”</th>
<th>7½”</th>
<th>8”</th>
<th>8½”</th>
<th>9”</th>
<th>9½”</th>
<th>10”</th>
<th>10½”</th>
<th>11”</th>
<th>11½”</th>
<th>12”</th>
</tr>
</thead>
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| 8-0” | 39%| 43% | 47%| 52% | 56%| 61% | 66%| 71% | 76% | 82%  | 89% | 95%  | 100%
| 8-4” | 41%| 45% | 49%| 54% | 59%| 65% | 71%| 77% | 83% | 90%  | 97% | 104% | 110%
| 8-8” | 43%| 47% | 52%| 57% | 63%| 69% | 76%| 83% | 90% | 97%  | 104| 111% | 118%
| 9-0” | 45%| 50% | 54%| 60% | 66%| 73% | 80%| 88% | 96% | 104 | 112 | 120 | 128%
| 9-4” | 47%| 52% | 56%| 63% | 70%| 78% | 86%| 95% | 104| 112 | 120 | 128 | 136%
| 9-8” | 49%| 54% | 59%| 66%| 73%| 81%| 89%| 98% | 107| 116 | 125 | 134 | 143%
| 10-0”| 51%| 56% | 61%| 68%| 76%| 85%| 95%| 105| 115 | 125 | 135 | 145 | 155%

**Laying Out a Dormer Cheek**

The dormer cheek (NR-11) should have the length of its bottom plate assigned in inches and the nominal height of the knee wall, which was 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, an assigned pitch is 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 inches and multiples. The bottom plate should be long enough to reach the floor line intersection of the rise and the tread assigned. Distance "T" 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 inches and are equal to the nominal dimensions between walls because the collar beams or ceiling posts 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 ½-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 fitting 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 cooperating 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 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 ½-inch plate glass with wood edge mould.
Builders see new sales opportunity in General Electric Light Conditioning!

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—

GENERAL ELECTRIC

NOVEMBER 1952
FEWER PARTS
EASIER TO INSTALL!

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. 605 TRACK
IN COMBINATION
WITH NO. 660 HANGERS

FOR ¾" BY-PASSING DOORS
NO. 604 TRACK IN
COMBINATION WITH NO. 662
AND NO. 664 HANGERS

FOR 1" TO 1⅛"
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

That's right!
Gates saves up to 60% of Concrete Forming
costs on every job

Could you use
60% SAVINGS?

ALL LUMBER RECOVERABLE UNSCARRED
USES ¼ THE 2x4's

FASTEST ERECTION EVER

FASTEST WRECKING EVER

That's why these builders say...

"... have completed 2½ homes
under FHA specifications and have
just started 191 more... Gates Form Ties
have proved economical..."

HUTCHINSON & CAREY, INC.
Denver, Colo.

"The GATES FORM TIES are taking
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

GATES ALSO HAS THE
FASTEST PANEL FORMING
METHOD • IN-THE-WALL
BREAK-BACK TIES • 2x4 TIES

Get all the details!
Investigate Gates
Today!

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WASHINGTON STEEL PRODUCTS, INC.
1940 EAST 31ST STREET, TACOMA 2, WASHINGTON

AMERICAN BUILDER
Kenbo Corp., builder of Rancho Monterey homes near Los Angeles, uses Drive-It "400" to fasten 2" x 4" 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.

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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" x 4" 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.

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**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. |
| DRIVE-IT is the only powder actuated tool which requires but one standard power load regardless of penetration desired. |
| Exclusive Automatic Barrel Extension for fastenings inside junction boxes or other recesses. |
| Exclusive Swivel Safety Pad easily rotated for getting into close quarter work. |

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**MAIL THIS COUPON TODAY!**

POWDER POWER TOOL CORP.
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Canada: Ammo Power Tool Co., Ltd.
735 Broadway, Vancouver, B. C.

☐ Please send FREE catalogue and literature.
☐ I want a FREE demonstration of DRIVE-IT.

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NOVEMBER 1952
Build and Profit All Year with P & H Homes

Cold weather building is no problem at all with P & H Homes. They arrive at the site so complete that you can have a house under roof in half a day! Your men do most of their finishing jobs indoors—though much of the trim and detail work is finished in the factory.

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.

HERE’S THE AMAZING $2,750 P & H 2-Bedroom Home Package

- gas or oil-fired furnace
- gas or electric water heater
- kitchen cabinets, Formica counter
- Rusco metal windows, screens
- full size picture window
- prefitted fir panel doors
- rugged room-size wall panels
- gable and roof panels, trusses
- full Fiberglas insulation
- predecorated gypsum board ceilings
- side wall and roof shingles
- all hardware, felt building paper, cornice, trim lumber
- Van Packer chimney

All Shipped on One Trailer Truckload

HOMES DIVISION OF HARNISCHFEGER CORPORATION

Better Homes for More People at Lower Cost

111 Spring Street
Port Washington, Wis.
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.

INSULUX PANEL-VENT
THE NEW WAY TO VENTILATE GLASS BLOCK PANELS

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
"MASONS BETTER SATISFIED... they like the plasticity of ATLAS MORTAR"

says DONALD RICHARDSON

project manager for the huge new Davystrom, 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 a 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.
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!
NATIONAL HOMES CORPORATION SCOOPS ENTIRE BUILDING FIELD WITH EXCITING NEW 1953 MODELS

Lafayette, Ind. (Special)—The nation's largest producer of homes at thrift prices, National Homes Corporation announced its all-new 1953 models. A convenient laundry alcove equipped with automatic washer and dryer adjoins the ultra-modern kitchen. Decorative folding doors shut off the area when desired. These features, along with the latest "ceiling-to-floor" picture window, shoulder-high bedroom, and spacious living area, make National Homes the "sensationally RESTYLED . . . sensationall PROMOTED!"

Sensationally RESTYLED . . .

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.

See our smashing full-color ads in:

- Good Housekeeping, Nov.
- Living for Young Home-makers, Nov.
- McCall's, Nov.
- Better Living, Nov.
- Fortune, Nov.
- Better Homes & Gardens, Nov.
- Coronet, Nov.
- This Week Magazine, Oct. 26
- Saturday Evening Post, Nov. 1
- Newsweek, Oct. 27
- Life, Oct. 27
the finest windows available . . .

BILT-WELL

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 assu res 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 kilndried Ponderosa Pine and are chemically-treated in strict accordance with NWMA standards.

Manufactured by

CARR, ADAMS & COLLIER CO.
Dubuque, Iowa

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
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 in-
formation. The two and three bed-
room 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. Fl.

MORE MORTGAGE MONEY—There
will be more VA money if the gov-
ernment 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, espe-
cially if it won’t go through.
Clarification of the present regula-
tions on VA money will also
strengthen the picture. Large buyers will take them. Now,
they don’t know where they stand.

ALBERT BALCH,
Seattle. Wash.

LAND COSTS—Codes of city, county,
and state are lowering land pre-
paration 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 in-
vestments. We still are producing
when half of Jackson’s builders have
gone out of business.

TOM POORE,
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.

the second round of

COST saving procedures, raising land costs, and mortgag-
emoney were discussed at the first of the second series of
trade-secret meetings held July 28, 29, and 30 in Chicago
and Madison, Wisconsin. NAHB president, Alan Brock-
bank, 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
carried out a Portland Cement Association’s Chicago office
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 ex-
periments 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 Slipher of Kaiser Homes, Los Angeles, Calif.

Culled for the American Builder reader are many impor-
tant 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 carpet tile. We pour the terrazzo mix on the green slate.
Then grind and polish the floor ourselves. After polishing, we
use an abrasive wheel on a power hand saw to score the ter-
razzo. The floor has good sales appeal.

FRANK ROBERTSON,
San Antonio, Texas

FLEXABILT HOUSES—Design is flex-
ible to meet the needs of the family
throughout their lives. Movable stor-
age 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. Both 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

**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.

**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.

**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 installation 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.

**PLASTER BOARD NAIL POPPING**

**D A V E S L I P H E R.**
Kaiser Homes,
Los Angeles, Calif.

PREFAB 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 1/4 inch exterior, solid core doors for weight bearing panels. Our wall-cost has been lowered to 57 cents per square foot.

**N E D C O L E.**
Austin, Texas

DESIGN—Too little research is being done in architectural design. Students are not being trained in housing. They produce beautiful houses with little interior thinking. There is a need for more complete house planning. Buyers are demanding more.

FRANK BURNS.
Denver, Colo.

MORTGAGE MONEY—Denver is the financial forerunner 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.

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 SLIPHER,
Kaiser Homes,
Los Angeles, Calif.

PREFAB 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 1/4 inch exterior, solid core doors for weight bearing panels. Our wall-cost has been lowered to 57 cents per square foot.

N E D C O L E. Austin, Texas

DESIGN—Too little research is being done in architectural design. Students are not being trained in housing. They produce beautiful houses with little interior thinking. There is a need for more complete house planning. Buyers are demanding more.
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 house, 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 1 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.

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.
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.
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.

Data courtesy of Small House Council, University of Illinois and Keith Hancherill, Professor of Farm Structures, University of Illinois

**BRAND NAME PRODUCTS USED**

- Andersen windows
- A.O. Smith hot water heater
- Corey exhaust fan
- Dexter hardware
- Formica counter tops
- Johns-Manville sheathing, insulation, and asphalt tile
- Kohler plumbing fixtures
- Minneapolis-Moneywell heating controls
- Triad furnace
- United States Gypsum lath

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.

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.
This Man has the answers to these questions:

WHERE are my prospects
WHO are they...and
WHEN are they going to buy?

"I'm frank to say that we just couldn't run this business successfully without Dodge Reports," says Mr. Sloat. "We find this service indispensable in 3 ways: 1. It puts us in contact with architects in the planning stage, to assure specification consideration. 2. Enables us to quote general contractors in the bids-taking stage. 3. Guides us in follow-up of obtaining contracts for our installations. When we started in business, we began using Dodge Reports for our Northeast Ohio territory—found them so essential we expanded the service to cover all of Ohio, Western Pennsylvania, West Virginia and Indiana."

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"Budgeteer"
SLIDING DOOR HARDWARE

the space-saving, cost-saving PLUS that makes 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. 2697-D Sliding Door Hardware.

The Stanley Works, New Britain, Conn.

STANLEY

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.
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MORE HOUSE...
BETTER LIVING!

PREFABRICATION
S-T-R-E-T-C-H-E-S building budgets

If you’re faced with growing competition and want to build comfortable, quality homes despite higher costs—look to PREFABRICATION. Here, new sales records are being set because prefabrication’s modern methods result in greater economies.

From thrift model to luxury home, builders can erect prefabricated houses faster, at lower cost and with fewer headaches.

Make 1953 a profitable year. Join the growing number of builders enjoying the advantages of prefabrication. Write for FREE booklet, “Build Better, Build Sooner.”

PREFABRICATED HOME MANUFACTURERS’ INSTITUTE
934 20th St. N.W. • Washington 6, D.C.

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.

No. D-96
fireplace and corner window

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.
NO. D-96 FIREPLACE & CORNER WINDOW

Elevation

Plan

Fireplace Section

Window Sections
SAVE
MORE THAN EVER... NEW

Ramset JOBMASTER

and Tru-Set Fasteners

for steel and concrete fastening

* star values bring
new ease, speed,
utility and economy

SEE the new Ramset JOBMASTER that fastens in split seconds into steel or concrete. Check the big, 10-Star Values for faster, easier, better fastening than ever before. One-Piece Tool and Trigger Action for quick, simple loading and firing. Self-contained Barrel Extension, always ready when needed. Gas Diverter to stop spalling. Visi-Chek Button and Manual Safety Control for positive protection. Exclusive Roto-Set Safety Shield for pin-point positioning. All these add up to the greatest work-saving, time-saving, money-saving advantages in the industry.

Always Use Tru-Set Fasteners

When you add these JOBMASTER values to the advantages of Tru-Set Fasteners, with the exclusive Red-Tip Pilot that guides them straight to the work, you’ve got an unbeatable combination for ease, speed, utility and economy. With 54 sizes and types, there’s a Tru-Set Fastener for almost any job. Ask your Ramset Dealer today for Fastener Specification Booklet, and demonstration of how this Ramset team can cut fastening costs and get work finished faster. Remember, Ramset System is the pioneer in powder-actuated fastenings—with more users than any other tool.

Ramset Fasteners, INC.
Division of Olin Industries, Inc.
12117 BEREA ROAD • CLEVELAND 11, OHIO

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. Finn, A.I.A. Chicago, Ill.  

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 small home 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 1/2 inch 195 for mounting to pipe, bracket or accessories. Unit carries Underwriters Laboratories and CSA approval. Stonico Electric Products Co., Dept AB, 333 Monroe Ave., Kenilworth, N. J.

PORTABLE GAS HEATER
AB115213

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 50,000 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 offers 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 all 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. Norge Cottages, Inc., Dept. AB, 21 West St., New York, N. Y.

SQUARE BATH
AB115209

A compact square-type bath, 47 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-creasing iron, cast for rigidity. The Stantish bath occupies only 1,312 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, exhalers wall moisture which has been generated within the building and trapped inside the outside paint film. The unit, called "X-Haler Moisture Ventile," 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 1/2 inch in diameter by 3/8 inches long, are inserted into holes drilled at right angles through the siding and sheathing of the house, about 1 1/2 inches beneath the lap. An average size clapboard house will utilize about fifty of the tubes. The overhang of the louveres shields the inside of the tube from driving rain or snow, as well as from insects. Moisture vents for the bottom permit moist air inside the walls to exhale naturally through the louveres. Carroll & 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 Louver 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 Louver 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, 1047 Richmond St., Los Angeles 33, Calif.

(Continued on page 160)
DEXTER
The Lock with a Million Friends

The Lock with a Million Friends

FOR SCREEN AND COMBINATION DOORS
Easier to install —
just bore two 1/4" diameter holes.

DEXTER LOCK COMPANY
GRAND RAPIDS, MICHIGAN
A SUBSIDIARY OF NATIONAL SPAES COMPANY
Manufacturers of America's Original Tubular Locks

in Canada: Dexter Lock Canada Ltd., Guelph, Ontario
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.
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. 6057 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 storm and part screen 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. Alumarc Corporation of America, Dept. AB, 2081 S. 5th St., Milwaukee, Wis.

(Continued on page 162)

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.
GLAMORIZE YOUR KITCHENS WITH PATTERNED GLASS!

CUPBOARD DOORS decorate this kitchen. They're sliding panels of Blue Ridge Patterned Glass. Women like the ease cleaning of this translucent glass. Architect: George A. Letts, Cleveland, Ohio.

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.

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: C. W. Mayhew, San Francisco, Calif.

BOOS 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.

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Name (please print).__________________________
Address.____________________________________
City.__________________State.__________________

BLUE RIDGE Patterned GLASS

new products

(Continued from page 161)

CELLAR 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 Pump, 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 manufacturer. 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 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 1/4 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)
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)

NOVEMBER 1952
TWO SEATTLE CONTRACTORS SPEAK ABOUT KAY-TITE

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 job where it has been used have been very satisfactory.

Our contracts cover all kinds of buildings, residential, government and commercial. We do work on all types of masonry, inside, outside 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.

February 20, 1952

Gentlemen:

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 ground 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 COLORS

KAY-TITE COMPANY
WEST ORANGE NEW JERSEY
1717 WESTLAKE AVENUE, NORTH, SEATTLE 9, WASHINGTON

More than 20 years of satisfactory performance

new products

(Continued from page 162)

REINFORCED MASONRY BLADES AB115207

Edge and grooving cuts, as well as grinding type cuts, can be made with conventional type abrasive blades can be made in complete safety with Tufflex® 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 bends. They are recommended particularly for cutting 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, vitrified materials, which are best cut with wet or dry abrasive blades made by the same manufacturer.

Eveready Brikaw Co., Dept. AB, 1509 S. Michigan Bldg., 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 connected 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 manufacturer's specially designed 9 or 12 foot tapered octagon standards. The lights are furnished complete with streamline fluorescent lamps, are wired ready for installation, and listed by Underwriters' Laboratories, Inc., for outdoor use. Extruded aluminum glass frames have airplane type cowl latches. The glass is Pentolite, ribbed for proper light diffusion. Knockouts are provided to permit a variety of mounting centers and for installation at spot or flood lampholders. Guardion Light Co., Dept. AB, 301 Lake St., Oak Park, Ill.

(Continued on page 166)
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!

"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 1½ cents a mile!

"I pay Only 1½¢ a mile to run my Ford Pickup"
says E. W. Sides, Amarillo, Texas

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.


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.

Name ________________________________________________
Address ______________________________________________
City ____________________________________________________
State __________________________________________________

Check here if student: 1

Using latest registration data on 8,069,000 trucks, life insurance experts prove Ford Trucks last longer!
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 doubles 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 sold 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. Cautious 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.

GUN-TYPE STAPLER AB115214
A special model gun-type stapling tack, adapted for installing the new parallel wire used in the installation of telephones, has a grooved out nose which enables the tool to fix 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. Boxitch Inc., Dept. AB, 887 Mechanic St., Westerly, R.1.

Send for FREE Booklets
REZNOR'S New Versatile "PAC"

All-Purpose Unit/Central Gas, Forced Warm Air Heater

- Unusually Compact
- Space Saving
- Efficient
- De Luxe Appearance
- Easy Installation

A De Luxe Unit; Heater

A Compact Central Heating Plant

"PAC" is designed to implement the contemporary building objective of providing the greatest efficiency in the smallest possible space. This Reznor unit conforms 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.

"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 22½" x 47" long; centrifugal blower; standard size filter; individually adjustable louvers; Reznor "aiform" 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.

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 deadlock 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

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 1-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. 43rd St., New York 36, N.Y.

DUAL ROOM HEATER

AB113218

An enclosed, fully vented, recessed wall heater engineered for all gases (natural, manufactured, mixed or 12 p.i. 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, the 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 sheeting 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)
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, alkalies, sewage. Ideal for house-to-sewer connections, septic tank disposal, downspouting, farm drains.

Write Dept. MB-11 at our Boston office for information.
new products

(Continued from page 168)

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, marblized 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.

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 offset 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 1/2 inches. Super-Grip Anchor Bolt Co., Inc., Dept. AB, 3333 N. 72nd St., Philadelphia 40, Pa.

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 3/8 inch to 1/2 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, 2010 Park, N. Minn.

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 black 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 black 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.

USE THIS COUPON FOR MORE INFORMATION ON NEW PRODUCTS IN THIS ISSUE

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Save Time—Just Insert Key Numbers and Mail To: American Builder, 79 W. Monroe Street, Chicago 3, Illinois

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder

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 2,300 degrees F. The torch's versatility will appeal to artisans in a variety of trades. Accessories, including flame spreader, point burning attachment, choice of pencil flame or general utility type burners, eliminate the need for multiple tools. Uses include tinning, copper sweat fitting, freezing frozen nuts and bolts, radio and television work, cable splicing, and many others. Ohio Burner Co., Inc., Dept. AB, 280 Lyell Ave., Rochester 6, N. Y.
watch prospects
nod approval when they see

Designed by Decorating Experts to Combine Beauty with Utility

MICARTA is Easy to Work With
Available in Economical Sizes

Easily installed Micarta panels are available in four sizes to eliminate almost all waste. For your convenience, they are prebonded to 3/16" Weldwood® Plywood; 24" x 96" . . . 48" x 96" . . . 30" x 60" . . . 30" x 96" all 3/8" thick. Ask your lumber dealer about Micarta. For more information, fill out and mail the coupon below.

Builders are becoming increasingly conscious of the new importance taken on by kitchens, breakfast bars, dinettes, and bathrooms. That's why they are seeking new, efficient, economical and convenient ways to impress new home prospects with these rooms.

New Micarta® “Mardi Gras” adds a gay, colorful, festive spirit to whatever surface it covers. What's more, its beauty is protected for years and years against normal household abuse. Long after other surfacing materials have been replaced, Micarta continues to resist scuffs, scratches, chipping, cracking and burning. In line with its bright, cheerful appearance, “Mardi Gras” leaves housewives carefree and workfree ... with plenty of time to praise the intelligent long-range planning of their builders.

United States Plywood Corporation
55 West 44th Street, New York 36, N. Y.

Please send color guidebook and full application information on MICARTA.

NAME ________________________________
ADDRESS _______________________________
CITY ___________________ ZONE STATE __________

NOVEMBER 1952

Westinghouse
micarta

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With a De Walt you can make 15 set-ups, 15 different cuts in less than 15 minutes!

Where most machines require 4 adjustments, De Walt's "3 adjustment action" allows you to position the saw for any cut in seconds!

De Walt offers you flawless precision and an amazing versatility! You rip, miter, tenon, dado, plough, rabbot, mould, shape and make many other cuts--a total of 15--in far less time than it takes ordinary saws.

Find out for yourself how De Walt's "3 adjustment action" saves you time...saves you money. Come in for a demonstration today.

De Walt Inc.
Lancaster, Pa.

POWER SAW
Subsidiary of AMERICAN MACHINE AND FOUNDRY COMPANY, New York

Statement of the Ownership, Management, and Circulation Required by the Act of Congress of August 24, 1912, as Amended by the Acts of March 3, 1953, and July 2, 1946 (Title 39, United States Code, Section 233)

Of American Builder published monthly at Bristol, Connecticut for November, 1952

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3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting; also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

CONRAD J. WAGEMAN, Business Manager.

Sworn to and subscribed before me this 18th day of September, 1952.

(Seal)
RALPH E. WESTERMAN, Notary Public
(My commission expires February 3, 1953.)
Now CLIPPER Gives You A NEW CONVERTIBLE MASONRY SAW!

Here's How...

FIRST YOU BUY A CLIPPER MASONRY SAW

THEN YOU ADD... the "CONVERTIBLE" CART

THEN USE YOUR CLIPPER "4" WAYS

1. Use as a DUSTLESS Masonry Saw
2. Use as a DRY Masonry Saw
3. Slip the head from your Clipper Masonry Saw into the "CONVERTIBLE" CART and you have a Handy Concrete Saw.
4. Place it in tracks and you can cut large stone slabs or transite sheets

GREATER JOB PROFITS THAN EVER BEFORE!

... at any time the cutting head of your Model HD Clipper Masonry Saw can be placed on the "CONVERTIBLE" CART (that's all you do) — you're then ready to saw concrete or asphalt patches or trenches! Imagine...switching from cutting glazed tile, concrete, face brick to sewer, water or gas lines or floor patches. No more fractures beyond removal lines — no more spalling!

But there's more...just set the "CONVERTIBLE" CART on Tracks and operate as a TRACK SAW. Stone slabs, Transite sheets, Plywood, Masonite, Pre-Cast Stone and large Refractories can at last be easily cut.

Try This Combination on FREE TRIAL

Order TODAY on FREE TRIAL. Discover for yourself how Clipper will increase production, cut costs, increase profits. Only through Clipper HD TRACK SAW, try this FREE USE for 14 days...NO OBLIGATION!...

MODEL HD
9 models from $265

SAVE-A-BLADE DIAL
Just turn the Save-A-Blade Dial to the material hardness and the Pressure Equalizer Spring automatically sets the tension — guarantees faster cutting and longer blade life.

SELECT-A-NOTCH
One man easily adjusts Cutting Head to desired height. Whether cutting 12" or 1" material, Operator's hands merely guide Weight supported by rear Bar.

PRESSURE EQUALIZER
Makes your blades last longer. Because Equalizer Spring automatically cushions blade pressure whether cutting HARD or SOFT materials. Outstanding for blade economy.

ADJUST-A-CUT CONTROL
Pull the knob — and the Cutting Head is free for finger-tip setting at any desired angle. Release the knob — and Head is locked in the desired position.

GENUINE CLIPPER BLADES — ALL DIAMETERS
DRY WET & W-R BLADES

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Send FREE Information and Literature on:
□ NEW CLIPPER MASONRY SAWS
□ DUSTLESS Model HD
□ CONCRETE SAW
□ FREE TRIAL 89

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STATE ___________________________

MAIL THE COUPON TODAY!

Serving the World as the World's Largest Manufacturer of Masonry Saws

NOVEMBER 1952
4 IMPORTANT REASONS WHY
SERIES "410" NATIONAL LOCKset

will prove more profitable to you

There's extra appeal in the line of NATIONAL LOCKset key locks, turnbutton locks, privacy locks and knob latches. This has been conclusively proven by the enthusiastic acceptance of building material and hardware merchants, builders, architects and consumers. Why don't you investigate NATIONAL LOCKset today?

Distinctive Hardware...All From 1 Source

NATIONAL LOCK COMPANY
Rockford, Illinois

Merchant Sales Division
Now available again
Of Brass Material!
Cabinet Hardware by...

No. 129 Board and Assortment

All these items and more...
Available from open stock

attractively envelope packaged

Glistening, Bright Chrome
Hinges, Pulls, Catches and
Knobs...a broad selection

You'll find a steady demand for NATIONAL LOCK chrome plated cabinet hardware. It’s smartly styled, easily installed, inexpensive for the consumer to buy. It’s consistently advertised in several national magazines regularly read by your customers. You can stock the complete yet short line, No. 129 assortment including handsome display board or you can purchase on open stock your specific selection from a wide assortment of items. Ask your supplier. NATIONAL LOCK cabinet hardware is proven-popular and profitable to handle.

distinctive hardware... all from 1 source

NATIONAL LOCK COMPANY

Rockford, Illinois • Merchant Sales Division

NOVEMBER 1952
You don't need to "sell" home buyers on "Plug-In" Strip. They like the multitude of electric outlets it provides—every 18” all around the room—for appliances, lamps, radio. Housewives like the freedom it allows for furniture arrangement... the electrical convenience (every 6”) it gives to kitchen work centers.

"Plug-In" Strip is an all-metal, pre-wired, ready-to-install wiring system that's SAFE. Eliminates dangerous, ugly extension cords. No soldered or screwed connections to come loose. Life-time, tamper-proof receptacles with permanent, locked-on capping. "Plug-In" Strip adds value and livability to any home—yet costs mere pennies more than ordinary, quickly outdated systems. Write for full details today. Give your homes that "added extra" that makes sales.

Listed by Underwriters' Laboratories, Inc.

National Electric Products
1329 Chamber of Commerce Bldg., Pittsburgh 19, Pa.
Please send me further details on "Plug-In" Strip.
NAME
COMPANY
ADDRESS

"PLUG-IN" Strip

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)
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.

Use VMP flush steel doors throughout house. Never warp, sag or crack! No customer complaints. No costly call-backs to repair doors or frames.

FREE: Architect's and builder's manual illustrated with two-color isometric drawings gives valuable door and frames cost cutting data. Send for your personal copy—yours without charge. Just write "VMP Steel Doors and Frames" on your letterhead or card, and mail today to Dept. AB-11

VIRGINIA METAL PRODUCTS CORPORATION
1112 First National Bank Building
Pittsburgh 22, Pa.

NOVEMBER 1952
Here's Why

LEADING ARCHITECTS AND BUILDERS use and recommend

Sterling

600 SERIES

SLIDING DOOR HARDWARE

Saves Time! Saves Money!
Easy to Install and Adjust!

1) USE STANDARD DOOR FRAME. No special header construction needed. No grooving!

2) APRON CONCEALS HANGERS AND TRACK. May be painted if desired. No extra trim necessary.

3) ONLY ONE INCH HEARDROOM REQUIRED. No need for extra headroom for hardware.

4) ADJUSTABLE HANGERS. Slotted screw holes make it easy to plumb door with jamb.

5) GUIDE STRIPS eliminate trouble-some grooving of doors. Not visible from the outside.

6) DOOR GUIDES can be installed after doors are hung. Slotted screw holes permit easy adjustment.

7) NO TRACK ON THE FLOOR to catch dust and dirt... floor is clear and clean at all times.

8) DOOR STOP keeps flush pull on rear door always accessible. Fingers can’t get pinched.

Write for Catalog on Sterling line of Sliding Door Hardware for wardrobes, pocket doors, side doors in home garages and other Sterling products.

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)
Let us send you this book of

HOME BUILDERS SHORT-CUTS

for FREE five-day trial

More than 800 "practical job pointers" that save time, expense and labor on building jobs.

Now! Carpentry, building construction and building repair jobs are made easier with the practical methods shown in this big 211-page book. Every one of these methods has been TESTED in actual use; every one saves time, saves work, saves money.

Contents include: 88 handy ways to use tools; 37 ideas for work benches and attachments; 62 work-saving ways to use portable equipment; 39 suggestions on excavations, foundations and forms; 32 methods for making sills, girders, joists and sub-flooring; 49 hints on exterior and interior wall construction; 36 short-cuts in roof and bay construction; 19 tips on making cornices and porches; 54 ideas for interior wall covering and trim; 27 helps on stair construction; 37 window suggestions; 54 ideas for installing doors; 29 tips on closets, shelves and built-in equipment; 24 flooring pointers; 35 aids in installing sanitary equipment; 44 short-cuts in laying out work; etc., etc., etc. More than 700 illustrations show you exactly "how-to-do-it." All items indexed so that any particular idea or short-cut you want can be located instantly.

Examine 5 Days FREE

Just fill in and mail coupon below to get practical "Job Pointers" for 5 DAYS FREE TRIAL. If not fully satisfied, return the book and send nothing. If you keep it, send only $3.98 plus few cents postage in full payment. You take no risk. Mail coupon below, now.

FREE TRIAL COUPON

Simmons-Beardman Publishing Corp., 11-52
30 Church St., New York 7, N. Y.

I would like to examine 5 Days FREE, "Practical Job Pointers." If not fully satisfied, I will either return it in 5 days and owe nothing, or send only $3.98 (plus shipping charges) in full payment.

Name ________________________________
Address ______________________________
City __________________ State _______
More than 104,000 housing units have been built with TECO TRUSSED RAFTERS

By eliminating load-bearing partitions, TECO Trussed Rafters provide clear span roof construction that affords flexibility of interior design and speeds up building schedules.

Common 2x4's and 2x6's, put together in pairs with TECO WEDGE-FIT Split Rings, save materials and labor in trussed rafters up to 32 feet in span.

See how others have saved time, money and materials by using TECO Trussed Rafters in homes, schools, churches and other building construction... send for your FREE copy of this booklet TODAY.
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.

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four top 'musts' in any builder's kit

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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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No. 106


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 sidings, 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 soaps 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.

182 AMERICAN BUILDER
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.
3. If necessary, wash brush in mild soap suds, rinse in clear water. Press out water with a stick.
4. Twist brush carefully.

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.

ATTACH OUTSIDE FINS — 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.

ATTACH INSIDE FINS — 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 weather seal all the way around the window.

FOR QUICKER, EASIER INSTALLATION USE

Pella CASEMENT WINDOWS

Pella Casement Windows cut installation costs to a minimum because all Pella Casement Windows are completely assembled and pre-fitted at the factory. Pella Casements, in modular dimensions, fit right into specified rough openings. All Pella Casement Windows are equipped with inconspicuous, convenient Roll-screens that roll up and down like window shades. More Thermopane standard sizes are available for Pella Casements than for any other wood casement window. Save time and labor costs with Pella Casement Windows.

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Photos and drawings by National Paint, Varnish and Lacquer Assn.

NOVEMBER 1952
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(Continued from page 382)

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.

PAINTING WITH SPRAY GUN.
Finger-tip adjustment control quickly provides a wide selection of spray patterns for various types of job and paint materials.
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, 3/0 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.

**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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NOVEMBER 1952
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Vikon TILE CORP. WASHINGTON, N. J.

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 weather-stripping 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, weather-strip 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-locking 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.

The ribbon arrangement provides excellent light for kitchen counter work space. Sash open outwards, in awning position.

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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.

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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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FLUSH-WALL RADIO COMPANY
Dept. AS, 1012 Cleveland Street, Clearwater, Florida

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

There are nine stock sizes and layouts for Flexivent units
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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.

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St. Louis 16, Mo. • San Antonio 6, Texas • San Francisco 24, Calif. • San Leandro, Calif.
Six months after its introduction into the home building field, the "SCR brick" (Reg. TM. SCPFRF, 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...
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 joints 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 wall 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 \( \frac{3}{4} \) 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 112)

FLOORS LIKE THIS help sell houses!

You make your houses easier to sell when you use quality floors of Wright Rubber Tile in key rooms.

Many builders have found that it costs no more to use genuine Wright Rubber Tile in the kitchen and baths of the homes they build. They have also found that this simple change adds hundreds of dollars to the sales price.

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Vulcan baseboard (Radi-Vector) radiation fits into any residential building plan ... semi-recessed or non-recessed it takes up little space. Economical and modern in design.

• Light in Weight
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• Modern in Design

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Guard against bad weather that ruins materials on the job ... that's the safe way to protect your profits, SISALKRAFT assures dependable protection because it's tough, waterproof, dust-tight ... low in cost, and can be re-used many times. Many building uses, too ... as you know! Whenever you build keep plenty of SISALKRAFT on the job. (Roll widths: 36" to 96"; Special "blankets" up to 26'6" wide).

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NOVEMBER 1952
SCR BRICK

(Continued from page 195)
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 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 "shell" 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 homes 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 home. Of the 39,800,000 families in the United States, only 1,000,000 have incomes above $10,000, and the greater percentage of this group is already suitably housed.

Add up all the costs! Inexpensive PlyScord® grade-Douglas fir plywood actually saves you money. Means better construction, too. FHA now accepts 5" plywood for 24' rafter span. Big panels cut application costs by 25% and more. Plywood reduces waste, requires fewer nails. Easy to cut, fit, fasten. Fir plywood is the perfect base for finish veneering. Dollar for dollar, practical plywood out-values them all.

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how to arrange wall and base cabinets

An efficient method of arranging a wall and base cabinet in a 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.

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Can be converted to fresh air circulator for summer use. Also available in 168,000 B.t.u. model with vent optional.

HEAT MEn AT WORK—NOT EMPTY SPACES

Just snap the switch!

Your Fageol Heat Machine will instantly pour out heat for keeping men warm at work, thawing materials and equipment, drying, treating, curing, heating buildings. It solves loading dock heating problems!

By blowing warm air out along the floor or ground, each Heat Machine creates a 6 ft. high heat blanket over areas from 1,600 to 3,000 sq. ft. Unlike ordinary space heaters, they heat where men work. Consequently, operating on No. 1 or 2 fuel oil, kerosene, or diesel oil, they save greatly on fuel costs.

Write today for Bulletin L-5391.

A new method for reinforcing outside corners, uncased door and window openings, pilasters, beams and soffits has been made possible by the introduction of Peri-A-Bead, a new product of United States Gypsum Company. It consists of a metal bead to protect the corner, with Peri-A-Tape wings or flanges on each side.

The new Peri-A-Bead is available in eight-foot lengths, packed in 125-piece and 25-piece cartons. It is applied using standard Peri-A-Tape cement by the following method:

1. The workman mixes Peri-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 Peri-A-Bead.

2. Holding the Peri-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 Peri-A-Bead held in place at the top of the corner, the workman pulls the bottom outward; this springs the metal slightly and forces the paper flanges to open up. Now laying the Peri-A-Bead against the corner, it is fitted into place, working from the top down. As this is done, paper flanges position themselves.

a metal corner that
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.

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 under the flanges is used later in filling. The metal corner angle is held in place during the embedding process.

6. 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.

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.
NEW All-Steel SAFWAY SHORE

- Goes Up Faster
- Holds More Weight
- Less Maintenance

"Bright Future," a full color motion picture, designed to play a significant role in improving the lighting of the average American home, has just been released by the Lamp Division of the General Electric Co.

You will get important savings on every shoring job when you use the new one-man, all-steel Safway Shore:

**YOU SAVE TIME** — because Safway Shores are erected so easily. Just extend upper tube to approximate adjustment—fasten with pin—rotate sleeve nut to exact adjustment.

**YOU SAVE LABOR** — because one man can carry, locate and adjust Safway Shores. Handle is at chest level. No nailing or bracing in most cases. Shores will stand alone.

**YOU SAVE MONEY** — because fewer Safway Shores are needed to support the same loads (capacities to 9,900 lbs.). Less maintenance required—sleeve protects threads.

**SAFWAY SHORE ADVANTAGES**

- Only 3 Sizes—Cover a 6' 15' foot range. Each size adjustable through 5 ft.
- 3 Head Types—8 in. U-head seats 4 in. or lapped 2 in. lumber, 14 in. U-head for beam formwork—square flat plates for reshoring.
- High-Carbon Steel Tubing—No wood members of uncertain condition and load capacity—no splitting or fire hazard.
- Handle High Work—Shores easily mounted on legs of standard Safway frame-type scaffold.
- Bracing Brackets—For heights over 12 ft.

Write for this Free Bulletin

RENTED and SOLD by distributors everywhere

SAFWAY STEEL PRODUCTS, Inc.
6221 West State St.
MILWAUKEE 13, WISCONSIN

Tubular Steel Scaffolding and Equipment

modern home lighting
subject of film

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; 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 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 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.

FREE BOOK!  LIFE-TIME SECURITY  YOUR OWN BUSINESS

YOU, TOO, START A $40 A DAY BUSINESS IN YOUR SPARE TIME!

Andy Phillips says: "My Belsaw Circular Saw Shop gives me BIG PROFITS | can run 35 to 40 saws in an 8-hour day. That makes me $40 a day."

You can start this REPEAT CASH business in your own home or garage, while you are working at your regular job. Easy to operate, no experience needed. "Pays for itself from just 65 saw jobs," Harvey Jensen says.

For as little as $15 down payment, you can get your BELSAW CIRCULAR SAW SHOP rushed to you.

You can make $4 to $5 an hour in your SPARE TIME sharpening and setting CIRCULAR SAW blades for builders, lumber yards, factories . . . . No Extra Equipment needed, no canvassing . . . . send postcard for your Free Copy of "Life Time Security" today.

BELSAW MACHINERY CO
4503 Field Building Kansas City 11, Mo.

198
The Only Guaranteed - Nationally Advertised

RED CEDAR CLOSET LINING
BROWN'S
SUPERCEDAR
SEAL-PACKAGED
ALL WIDTHS 40' TO PKG.

Guaranteed 80% Red Heart, 100% Oil Content

Our national advertising is currently producing thousands of customer inquiries which are turned over to our dealers for follow-up. This interest in cedar closet lining represents a growing and active market. Brown's Super Cedar is a fast-moving, profitable item as produced by the largest and oldest experts in the business. Sold only through leading lumber and millwork distributors.

Write for Builders Folder and Consumer Booklet

PRODUCT OF GEO. C. BROWN & CO., INC.
GREENSBORO, N.C. Established 1896
LARGEST MANUFACTURERS OF AROMATIC RED CEDAR IN THE WORLD

READY BUILT Fireplaces

Regular U.S. Pat. Off.

No Home Complete Without a Fireplace

Shipped Complete, Ready to be Installed

Adds beauty, cheer and comfort to any home, old or new

The modern fireplace that fulfills all modern day requirements—used with gas or electricity.

Large variety of attractive models in brick, stone, wood, etc., available.

DEALERS, BUILDERS and HOMEOWNERS write for catalog and full information.

The READY BUILT PRODUCTS COMPANY
1705-23 McHenry Street Baltimore 23, Md.

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.

PLUGMOLD 2000
Multi-Outlet System
gives your homes a plus appeal!

...and this New system
by WIREMOLD is
FASTER, EASIER
CHEAPER to Install!

Plugmold 2000 is your perfect answer to home buyers who insist on utmost convenience...it provides a double convenience outlet every 30 inches around every room, with closer spacings available.

In addition, you can now have both "hot" and switched outlets in the same receptacle.

You'll save time and installation costs — Wiremold's famous Snapicoil, pre-wired in 50 foot coils is installed in one, long, continuous run.

Plugmold 2000 is easily installed in new homes; and in homes you're modernizing without tearing out walls or floors.

Write today for the new, free Plugmold 2000 book.
**Association News**

(Continued from page 32)

**1000 Homes on Display in Metropolitan Detroit**

With formal proclamations issued by Governor Meinen, 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 1951 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 RAMID, 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 bared 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 Tymes, 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!"

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**Wonderdraft**

![Diagram of fireplace installation](image)

**SECTIONAL VIEW OF FIREPLACE**

- **Wonderdraft** stops firesplaces from smoking 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 fire-place from pulling all the warm air out of your house. Doubles the pleasure of an open fire.**

- **Send for free descriptive circular.**

---

**Carter Engineering Co.**

Warrenton, Virginia

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**Perfectly Accurate One-Man Level**

**Perfectly Accurate One-Man Level**

**Up to 50 Feet or More**

**Levelall**

**Faster than $100 Engineer Instruments!**

New and improved! The most inexpensive water level giving perfect level with accuracy. 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 poly-chloride tube, filled with red Level-Flo liquid. 2 heavy steel brackets for easy 1-man use. Husky carrying case.

**The Deluxe Levelall** is also offered with 75' tubing — an extra supply of Level-Flo fluid — and a Deluxe Carrying Case.

**DEALER INQUIRIES INVITED**

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**Kimble Glass Company**

Subsidiary of Owens-Illinois Glass Company

Toledo, Ohio

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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 reputting. 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 1935, Toledo 1, Ohio.

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**Kimble Glass Company**

Subsidiary of Owens-Illinois Glass Company

Toledo, Ohio
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.

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 NAHB. 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 though day by day contact with research planning, operations and results.

3. Field trials 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, Insulite Division of M & O Paper Co., Ruberoid Company, National Gypsum Co.

Pertinent subjects discussed at this meeting included Dealer Meetings, 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.
Choice of Leading Architects and Builders... for Over 31 Years

A top-quality, economy line of Modern-design auxiliary heaters for any confined area where quick, efficient, low cost "extra heat" is required. Choice of many styles from 600 to 3000 watt capacity. All with new GLOBAR non-metallic 5-year heating elements having added Infra-Red health features. Finished to conform with any interior. UL listed and approved.

Specify SHEPLER for Year 'round COMFORT

Electric Portable Room Heaters

Gas and Electric Fireplace Logs

Also Makers of RADIA Ventilating Exhaust Fans

* DISTRIBUTORS ATTENTION
For PROFITABLE additions to your present lines get the facts on Shepler Ventilating Fans and Heaters. Write for full information today

SHEPLER Manufacturing Company
1229 GOEBEL STREET
PITTSBURGH 33, PA.

SEND FOR COMPLETE CATALOG

stress lower costs of hot water heating

In the course of the research program sponsored at the University of Illinois by the Institute of Boiler and Radiator Manufacturers it has been found that the elimination of swing joints and radiator valves effects a saving of about 35 per cent in the cost of the material for each pair of radiator connections. In addition, the estimated time required to install the radiator branch connections is reduced by about 40 per cent.

It was found that the omission of swing joints caused no difficulty in making connections, nor caused any operational trouble or noise. A single horizontal offset is all that is needed to connect to the riser that passes up through the floor to the baseboard connections. This connection still provides all the flexibility required for quick piping work and quiet operation.

The savings effected with the series loop system, as borne out by the 1-B-R tests, can be considerable. Here's the way it breaks down for a typical one-story, five-room house:

1. 56.6 per cent saving on cost of pipe;
2. 66.5 per cent saving on cost of nipples;
3. 40.6 per cent of fittings;
4. 50.6 per cent on estimated installation time.

The researchers found that if labor is valued at $2.50 per hour the total saving amounted to 49 per cent when the series loop system, minus the swing joints and valves, was installed. This saving, it should be explained, applies to the cost of pipe, fittings, and labor to install the piping system. This was equal to a saving of about $12.50 per room heated.

Throughout at least one complete heating season the researchers tested the simplified piping system in a two-story, six-room house with a full basement and in a prefabricated, one-story, basementless house.

The development of the series loop system and other simplifications in piping and installation are typical of the innovations in hot water design resulting from research.

The Only CAULKING GUN GUARANTEED for LIFE

Uses Cartridge or Bulk Compounds

The BEAVER CAULKING GUN is precision made for longer life and better results.

* All working parts accurately machined.
* Uses all caulking materials—handles light oils.
* Extra heavy gauge barrels.
* Positive ratchet drive.
* Threaded nozzles—no bayonet joints to come loose.
* Guaranteed for life. Any gun damaged or worn out in service will be repaired or replaced by the manufacturer for only 50 cents.

Three popular sizes—6 1/2", 10" and 15". List prices—$6.50, $7.50, $8.50. Write for discounts.

IMMEDIATE DELIVERY

WESTERN RESERVE MFG. CO.
3770 E. 93rd St. Cleveland 5, Ohio

AMERICAN BUILDER
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.
Sand Floors nearly Twice as Fast with

AMERICAN SUPER 8

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!

SAVE LABOR WITH THESE "PLUS" FEATURES!

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.

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 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, 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 nails 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.

Scale drawing of a standard Dox Block, indicating 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 Superfex 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
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 standing 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 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.

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.
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 do 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 revealing 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.
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!"

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.
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.

Build and insulate with double-duty

**INSULITE**

Made of hardy Northern wood
For Lower Per Square Foot Cost...
Lower On-the-Job Application Cost...
Lower Maintenance Cost...
More Years of Service...
The Beauty of a Genuine Plastic Laminate...

Use Genuine LAMIDALL
DECORATIVE PLASTIC LAMINATE

IN EASY-TO-APPLY 1/8" THICK PANELS

for WALLS and TOP SURFACES

LOWER PER SQUARE FOOT COST! Lamidall is produced in panels up to 4' x 12' by an exclusive Woodall production process that affords a real savings in initial cost.

LOWER ON-THE-JOB APPLICATION COST! The 1/8" structural thickness of Lamidall panels makes them easy to work and apply, using ordinary carpenter's tools. The extra thickness of Lamidall provides a substantial savings in supporting-surface preparation.

LOWER MAINTENANCE COST! Lamidall never needs painting or refinishing. The hard, glass-smooth surface wipes clean with a damp cloth.

MORE YEARS OF SERVICE! Lamidall never chips, cracks or peels—it resists heat, stains and abuse, and gives a lifetime of service under ordinary residential, commercial or industrial use.

THE BEAUTY OF A GENUINE PLASTIC LAMINATE! You can choose from an outstanding variety of "life-like" wood grains, modern patterns and colors to match any room decor. The tough, satin-smooth plastic surface gives patterns and colors a depth that is impossible to match in any other material.

Send for Free Samples and New Full-Color Folder!
Note the thickness and strength... see the beauty... test the durability. A Lamidall Distributor is near you, to give you prompt, efficient service and advice.

One of the new abrasive wheels making a difficult cut look easy

Lamidall is structurally strong—easy to handle, cut and apply. Notice how one man can easily handle a large panel.

choose your color and cut that tough material

With the great number of new building materials now being introduced, the Porter-Cable Machine Co. has found that much confusion and lack of understanding exists among builders and dealers as to the best way to cut them.

To solve this "how to cut what" mystery, the company has just developed a simple abrasive wheel system making possible the use of a high speed power saw to cut, score or grind every type of "problem" building material on the market.

Following extensive field tests, it was determined that only three different abrasive blades were necessary to do the proper cutting job on all materials not suited to the conventional steel saw blade. Each abrasive wheel has been "color-graded" to make certain that the correct blade for the job is always selected.

Red label wheels are recommended for highly compressed fibrous composition boards; also non-ferrous metals such as aluminum, copper, bronze, zinc, etc.

Green label wheels are designed to cut or grind plastic materials; also ceramic, clay and stone products and other heavy aggregates such as concrete or cinder block, building brick, tile, firebrick, marble, slate, granite, terra cotta, synthetic stone, terrazzo, limestone, porcelain concrete and mortar.

Blue label wheels are intended for the ferrous metals, including alloy steels and cast iron in the form of pipes, angles, bars, sheets and rods.

Special compact display packages of the new abrasive wheels are now made available to dealers. Blades come in 6-, 7- and 8-inch sizes for each type.

Lamidall is a product of Woodall Industries Inc.

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"LOOK AT LOCKS
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When you tell a home-buyer there's a SARGENT lock on the front door, he feels confidence in you and your good judgment as well as in the lock.

Mr. Home-buyer appreciates the many advantages of the SARGENT "4500" line. He admires the "tulip"-shape knobs and the neat, well-proportioned roses. He approves of the key-in-knob lock on the front door, and the obvious quality of the locks on bedroom and bathroom doors.

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building a breakfast nook

That spare corner in the kitchen can be put to excellent advantage by the installation of a breakfast nook. It measures 2 1/2 to three feet in height to the backs of the top of the seats, and the seats extend only one foot seven inches from the wall. The length in either direction from the corner depends entirely upon the amount of space available.

The base of the seats is formed of two 2x4's laid flat on the floor, with an eight-inch piece of 2x4 joining them for strength. Two upright 2x4's, each 11 inches high, stand with their flat or four-inch surfaces facing the end of the bench. Lengthwise on top of the uprights, two 2x4's extend for the length of the seat to the room corner. The construction consists of a sturdy frame, 16 inches wide by 15 inches high, the length optional.

Over this frame a 1/2-inch plywood sheet is placed to form the seat. The back of the seat is also a 1/2-inch plywood sheet, extending diagonally upward for one foot or one foot six inches, depending upon the desired height.

On the bottom front of the base, a third plywood sheet is used. Fastened to each of the two upper plywood surfaces are two-inch air foam cushions, forming the actual seat and back of the breakfast nook. Over the cushion seats and backs and extending over the 2x4's to the floor, a plastic covering adds to the room's decorative scheme.

For the adjoining seat which meets the first one at a right angle in the corner, a duplicate construction of 2x4's is made, similarly covered with air foam cushions and plastic. The floor linoleum is extended vertically beyond the edge of the base for three inches, forming a scuff-plate.
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