BUILDING WITH PREFABRICATED HOUSES
A Series of 9 on-the-Job Reports

RESEARCHERS GIVE A SEAL OF APPROVAL
On the Under-$20,000 House

WHAT PAINT IS --------- Part 2 of a Series
behind the glistening finish—precision manufactured security
SAVE BUILDING TIME AND MONEY
— with the new
FENESTRA
Ready-Trimmed
Steel Window Unit

Now you can get all standard sizes of popular Fenestra® Residence Steel Casements in a new time and moneysaving package. Sash, frame, hardware, inside trim, outside trim—all in one modern unit that comes to the site completely assembled. It saves time, labor, materials and money!

Goes in Simplest Rough Opening
Sheathing is run over studs and cripples, nailed and cut flush around opening. No need to recess for stops, etc. Same rough opening preparation for frame, brick veneer or stucco.

Quickest, Easiest Installation
Unit is simply plumbed in opening and nailed to sheathing through holes in flashing of trim—no grounds or special blocking required. No finishing or refitting. No extra trim or stops needed. Plaster or dry wall butts against the metal trim inside. Shingles, siding, stucco or brick butt against it outside.

Helps Sell Houses
Fenestra Steel Casements Units are weather-tight. The windows are graceful and beautiful. They always open easily. They are washed, screened, and storm-sashed from the warm, comfortable inside of the house. And they are available (on special order) Super Hot-Dip Galvanized, Bonderized, and prime painted so they never need maintenance painting. Call your Fenestra Representative today.
Take it from these SUCCESSFUL builders!
THEIR BEAUTIFUL NEW PROJECTS GAVE KALMAN KLEIN and DAVID TEICHOLZ

504 REASONS to choose KELVINATOR!

"We're very proud of each and every apartment in Langdale Gardens and Austin Gardens. We feel that they speak well of our buildings. We decided that each apartment's refrigerator must be the finest, most attractive and most dependable. With Kelvinators in operation, we know that each family will enjoy steadfast, flawless refrigeration over long years. And that will mean real savings to us."

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144 brand-new apartments in pleasant Forest Hills — only 15 minutes from New York City. This is the new Klein-Teicholz Austin Gardens project. It provides up-to-the-minute space and convenience features — including a Kelvinator Refrigerator in every kitchen.

360 garden apartments — each with unusually large rooms — each kitchen starring a Kelvinator Refrigerator. It's the Klein-Teicholz Langdale Gardens at Bellerose, Queens, New York — an outstanding project.

THERE IS A BETTER REFRIGERATOR FOR BUILDERS...

IT'S Kelvinator
Division of Nash-Kelvinator Corporation, Detroit 32, Michigan

REFRIGERATORS, RANGES, HOME FREEZERS, WATER HEATERS, AIR DRIERS... Electric, of course!
"I save enough include 'extras'"
Roscoe E. Albright, Jackson, Michigan, builder, tells how Insulite Shingle-Backer and Bildrite Sheathing help him build better homes, yet save enough to pay for extra features!

"I'm able to include such features as automatic dishwashers in my homes at no increase in cost with the money I save using Insulite Shingle-Backer and Bildrite Sheathing. My saving on the home pictured here ran to about $180.

"There's no comparing this new Insulite application system with old-time methods. It gives you a tighter, better looking, better insulated, more permanent job for less money! What's more, carpenters like it because Bildrite and Shingle-Backer are easier to handle, easier to use!"

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The plain hard facts prove you save with

CHEVROLET Advance-Design TRUCKS

FACT No. 1
MORE TRUCK FOR LESS MONEY
Compare the list price of a Chevrolet truck with that of any other truck built to handle the same payloads. You'll find the Chevrolet truck lists for less, yet brings you ruggedness, stamina and great truck features you won't find in many trucks costing much more.

FACT No. 2
ROCK-BOTTOM OPERATING COSTS
Dollar-for-dollar comparisons prove that Chevrolet trucks cost least to own and maintain. Valve-in-Head economy saves on gas, in the 105-h.p. Loadmaster or 92-h.p. Thriftmaster engines. Four-way engine lubrication reduces wear and oil costs. Rugged construction means long life.

FACT No. 3
ENGINEERED FOR YOUR LOADS
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LOWER, SLOWER DEPRECIATION
Records show that Chevrolet trucks traditionally bring more money at resale or trade-in than many other makes. Chevrolet's market value stays up because the value stays in! Here is important and convincing proof that Chevrolet is the best truck buy!

CHEVROLET ADVANCE-DESIGN TRUCK FEATURES

TWO GREAT VALVE-IN-HEAD ENGINES—the 105-h.p. Loadmaster or the 92-h.p. Thriftmaster—to give you greater power per gallon, lower cost per load • POWER-JET CARBURATOR—for smooth, quick acceleration response • DIA-PHRAST SPRING CLUTCH—for easy-action engagement • SYNCHRO-MESH TRANSMISSION—for fast, smooth shifting • HYPOID REAR AXLE—for dependability and long life • TORQUE-ACTION BRAKES—for light-duty models • PROVED DEPENDABLE DOUBLE-ARTICULATED BRAKES—for medium-duty models • TWIN-ACTION REAR BRAKES—for heavy-duty models • DUAL-SHOE PARKING BRAKE—for greater holding ability on heavy-duty models • CAB SEAT—with double-deck springs for complete riding comfort • VENTILATION—for improved cab ventilation • WIDE-BASE WHEELS—for increased tire mileage • BALL-TYPE STEERING—for easier handling • UNIT-DESIGNED BODIES—for greater load protection • ADVANCE-DESIGN STYLING—for increased comfort and modern appearance.

CHEVROLET DIVISION OF GENERAL MOTORS, DETROIT 2, MICHIGAN
Al is a builder who knows his way around in this business. He's seen 'em waiting to sign up for houses still in the framing stage...and he's watched new houses stand empty for months. AL KNOWS. So, when he talks, it pays to listen.

Al's advice for '52 is:

"WATCH TRENDS
...Build the Way the Public's Thinking!"

What buyers want everywhere are homes with a feeling of outdoor spaciousness. That's why they really go for rooms and breezeways enclosed with Ualco Aluminum Jalousies...all-climate, weather-tight. Ualco Jalousies cut costs: No painting; No weatherstripping; easy installation. Upgrade your building! You can offer "more house for the money." For REMODELING, too, they're the perfect windows and doors. So, cash in on the new trend—Give both markets what they want — UALCO ALUMINUM JALOUSIES!

You'll enjoy knowing Al. He's friendly and wise. From time to time he'll be passing along some of his ideas on building. So, watch for him regularly.

There's a Ualco Aluminum Window for Every Construction Requirement including:

- Casement Windows
- Double Hung Windows
- Hopper Windows
- Basement Windows
- Twinstial Windows

Guaranteed Immediate Delivery from your supplier, despite restrictions—because of our vast, raw material supplies.

UNION ALUMINUM CO., INC.
Sheffield, Alabama — AB3

Please send me at once:
☐ Name of my nearest supplier of Ualco Aluminum Windows.
☐ Technical information and data.
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Address
City State
Bruce Strip Floor — This hardwood floor has been used in more homes than any other type. Available in all grades of Red Oak, White Oak or Beech—prefinished or for job-finishing.

Naturally Beautiful

MODERN HARDWOOD FLOORS
FOR MODERN INTERIORS

The biggest news in the home field today is the definite trend to natural, inherently beautiful materials. Builders, architects and decorators are using nature's own colors and textures to create the simple, honest charm of modern homes.

Bruce Hardwood Floors are natural in texture, natural in color, natural in design. They harmonize perfectly with any style of modern architecture and interior decoration. These solid oak floors will retain their charm and beauty for the life of a home . . . need never be replaced.

Specify prefinished Bruce Hardwood Floors to save time and money on the job. There's no waiting for floors to be sanded, no tie-ups while finishes dry. And owners get a penetrating seal finish that brings out all the natural beauty of the wood . . . outwears on-the-job finishes 3 to 1.

See our catalog in Sweet's Files for complete information on naturally beautiful Bruce Hardwood Floors.

Write for free color booklets showing Bruce Hardwood Floors in modern homes.
E. L. BRUCE CO., MEMPHIS 1, TENN.
No 'Cadillac' Houses

WHEN the war ended in 1945 it was conceded that everything possible should be done to help young veterans in their delayed attempts to establish homes for their families. Every resource of home builders and the government was bent toward providing low-cost homes for thousands of these young veterans. The attempts met with success, and in the course of a few years every young vet who could amass a minimum down payment acquired a home of his own.

It is pertinent to point out now, that with World War II seven years behind us, the veterans of that war are acquiring stature in industry and the professions, and with that stature, the incomes required for higher living standards.

But, can they purchase the physical manifestations and accoutrements of success? Yes, up to a point. They can acquire enlarged and more expensive wardrobes for themselves and their families. They can acquire expensive automobiles. They can travel. They can join town or country clubs. They can buy all but one of the trappings and earmarks of those in higher income brackets. That exception is a 'Cadillac' home. The successful veteran, although he is still four years behind in his business or professional career, and always will be as long as he lives, gets no privileges.

With the limitations imposed on the use of alleged critical metals it is not possible to build a luxury home now for the veteran or for anyone else. A veteran, if he wants priority, must remain in the low-income brackets. As far as government is concerned, as soon as he reaches middle or high income he must take his chances with non-veterans or veterans of the old war in matters of housing. He can purchase a new Cadillac automobile, but he cannot build a 'Cadillac' house to go with it.

Why are Cadillac automobiles being manufactured and sold, while 'Cadillac' houses are forbidden? Part of the answer is that Washington's government economists do not want to put the Cadillac automobile people out of business. No one will argue with that. The rest of the answer is that builders of luxury homes can shift to military or defense housing. The truth is that custom builders cannot make that shift, that a great majority of builders are custom builders, and that these custom builders still build most of the houses.

It is up to Washington to be consistent. If it really is interested in veterans—all veterans—why are economically successful veterans not given priorities now for the kind of houses to which they are entitled? And why, if the Cadillac automobile people are to be kept in business are 'Cadillac' home builders not just as necessary to the economy?
A NEW NPA-HHFA REGULATION, tailored especially for residential construction, is currently in the works. There has been unlimited speculation here on what the final version will contain. Apparently, as this issue went to press, not even government officials were sure.

PURPOSE of the new restrictive order on housing, according to government men, is to stretch the dwindling supply of copper, steel and aluminum as far as possible. This order will be issued separately from CMP Regulation 6. That's another construction regulation up NPA's sleeve.

NO SQUARE FOOT LIMITATION, at least at the moment, is in the new housing order. There is a bathroom limit (one and one-half baths per unit), but many think this will be removed from the final version. Industry men met with NPA and unanimously opposed this bathroom idea as an "unrealistic" restriction.

THE ORDER PROPOSES new copper and steel limitations, based on square footage of floor space. This would have the effect of restricting home sizes, and industry men are opposing it. One weakness of this whole thing, they say, is that no provision is made for larger homes for large families.

SELF-CERTIFICATION SYSTEM will still be used. Talk of a permit or quota system to restrict home building has quieted. It may be revived if starts continue at a high level the next two or three months.

RESTRICTIONS ON CONSTRUCTION of temporary or seasonal housing; a more stringent rule on alterations and repairs; continued prohibition on the use of aluminum, and limits on the use of copper tubing—all these are in the new housing regulation at the moment. Whether they will remain in is anybody's guess. It's expected the order will be finished, however, and issued within the next few days.

CMP REGULATION 6 is NPA's new "simple language package" on commercial and industrial construction. It will combine all previous NPA construction regulations into one order, and several new provisions will be added. Present indications are that it will be adopted early in March.

A STORMY SESSION was held February 11 when the Construction Industry Advisory Committee met with NPA to discuss this new order. The committee emphatically opposes further restrictions on structural steel for commercial building. Current regulations permit self-authorization of up to two tons, and NPA proposes to eliminate this altogether. Effect of the committee's objections remains to be seen.

ANOTHER PROVISION tentatively in the new CMP-6 has to do with use of foreign steel. The advisory committee says NPA should permit its use without specific approval, but the agency fears this might put a new strain on the copper supply. The order also proposes, at this time, a limitation on the dollar amount of "B" products that may be self-certified in commercial construction.

A ROUND-TABLE DISCUSSION of the mortgage situation was held early in February by the Senate Banking Committee. Attended by some 24 representatives of the building industry, insurance companies, savings banks and government, the three-day session explored 1952 prospects, particularly on defense area housing.

RESULTS of the meeting boiled down to a desire by lenders for higher GI and FHA...
rates, a defense of existing rates by government spokesmen, and a general conclusion by everyone that there will be enough money to support 800,000 starts this year. The unanswered question, of course, is whether that money can be channeled into the mortgage market unless present interest rates are changed.

"I CAN SAY THAT OUR PROBLEM is a tight money market," Alan E. Brockbank, president of NAHB, told the group. Builders who are ready and willing to start defense housing have run up against the money problem. Others report they cannot get utilities up to their tracts. In remote areas, the military has been unable generally to certify an installation will be permanent; and FHA cannot give full commitment without it. Builders complain that mortgage money for these out-of-the-way places is almost non-existent.

MORTGAGE BANKERS are fearful of participating in home-building programs in remote areas, afraid they may be left with a ghost town in three or four years. With the present FHA debenture rate pegged at 2½ per cent, lenders just think they can make better investments elsewhere. The same is true of insurance companies. Demand for their funds is high and they say they must put their money where it will get the best return. They argue that fixed rates on FHA and VA money have dropped below the market in the past year.

VA MORTGAGE MONEY was reported "spotty and sparse." In spite of this, the VA says it is insuring from 20,000 to 30,000 units a month. At that rate, this source alone would account for a substantial part of 1952's anticipated 800,000 units.

CONGRESS HAS STEPPED INTO VA's direct-loan picture. The House Veterans Committee has cleared a bill (HR 5893) which would give VA up to $125,000,000 to add to the existing "revolving fund." Present consensus is the bill will pass the House when it comes up.

UNDER THIS LEGISLATION, the VA would have at least $25,000,000 a quarter for making direct home and farmhouse loans to veterans. The new money authorized each quarter would be reduced by whatever the VA obtains during the preceding quarter by selling old mortgages. If the agency makes no sales, however, it would get the full $25,000,000. This program would begin April 1, 1952, and continue through June 30, 1953. Then the direct-loan authority is due to expire.

NO REPORTS ARE AVAILABLE YET on how VA is making out in its efforts to sell old mortgages already acquired through direct loans to veterans. Sale of these mortgages to private lenders would restore the $150,000,000 revolving fund from which the agency makes 4 per cent direct loans for veteran housing. It's still "too early" to determine any trend, the VA says. The mortgages were placed on the market, via VA regional offices, last December.

NPA DENIED over 77 per cent of the applications for materials to build commercial, religious, entertainment and community structures in the first quarter this year. Allotments were made to only 188 applicants for commercial construction, out of 1,004 that applied. Virtually no new commercial construction will be permitted in the second quarter, NPA reports.

A LITTLE MORE COPPER, and considerably more steel, will go to manufacturers of plumbing equipment, roofing and other building materials in the second quarter. DPA split up so-called reserve supplies of the scarce metals, thereby providing another 9,000 pounds of copper and 100,000 tons of steel for building materials.

PRESENT OUTLOOK for plumbing and heating equipment is not "too serious," according to some industry men. But if further cutbacks are made by DPA, a shortage of plumbers' brass goods, brass pipe and copper tubing can become a "great deterrent" to completion of houses. Government spokesmen, including Mr. Foley, have expressed the same fear. They don't want houses started which can't be completed on schedule.

HOUSING STARTS IN JANUARY totaled 68,000, the Bureau of Labor Statistics reports. This is 10 per cent above December, and, according to the bureau, it may reflect some effort to get work under way before further restrictions are imposed by new regulations.
CONSTRUCTION activity is continuing at near-record levels in dollar volume. Substantial increases over a year ago in military, industrial and public utility construction maintained the level of construction outlays despite reductions in housing, commercial building, highway and some other types of construction. School building activity was also above a year ago in January.

Total private outlays for new construction in January amounted to $1.5 billion, off by 4 per cent from December and 8 per cent under the January, 1951, level. The volume of residential building, estimated at $220,000,000, was 20 per cent below a year ago.

Industrial and most other types of private non-residential building advanced in January. Total public expenditures for new construction in January were estimated at $670,000,000, 31 per cent more than the January, 1951, total. Military construction was nearly six times the year ago volume, public building, industrial and residential, was more than double, and school building was up 14 per cent from last year. Highway construction was about 20 per cent lower this January than last, and the remaining types of public works were down moderately.

PRICE CHANGES. Prices of building materials, after remaining stable for four consecutive months, started to decline slightly during mid-January. Flooring and doors are down 15 per cent and 14 per cent, respectively, below a year ago. Paint and nails are up 4 per cent and 5 per cent, respectively. Other materials show slight decreases.

CONSTRUCTION WAGES. Increases in wage rates will more than offset the relatively small decreases in price of building materials as compared with a year ago. Average hourly earnings of construction labor are up 9 per cent. The average construction worker worked 37.3 hours weekly in 1951 and earned $81.37 at the rate of $2.18 per hour. His earnings have increased each year from $53.73 weekly in 1945 to $36.24 in 1946, to $63.30 in 1947, to $68.85 in 1948, to $70.95 in 1949, and to $73.73 in 1950.

A NEW ESTIMATE on housing needs has been made by the Housing and Home Finance Agency. Taking into account the amount of housing needed for our expanding population, the job of replacing or rehabilitating substandard housing and offsetting the miscellaneous losses to our stock of housing through 1960, the total job adds to about 1½ million units or an average of close to 1½ million non-farm units a year. HHFA says that during this period we must build enough houses to take care of 6,000,000 families as yet unformed or as yet unhoused. We will have to wipe out 400,000 of the houses we now count on to house our people.

HHFA estimates that the passage of time will leave its mark on 1,400,000 houses which today are safe and sound. In addition we need to build or repair somewhere between 2,000,000 and 3,000,000 farm houses.

Private homebuilders showed what they can do in 1950 when they actually got nearly 1,400,000 new units under way. Government restrictions reduced starts to 1,019,000 in 1951. Starts in January, 1952, were 21 per cent under last year.

THE SCORE BOARD

<table>
<thead>
<tr>
<th>The Score Board</th>
<th>Per Cent Change Compared With Last Year</th>
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<tbody>
<tr>
<td>Dwelling Units Started</td>
<td>Up</td>
</tr>
<tr>
<td>Month of January</td>
<td>21</td>
</tr>
<tr>
<td>Dollar Volume of Construction (January)</td>
<td>20</td>
</tr>
<tr>
<td>Residential Alterations</td>
<td>4</td>
</tr>
<tr>
<td>Industrial</td>
<td>39</td>
</tr>
<tr>
<td>Commercial</td>
<td>26</td>
</tr>
<tr>
<td>Institutional</td>
<td>3</td>
</tr>
<tr>
<td>Farm</td>
<td>11</td>
</tr>
<tr>
<td>Public Construction</td>
<td>31</td>
</tr>
<tr>
<td>Total Construction</td>
<td>2</td>
</tr>
<tr>
<td>Price Changes (January)</td>
<td>Common Brick</td>
</tr>
<tr>
<td>Cement</td>
<td>1</td>
</tr>
<tr>
<td>Dimension Lumber</td>
<td>2</td>
</tr>
<tr>
<td>Flooring</td>
<td>15</td>
</tr>
<tr>
<td>Doors</td>
<td>14</td>
</tr>
<tr>
<td>Paint (Outside)</td>
<td>4</td>
</tr>
<tr>
<td>Bathtubs</td>
<td>4</td>
</tr>
<tr>
<td>Furnaces</td>
<td>2</td>
</tr>
<tr>
<td>Asphalt Shingles</td>
<td>2</td>
</tr>
<tr>
<td>Window Glass</td>
<td>N.C.</td>
</tr>
<tr>
<td>Nails</td>
<td>5</td>
</tr>
<tr>
<td>Insulation Board</td>
<td>2</td>
</tr>
<tr>
<td>Average Hourly Earnings</td>
<td>Construction Labor</td>
</tr>
<tr>
<td>N.C. = No Change</td>
<td></td>
</tr>
</tbody>
</table>

Source: Bureau of Labor Statistics American Builder Chart

14 AMERICAN BUILDER
American Colonial

The most beautiful popular-priced Asbestos Roof ever developed by Johns-Manville

In pleasing colors... with rich texture...
J-M Asbestos Shingles are fireproof, rotproof and weatherproof

American Colonials are rigid shingles made of asbestos and cement—two practically indestructible minerals. They have the same sturdy qualities that have proved themselves over the past 40 years in all J-M Asbestos Shingles, but in addition they have a new styling, new striking beauty of design and a new note of architectural simplicity and distinction.

Johns-Manville developed the American Colonial Shingle so that the beauty, permanence and fireproof qualities of an asbestos shingle roof could be enjoyed by the owner of even a modestly priced home. They are economical in cost, economical to apply.

For full details and a free brochure showing the full color range of American Colonial Shingles, write Johns-Manville, Box 290, New York 16, N. Y. In Canada write 199 Bay Street, Toronto 1, Ontario.
"EVERYTHING Hinges ON Hager!"
ASK ABOUT THE CASEMENT OPERATORS WHILE YOU'RE THERE

On many of your general remodeling and repairing jobs, you'll discover casement windows that are crying for help. Many have obsolete stay bars, while others are equipped with faulty operators or no operators at all.

You can remedy that situation quickly and profitably by recommending and installing GETTY operators. Just 2 measurements, 6 screws—and each casement window is equipped with a handsome new GETTY operator!

Anticipating this customer-need represents far more than builder salesmanship. It represents builder service too. And it will be appreciated through the years and years of trouble-free service provided by the GETTY operators you had the foresight to install.

H. S. GETTY & Co., Inc.
3348 NORTH 10TH STREET • PHILADELPHIA 40, PA.

GETTY OPERATORS ARE USED ON MORE CASEMENT WINDOWS THAN ALL OTHER OPERATORS COMBINED.

MARCH 1952
Nail down building costs with PlyScord® Subflooring

The real story of construction costs isn’t always shown on the bill of materials. It’s the applied cost that counts! PlyScord subflooring can be laid in less than half the time required for lumber subflooring. Big, work-speeding panels are light, easy to handle . . . cover large areas quickly . . . fit standard joist spacing without wasteful sawing and fitting . . . require far fewer nails.

PlyScord subflooring means better construction, too. Plywood’s rigid plate-like action protects against violent racking action of wind or earthquake. Strong, rigid panels provide a solid, squeak-free base for finish flooring . . . protect against drafts from below. PlyScord subfloors won’t cup, shrink or swell. Result: finish floors look better, last longer.

Plan now to include PlyScord in your next bill of materials— for better construction, for building economy.

Douglas Fir
Plywood
AMERICA’S BUSIEST BUILDING MATERIAL

* PlyScord is the unsanded construction grade of interior-type plywood bonded with highly water resistant glues. For subflooring, sheathing, backing, one-use forms. PlyScord is a registered grade trademark identifying quality plywood manufactured in accord with U.S. Commercial Standards and inspected by Douglas Fir Plywood Association (DFPA).

PANEL DISCUSSION

FHA Accepts ¾” Plywood
Over Rafters 24” O.C.

On the basis of recent tests and experience data, Federal Housing Administration now accepts plywood ¾” thick as roof decking over rafters spaced 21” on centers, according to a letter from Curt Mack, assistant commissioner of the FHA underwriting office, to Douglas Fir Plywood Association. A revision of FHA Minimum Property Requirements is planned; meanwhile, FHA at Washington (Underwriting Office) will advise any insuring office upon inquiry that ¾” plywood over rafters 21” on centers will be accepted. Plywood roof deck thicknesses now accepted by FHA are shown below in tabular form.

<table>
<thead>
<tr>
<th>Roofing Material</th>
<th>Max. Rafter Spacing</th>
<th>Min. Plywood Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood, Asphalt</td>
<td>16”</td>
<td>5/16”</td>
</tr>
<tr>
<td>Shingles</td>
<td>24”</td>
<td>¾”</td>
</tr>
<tr>
<td>Slate, Tile, Asbestos-Cement</td>
<td>16”</td>
<td>½”</td>
</tr>
<tr>
<td>Flat Roofs</td>
<td>20”</td>
<td>5/8”</td>
</tr>
</tbody>
</table>

*Under wood shingles, if plywood is less than 5/16” thick, apply 1” x 2” nailing strips.

A folder giving detailed information regarding use and acceptance of Douglas fir plywood in homes built under FHA financing may be had free of charge from Douglas Fir Plywood Association, Tacoma 2, Washington.

Concrete Intaglio

Plywood cut-outs, nailed to the plywood form face, were used to create these whimsical nursery figures on the exterior concrete wall of the kindergarten play yard at the Whitman School, Tacoma, Wash. Architect John G. Richards of Lea, Pearson and Richards developed the idea. Over 7” high, the figures were formed using ¾” plywood cut-outs, secured to ½” form panels. On the soon-to-be-constructed school, the figures will be a permanent part of the play yard.
**Speeds Siding Application**

Builder-Owner H. J. Cox reports application time and labor costs were reduced by one-third with Douglas fir plywood siding in building this Eugene, Oregon, home. "Not only did the plywood help hold costs down," Builder Cox reports.

"but after over four years exposure to our rainy Northwest weather, the siding looks as good as the day it was finished," Architect Percy D. Bently specified the interesting batten detail shown. Exterior plywood panels were sawn to correspond with the level of the specially run molding and tightly fitted with a sealing of white lead paste. Corners were formed with ¼" quarter rounds. The siding 4'×8' sheets, cut to 2'×8'—is painted beige, the molding tobacco brown.

**PlyScord® Sheathing-Best under any conditions**

ANY CONDITIONS—including wind storms or earthquakes. U. S. Forest Laboratory tests prove plywood sheathing to be twice as strong, twice as rigid as any other material.

This superior bracing strength is particularly important in windy locations or earthquake areas. Plywood shear walls are also used to good advantage to compensate for loss of lateral rigidity in structures with walls containing large openings or areas of glass.

PlyScord, the sheathing grade plywood, offers many other advantages. It can be applied 25% faster, saving time and labor. PlyScord provides the perfect base for finish siding and roofing. It holds nails well . . . won't split, crumble or puncture. Big panels insulate, seal out drafts . . . make homes warm, snug, stable—now and five or fifteen years hence.

**Douglas Fir Plywood**

AMERICA’S BUSIEST BUILDING MATERIAL

*PlyScord is the unsanded construction grade of interior-type plywood bonded with highly water resistant glues. For subflooring, sheathing, backing, one-use forms. PlyScord is a registered grade-trademark identifying quality plywood manufactured in accord with U. S. Commercial Standards and inspected by Douglas Fir Plywood Association (DFPA).*
It really when you use

**Nu-Calk Speed Load**

America's Favorite Calking Compound

Every calking job will be "top notch" when you use high quality Nu-Calk Speed Loads. Nu-Calk "stays put" — will not dry out, run, crack, harden or pull away. Speed Loads are easy to use, too! User’s hands never touch the compound. Always has a smooth, even flow, and easy trigger action. Try it yourself and you'll see why Nu-Calk Speed Loads enjoy such nationwide popularity!

**Nu-Calk Calking Compound in Cans, Too!**

The "standard of quality" in the calking field! Same fine product as in Speed Loads, but also available in ½-pint, pint, quart, gallon, 5-gallon cans. Also 55-gallon drums! Order a supply, today!

**CG-4 Speed Loaders**

Here's the streamlined gun that goes with Nu-Calk Speed Loads. This SPEED LOADER calking gun is light, sturdy, fool-proof. Simply slip in a load and you are ready to calk!

**CG-3 Standard Gun**

Experienced calking appliers still favor our CG-3 Standard Gun's easy trigger action and powerful piston action. Fitted for use with Nu-Calk Speed Loads or bulk calking.

FOR FAST DELIVERY, ORDER NOW!
Your order will be shipped same day received!

- Full freight charges prepaid and allowed on orders of 100 ± or more.
- Nu-Calk Speed Loads, Nu-Glaze and Nu-Phalt may be combined to make a 100 ± shipment.
Nu-Phalt PLASTIC ASPHALT CEMENT

For Sticking Down Asphalt Shingles and General Repair on Roofs and Flashings!

Comes in popular load form like M-D's famous SPEED LOAD for calking guns, or in 2½ lb., 10 lb., 50 lb., and 550 lb. containers.

NU-PHALT HAS DOZENS OF USES!

Stick down asphalt shingles or other roofing repair work.

Perfect around gutters and valleys. Applicable to all roofing work.

Apply around chimney flashings with calking gun or with putty knife.

Handy for sticking down loose asphalt tile, and many other uses.

Use Nu-Glaze GLAZING COMPOUND instead of putty!

Nu-Glaze overcomes all the old bugsaboos about putty because it "always stays put!" Never dries out, hardens, cracks or peels off!

Nu-Glaze is not a putty, but a plastic glazing compound that's perfect for glazing, filling cracks, setting plumbing, boatwork, etc. Comes in ½ pint, pint, quart, 5 lb. cans. Also available in drums — 25 lb., 50 lb., 100 lb., and 880 lb.

Order your Nu-Glaze today!
Nine women out of ten agree... Lavanette is one of the most glamorous, practical bathroom developments in years. They love it... they want it... they buy it!

Yes, Lavanette is really loaded with appeal. One glance explains its advantages. Bathroom convenience is doubled. Now one can sit down to powder, wash, shave, and comb. It makes a bathroom, bedroom or powder room look more attractive. And it puts dangerous medicines in a locked drawer out of reach of children.

What a combination of features to demonstrate! Lavanette is all steel with a Formica top. Bowl is finished in acid-resistant porcelain enamel. Three sizes and four color combinations enable it to fit any space arrangement, any color scheme. And there are three drawers, a removable cosmetic tray and a linen compartment.

Full details are waiting. Write today.
which builder is right?

Builder A says: I use Curtis Silentite double-hung windows because:

- with their patented "floating" weather-strips and their double "Z" type spring leaf weather-strip protection, they are the most weathertight windows made today
- easy operation that stays easy—no pulleys or weights—famous Silentite spring suspension
- they save time on installation—windows are accurately pre-fitted to the frame at the factory—no fitting required on the job.
- frames carton-packed to assure clean, unmarked stock—frame jamb liners permit easy adaptation to any wall construction and all wall thicknesses
- pre-fit screens and storm sash are available for Silentite to cut installation labor still more
- modern appearance sells houses.

Builder B says: I use Curtis Silentite casements because:

- they are so weathertight that they cut home heating costs as much as 16%
- easy, positive operation—no sticking, binding, or rattling—special sash adjuster holds window firmly in place when open or closed
- concealed hardware of simple design—no hardware on outside face of frame or sash when closed—minimum of hardware exposed to weather—no inside projecting hardware
- insulating glass and screen are available for year-round owner satisfaction
- easily washed from the inside, a big point with housewives
- wood casements have always been my choice, and home owners are demanding them more and more.

Both builders are right. Whether you choose Silentite double-hung windows or Silentite casements, you get exclusive advantages that mean increased profits. Send the coupon for the whole story.

Curtis Companies Service Bureau
AB-3 Curtis Building
Clinton, Iowa

I want to know more about Curtis Silentite Windows. Please send me your free window booklet. I am ( ) architect, ( ) contractor, ( ) prospective home builder, ( ) student. (Please check above.)

Name: ..................................................
Address: ..........................................
City: ............................................. State: ..............
"Why, of course, I'll be glad to comment on my G-E Kitchen. Do come in, and let me tell you why I'm still as enthusiastic about my G-E Kitchen as I was the first day we signed up for this house.

"I don't mind telling you that it was the well-designed General Electric Kitchen that sold me on this house. My husband and I felt that a builder who put so much thought into the kitchen certainly must have put just as much thought and quality into the rest of the house. I'm sure many of my neighbors bought for the very same reason!

"I always wanted a General Electric Refrigerator in our new house. It's such a dependable, trouble-free refrigerator and there's so much space in it. I don't think there's a finer refrigerator in the world!

"Our friends are envious of our General Electric Dishwasher. Messy dishes are no longer a problem with us. We simply place them in here, turn the switch, and our dishes and silverware come out all shiny and clean.

"... and I must tell you about my Automatic G-E Clothes Washer, too. It gets clothes so nice and white and dry, they're a dream to iron!

While other builders' houses remained vacant, they sold 114

HERE'S Mr. Abner Rosenberg and Mr. Albert Benenson, partners of Yedlin & Company, of Wallingford, Connecticut. They erected the Beth Page Project of 114 houses in Bethel, and sold the entire development before it was completed.

Here you see them calling on Mrs. C. R. Macgregor of 23 Fairfield Drive, after she had lived in one of the houses several months. They want to get her candid opinion of the G-E Kitchen that was installed in her home.
"I think there's nothing like electricity for an oven. No odors, no uneven heat, and it's cool even in the summertime. My G-E is wonderful."

"Good!" says Mr. Benenson, "We put in these G-E Ranges because we found most women preferred General Electric appliances!"

"Here's another thing I like about my G-E Kitchen, Mr. Rosenberg; the interior wire shelves are perfect. They're so easy to keep clean and everything in the cabinets is in plain view! This G-E Kitchen certainly was designed with me in mind!"

- General Electric equipment does not call for a luxury price-tag!

The 114 houses in the Beth Page Project were tagged at only $10,399.00 each.

And that included the full price of the General Electric Kitchen-Laundry!

Imagine what a selling feature General Electric equipment can be in your houses ... just as it is for Messrs. Rosenberg and Benenson, and many other successful builders throughout the country.

Do you know, too, that even today under rigid credit restrictions, the complete General Electric Kitchen adds as little as $3.50 a month extra to monthly mortgage payments!

No wonder even families with incomes of $50 a week are enjoying the comfort of a G-E Equipped Kitchen-Laundry.

Why not start selling your houses faster, too? See your local G-E distributor, or write to the Home Bureau, General Electric Company, Louisville 2, Kentucky.
There's a famous BEE GEE Window to meet every need, satisfy every fancy, fit every budget—of every customer for every type of home. Beauty, design, style, practicability, price—BEE GEE Modern Wood Windows have them all—in over 42 different styles and sizes.

Famous BEE GEE features: Clean the OUTSIDE from the INSIDE—the BEE GEE Modern Wood Window is a complete unit consisting of frame, pre-fit glazed sash with glass bedded in putty—Copper screen and all hardware installed at the factory. A complete unit ready to set in the wall.

New, extra-added feature:—New automatic modern storm windows.

BROWN-GRAVES CO.
Akron 1, Ohio

Write now! Get the complete, beautifully illustrated BEE GEE Window Catalog.

BROWN-GRAVES CO., Dept. AB-102
Akron 1, Ohio

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CITY STATE
SLIDE-EASE is the perfect answer to your closet construction problems. Available in either masonite or plywood, the new Slide-Ease sliding door is the lowest priced door on the market...the simplest to install! One man, plus one screwdriver, plus 15 minutes, equals installation. With these superior door packages you also get the famous SLIDE-ALL hardware that has been used by the country's leading builders in more than 200,000 installations. Slide-Ease doors can be painted or wallpapered and are available in a variety of sizes to meet all requirements.

LOOK AT THESE FEATURES!
- Completely guaranteed
- Both sides edged in steel
- Simplest to install...only 15 minutes
- Adjustable levers
- Complete package includes doors, overhead track with ball bearing rollers and grooved oak saddles.

Made by America's Largest Sliding Door Manufacturer

U. S. SLIDING DOOR CORPORATION

MARCH 1952
NEW ELJER COUNTER LAVATORY
SMARTLY Styled FOR MODERN HOMES

The smart styling that characterizes the Eljer line of plumbing fixtures and fittings is embodied in the latest in counter-top lavatories . . . the Priscilla. Made of top-quality vitreous china, it is supplied complete with a polished, metal frame that assures perfect fit and easy installation. Furnished with either regular punching or with unit punching for center set fitting. The latter comes in white or colors, the former in white only. Size is 20" x 18". Its ease of installation will be appreciated by your plumbers.

Write the Priscilla into your next specifications . . . it is bound to increase the satisfaction of your customers. For complete information see your Eljer Distributor or write Eljer Co., Ford City, Pa.

- One-Piece Polished Metal Frame
- In White or in Color
- Concealed Front Overflow
- Top-Quality Vitreous China
- Front Anti-Splash Rim

It pays you, it pays us—because we specialize in Plumbing Fixtures and Brass
BROCKBANK ELECTED NAHB PRESIDENT FOR ’52

New Head Nationally Known
For Role in Expediting
Defense Housing Program

Alan E. Brockbank, prominent Utah
builder and authority on military and
defense housing, was elected president
of the National Association of Home
Builders at the Chicago convention. He
succeeds W. P. “Bill” Atkinson of Mid-
west City, Okla.

Brockbank, who served as first vice
president of NAHB in 1951, has been
an elected official of the organization for
the past six years. Last year, he devoted
most of his time to encouragement of
construction of military and defense
housing over the nation and was instru-
mental in setting up a special liaison
committee of NAHB builders to expe-
dite such work.

Spiegel Heads Jersey Group

Other 1952 officers elected are Eman-
uel M. Spiegel of New Brunswick,
N.J., first vice president; Joseph Haver-
stick of Dayton, Ohio, second vice presi-
dent; R. G. “Dick” Hughes of Pampa,
Texas, treasurer, and Paul Burkhard of
Gendale, Calif., secretary.

Spiegel, NAHB second vice president
for the past year and a former conven-
tion chairman of the organization, is the
next president of the Home Builders
Association of New Jersey. At present,
he is building “Rutgers Village,” a proj-
et of 700 homes in New Brunswick.

Haverstick, who has served on the
executive committee of NAHB for sev-
eral years, is chairman of the associa-
tion’s current convention, attended by
a record 17,000 persons.

Hughes, who has just completed a
year as NAHB secretary, is a home
builder operating in several Texas cities.
Burkhard, a prominent California

17,000 Turn Out For
Home Builders’ Meeting

Record-breaking has become the
rule with NAHB conventions and
1952 attendance hit a new high when
17,000 persons jammed the Conrad
Hilton and Congress Hotels in
Chicago to exceed last year’s mark
by 1,000. The dates were January
20-24.

Almost 200 exhibitors (50 more
than last year) used around 250
booths to display more than 60,000
square feet of home building ma-
terials, products and services. Ex-
hibit personnel numbered 1,200.

Emanuel M. Spiegel
Joseph R. Haverstick
R. G. “Dick” Hughes

MARCH 1952
800,000 Home Starts Set as Nation’s ’52 “Safe Limit”

Foley Calls This Figure “Attainable” by Strict Conservation of Metals

Immediately following his announcement of the Government target of 800,000 home starts in 1952, Raymond M. Foley, FHA administrator, told builders at a convention general session that the new figure represents a “best judgment,” under present conditions, of the number of units that can be safely started and finished this year.

Foley said he believed there was general appreciation of the inevitability of curtailment of the building activity at this time of the large production of housing units in 1950 and 1951, since we are in a critical phase of the country’s defense mobilization.

An “Attainable Ceiling”

“A total of 800,000 housing units can be started in 1952 if strict conservation of critical metals is practised,” said Foley. He pointed out that the figure of 800,000 has a double significance. “If conservation of critical materials is practised to a higher degree for housing units than heretofore, and with some drain upon inventories in builders’ hands and in the pipeline of distribution, we believe 800,000 units can be safely started. We now believe that all that can be safely started and so we have described the figure as the ‘attainable ceiling.’”

Quality, Objectives Not Sacrificed

Foley warned that this new limit does not mean that the nation’s housing objectives have been given up or altered, but simply slowed down as to accomplishment. “We still must build good houses,” he stated, “and must still have in mind the special areas of need our experience has revealed to us.” He spoke with appreciation of the “Trade Secrets” meetings of NAHB members as being a real advance toward “more houses for less money,” but pointed out that the new limit must also be added, “with less of critical materials.”

The Mortgage Situation

Mortgage financing came in for intensive discussion in the panel talk which followed Foley’s remarks. The panel was moderated by Jefferson Moyerhoff, a NAHB past president, and included: Nathan Mauldon and Alan Brockbank of NAHB’s mortgage finance and defense housing committees; F. E. Spiegel of the association’s committee to effect economies in materials and construction; U. S. Senator John J. Sparkman, U. S. Congressman Jesse Weddell; NAHB past president Tom Coogan; Robert Bash, representing the American Leasing Men’s Committee of the Mortgage Bankers Association of America; Perry Prentice of the “Magazine of Building”; Herbert S. Colton, FHA counsel; Raymond M. Foley, FHA commissioner, and Foley.

The experts feel that there are enough funds for mortgage financing in 1952, although just now the situation is tight. Tom Coogan pointed out that under the new 800,000 limit, $2,000,000,000 less of credit will be needed during the year.

Audrey Costa felt that the mortgage problem is not the amount of funds available but a matter of frozen interest rates. She said he felt that the public would not react unfavorably to higher interest rates, and that raising rates would stimulate the flow of investment funds into mortgages.

Program to Guarantee Houses for Six Months Is Adopted by NAHB

In his first press conference following the 1952 election, Ray E. Brockbank revealed that the directors who have voted to adopt the use of a “home owner’s service” policy. Modeled after the service policy used for the Cadillac car, the builders’ policy will guarantee a house for six months.

Objectives behind the new policy is to tighten standards of building as practiced by members of the Association, and to make the NAHB emblem a hallmark of guaranteed performance in house construction. The Home Owner’s Service Policy has to be advertised before NAHB members for 30 days before it becomes part of the by-laws.

Handling the Complaints

The line of buyer complaints as provided in the new policy is from home owner to builder of the house, or from owner to the local NAHB association is satisfaction is not obtained from the builder-member. NAHB’s local chapters already have in operation a system of complaint committees composed of representatives of the community.

Brockbank emphasized that this new service plan “is not a stiff policy,” but neither is it window-dressing. He presented it as a serious first step forward in an educational campaign to develop a master-builder character to all work by NAHB members.

Sharper Shortages Ahead

Fleischmann Predicts

Charges of unfair allotments of controlled materials to some industries, notably the construction business, were denied yesterday by Defense Production Administrator Manly Fleischmann.

Fleischmann said the rumors and charges that the automobile industry has been favored are completely untrue. He pointed out that the automobile industry has been cut about 50 per cent below the peak 1950 level in the materials it can use in the second quarter, while the building industry has been given a 50 per cent cut below the 1950 level.

This country has now entered the most difficult and important year of the Defense Production Program, according to Fleischmann, a year in which the military requirements for materials will reach an all-time high. Inevitably, he said, it will be a year in which privations and shortages will be very acute, and there will be very little to show for it.

Saying that, in effect, the country will be presented with a bill in 1952 for goods that cannot be delivered until 1953, he predicted the year will be a real test of the stamina and understanding and endurance of the nation.

More Severe Shortages Ahead

Fleischmann brought out to the builders that the shoe is beginning to pinch, material shortages have begun to cut deeply, and he assured them that they will cut deeper.

“The housing industry,” said the administrator, “must unfortunately bear a considerable share of the problems arising from the material shortages. Housing, of course, is not only a direct consumer of controlled materials, but also requires much fabricated equipment, like heating units, valves, faucets, fittings, water meters, lead-in wires, telephones, and the rest of the material and equipment needed to make new houses habitable.

800,000 Starts Assumed

“We certainly do not want thousands of almost finished houses which cannot be occupied during the latter part of 1952 for lack of some vital piece of equipment. We learned our lesson about this situation in the period of material shortages just after World War II,” Fleischmann said.

Fleischmann made it clear that the Defense Production Administration has set no absolutely definite limits on housing starts for 1952 and a figure of some 800,000 is assumed to be the limit.

The limitations are in the amount of materials, he explained, not in the number of houses. This applied particularly to copper, steel and other scarce items.

He assured the builders that the percentage of new starts will be assured, provided help is given by the industry in using substitute materials, and provided no group of individuals tries to beat the gun.
Experts See Ample Building Materials
For Government's “Attainable Ceiling”

Supply of building materials in 1952 will be ample for the government-set "attainable ceiling" of 800,000 housing starts, but builders should proceed with caution to avoid bottlenecks in certain items which may disrupt construction schedules. This was the consensus of a panel of government and industry experts at a convention general session.

Rodney M. Lockwood, past NAHB president and panel moderator, said he was of the opinion that shortage of building materials will not have substantial effect on the number of units started during the first six months, but that credit controls, combined with a general shortage of mortgage money, would operate to restrict housing starts more severely than would shortage of materials.

Put Your Money on Research

"However," Lockwood said, "during the last quarter of 1952, if we have a reasonably high level of housing production during the first three quarters, as I believe we will, then shortages in copper items will begin to become so severe as in all probability to restrict the amount of housing that is put into production."

John Haynes, director of NPA's building materials division, described the supply outlook for non-metallic items (including cast iron) as good. He also saw no immediate supply problem for plumbing and heating materials. With reference to the scarce metals, Haynes advised builders to "put your money on research."

Some manufacturers of essential building products, according to producer A. Naughton Lane of the Producers Council, have received such small allocations that they do not see how anything like 800,000 new homes can be supplied in 1952. He said a recent council survey indicated that the most serious shortages may occur in the case of plumbing and metal weatherstrip.

Using All Alternate Materials

These manufacturers, Lane said, report they have done everything possible to stretch allocations but, even so, their allotments will fall far short of meeting requirements.

The survey also indicated that manufacturers requiring steel, copper, and aluminum have been using every possible alternate material in making their reduced supplies go as far as possible.

Gas utilities will be able to acquire the materials essential for providing gas service to the new homes in 1952 under the current forecast, it was predicted by F. R. Hargreaves, president of People's Gas and Coke Co., Chicago.

Bjork said he believed at this time that utilities can be reasonably hopeful of being able to provide service generally, but there might be some local difficulties from time to time.

Cortright Cited for 10 Years’ Service To Home Building

Coinciding with the convention is the tenth anniversary of service to the industry by Frank W. Cortright, NAHB's dynamic executive vice-president. In recognition of his contribution, the American Builder bestowed its Award of Merit on Cortright at a general session of the convention.

John Dickerman, NAHB legislative director, accepted the honor on behalf of Cortright whose serious illness prevented his attending this meeting.

JOHN DICKERMAN, legislative director of NAHB, accepts award of merit presented to Frank Cortright by E. G. Govin, editor of American Builder, in recognition of Cortright's tenth year as executive vice president of NAHB. Serious illness prevented Cortright's attending the convention.

The story of Frank Cortright is essentially that of NAHB, for he has been at its helm since its formation in 1942.

In January of that year Cortright, a Philadelphia realtor, went to Washington to become secretary of what was then known as the Home Builders Institute, an offshoot of the National Association of Real Estate Boards. At that time the group, which recently signed up its 25,000th member, consisted of 250 members, a total budget of $9,000, and a staff consisting of Cortright and a stenographer.

Defence Housing Primary Task, NAHB Declares In '52 Policy Statement

The following declaration of policy was issued near the close of the convention by NAHB President Alan E. Brockbank:

The American Home Building Industry, speaking through the National Association of Home Builders, last year repeated its longstanding pledge to the American people to supply housing wherever and when needed.

Despite the most acute shortage of mortgage credit in years, we have fully kept that pledge. We have demonstrated again the vigor and flexibility of the American private enterprise system. Home builders have thrown their full energies into the production of defense and military housing, while continuing to provide homes to meet normal civilian demands.

In order that we may continue to meet the problems that now face the industry in 1952, we declare as follows:.

I. Defense Housing

The primary task of the Home Building Industry in 1952 is the production of defense and military housing. In most instances thus far, critical defense area housing programs have been far oversubscribed. This Association has appointed an Emergency Working Committee charged with the duty of aiding and accelerating the defense housing program.

II. Adequate Housing Supply

The fundamental importance of maintaining an adequate housing supply is now generally recognized. Frequently overlooked, however, is the fact that home building in 1951 was 4% below 1950 and currently is at an annual rate 3% below 1950. Moreover, home builders have substantially reduced, by intelligent conservation, their per unit consumption of critical materials. Further reduction in housing goals will cause dislocations and disruptions such as the American public was forced to endure in the years immediately after World War II.

III. Mortgage Finance

Defense housing projects have been retarded and veterans of limited income have been compelled to forego or delay the purchase of a needed house through lack of sufficient supply of mortgage financing. As a result, the pressure for direct government lending in various forms has increased. The problem of maintaining an adequate supply of mortgage money has rapidly changed economy must be solved. We urge the operation of representative lenders and government agencies in an attempt to find a proper and reasonable solution.

Meanwhile, we recognize the authority of the Federal National Mortgage...
Latest Housing Research Developments Summed Up at Convention Session

"Stressed skin and sandwich" construction, in which all members contribute to the strength of the structure, was a featured topic at a convention discussion panel on housing research. The system was contrasted to the usual sheathing with which some members do not contribute to strength but is carried as excess on the frame.

L. J. Markwardt of the Forest Products Laboratory, Madison, Wis., cited the gabled plywood panels used in many prefabricated houses as outstanding examples of stressed-skin construction. Sandwich construction, he said, means thin faces of some suitable construction material (or several different materials) bonded intimately together into a core which builds up strength.

Paper is often used in sandwich panels, Markwardt stated, and he demonstrated a promising "honeycomb core" panel made up of paper reinforced with synthetic resins and encased in plywood faces. Sandwich panels are now used for dressing a house and other pieces of furniture, at a saving in weight and cost of materials.

Paint Standards

Markwardt said that research at the Forest Products Laboratory has determined that paint coatings of less than 0.004-inch thickness do not give good service, even if the paint is of the best quality. Also, when paint becomes too thick on a building, it gives poor service. The best service, Markwardt said, is generally obtained with two coats of paint every six years or with one coat every four years.

Markwardt reported that a new text on "Basic Principles of House Construction" is in process of being published jointly by the Laboratory and HHFA. He also mentioned a second new booklet, published cooperatively by the two agencies, on "Technique of Home Painting."

New Brick to be Cheaper

Robert B. Taylor, director of research for the Structural Clay Products Research Foundation, reported that improvements in the size and shape of clay units have recently been made which are expected to lower construction costs. One new unit will cut costs of brick some 50 per cent and make a brick home competitive with frame construction, he said. News on this new brick will be announced to the building industry April 1.

Taylor emphasized that the research of his agency is directed not toward producing a brick but to make brick cheaper in the final assembly. Time-and-study motions of bricklayers on the job are being made and other research done which is expected to help cut-assembly costs on masonry. Taylor mentioned that the pre-assembly of masonry panels is being studied as a real possibility, and said that the process has already been worked out for the pre-assembly of interior masonry partitions.

An improved cavity wall has been developed for lower-cost masonry construction, Taylor stated, and is now available to builders. It has a U-value of .12 and can be plastered directly without lath or furring, or the interior masonry surface can be left exposed.

Damp-Proofing Slab Floors

The housing research activities of the Housing and Home Finance Agency were outlined by Joseph H. Orendorff. One of the problems studied by this agency has been that of dampness in concrete slab floors. Orendorff said they have found that 15-lb. saturated roofing felt laid down as a moisture barrier is soon perforated; that roll roofing of 45.55 lbs. is required, pending the availability of special membranes which are being developed by manufacturers. Orendorff also spoke of the structural concrete floor slab developed by the "Southeast Research Institute to withstand inescapable soil movements. He said that this new type of slab foundation may revolutionize slab floor construction.

HHFA is also involved in research on plumbing standards, building codes, variations in septic tank shapes to cut costs, inexpensive eave vents to prevent troubles from ice collection, roof loads, and on the cracking of concrete masonry. The modular principle of construction is getting HHFA support in three demonstration houses which are being set up cooperatively with technical colleges and builders.

Housing Studies Help Building Research

Housing research carried out effectively as a municipal responsibility was discussed by F. L. Carmichael of the Bureau of Business and Social Research of the University of Denver. He described how the studies carried out by the Denver bureau to determine which way the wind is blowing for housing demand at given times, are helping builders chart their activities. Such knowledge has also helped the FHA to guide the direction of construction activity more realistically, he said.

Neighborhood Development Awards Go to 5 Builders

Award of merit certificates to winners of the 1951 NAHB-sponsored neighborhood development contest were presented at the convention's opening panel.

David Bohannon, San Mateo, Calif., builder who presided at the session, distributed the top awards to five builders: Albert Welburn of Seattle, Wash., for his Wedgewood development; William G. Farrington, builder of Tanglewood at Houston, Texas; Todd Tibbitts, who created Park Lawn at Columbus, Ohio; the Kenko Corporation of Los Angeles for its Ben Hur Estates at La Canada, Calif., and to American Community Builders, Inc. of Chicago, developer of Park Forest.

Wall-type parking facilities, location of professional offices in shopping centers, and maximum road grades were among leading problems discussed at the seminar.

After actual presentation of the award scrolls, slides of the individual winning projects were shown with a critique and commentary by the award jury. Max S. Weinblum, director of the Urban Land Institute, participated in the panel.

25,000th NAHB Member Debuts at Convention

The National Association of Home Builders reached an all-time high in membership at the convention—and marked the event by presenting its 25,000th member at the opening general session. He is John Feist, 52, Buffalo, N. Y., a builder for more than 30 years.

His firm, the John Feist Building Company, is one of Buffalo's largest construction organizations, building more than 100 homes per year, mostly in the low-price field. He has been active in local builder organizations since 1938.

Feist was introduced to the crowd attending the opening session by Floyd Kimbrough, chairman of the NAHB membership committee, who awarded him a scroll of welcome to the organization.

JOHN FEIST (right) of Buffalo, N. Y., NAHB's 25,000th member, arrives in Chicago to appear at the convention. He is greeted by NAHB membership chairman Floyd Kimbrough of Jackson, Miss. Feist's signing up was the "pay-off" in NAHB's 1951 campaign to raise its membership from 19,000 to 25,000.

Feist said that for the past fifteen years he has been extremely active in local Buffalo and New York state building problems, and that he now wanted to participate actively in the national builders' group.

"Most of us are pretty well concerned with our own local problems," he declared, "but I feel that since all builders benefit from the efforts of the NAHB it is only right to participate in their programs actively."
Chart Program to Produce Certified Quality Houses; Research Service Offered

Twenty-seven key builders met at the convention with C. W. Smith and John Calliey of the Housing Foundation of the Southwest Research Institute, and with Robert H. Morris, Edward G. Gavin, C. J. Wageman and B. H. Wambolt of the American Builder to organize a program for producing houses of certified quality design during 1952.

Meetings will be held in each of four regions, at which builders of the area will be invited to consider gearing their production plans into the advisory services offered by Southwest Research Institute's Housing Foundation to builders using registered architects.

Homes built on plans approved by the Housing Foundation and given its certification of quality design will be featured as part of National Home Week for 1952. The houses involved will be for the most part in the under-$20,000 class.

The conservation of critical materials will be an important aspect of the program. In judging of houses submitted to it for certification, the Housing Foundation will make the least amount of steel and copper used per cubic foot an important consideration.

Charles Wilson, former chairman of the General Electric Company and now head of the nation’s defense production efforts, is expected to make an award to the builder who has done the best job of using the least amount of critical metals.

Twenty-seven builders of the nucleus group were invited to submit plans and specifications at an early date to the Foundation. Its analysis of these plans will then be the basis for presenting the program of certified house quality house production in 1952 to regional meetings of builders.

Descriptive booklets on this program will be sent by the American Builder to builders interested in affiliating with it.

Executive Officers Honored For Service to Members

Achievement awards were presented at the 1952 meeting to three executive officers of local NAHB chapters for services rendered to the members of their organizations. Presiding at the presentation was Jerry Madigan, president of the Executive Officers Council, formed two years ago for the exchange of ideas between NAHB chapters.

The awards were presented to the individual executive officers performing the greatest service to members of their chapters. The award for Group I went to Gus Fields of the Oklahoma City Home Builders Association. Fields was instrumental in having the Oklahoma A & M College make a survey of regional differences in relation to the national development in housing.

Wins $350 for Identifying Exhibits

GRAND PRIZE winner of $350 in American Builder's Exhibit Identification Contest, Roger Hawk (left), Pocahontas, Okla., and wife are photographed with Edward G. Gavin, American Builder editor. Popular contest for cash prizes was based on exhibit pictures published during convention in AB Convention Daily newspaper. Others who got prizes: Robert R. Schneider, Canton, Ohio; Mrs. J. B. Haverstick, Dayton, Ohio; Samuel L. Green, Philadelphia, Pa.; Mrs. Ralph Andrew, Marion, Ind.; and Arnold P. Olson, Fairfield, Conn.

The report analyzed the effects of Regulation X on home building in the Oklahoma City area and the impact of this survey greatly influenced congress in relaxing credit curbs.

Minneapolis Tribune Gets National Home Week Award

Highlight of the annual NAHB convention reception and dinner for the press at the Congress Hotel was the presentation of awards for the best real estate sections prepared in conjunction with National Home Week, September 9 through 16. Winners received checks and handsomely inscribed certificates denoting their achievement. There were 76 entries.

Top honors went to Ross Springs and John Wickland of the Minneapolis Sunday Tribune. Ed Vail of the Des Moines Sunday Register won second place; while the third place winner was Bill Manly of the Milwaukee Journal.

Honorable mention awards were given to the Indianapolis Times; New Haven, Conn., Register; St. Petersburg, Fla., Independent; San Rafael, Calif., Independent Journal, and Binghamton, N. Y., Sunday Press. W. P. "Bill" Atkinson, NAHB's retiring president, made the awards. He was introduced by Mike McGehee, real estate editor of the Memphis Commercial Appeal and president of the National Association of Real Estate Editors.

This was the second annual newspaper contest sponsored by the National Association of Home Builders in connection with National Home Week observances throughout the country. Awards this year were based largely upon reader interest stories, use of photography and layout.

Pat Harnish, NAHB director of publicity relations, acted as master of ceremonies.
Prefabs Held Small Builders' Answer To Today's Problem of Cutting Costs

Consensus of four builder-converts to prefabrication who led a convention discussion panel on the subject was that factory-built housing has come of age, both from the point of view of the trade and the consumer. The session drew a capacity crowd, about half of which were not erecting prefabricated houses.

Theodore H. Maenner, Omaha, who led off the panel, said that in his opinion prefabrication is now the answer for the small builder, who must keep prices down. He said that prices can still be kept down by conventional building methods, but that this is possible only when the operation is on a big scale.

Maenner said he began erecting Gunison homes in 1949 and has built 250 since then. He cited four reasons for his conversion to prefabrication: (1) they can be successfully handled by the small builder under today's conditions; (2) the builder gets the advantages of the manufacturer's investment in research; (3) a house makes possible prices which middle-income buyers can pay; (4) prefabs greatly simplify financing difficulties.

Large Project Efficiency

Arthur K. Hellerman, a builder of large projects in Milwaukee, described his operation as a mass-production one in which top efficiencies have been achieved by using a complete range of power tools on the site and by mass-purchasing. But he has found in the last year that the prefabricated house makes possible this same kind of efficiency outside the large project. It also offers an excellence in architectural design, he added, which the builder often cannot get otherwise.

Hellerman believes that the builder can control and plan his program with greater precision by using the prefab type, and can stay closer to his market, making for a much stronger financial structure. Prefabrication also was said to make possible on-order building without the usual headaches of such a job.

Schedule Completions

Kenneth Hammond, a builder of both conventional and prefabs in the Cincinnatii area, builds about 85 houses a year. He stated that he is currently building conventional houses chiefly as a means of keeping his crew of workmen busy full time the year around. The major part of his program concentrates on the Peaseway prefabricated house.

Hammond stressed his system of scheduling completions instead of starts, based on prefabrication. He completes a house every five days, thereby avoiding construction financing. He urged builders to start thinking in terms of completions instead of starts, and to turn to prefabrication as "a new way of life" for the builder burdened down by the endless details of conventional building.

B. F. Killion, a small-volume builder from Milwaukee, reported that he has come to the conclusion that "conventional building is the hard way." He turned to prefabrication a year ago, uses the Pullman house made by the Thyer Corp., has erected 27 of these houses. He said he has found that the prefab operation eliminates fixed overhead, makes possible the completion of three houses for one of the conventional type, gives the builder a 40-hour week, and makes possible lower prices.

Discussion brought out that there is a trend among prefab manufacturers toward interim financing, sometimes through acceptance corporations which are subsidiaries of the company.

How They Keep Score in Chicago

NATIONAL ASSOCIATION visitors are shown membership roster in clubroom of Chicago Metropolitan Home Builders Association, convention host chapter, by Managing Editor, Chicago, American Builder. They are Wm. A. Tolan, Jr., NAHB's director of labor and chapter relations; and Miss Mildred Clark, director of membership.

Exceptional Cost-Savings Told at Convention's "Trade Secret" Session

A Texas manufacturer told a 37-man "Operation Trade Secrets" panel at the convention of a case where a carpenter is now doing the job, and who used to be done by 17. This cost-saving feature was the most unusual of many described at the capacity meeting.

Most of the builders said they had been able to cut costs through many little items rather than a few large ones.

Neil Cole, Austin, Texas, manufacturer of storage walls and interior partitions, told of the reduction of carpenters. Cole advocates slab construction and truss roofs of 3-in-12 pitch, drywall application before partitions are place. This operation effects savings of many hours of labor, he said, with a threeman crew applying all the gypsum board in two or three hours. He alleged that builders using his principles would maintain the same level of construction with fewer carpenters.

M. L. Barling, Jr., of Knoxville, Tenn., another storage wall manufacturer, said much the same as Cole about his use of the walls. M. LaPierre, Seattle, the builder, predicted that window walls, cabinetized bath, and built-in bedroom furniture will be the big selling features in 1952.

Necessity Finds a Way

"Don't curse them, trap them," were the words of Andy Place, North Bend, builder, in relating how the building commissioner wanted him to include a bath and a half in his low-cost, doubleglazed, four-bedroom house. Place found loopholes in the plumbing code, had special stack fittings made to use all units without reveting in the half-bath. This method was incorporated into the plans at an increased cost of only $55.

The "Trade Secrets" session is an outgrowth of three area meetings held by NAHB in the last few months under the direction of president W. P. "Bill" Atkinson. The impact of these important conferences led the American Builder to present Atkinson an Achievement Award.

New England Group Set to Fill Defense Housing Need

Private builders will construct all defense and military housing in designated areas of its territory, the New England Council of Home Builders Associations declared in a resolution adopted at its recent annual meeting in Worcester, Mass. Local associations pledged to help one another carry out their obligations to provide housing in critical areas.

Alfred Cole of Hingham, Mass., was elected president of the Council, replacing George Decker of Bridgeport, Conn. Other new officers named were Arthur Boyer, Springfield, Mass., first vice president; Anthony Vida, Springfield, second vice president; Arthur Olson, Hartford, Conn., secretary, and Fred Schmidt, Greenfield, Mass., treasurer.
Defense Housing . . .
(Continued from page 31)
page Association be increased to provide a sufficient secondary market for
offensive area financing, and that Title IX of the National Housing Act be re-
studied to make it fully effective.

IV. Federal Controls

Controls imposed upon our economy should be kept to a minimum as long
as basic materials are in critically short supply and should be terminated as soon
as possible. In the operation of controls upon home building, the mistakes of
World War II have to some degree been avoided largely through consulta-
tion with the industry. Where the offered cooperation of the industry has
not been utilized—as in credit, price and wage controls—inequities and needless
disclosures have resulted.

V. Materials

In 1951, home builders have, through
their ingenuity in conservation of ma-
terials, effected substantially per unit
savings in the use of critical materials.
We will continue to exert our utmost
intensity to produce the maximum num-
er of homes within the limits of the
amount of critical materials which can
and fairly should be allocated to home
building. We must avoid the mistakes of
ten years ago in disrupting the manufac-
ture of materials and dissipating the
pool of skilled labor available to our
industry and to our material supply. We
will continue to press for revised local
building codes and amended require-
ments by lenders and government agen-
cies in order to permit full use of alter-
ate materials and conservation prac-
tices. For the long-range benefit of the
home buying public, our Technical
Department will continue its work of
research and manufacture of new prod-
ucts, and the leaders of our industry
will continue to meet and to make avail-
able to all builders the methods succes-
sively being employed to reduce costs
and to produce better homes.

VI. Home Owner's Service Policy

As part of a progressive industry which recognizes its responsibility to
the American public, the members of this Association stand behind the homes
they build. In increasing numbers, our individual members and local affiliated
Associations are issuing to their cus-
tomers various forms of assurances of
good quality. To further this program, we have now adopted a standard form
of Home Owner's Service Policy.

VII. Public Housing

While government insists that private
home building be reduced to 60% of its
1950 level, it permits tax subsidized
public housing to plan a volume several
times that of its production in that year.
Such public housing, as this Associa-
tion has long pointed out, does not house
people of lowest income. The problem
of adding families in the lowest income
brackets, as part of the program pro-
vide adequate housing for all American
families should be immediately restudied
and revised.

Cortright's Column

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

The Small Volume Builder
Comes into His Own

The man who builds ten houses a year is the backbone of the home
building industry. He builds the bulk of the housing produced each year.

The builder who erects ten homes per year readily recognizes the
value of ideas obtained from the man who builds 100 or 1000 units per
year. But, too often the small operator is unable to fit into his opera-
tions many of the new ideas gained elsewhere. So, being a practical
man, he realizes the importance of obtaining ideas from practical men
on his own level.

In most cases such ideas are hard to obtain on a purely local level.
For that reason, the National Association of Home Builders has estab-
lished the Small Volume Building Council, headed by Joseph Entress, a
practical home builder of Rochester, New York. The council will give
the builders of from one to 20 houses a better chance to get together
at local, state and national meetings to discuss mutual problems, ex-
change ideas, counsel and advice.

In addition, the needs of this group will receive special attention from
the Technical Department of the NAHB. We have long felt the need
for such a council to place special emphasis on the problems encountered
by small volume builders, and reaction from the field indicates that the
council will be one of the most used services of the NAHB's many
services.

One of the most interesting and best-attended meetings during the
recent NAHB Chicago Convention was the Small Volume Building
Council. Delegates present outlined specific needs of the small volume
builder. It was suggested that local associations could better serve the
small building by providing such help as approved contract forms, regular
bulletins of interest, assistance in the preparation of news releases and
promotional materials to the local press, a school of instruction that would
include such items as taxes and accounting, estimating, site planning,
architecture, cavity wall and dry wall construction, perimeter heating,
legal advice, etc.

The council commended the new book by HHFA just off the presses,
called "Record Keeping for Small Volume Builders," and hopes to sup-
plement this booklet with additional suggested forms and record systems
which would be of value to small volume builders.

It was recommended that the development of greater interest in the
Small Volume Building Council and its work be made a part of the
activities of the NAHB regional vice presidents, with a view to promot-
ing greater use of the services rendered by the national, and emphasizing
the advantages of these services and others planned for the future.

The small volume builder, who builds the majority of homes in the
nation, makes up a large segment of our membership. In addition, there
are thousands of other builders in this category who are potential mem-
bers, and who can be interested in joining the Association, knowing that
special attention is being directed to their particular problems.

Already local small building councils have been established in the fol-
lowing NAHB affiliated local associations: Home Builders Institute of
Los Angeles; Home Builders Association of Richmond; Milwaukee
Builders Association; Home Builders Association of Greater St. Louis,
and Better Builders Association of Onondaga, Syracuse, New York. I
have received reports that many other groups are in process of forma-

Joe Entress, the council's capable chairman, is receiving enthusiastic
coopration. Entress points out: " . there is little room for doubt
that there is need for something which offers special interest and bene-
fits to small volume operators. There is a paramount need for an over-
all plan which can be implemented, guided and directed by the NAHB,
yet motivated by the small volume operators themselves.

"The average builder is a very practical man, whether he be a large or
small operator. There are among small volume builders many quali-
fied men able to represent themselves in industry in whatever activities
local councils will undertake in cooperation with the national council of
the NAHB."

MARCH 1952 35
Dealer's Viewpoint

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

Stable Production Outlook
Needed to Sell Materials

At the halfway mark in the federated association's convention season, dealers still seem to feel that the 1952 picture can shape up pretty well, provided that there are no drastic upsets on the international front and that the government maintains a relatively consistent policy regarding building materials.

One of the biggest problems before the building industry all along has been constituted by the variations, however slight, in the official outlook on production, whether brought about by administrative changes, Congressional action, or revisions of too quickly drawn "target" figures.

Stability and consistency in Washington is in direct with the very important local factor of consumer confidence. If a straightforward, well thought-out program is followed at the top, the prospective building materials buyer is much more likely to be convinced that he can rely on both his construction plans and his customer confidence and only then can sell him the lumber and other materials he really wants—if he is convinced he will be able to finish his building job.

Of course, because of the necessity for allocating critical materials, the civilian construction cutbacks have been tremendous and the defense program naturally must have priority. But the very urgency of that program means that repair and modernization needs must be recognized and met so that productive America is kept in first-rate condition. You can't, in other words, keep a factory going at full schedule when the plasterer or your assembly line is breaking away or your work tables are supported by shaky legs.

The need for stepped-up agricultural production in 1952 is also going to mean that the farm market for building materials will pretty generally run on a high level, while many of the biggest sales prospects in commercial and urban areas are going to be among those who, realizing that they will have to forego new, large-scale construction, will want to make the most of what they have keeping their present stores or offices or homes in good repair.

Altogether both rural and urban markets for retail lumber and building materials dealers ought to continue in good condition so far as noncritical materials are concerned as the year swings into the spring "springing up" period.

Dealers will have to keep on their toes to see that the buying public has the facts about construction possibilities well in mind. They will need to be ready to give clear-cut, reliable answers to customers' questions about official government rulings. They will have to be prepared to reassure the hesitant customer, but, barring unusual complications, they will still be able to guarantee him quantity and quality in noncritical building products, ready when he needs them, for whatever legitimate construction job he has in mind.

U.S. Gypsum Co. Lauded
For Product Development

In commemoration of the United States Gypsum Company's 50th anniversary, NAHB President W. P. "Bill" Atkinson presented an achievement award to the company at a convention general assembly. The award praised the company for its aggressive research and new product program.

Accepting the award for the company was Oliver M. Knode, president, and Clarance H. Shafter, chairman of the board. Knode stated that his company has developed products in its laboratories as well as in the "greatest laboratory of them all," the home.

OLIVER M. KNODE, U.S. Gypsum Co. president, receives award from W. P. "Bill" Atkinson

Alliance Planned by Canada-U. S. Builders

Unprogrammed developments which emerged out of the convention included a meeting between NAHB officials and leaders of the National House Builders Association of Canada.

PHIL MAGER (left) of Winnipeg, president of the National House Builders Association of Canada, is greeted by W. P. "Bill" Atkinson, NAHB's 1951 leader.

The objective was to lay the foundation for an alliance between the two associations which would make possible the exchange of vital information on building practices. The Canadian group at the convention was headed by F. A. Mager of Winnipeg, president. Angus Gordon of Toronto is secretary. About 50 Canadian home builders attended the convention.

Demonstrate New Materials
Designed to Ease Shortages

An array of alternate, new and substitute materials and products which builders can use to alleviate critical shortages in their communities was demonstrated during one of the convention's general sessions.

The demonstration was conducted by Joseph H. Schultz, president of New Products Institute of America, Los Angeles, the firm delegated by the new materials committee of NAHB to ferret out products and methods of construction which will aid builders during current crises.

Products shown included a faucet in which 80 per cent of the copper and brass were eliminated from the fittings and replaced with a malleable iron, coated inside and out with glass to avoid even the remotest possibility of rust or corrosion.

Among others demonstrated: a low voltage switching system with the relay assembled in a plastic box, replacing the conventional steel outlet box; a shower head in which plastic replaces 100 per cent of the copper and brass formerly used for this fitting; and a new line of cabinet and drawer fronts which make it necessary to have only the fronts of the cabinets of metal but eliminates the use of metal for the shelves, sides, tops, bottoms and backs of the cabinets.

Additional Association News appears on pages 196—198—200—204—206

AMERICAN BUILDER
The Bennett Fireplace line is complete—and profitable. And Bennett dealers enjoy a steady demand, thanks to our continuous national advertising. It pays to feature Bennett.

SIMPLIFIED and STANDARDIZED

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

**BENNETT**

**GRATES & LOG DOGS**


Cat. No. A-511 Log Dogs for Heavy Logs. Protect valuable andirons. Ideal for camp or outdoor fireplace.

**BENNETT**

**EXPANSIBLE THROAT DAMPERS**


**BENNETT**

**CAST-IRON DAMPER**

A quality damper at competitive prices. Superior casting facilities in our own foundry enable us to produce this steep slope 50° Damper, with interchangeable Rotary or Ratchet Control feature. With guaranteed steel valve (No. C-103) or cast iron valve (No. C-104).

**Flexscreen**

SAFETY FIREPLACE CURTAINS

The only Nationally Advertised curtain screen. Every fireplace owner is a prospect for Flexscreen. Its own best salesman, a display on your floor will increase your volume on this “quality” product. This year, the Flexscreen line includes a perfectly balanced line of Fireplace Accessories, too.

Write now to 352 Market St. for Catalog and Full Information on the COMPLETE POST-WAR BENNETT LINE
FOR EXTRA CUSTOMERS,

Use your top resources' advertising in April

HOUSE BEAUTIFUL

...by tying in with local ads and eye-catching display cards!

Add prestige and selling power to your Spring promotions by building them around the forthcoming issue and the top-quality names on its advertising pages—names like the typical best-sellers whose informative trade messages appear below:

ANDERSEN WINDOWWALLS are precision manufactured residential wood window units of highest quality, complete with weatherstripping, operating hardware, screens and storm sash or insulating glass. The line includes casement, horizontal sliding, double hung and bayousand jeutility window units in a wide variety of styles and sizes for every residential requirement.

ARKANSAS SOFT PINE satin-like Interior Trim provides superior woodwork at moderate cost. With its fine grain, soft texture and freedom from pitch, the wood works easily to exact detail. Seasoned to specified moisture content, it holds paint, stains, and transparent finishes free from bleeding, deckoration, or raised grain. Write for Handbook for Builders, Arkansas Soft Pine Bureau, 412 Boyle Building, Little Rock, Arkansas.

A high-fidelity amplifier that is recommended by independent research organizations for its fine reproduction qualities—The BELL model 2122 A AMPLIFIER is that unit. It’s pleasingly economical in cost and small in size, making it ideal for the lover of fine music who wishes to build a custom console or FM or AM radio. Write Bell Sound Systems, 501 Marion Road, Columbus 7, Ohio for further details.

SAMUEL CABOT, Inc., Boston, Mass., manufacturers of house Points (Glass Collapsers). First made of these colors for special orders from architects. Others were matched to famous buildings or regional colors. Hudson Bona Red, for example, is a New England color found in the Connecticut valley.

CHURCH PLASTIC WALL TILE offers the beauty, permanence and luxury finish without the weight or cost of conventional tile. 23 lovely decorator colors, two new sizes and other features exclusive with Churchmakers of the famous Best Swat in the House! Beautiful, economical, easily installed. See your floor covering installer.

The news is VINYLITE—the wondrous new flooring that never needs waxing—but never! Because Goodyear preprocesses it for you to a lifetime lustre, saves you all that work. Choose Vinylite in a rainbow range of 24 decorator colors, see it add enchantment to any, every room.

KENTILE RUBBER TILE provides quiet, luxurious floors of “cushioned beauty” that won’t wear out through years of use. Only Kentile Rubber Tile offers all these beautiful colors and exclusive decorative Thematite and Feature Strips. Kentile, Inc., 38 Second Ave., Brooklyn, N. Y.

KIRSCH national advertising says to Mrs. America in part: “Choose the name you know—Kirsch. In response, Mrs. America does choose Kirsch. The name commands tremendous and unchallenged acceptance in connection with anything pertaining to window dressing. It pays to tie up with it in your displays, advertising and selling.

MARTIN S’NOUR NU HUE CUSTOM COLORS—prescription mixed fine quality paints in any special color you ever saw or heard of. Available at Martin Senour Nu-Hue Color Bar dealers throughout the United States.

MOR-SUN PRESSED STEEL FURNACE (for gas and oil) unique in that it is mass precision produced! Every part is die-pressed. Beautiful on the outside and rugged efficiency on the inside are not enough: The Mor-Sun gives more dependability through use of quality control equipment. Mor-Sun, finest, most beautiful furnace in the world!

WARNER’S “TOWN AND COUNTRY COLLECTION is so versatile that it can be effectively used in any room in the house. Its conservative patterns of closed shutters and ivy is beautifully interpreted in six color combinations with plain fabrics in complementary colors.

The popularity of outdoor living has made millions look conscious. To get the huscious lawn beauty of their dreams, home owners will be shopping for SCOTTS SEED, turf Builder and other Scott Lawn Care products. It’s seeding time, so keep your Scott display wall stocked including 4X4, Scotts dry applied weed control, along with Scotts spreaders.

AMERICAN BUILDER
OTIS WOVEN AWNING FABRICS for residences and store fronts, are generally regarded as the most attractive line made. They are noted for beauty and durability. Made of heavy 2-ply yarns, dyed before being woven, showing 'both sides alike'. Come in all colors, in lovely stripes and bright solid colors. Distributed by jobbers who carry stocks throughout the country.

The 1952 HUFFY MOWERS introduce two exclusive features. 'Card Control', a handle extension which holds the electric cord out of the way of the mower and the operator, and 'Twist Release Card Hook' which eliminates unwinding the cord. Available in 16 and 18 cut.

Two new WORCESTER MOWERS were recently introduced: a rotary and an electric mower. The line now includes these new models, the nationally advertised 21 inch Worcester Shear Master and a popular 18 inch mower. Also three fine hand mowers. It's a fast selling line, famous for over 50 years! Write for catalogue.

GLEN DURA soil-proof wallcoverings by IMPERIAL—These lovely wall decorations have the beauty and color of the finest wallpapers, yet are impervious to spots and stains. Finger marks, crayon streaks, grease spots, lipstick can be removed by following directions. No special paste or hanging methods—hangs just like wallpaper.


An arresting four color full page ad in the April issue of House Beautiful makes sales for VENI-FLEX translucent blind. Veni-Flex is the most beautiful, economical, practical venetian blind ever made, the only blind that looks custom made and worth a custom price. Tie in with Veni-Flex advertising to boost your sales.

No wonder OZITE is the most "walked on" carpet cushion in the world! Only Otite helps you sell with such strong, solid, convincing facts. Otite commands respect... sells easily... stays sold through superior performance ... adds to your store's prestige. And remember that Otite is sold under a guarantee of satisfaction.

Window Shaders that are better looking and longer lasting made of VINYLITE BRAND PLASTIC by Illinois Shade Cloth Co. These shades will not rot or fray, are completely washable and are less expensive than conventional shades.

Kitchens and small rooms must be ventilated at the ceiling level to do a thorough job. TRADE WIND CLIPPER VENTILATORS come in two types, for installation in the cabinet over the stove or in the ceiling. Both provide complete, quiet ventilation, are simple to install and give years of trouble free service.

EASTWARD FLIGHT WALLPAPER, a new group of exciting designs in the famous STOCKWELL series of "Trend of the Times Wallpap ers", was received with great acclaim at the Press Review in New York on February 13. Sample books available to leading distributors and C. W. Stockwell Co., 3262 Wilshire Blvd., Los Angeles. Illustrated booklet 25c.

**SEND TODAY** for handsome "Right from House Beautiful" display cards ... an effective tie-in newspaper mat. They're available, of course, free of charge.

For display cards, mounted with April advertisements you want to feature, check any or all of the products on the listing below that are preceded by a number. For a mat, in which product names can easily be inserted, check the square indicated. Fill in your name and mailing address, mail to: Merchandising Division, House Beautiful Magazine, 572 Madison Avenue, New York 22, N. Y.

1. AGA WATER HEATER
2. AMERICAN STANDARD HEATING
3. ANCHOR FENCE
4. ANDERSEN WINDOWS
5. ARKANSAS PINE WOODWORK
6. ARMOUR VERDIGRIS PLANT FOOD
7. AUTOGAS HEATER
8. BELL AMPLIFIER
9. BELGIAN HARDWOOD HYDRO-FL O HEAT
10. BRIGGS BEAUTYWARE PLUMBING FIXTURES
11. CAROT COLLOPAK PAINT
12. CASE PLUMBING FIXTURES
13. "Card Control" 12 OZ. TURBO AIR TEMP.
14. CHAMBERLIN HOME INSULATION
15. CHURCH PLASTIC WALL TILE
16. CLEVELAND STEEL TURNTIDEH
17. COOKING
18. CONCEALER-MAIRNE CHARADE LINOLEUM
19. CONVEXITE CUSHIONETTE WATER SYSTEM
20. "DOO-KLIP GARDEN TOOLS"
21. DOUGLAS FIR PLYWOOD
22. DUNDIE VIENNOIS WOOD FENCE
23. ELKAY STAINLESS STEEL SINK
24. FIRESTONE VELON SCREENING
25. FLEXALUM VENETIAN BLINDS
26. FORBIZ
27. FREEMONT RUBBER RUG CUSHION
28. GATE CITY ANNOYING WINDOWS
29. GENEVA KITCHENS
30. GLASSMASTER
31. GOODYEAR VINYLTILE FLOORING
32. HABITANT FENCE
33. HUNTER ATTIC FANS
34. HYPOXITE PLANT FOOD
35. ILLICITE VENTILATION
36. IMPERIAL GLEN DURA WALL COVERINGS
37. INCLINATE VENTILATION
38. INERTOL RAMAC ENAMEL FOR POOLS
39. KENTILE RUBBER TILE
40. KIRK'S EASY-LEAT DRAPERY HARDWARE
41. KITCHEN-AID VORTEX MIXER
42. KITCHENAID HOME DISHWASHER
43. K-VENETIAN "LLOYD" VENETIAN BLINDS
44. LORD & BURNHAM "OXY" GREENHOUSE
45. MARTIN SENOUR "NEW HUE" PAINT
46. MAYER'S DECAL DECORATIONS
47. MINNEAPOLIS HORTICULTURAL ZONE
48. "MOR-FOAM" FURNACE
49. POW-MATIC HEATING MOWER
50. MUELLER CLIMATROL
51. NACO FERTILIZER
52. OTIS WOVEN AWNINGS
53. OZITE CARPET CUSHION
54. PELLA VENETIAN BLINDS
55. PHILCO FREEZER
56. PITTSBURGH PLATE GLASS WINDOWS
57. PORTA BILT HARDWOOD KITCHENS
58. PRECISION FOLDING STAIRWAY
59. RUSTIC WINDOW FENCES
60. RAYOVAC CHIEF POWER MOWER
61. RAYOVAC CLIPPER AUTOMATIC HEATING
62. "SCOTTS LAWN CARE"
63. SELKA WEEDER
64. SHEPARD HOMEFIBER
65. SHERWIN-Williams WAX FLOOR
66. "SIDEWALKER TOOLS"
67. UNIFIED SPEEDLINE TOOLS
68. U.S. RUG UNDERLAY
69. VENI-FLEX VENETIAN BLIND
70. VIGORO END-O-WEED
71. VINYLITE PLASTIC WINDOW SHADES
72. VINTAGE GLASS PANEKING
73. "VOCAHOR INTER-OM"
74. WARNER WALLPAPER
75. WATERTOWN PORTABLE POWER MOWER
76. "WEBSTER BASEBOARD HEATING"
77. WESTERN HOME INSULATION
78. "WESTERN TOOL HOMOKO POWER MOWER"
79. "WHITNEYS LAWN SEED"
80. "WIERION TOOLS"
81. "WIRMER TOOLS"
82. "WINCO CONVECTOR RADIATOR"
83. WINDSOR TOOLS
84. YOUNG CONVECTOR RADIATOR
85. "ZZEPRIN VENTILATED AWNINGS"
86. "GIVEN WASTE KING PULVERATOR"
87. "THERMADOR STOVES"
88. "ALUMATIC REDWOOD COMBINATION WINDOWS"
89. "JACOBSEN POWER MOWER"

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How to build a **Dry, Beautiful Basement**

What could be finer than the feeling that the basements you build for your home owners will be dry and beautiful for years of satisfactory living, rather than damp and dingy in just a few short years. You can make this perfect basement a reality by building basements the Medusa way... with Medusa time-tested waterproofing and masonry paints!

First, specify Medusa Waterproofing (either Medusa Waterproofed Cements or Waterproofing Paste or Powder mixed with regular cements) in all concrete and mortar. Such waterproofing is inexpensive... yet combined with proper workmanship and materials, actually repels water at the surface, assuring a dry basement for the life of the home.

Next, for permanent beauty, paint the masonry walls with Medusa Portland Cement Paint, the original cement paint that won't peel, chip, or flake off masonry surfaces when properly applied. Finally, decorate the concrete floor with Medusa Rubber Base Paint, the special concrete paint that actually bounces off wear. The result is a perfect basement... watertight and beautiful. For additional information, write or phone your nearest Medusa sales office.
Plan to use PC Glass Blocks and avoid costly delays caused by shortages of critical materials. PC Glass Blocks are available right now...for immediate delivery.

Immediately available Pittsburgh Corning Glass Blocks speed up jobs...save you money!

- You’ll find, like hundreds of builders have discovered, that the use of non-critical PC Glass Blocks means big savings in time, labor and material. For example, you can install small panels of these glass blocks—up to an area of 25 sq. ft.—without using wall ties, wall anchors or expansion strips. And regular bricklaying tools will do the job.

There are many places in the homes you build or remodel where the handsome appearance, efficient insulating properties, freedom from repairs, painting and puttying inherent in PC Glass Blocks make them ideal. Besides, they guard privacy because they’re non-transparent, and they eliminate storm sash. These features mean a lot to you and to homeowners. Why not get complete information on the possibilities of PC Glass Blocks? Use the convenient coupon.

SEND FOR THIS FREE BOOKLET ...NOW!

PITTSBURGH CORNING CORPORATION
PITTSBURGH 22, PA.

GLASS BLOCKS
The mark of a modern building

Distributed by Pittsburgh Plate Glass Company; W. P. Fuller & Co. on the Pacific Coast; Hobbs Glass Ltd. in Canada; and by leading distributors of building materials everywhere.
The BILT-WELL Superior Window has what everyone wants:
Complete weathertight protection and
Easy sliding windows at all times.

Thousands of prospective home owners will discover the Superior Window for the first time at home shows held this spring. This fast selling Superior weatherstripped unit is by far the most outstanding window today.

Laboratory tests prove it has almost double the weathertight efficiency required by the American Wood Window Institute's specification. And, the patented Superior flexible jamb-liner, which automatically compensates for swelling and shrinking, provides what everyone wants in today's weatherstripped unit—
Complete Weathertight Protection and Easy Sliding Windows at all times.

Yes, the Bilt-Well Superior Window is today's outstanding unit—counter-balanced, weatherstripped, *adjustable* and chemically treated.

See our products in Sweet's Architectural Catalog pages 24B/CA and 17C/CA.

*Adjustable to various wall thicknesses.

Carr, Adams & Collier Co.
Dubuque, Iowa

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Here's a list of the BILT-WELL LINE:
- Superior Unit Wood Windows
- Nu-Style & Multiple-Use Cabinets
- Car-Door 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
FOR permanent strength and beauty, mortar must be durable - must be able to withstand the alternate freezing and thawing to which it is subjected many times each winter.

Brixment mortar is durable. This durability is due partly to the strength and soundness of Brixment mortar, and partly to the fact that an air-entraining and water-proofing agent is incorporated into Brixment during manufacture. This helps prevent the mortar from becoming saturated — therefore helps protect it from the destructive action of freezing and thawing.
Thank You

Sir: I have noticed with considerable interest your new editorial section, "AB Washington News Letter," and want to be among those to congratulate you for it.

For anyone who writes about the home building industry—such a presentation of concise, easy-to-read facts, renders a real service.

I've also noticed the new appearance of your AB covers. They are much more attractive—so much so, in fact, that I'd like to know something about them. Would it be possible in each issue to run a little explanatory story about your covers, say near the editorial page?

Robert Charles, Publicity Director, Fulton, Morrissey Company

Latin American Neighbors

Our subscription department recently received these interesting comments of Edmund J. Messier, a North American consulting engineer. In forwarding his subscription payment Mr. Messier included $150 to secure air mail delivery of every issue of his American Builder. Mr. Messier relates the building picture in South America.

Sir: Dr. O-car Americano is the president of an engineering firm here in Sao Paulo which is laying out a village for workers. This includes sub-dividing the land, constructing streets, and playgrounds for children, zoning the business section and constructing housing on 25,000 lots which will be available after deducting area for streets and parks. These lots will be approximately ten by thirty meters each. The plan is to construct houses for industrial workers with two bedrooms to sell for about $5,000 complete with the lot.

We are especially interested in building these homes with all the built-in conveniences possible within this price range since up to the present time, comfort, conveniences, and utility have been given little attention even in many higher priced homes in Brazil.

After having been here for five years, we feel that the Brazilian builders excel the American builder on the aesthetic side, but are lagging far behind on the practical side. In the field of reinforced concrete, they are perhaps ahead of the United States, because they lacked steel to go into skeleton steel construction. Sao Paulo and Rio are two of the fastest growing cities in the world. Last year in Sao Paulo alone over ten thousand buildings were completed, and construction is continuing at that rate.

American builders could learn from the art of the Latin, and the Latin builder could benefit from the practical and efficient aspects of the North American builders.

Edmund J. Messier, Cia. Construtora e Comercial, Sao Paulo, Brazil

Be Thankful

The following letter received by the American Builder for use in its Letters to the Editor's column conveys the stirring of Donald R. Warren, Los Angeles engineer. Mr. Warren has just returned from an extended tour around the world and his comments were forwarded to us by the Home Builders Institute of Los Angeles.

Be thankful you live in America, where everyone wears shoes, where ox carts do not impede traffic, and where people do not sleep on the sidewalks for lack of a home.

I have seen such low standards of living in my travels of the past two years. One morning I counted fifteen sleeping forms, lying on the pavement in the City of Bombay, along a wing of one of India's best hotels. I watched Indians cleanse their bodies by pouring cans of water from a public hydrant down the necks of their shirts and dresses.

In front of the hotel in Djakarta, Indonesia, women washed the family laundry in the open canal that flowed down the center of the main business street, while nude children dived and swam.

Women toiled in the fields of Portugal, and barefoot fishwives, with baskets of fish balanced on their heads, called loudly for customers.

An Egyptian guide, an African fundi, and an Australian youth asked, "How does one go to America?"

Why is America the bright spot of the world?

We are a young nation, richly endowed. We still have the opportunity to develop personal initiative and receive some reward of profit. We still have more freedom than other countries.

Housewives of Sydney, Australia, were indignant about the butter shortage. The low price set by the government was below world markets, so butter was siphoned out.

(Continued on page 45)
interim financing... The Gunnison Plan of Interim Financing includes the complete cost of the Home Package, plus additional cash. This plan is available to all qualified Gunnison Dealers.

sales promotion aids... A variety of aids are available to all Gunnison Dealers.

participation advertising... Participation Advertising Campaigns are announced frequently to enable Gunnison Dealers to avail themselves of a steady backlog of sales.

FHA - VA financing... Gunnison Homes are eligible and qualify for FHA Insurance and VA Guaranty.

variety of elevation... The Champion, the Coronado and now the new Catalina. The most complete line of Homes in the Home Building Industry. The Gunnison Product Line offers a multitude of elevation, model and floor plan combinations. For the first time in the low priced field there is an "L" Shaped Home, the new Catalina.

most complete package... Your material shortage problems are shifted to other shoulders when you are a Gunnison Dealer. You become the beneficiary of a mass purchasing program which is unparalleled in the home building field.

quality, strength and durability... Quality is there for all to see. Strength and durability have been proven throughout the last seventeen years as the Homes have withstood the ravages of time, flood, weather and fire.

wood paneled interiors... All Gunnison interiors are in Wood Paneling with the famous Mellow-Tone finish. This means no costly delays due to labor and material shortages. An Owner of a Gunnison Home is presented with luxurious interiors which are dignified in their beauty and trouble free in their maintenance.

technical assistance... A complete liaison is maintained between the Gunnison Dealer and Gunnison Homes, Inc. The vast facilities of the entire Gunnison Organization are available wherever and whenever you need them.

prompt delivery... Regardless of your requirements for Home Packages, you know that you have but to pick up a telephone or drop an order in the mail to obtain rapid delivery. By the time you get your foundations ready the Homes will be there.

rail or truck shipment... Gunnison Dealers have their choice of rail, or truck shipments delivered to their building site.

franchised dealerships... Gunnison Dealers operate on a franchised basis in a specified territory.

Gunnison announces an "L" shaped home!

Out of tomorrow, GUNNISON brings you their latest... the Catalina... to take its place along side the new '52 series of Coronado and Champion Homes! All GUNNISON HOMES are designed to sell in the $7,000 to $12,000 price range... America's mass market!

Fresh design and expert planning make all GUNNISON HOMES ideal for project building... many elevations, models and floor plans... and the only "L" SHAPED home in its price range! These homes feature Quick Erection, High Quality and Strength! They are delivered to the building site complete, except for plumbing, wiring and masonry work.

Here are the homes of tomorrow — your's to sell today! Sell the best — sell GUNNISON! Investigate the possibility of including GUNNISON HOMES in your building program! For more complete information, write Dept. A-23, GUNNISON HOMES, Inc., New Albany, Indiana.
Letters...

(Continued from page 41)

The government of South Africa still rations meat to the butchers, and there is a shortage of beef and pork.

Industry Stifled

Johannesburg, South Africa, had an acute coal shortage this winter, with a resulting shortage in cement, that in turn curtailed the building industry. This was the result of the inability of the government-owned railroads to deliver coal to meet the demand. The government, refusal to permit trucks to compete with the railroads. The president of a safari company told me he offered to establish a trucking system and give it to the government without cost at the end of five years. The government refused the offer.

It often takes weeks for the government railroads to deliver equipment from the coastal ports to Southern Rhodesia, a few hundred miles distant. Southern Rhodesia, rich in natural resources, remains undeveloped.

In Australia the railroad systems are owned by separate states. These railroads have different gauge widths that result in delays and economic loss in the handling of freight at the state line. They constitute a weakness in national defense.

I was told that the government-owned railroads of New Zealand had taken over a successful private owner company because of its competition. Now, both the railroad and trucking system operate at a deficit. An Auckland hotel manager said he wished he could put an electric heater in every room; but if he exceeded his quota of electricity, the service would be discontinued by the government bureau of power—despite the fact that there is an abundance of coal to develop steam electric plants.

In all countries visited, I was impressed with the stifling effect of government-controlled economy. Big government means economic control and strangulation of progress.

In an African native village of Northern Rhodesia each family had a storage bin of grain. The village headman explained that if natives tilled collectively and placed the grain into one bin, many of the natives would not work. Even in this simple, primitive life socialism was not practical.

Travel Opens One’s Eyes

Travel stimulates thinking. One is placed in new surroundings with time to think. At home in everyday life

(Continued on page 48)
In today's outstanding homes... the homes which you (and your prospects) see pictured in the magazines and Sunday newspapers, notice how often Stanley Black Ornamental Hardware is "part of the picture" and goes with practically every architectural style. It adds to the charm of a kitchen, dining-living room, recreation room, or den, giving the homes you build a smart "interior decorator" touch.

Authentically styled
Stanley Black Ornamental Hardware has the hand-wrought "look" of original Early American pieces. And it's far easier and quicker to install.

When selecting builders' hardware consider the many possibilities for creating distinctive interiors and keeping building costs down with Stanley Black Ornamental. For complete details and a "houseful" of ideas, send for free booklet.

The Stanley Works, New Britain, Conn.
HARDWARE • TOOLS • ELECTRIC TOOLS
STEEL STRAPPING • STEEL

March 1952
Choose
the exact instrument
you need from these three
LOW PRICE MODELS

1

Finest 12" Dumpy Level available anywhere — gives you more features you want, more accuracy, more durability at less money than any other instrument. It has dust and dirt-free internal focusing and has coated optics for clearer distortion-free, sharper images.

Model No. 8014
Price $145.00 complete with tripod

2

Here's the standard convertible level for the country for the past 50 years! No other instrument has the recognition and acceptance as given to the David White Carnegie Improved Convertible level. Now it's available to you with complete dust and dirt-free internal focusing and coated optics for clearer, sharper, distortion-free images.

Model No. 7096
Price $170.00 complete with tripod

3

The David White "Universal" level-transit is the most practical and complete builder's instrument on the market. Now available in a new improved model—complete with internal focusing, coated optics — guarded vertical arc — in fact every possible feature to assure you lifetime durability and extreme accuracy.

Model No. 3000
Price $185.00 complete with tripod

Choose the exact instrument you need from these three.

Compare their outstanding features, their precise, yet rugged construction, their accuracy and their price with all others. Then you'll see why we say you'll buy "right" when you buy a David White. For complete information on any one or all three of these instruments, consult your nearest dealer — or write direct to David White Co., 311 W. Court Street, Milwaukee 3, Wisconsin.

We offer complete, prompt repair service on all makes of instruments — levels, transits, theodolites, etc.

Letters...

(Continued from page 46)

one sometimes fails to see the direction of the road he travels. I wish all the people of America might visit other countries, that they might see, compare, and resolve that what has happened to them shall not happen here. They would fight to retain their freedoms.

Donald R. Warren
Los Angeles, Calif.

Editorial Leadership

Sir: Our heartiest congratulations to you for assuming editorial leadership on outside basement doors.

We enjoyed reading the article on pages 120 and 121 of your December issue. A field study, such as this, accomplishes far more than anything we could do to point out how much the direct door helps the builder during construction and, at the same time, gives a real selling feature which the home buyer will always appreciate. It was a well prepared article.

J. M. Lyons
The Bileo Company
New Haven 5, Conn.

All I Want For Christmas

Sir: The only thing my husband wants for Christmas is a subscription to your magazine "American Builder." Will you please help me out?

Enclosed find a check for $5 for a three-year subscription.

Thank you for your cooperation.

Mrs. C. D. Haskins
Farmington, Mich.

We were happy to help.—Ed.
Parklabrea, in Los Angeles, is one of seven huge Metropolitan Life housing developments in which Kohler plumbing fixtures and fittings are used. The others are Parkchester, Stuyvesant Town, Peter Cooper Village and Riverton, in New York; Parkfairfax at Alexandria, Virginia; and Parkmerced in San Francisco.

In these seven projects, more than 142,000 Kohler fixtures were installed, with Kohler fittings of chromium plated brass.

One of the world’s largest, Parklabrea occupies a 176-acre site, consists of 40 blocks of 2-story apartment structures, and eighteen 13-story buildings of 153 apartments each—a total of 4,253 dwelling units.

Kohler fixtures include Cosmopolitan Bench Baths; Chesapeake vitreous china ledge lavatories on legs, with mixer fittings; Delton enameled iron wall-hanging shelf lavatories, with mixer fittings; Wellworth close-coupled closets; Branham urinals; Daybrook drinking fountains.
BUILD BETTER BUILD SOONER
with
PREFABRICATION

ON and OFF the Record

BASEMENT vs CELLAR—W. G. Stephens, architect of Phoenicia, Virginia, criticized an *American Builder* article because it mentioned a basement, which Mr. Stephens said should be called a cellar. Our answer to him was that there was no difference. Whether it's a basement or a cellar depends upon which term is preferred in a given section of the country.

STEPSHENS' DEFINITION—But, Mr. Stephens was not to be put off with that answer. Recently, he wrote, "As to the difference between a cellar and a basement, there is one. If the excavation is more than half the depth of the room, the term is cellar. If the excavation is less than half the height, the term is basement."

NEW A JURY—The discussion has reached an impasse. We wrote to Mr. Stephens and told him we would put the question to the readers, and ask their views. So, reader, what can you contribute to the basement vs cellar discussion?

WHY BOTHER?—No doubt many will ask that question, or another to the effect that it doesn't make any difference as long as everybody knows what it means. Well, it does make a difference to a purist in the use of words, and Mr. Stephens is a purist. We think he is entitled to a judgment.

LAST vs PAST—We think so, because we notice a tendency on the part of current journalists to confuse these two words, and it bothers us. Frequently, we get copy which reads, "In the last six months builders have been very active..." or something similar to that. According to our understanding, "last" used in such a statement means that there never will be other months. The six were the last. That isn't what the author means. He means the six months up to now, and has no intention or conveying the idea that there are more months to come. He should, therefore, use "past."

BATH TUBS—But, Mr. Stephens is not only a purist in his use of words, he also has some definite ideas about placing bathtubs. He took us to task for showing plans that have the bathtub across a window. We told him we saw nothing wrong with that in certain types of bathrooms. Mr. Stephens contends that it is done often, but insists that it is not good practice. What about window and shower operation, he asks.

"YOUR NEW HOME"—The Long Island Home Builders Institute recently produced a booklet entitled, "Important Information about Your New Home." In 12 pages it packs a lot of useful information for the purchaser of a new home. It tells him what to expect, and gives some useful hints about maintenance.

"MODERN HOMES"—The home of today is not a simple structure. It can't just be lived in. It has to be operated, and its operation calls for some instruction. Checking with our own editorial staff we find that they live in homes which have an average of 12 electric motors each. Then, there are such items as radios, television sets, and floor cloisters—all mechanical or electrical, and requiring some knowledge for assurance of smooth operation, and minimum repair and maintenance costs. The new home owner of today should be provided with a book of instructions on the care, treatment and maintenance of his new home. Such a booklet is just as important to him as the one he gets with his new automobile, and considering the relative size and importance of the investments, probably more important.

CONGRESSMAN GWINN—He agrees with Senator Byrd who said that the country today faces a "financial peril as great as that of war itself." Gwinn (N.Y.) says, "A few days before the end of the first session, the 82nd Congress, confronted by the outrageous increase of 1951 taxes, became alarmed and rejected the tax bill. But, it stood fast for two or three days only. The selfish minority groups that are getting the resultant benefits of these taxes, with the help of numerousobbies in Washington, bluecoats, the Congress in taxing the people to give about 10 billion dollars to special privilege groups for housing, jobs, controls, loans, gifts, health, domestic relief, foreign relief, etc."

SURRENDER—"When Congress," continued Gwinn, "talked on the taxes, the dole seekers got busy and all you Congressmen can't promise money to us for your votes and then fail to levy taxes to make good your promises." It is a fact that a majority of the members of Congress—your elected representatives—have

(Continued on page 52)
My husband is the "man of the house," but I spend more of my time in it than he does—and the kitchen is my most important room. That's why, when we bought our new home—although there were a lot of features we liked, the Electric Range in the kitchen made me decide.

"I watch the woman's point of view," says builder DAN OSTROW of Washington, D.C., "and in my Carroll Knolls development at Silver Spring, Maryland, I made a test. I gave prospective home buyers their choice of either a kitchen equipped with a fuel-type range, or one equipped with an Electric Range. Out of the first 25 buyers, 22 chose electric—and within three weeks the three non-electric buyers had changed their minds. Women just naturally prefer the Electric Range because they know it's clean, cool, economical and fully automatic. And I don’t have to tell you—it pays to give home buyers what they want!"

Carroll Knolls kitchens include electric sink with dishwasher and food waste disposer, and electric ventilating fan as shown in wall at right. And the range... of course, it's ELECTRIC! This is the combination that won 100% when home buyers had their choice.

These three-bedroom brick homes sold from $11,000 to $15,000. Their design and placement on the lots were varied to provide attractive appearance—but one feature remained the same in a majority of the kitchens—the Electric Range.

ELECTRIC RANGE SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

ADMIRAL • COOLERATOR • CROSLEY • DEEPFREEZE
FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT
KELVINATOR • MONARCH • NORGE • PHILCO
UNIVERSAL • WESTINGHOUSE
PARKAY HADDON HALL has Everything

★ Beautiful Basketweave Pattern
★ Choice of Five Woods
★ New Low Price
★ Prefabricated and Prefinished for Economy and Lasting Beauty

Even the modest home can now afford the floors of a mansion. It's Haddon Hall—a fine hardwood flooring whose distinctive basketweave design is a direct copy of the classic English pattern.

Parkay Haddon Hall is factory assembled in 12” x 12” beveled edged units composed of 2” x 4” and 2” x 2” solid blocks 1/8” thick. The blocks making up each unit are selected to insure contrast of grain structure—then finished by proven factory methods for lasting beauty.

Haddon Hall flooring is applied with Parkay Adhesive to any sound, smooth subsurface—wood, concrete or terrazzo. The simplicity and cleanliness of installation are distinct advantages on new and remodeling jobs alike. Choice of five woods—light or medium finish Oak, Walnut, Avodire, Mahogany and Teak.


On and Off the Record

(Continued from page 50)

given up control of finances. They have not the will to resist these groups."

SOME HOPE—There is some hope, says Gwinn. It lies in insistence from thrifty, self-supporting citizens. They'll have to demand Constitutional limitation to five per cent of national income for non-military functions of government including interest on debt; limit taxation on individuals and corporations to a maximum of 25 per cent. With these provisions, "The steady progress of this country toward financial ruin MAY be arrested."

PICKET FENCE—The Shore Line Times of Guilford, Connecticut, has discovered a picket fence in Guilford which it believes to be the oldest in existence. Built in 1845, the fence is now nearly 107 years old. "And as sturdy today as it was when it was built," says the Times.

IRON POSTS—Most interesting feature of the fence is that it appears to have no posts. "Actually," says the Times, "the posts are iron bars, identical in size and height with the pickets, and painted the same color. They are set in stone foundations, thus keeping them from contact with the soil. Another feature is that the posts and pickets pass through rectangular holes cut in the rails, instead of being nailed on. The fence is more than 600 feet long."

VANDALISM—The builders in metropolitan Detroit probably suffer more from vandalism than builders in any other city. But Detroit builders know what the cost of vandalism adds up to. Last year it amounted to two million dollars.

ACTION—When this damage figure per year was arrived at, the Builders Association of Metropolitan Detroit launched a campaign. It was backed by every civic-minded group in the city. In less than a year it pared over $500,000 from the annual loss.

NEW HOME SITES—Damage suffered by Detroit builders on new homes sites ranged up to $30,000. Of course, this loss has to be passed on to the owners in the form of higher selling prices. The Detroit campaign will be carried on indefinitely.

Kind of Damage—It runs from petty theft and minor damage to fires which destroy nearly completed homes.

(Continued on page 54)
You don't need
a crystal ball
when it comes to buying doors!

You can “see the future” of Weldwood and Mengel Doors by looking at their past performances!
There’s no doubt about the enduring qualities of these doors. You can recommend either one of them to your customers or prospects with complete assurance.

The Weldwood Honeycomb Door employs a new construction principle that has been thoroughly tested in laboratories and in many actual installations. The door is dimensionally stable, light in weight; and because of its low cost, is ideally suited for many interior applications.

The Mengel Hollow-Core Door. Hundreds of thousands of satisfied customers give wide testimony to the acceptance given to this popular door. Its low price ... high quality ... meet every demand for a beautiful, durable flush interior door that provides beauty at budget prices. Especially recommended for residential use.

Both the Weldwood and Mengel Doors are made in a wide variety of fine decorative hardwood faces, including birch, oak and Korina.

Recommend either door for any house you build.

WELDWOOD Flush Doors
Manufactured and distributed by
UNITED STATES PLYWOOD CORPORATION
55 West 44th Street, New York 18, N. Y.
Branches in Principal Cities • Distributing Units in Chief Trading Areas • Dealers Everywhere
 Builders who have American Floor Machines and Portable Tools on their “production team” know that American helps them save labor, save time and reduce costs! Here’s why—

When you buy American you get machines of advanced design that perform day in and day out with high speed and accuracy... machines built to last, produced with skill and precision to highest quality standards... machines that keep producing without long and costly delays when service is required. There are American Service headquarters near you in 35 principal cities all over the United States. These distributors carry a complete stock of original replacement parts and maintain a factory-trained service department. All this is backed by American’s know-how of nearly 50 years as pioneer producers of floor machines and finishes. Send coupon for latest catalogs.

Send coupon now to:
The American Floor Surfacing Machine Co.
511 So. St. Clair St., Toledo 3, Ohio

Please send latest catalog on the following, without obligation:

- Floor Sanders
- Floor Edgers
- Portable Electric Saw
- Floor Finishes
- Floor Maintenance Machines
- Belt Sanders
- Scinta Saw

Name ____________________________
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City ____________________________ State __________

The Fabulous One—There are dozens of fabulous characters among the home builders of the nation. They are worth a book—which we intend to outline over some weekend, if we ever get one free of the pressure that seems always to be on an editor.

Retailers—There appears to be a lot of concern about declining volume in January and doubtful outlook for the first half of 1952 among retail lumber and building material dealers. It’s well to remember that with the postwar market leveling off, business probably is feeling the old traditional season slump.

Remainder of Year—As for the rest of the year, there is nothing in the picture during the late winter months to indicate that there will be a serious drop in the market for materials.
HAVE YOU HEARD ABOUT THE

BIGGEST BUILDING NEWS IN A DECADE?

THE FLINTKOTE COMPANY, Building Materials Division, 30 Rockefeller Plaza, New York 20, N. Y.

*A Trademark of The Flintkote Company

MARCH 1952

Wait until you see this new product of ours. DURA-SHIELD is the most beautiful weather and stain protector a house ever had

... another Flintkote development.
New Techniques in 2-inch Solid Plaster Partitions with Lightweight Aggregates

THE two-inch solid gypsum lath and plaster partition is used to attain the best advantages offered by lightweight aggregate plaster and at the same time serve as space-saving factors. These partitions consist of ½-inch-thick gypsum lath in long lengths extending from floor to ceiling. The lath is centered in a floor runner assembly which provides a metal base at the floor. It is secured at the ceiling in concealed runners or tie-wired to cornerite.

To provide temporary rigidity for plastering, 3½-inch cold rolled channels are placed longitudinally at the center or third points depending on ceiling heights. Channels are also secured to the construction at the ends of the partition. If the partition exceeds 10 feet in length a temporary two-inch vertical channel is wedged between the floor and ceiling alongside of the 3½-inch channels and tie-wired for supplementary support.

Three coats of plaster are applied to each side of lath for a total thickness of two inches. Temporary channels are removed in the process of plastering. When completed, the partition has a ½-hour fire resistive rating. An increase of ¼ inch in the plaster thickness increases the fire resistance to two hours. These partitions weigh approximately 12 pounds per square foot.

(Continued on page 58)
METALS ARE THE BEST INSULATORS AGAINST HEAT AND COLD IN BUILDING SPACES

Ordinary iron is about 4 times better insulation in an air space than sheep's wool, rock wool, asbestos, asphalt paper, brick, plaster, wood, marble, slate, tile, enamel. Aluminum, brass, gold, silver, and many other metals are 40 times better.

Space has slight density, therefore heat flow by CONDUCTION is slight. CONVECTION, which causes 15% - 20% heat flow in space sideways, and 25% to 40% upwards, is BLOCKED by metals in space. RADIATION, responsible for 65% to 85% heat flow in space sideways and 55% to 75% upwards, is absorbed and emitted least by metal surfaces; from 1% to 5% with aluminum, brass, gold, silver; but over 90% with most building materials, including ordinary insulations.

Multiple sheets of metal, suspended in space, and spaced apart, make the supreme heat and cold insulation. One commercial form of this construction is Infra Accordion Aluminum Insulation, Types 4, 6, and 4 Jr.

Write for interesting, informative, newly compiled, free RADIATION AND ABSORPTIVITY CHART OF MOST BUILDING MATERIALS AND METALS

The facts contradict most people's preconceptions.

INFRA THERMAL FACTORS, TYPE 4

Up-Heat C.134, R 7.46 = 3" dry rockwool
Wall-Heat C.107, R 9.34 = 3¾" dry rockwool
Down-Heat C.065, R 15.38 = 6" dry rockwool

INFRA INSULATION, INC.
525 Broadway, New York, N. Y.
Phone: WOrth 4-2241

INFRA INSULATION, INC.
525 Broadway, New York, N. Y. Dept. B-3
Send FREE Radiation & Absorptivity Chart.

Name
Firm
Address

☐ Send Prices of Infra Insulations ☐ Send Sample
ONE-HALF inch thick, long length gypsum lath with grooved or square edges is set into the floor runner and tie-wired or clipped to the ceiling runner. Aluminum foil backing serves as reflective insulation for exterior wall furring.

LATH is secured to the ceiling runner with wire clips.

TO GIVE RIGIDITY to the partition laths, temporary 3/4-inch channel braces are secured horizontally to the lath at third points on one side only. Channels are secured with tie wires.

TIE WIRES are twisted over a nail on the unbraced side of wall.

SCRATCH COAT OF PLASTER is applied to both sides of partition and a brown coat is applied to the unbraced side. When brown coat sets the channel braces are removed and brown coat is applied to side from which braces are removed. Wooden runner serves as ground for brown coats.

ANY of the standard plaster finishes may be used for final coat.

Photographs and data courtesy of Gypsum Association. 

AMERICAN BUILDER
ONE WORD
THAT WILL HELP
YOU SELL A CARLOAD
OF BESTWALL

BESTWALL
IS THE
ORIGINAL GYPSUM
WALLBOARD

ORIGINAL means first, indicates leadership, symbolizes quality that endures. It is one word that puts confidence in the customer's mind. It is your shortest and strongest sales argument.

IVORY-FACED • WOOD-GRAINED • INSULATING

BESTWALL
• FIREPROOF
• TWIN-MOUNTED
• CAN BE BENT
• HOLDS NAILS
• WON'T WARP
• CUTS EASILY

Certain-teed
Quality made Certain... Satisfaction Guaranteed
CERTAIN-TEED PRODUCTS CORPORATION
ARDMORE, PENNSYLVANIA

MARCH 1952
Some of the steps required in correcting masonry walls in a mildly damp basement.

How to Make Basements Dry

In days past basements were never quite as good looking nor as much fun as they are today—but of course, they must be dry, and to be dry they must be properly built. Unfortunately, many basements, even in new homes, become damp in a few years. It would be a waste of money to decorate a wet basement. The problem is how to make a basement lastingly dry. It is discouraging to have basement dampness reoccur in two or three years. If rooms are to be available in the basement then it is extremely important that this area be absolutely dry at all times of the year.

Where dampness is encountered in the basement, two factors form the nucleus to a practical solution: First, what causes the dampness? Is the basement wet because: (1) wall is poorly constructed; (2) there is a fault in the drainage system such as poorly graded lot, or (3) a static head of water is present around the foundation?

Second, have the walls and floors been made watertight? Basements are rated as to dampness, for variation in degrees of dampness require different steps to make the basement dry. Basements are classified as (a) mildly; (b) moderately and (c) severely damp.

Dampness can be caused by poor land drainage, improper backfilling, no tiling against wall footing, utility pipes entering the house below grade level, backed up sewers, static head of water, clogged downspouts, tree roots in downspouts and tiling, shrinkage of concrete floors, cracks in masonry walls and concrete floors, condensation, poorly constructed floors and walls.

A mildly damp basement is one defined as showing a little dampness on the walls after a hard rain. To remedy: Mark the area where dampness appears with a chalk or pencil. Wait until walls are dry. Clean off loose dirt and dust with a stiff wire brush. Scrub in on the area where dampness occurs a coat of cement paint. Extend paint several feet beyond damp area. Work paint into all voids with a scrub brush. Afterward, decorate. Cure by applying a fine fog spray of water. Apply a second coat of paint in this manner.

(Continued on page 62)
WHY A Westinghouse

Dishwasher Simplifies Installation

... of course, it's electric!

FRONT OPENING—TOP LOADING

The exclusive Washwell* rolls out to load, rolls back to wash leaving the counter surface over it undisturbed and always usable. It's super-sized, holds more and larger pieces—more versatile for any family.

*Trade Mark

STANDARD SIZES—The Under-Counter Model fits under standard height counters. The Cabinet Model has its own porcelain counter surface. Both models are only 24 inches wide. The 48-inch wide Electric Sink is available with or without porcelain sink top and bowl, can be equipped with a Westinghouse Waste-Away® Food Waste Disposer.

One Water and One Drain Line Serves Both Sink and Dishwasher

There is no need for separate drain line or trap. The Westinghouse Dishwasher drain is pump operated. Water is discharged through a special Y tail pipe installed in the sink drain line. (See diagram below).

Dotted red lines show only plumbing connections required.

Westinghouse Electric Corporation
Electric Appliance Division
Mansfield, Ohio
Please send me a Dishwasher Specification Sheet.
Name_________________________
Street_________________________
City__________________________ State__

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

MARCH 1952
MORE DOLLARS...

of building appropriation for construction
by specifying REZNOR GAS UNIT HEATERS

- Plan more building for your client's appropriation by using Reznor units for heating. The Reznor unit is a complete package that manufactures and distributes heat on-the-spot, automatically, for the area where the heater is installed.

With Reznors, you don't have to allocate space for bulk fuels and boilers. You don't have long runs of heat conductors. Installation is easy, fast and economical. Your client's building dollar will go further. Reznors simplify planning and construction.

With Reznor units you give clients the most effective, versatile heating for the money. Units can be put into use or taken out of operation at will. Sectional temperature control is more easily regulated.

For each project you plan check Reznor specifications for adaptability to functional requirements of construction and your client's operational plans.

USED WITH NATURAL, MANUFACTURED AND LP GASES

REZNOR
WORLD'S LARGEST-SELLING
GAS UNIT HEATER

MECHANIZED HEATING

A completely automatic, packaged unit in sizes from 25,000 to 200,000 BTU. Installed singly or in multiples as required. High efficiency due to balanced engineering of heat production, air movement and controls. Both floor and suspended models available.

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12 UNION ST. • MERCER, PENNA.
Send me 20-page catalog in full color

Name:
Firm:
Address:
City:
Zone:
State:

(Continued from page 60)

A moderately damp basement is one where water soaks and seeps through certain sections of the wall and floor so that the basement is noticeably wet after hard rains. Remedy: Ordinary concrete or masonry walls absorb water to a slight degree. If water is thrown against masonry or concrete under pressure, this situation becomes aggravated. To combat this condition an integral method of waterproofing concrete is set up by developing a compound for intermixing with cement. This substance contains stearates which line all the pores of the concrete, preventing entrance of moisture.

A severely damp basement is defined as occurring in the older homes where the walls are porous and poorly

MASONRY CONSTRUCTION OF
CONCRETE BLOCK, TILE OR BRICK

POURED CONCRETE

CONSTRUCTION

SECTION showing conditions required to obtain a dry area

constructed. In most cases of dampness, it is usually sufficient to apply a plaster coating to the inside walls and a floor topping of waterproofing. However, severe cases of basement dampness demand a plaster coat of waterproofing on the outside of the basement wall. This condition may exist in an old house where the basement walls are porous, or in a new house with a block or masonry foundation wall with no plaster coat of cement on either the inside or outside wall. Waterproofing; properly applied, tends to drive this coat against the wall rather than away, which often occurs when the coating is put on the inside of the foundation wall.

To obtain dry basements you should adhere to the following formula:

1. Locate foundation wisely by placing on high solid ground. Avoid filled land. Be sure waste outlets are higher than the sewer system.
2. Carry footings to firm soil below frost line.
3. Build concrete block wall and poured concrete basement wall, using waterproofing material and mortar.
4. Apply a 1/2-inch-thick exterior plastering made of waterproofing.
5. Build a 4-inch-thick concrete floor of waterproofing material.
7. Place concrete drain tile at side of footing.
8. Place gravel over drain tile.
9. Place earth fill, free from debris, in even, tamped layers over gravel.
10. Slope final grading away from wall for 8 or 10 feet.
11. Paint the walls with cement paint.
12. Paint the floor with a good paint recommended for that use by a reputable manufacturer.
YOU DON'T NEED "HARD SELLING" TO SELL BARRETT* ROCK WOOL INSULATION

The outstanding features of Barrett* Rock Wool are so readily understood by any prospect that it largely sells itself.

Any customer can see at once the advantages of the 8-foot batts that provide seamless, vapor-barrier, ceiling-to-floor protection. They can appreciate the advantage in easier application ... and in the extra strength of the triple-thick nailing flange for secure fastening. They can feel the difference in Barrett Rock Wool, for it's made from carefully selected slags that produce a cleaner, lighter, more resilient wool.

And they'll like its price. For Barrett Rock Wool is priced right for the average home owner.

You can store more Barrett Rock Wool in less space. It compresses readily, yet returns to specified thickness after long storage. Write Barrett today. Your representative will give you full information, and show you the attractive advertising and sales promotion material that is available.
With three big names—GLIDE, SHEDWELL and ROLLAWAY—Frantz blankets the Door Hanger and Track field. Whatever your demands for rolling door hardware in garage or barn, Frantz can supply you. Exclusive patented designs in hangers and track make these famous “Red Label” brands synonymous with satisfactory sales across the nation. Remember, too, you’ll find a complete line of guaranteed builders hardware offered by Frantz—for more than 40 years an honored name with the trade. Write today for full particulars.

SHINGLE BACKER . . .

(Continued from page 64)

SUCCEEDING COURSES of shingle-backer and shingles are applied in the same manner, with the bottom edge of each shingle-backer panel nailed through to the studs with four 8d nails.

Strength of the new technique for wall construction is the method of nailing shingle-backer panels. Galvanized 8d box nails are driven through the bottom edge of the panels, through the top edges of the next lower course of outside shingles and shingle-backer, through the sheathing and into the studs. In this manner all four layers of material are anchored securely to the studs, providing a strong, unified, 1½-inch-thick nailing base. The outer-course shingles or shakes are then permanently fastened to the base with two-inch annularly-grooved nails.

Shingles applied over shingle-backer and sheathing have withstood winds of over 250 miles an hour in wind-tunnel tests conducted at the University of Minnesota.
THIS UNIQUE CORE PREVENTS WARPING IN MENGEL HOLLOW-CORE FLUSH DOORS

Mengel Hollow-Core Flush Doors stay flat. Mengel’s exclusive, Insulok core is just one of the important "reasons why". This patented interlocking grid has no directional "grain", provides a rigid, neutral core. Each strip is 5/8" wide, and the strips are only 1" apart. This closely-spaced grid provides greater bonding surface than is found in any competitive hollow-core door — helps give Mengel Doors unmatched strength and resistance to warping...

Mengel Flush Doors have genuine hardwood stiles, rails, lock blocks, cross-banding and faces. They are the finest that can be built. They are fully guaranteed without limitation as to time — yet sell for little more than softwood doors.

STANDARDOR

Ask about Mengel’s popular new economy door, Standardor. Made by the same craftsmen as the famous Mengel Door, yet simplified for large volume production, bringing substantial cost-savings to you!
CECO WINDOWS

at home -
in any home!

Here are 5 of many architectural home designs are enhanced by Ceco Windows.

Ranch Type

Cape Cod

Provincial

Contemporary

Mid-Level

CECO STEEL

In construction products CECO ENGINEERING
For every style of home architecture, there is a Ceco Steel Casement, designed not only to blend harmoniously, but actually to heighten and enhance the individual charm of each style...to accent the clean, modern lines of Contemporary and Tri-level architecture...to emphasize the spaciousness and informality of the Ranch style home...to complement the simplicity of Cape Cod Colonial...or to give added grace to the dignity of the Provincial home.

Yes, there is a Ceco Steel Casement to suit every taste...always in good taste. Always a good buy, too, because Ceco Windows offer every practical advantage. They're precision engineered for the tightest weather-seal...are easy to open and close...won't stick or warp. They're designed for maximum ventilation control, light, and vision. When you choose Ceco Steel Windows, you know you've chosen the very best...you assure your customer's economy, too.

CECO STEEL PRODUCTS CORPORATION
General Offices: 5601 West 26th Street, Chicago 50, Illinois

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Ceco Steel Products Corporation
5601 West 26th Street, Chicago 50, Illinois

Please send me Ceco booklet titled "New Beauty in Steel Casements" and catalog detailing windows for all types of structures.

Name: ____________________________
Address: __________________________
City: ____________________________  State: ___________  ZIP: ___________
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ANDERSEN Windowalls®

More and more often architects are placing walls of glass where once there would have been walls of plaster and wood. And in today's glass wall, Andersen Windowalls have their place. They competently perform their dual function of window and wall. They breathe fresh air into the open plan, yet they seal out moisture and winter's cold. Both windows and walls, they are Windowalls.

Andersen Corporation • BAYPORT, MINNESOTA
FAMOUS FOR COMPLETE WOOD WINDOW UNITS

For details or other information: see your local millwork dealer, see Sweet's Builders' file or write Andersen Corporation.

Andersen Gliders—Home in Chappaqua, N. Y.—Joseph Douglas Weiss, architect
OIL AND GAS FURNACES, soundly constructed to highest quality standards, provide the finest in winter air-conditioned heat. Fired by wall-flame burners.

A major selling point in your new homes!

93 models of oil- and gas-fired furnace and boiler units from which to select the right model for the homes you build. Oil-to-gas conversion kits. Oil-fired water heaters, too!

Consult your Sweet's File for performance data and specifications, or write directly to Timken Silent Automatic, Jackson, Mich., for a copy of our catalog.
"Ask The Experts"

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

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

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

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

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

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

Drawing an Oval

I am an old time subscriber of the American Builder. I wish you would please publish or let me know the best method of laying out, or drawing an oval of any size.


First determine the size of the oval that you wish, then divide the length into four equal parts. Place a pin or small finishing nail as shown in the diagram. Tie a piece of string on one pin. When tying the other string leave enough slack to have a pencil, inserted in the string, reach the end point of the oval. The pencil run around the two centers will make the desired oval.

Condensation Problems

I have subscribed to your magazine for several years and have found it thoroughly satisfactory with a great deal of useful information in every issue.

I understand that your staff is available for advice on special building problems and may be able to offer a solution to a condensation problem which I have been unable to solve.

The problem consists of moisture condensation in the attic space of a flat roof house on the Monterey Peninsula. The house has been completed for about six months and has a flat roof with a pitch of about 1 1/2-inch in 12 inches, exterior walls are 1-inch redwood rustic, and the interior finish is 1/2-inch gypsum board. Aluminum backed gypsum board was used on all exterior walls and ceilings and the board on the ceiling was applied over 1x4-inch furring strips applied to the bottom of the rafters.

In some manner, the attic space has become saturated with moisture and condensation is taking place on the high side of the house near the outside wall. Moisture has worked out around the frieze and stained the siding. Several joints in the ceiling near the outside wall have deteriorated to the extent that they will have to be retaped.

I cut a hole in the ceiling and the excessive moisture is evident as there were drops of moisture on the inside of the frieze and there was some evidence of water having accumulated on the back of the board in the ceiling.

I have bored 1-inch holes between the rafters to ventilate the attic space, but this does not seem to take care of the moisture.

The house has a forced air heating system of 150,000 BTUs capacity and the owner has complained of excessive fogging on a number of large glass windows.

What steps might be taken to remedy the situation?

W.R.H., Santa Cruz, Calif.

The excessive window fogging is evidence of the presence of an abnormal amount of moisture within the house. This moisture may come from human sources; household sources such as an open laundry or bathing facilities or unvented gas heaters; structural sources such as an unexcavated basement space or exposed concrete floors on grade; de-literate sources such as humidifiers or open water containers. The source or sources of this excessive moisture should be determined and removed or controlled where possible.

The insulating (foil backed) gypsum board finish is an adequate vapor barrier provided it is installed over the entire ceiling and side walls. Openings around ceiling lights, vents, etc., or ineffective stopped walls or interior partitions may be the means whereby the moisture is bypassing the vapor barrier.

Effective condensation control requires proper ventilation of the attic spaces. Properly designed eave vents, with adequate free-venting area at both ends of the joist spaces usually will be satisfactory. The 1-inch holes bored between each rafter are undoubtedly inadequate. Recommended practices as suggested in the HHFA pamphlet “Condensation Control in Dwelling Construction” suggests that for a flat roof 1/300 of the area be enclosed within the building lines at the same level, and distributed uniformly at the eaves.

Storm Entrance

We are interested in building a wood storm entrance for one of those beautiful stainless steel diners. Could you supply us with any blueprints or any other information on a storm entrance?

F.G.N., Mauch Chunk, Pa.

We have given much thought to a storm entrance that could be easily erected and taken down. We believe the over-all design should be in keeping with the clean lines of the stainless steel exterior. However, a little color with a sort of carnival atmosphere would lend itself well to the design. It is this in mind that we suggest wooden posts with a colorful canvas canopy. The canvas should be tied to the posts. The frame work can be built by a carpenter and an awning manufacturer can produce the canvas covering.

Two Serious Problems

We have two serious problems in our new home, on which we would appreciate obtaining expert advice. Can anything be done to overcome condensation forming on aluminum sash? Our win-
dows are covered constantly with large beads of water.

Our second problem concerns the oak floor which was installed in our living room last spring. Prior to laying, the flooring had been stored for a year in a dry but unheated cannery loft. When we moved into our house in August of this year (1951), we installed an oil heater for temporary use in the basement, directly below this floor. Within a month the seams between the flooring opened up in many places as much as 1 16-inch. The floor had been filled and stained but not varnished, and since it opened up, we have never finished it, wondering what could be done to fill the seams. Would you advise us as to what would be the best procedure to follow?

B.E., Wrangell, Alaska

Relative to the first problem that involves condensation forming on aluminum sash, it would appear that possibly much of the condensation was due to the high humidity that prevails in your section. One of the methods employed would be to raise the temperature of the window sash by installing storm sash on the outside or apply heat directly to the area involved which would be directly under the window. Another method would be to lower the humidity in the room with a mechanical type of dehumidifier.

As to the second question concerning the opening of the seams of the oak flooring, it appears that additional moisture content had been absorbed by the oak during the time it was stored in the unheated cannery loft. The normal moisture content of an oak floor would not be more than six percent. Apparently, this flooring absorbs between 15 and 18 percent moisture while stored and then when installed and heat applied the joints opened.

There are a number of resilient types of filler compounds that can be used in the joints. Your local flooring contractor can recommend one that might be available in your area.

Can We Use

We have two-5 gallon cans of adhesive for use with Marlite and Cushionstone. We have had them two or three years and are reluctant to sell them as a hard crust has formed on top. It is not worth wasting labor on; however we ask if there is a solution which will safely soften the adhesives and renew their effectiveness.

L.N.R., Springfield, Ohio

We have referred your question to the manufacturers of these products. Their reply was that a leakage of air caused the top surface of the five gallon drums to become hard and crusty. They suggest that you remove the cover and peel off the hard crusty surface of the adhesive. The remaining portion will be just as good as the day it was purchased. They do not recommend thinning or mixing the material as they doubt that the hard crust could be dissolved. Removal of the crust is the only answer.

Plumb Corners

Can you tell me of a method of obtaining plumb corners without using a framing square. Will the method be useful in foundation layout?

I have used a plumb bob, framing square and level but these methods require a lot of time and labor. I would like a method where one or two men could do the job.

R.H.N., Dallas, Tex.

The old six, eight, and 10 foot method can assure plumb corners. Measure eight feet on the sill, six feet on the post and 10 feet on a length of lumber. Nail the brace on the corner post at the six and 10 foot marks. Then nail on sill at the eight and 10 foot marks. A plumb corner will result.

High Strength Mortar

We plan to build concrete masonry homes in an area in which high winds are frequently encountered. Can we increase the strength of type II masonry cements?

A.H.J., Kansas City, Kas.

In Section 2-15, “Classification of Mortars” of the ASA Code Requirements, Type A mortar is indicated as having a minimum compressive strength of 2500 psi, and Type B as 600 psi. Paragraph B in the same section indicates that such mortars when made up of the following proportions may be assumed to meet the strength classification given in Section 2-15 (a).

The proportions by volume of Hydrated Lime Aggregates are as follows:

<table>
<thead>
<tr>
<th>Type of Wall</th>
<th>Mortar</th>
<th>Hydrated Sand or Lime</th>
<th>Damp or Lime</th>
<th>Poty</th>
<th>Loose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary</td>
<td>Type II masonry</td>
<td>2-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject to severe winds, earthquakes, or heavy loads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject to severe frost</td>
<td>1 portland</td>
<td>1 1/4</td>
<td>4.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 portland</td>
<td>4.6</td>
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</tr>
<tr>
<td>1 portland</td>
<td>6 1/4</td>
<td>2.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Since your letter indicates you plan to build in an area where high winds might be encountered, we recommend you select one of the mixes shown in the above table for high wind conditions.

Where I type II masonry cement plus 1 portland cement is used as the cementitious material, the volume of the aggregate can be at least twice but not more than three times the volume of the cementitious material. Portland Cement Association.

Decay Where Porches Join Building

We find it hard to keep the structure from decaying where concrete porches join the building. Have you a better method?

We have used roofing paper, sheet aluminum, and galvanized steel as a barrier between wood and slab.

L.A.R., Woodburn, Oregon

The best, and probably the cheapest, method of construction for the porch slab would be to pour the concrete foundation wall as usual, then, using a hard brick build up to the desired slab height.

The bricks would be only a 4-inch thickness, leaving four inches on the foundation wall for a 2x4-inch plate. The floor joists are cut back four inches and rest on the 2x4-inch plate. The brick work can be mopped to insure its being waterproof.
Today's house

The Weathermaker Home is built around 4-season Carrier Weathermaker Air Conditioning.

Why is it such a good idea today?

Today's house needs space

Space today costs three times as much as it cost about ten years ago. So it's important to use space wisely . . . and in the Carrier Weathermaker Home you can. Windows need not be planned for ventilation. They can be fixed or grouped. So the floor plan can be a simple rectangle.

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Today's house is smaller. It has more window area. Its appliances create more heat. So it's bound to be hotter in the summer. In the Weathermaker Home, Carrier Weathermaker Air Conditioning delivers more comfort for less money than extra space would cost.

Today's house needs freedom

Living today is a complicated affair. And we need all the help our houses can give us. The Weathermaker Home should be cleaner, quieter, easier to run (the weather you want is at your finger tips) and more fun to live in. There's increasing evidence that it's the kind of house people want today. We'd like to work with you in giving it to them.

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AIR CONDITIONING • REFRIGERATION

AMERICAN BUILDER
Any way you look at it...

**TWINDOW has the edge!**

This stainless steel frame
makes handling easier and safer...saves installation time on the job.

**TWINDOW**

the window with built in insulation

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**TWINDOW**, Pittsburgh's window with built-in insulation, gives homeowners all the advantages of large window areas — brighter, happier rooms, fuller enjoyment of outside views—without sacrificing heating and air-conditioning efficiency or personal comfort. In fact, Twindow effects worthwhile savings in cooling and heating costs, makes possible the installation of smaller, more economical equipment.

This quality insulating unit is the result of more than fifteen years of experience in the manufacture of double-glazed window units by Pittsburgh Plate Glass Company. Twindow is completely prefabricated. Its exclusive stainless steel frame protects the seal and glass edges, makes handling safer and easier, saves time on the job, because it is installed like a single pane of glass. Forty-seven standard Twindow sizes are available to fit the standard wood, steel and aluminum sash made by leading American sash manufacturers.

For additional information on Pittsburgh's Twindow, why not fill in and return the coupon right now?
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to be welcomed...!

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Mosaic Carlyle Quarry Tile!

Specify continuing contentment for the homes you
design or remodel. Specify Mosaic Tile...the
material of beauty and permanence that builds pride
of ownership; gives more pleasure, more satisfaction,
more in every way for your clients' money!

The warm, earthy colors of Mosaic Carlyle Quarry
Tile—as illustrated on the opposite page—are
wonderful to live with; never fade or lose their
"just new" look! And, this type of Mosaic Tile is
virtually indestructible, impervious to dirt and
moisture, and easy to clean.

Use Mosaic Carlyle Quarry Tile indoors and out!
For recreational rooms, entrances, porches,
beechwalks, terraces and walkways—choose from
standard surfaces, in ten modern colors, or from
5 "non-slip" types—Abrasive Surface, Abrasive
Body*, Corduroy, Diamond Face and Safety Tread!

For quick facts, contact our nearest office. For
helpful literature on the many other types of
Mosaic Tile, write Department 35-3. The Mosaic
Tile Company, Zanesville, Ohio.

*Abrasice Body is available in one color only—Navajo Red.
This beautiful entryway will keep its “welcoming”
good looks indefinitely . . . it’s weatherproof,
fadeproof Mosaic Carlyle Quarry Tile!

Specifications: Mosaic Carlyle Quarry Tile in Navajo Red.

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San Francisco, California
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Phone: Valencia 6-3924

Seattle, Washington
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Phone: Mutual 2213

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Offices, Showrooms and Warehouses across the nation
Over 4000 Tile Contractors to serve you

MARCH 1952
as fundamental as kitchen cabinets...

To be really complete in every detail, a house needs cabinets in the kitchen—and telephone raceways in the walls. Bur conduit is your only guarantee that telephone wires can be concealed, that the beauty of carefully finished interiors will be fully protected. And features like this make a house more salable.

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First in VARIETY...First in SALES!

NATIONAL offers more floor plans, more exterior designs, than any other producer of homes. De Luxe and “Super-Thrift” — 2, 3 and 4 bedrooms — some with 2 bathrooms. New L-shaped living room-dining room arrangements. Porches, fireplaces, breezeways and garages are available. All Nationals are priced to offer the utmost in VALUE!

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The modern house is a

**TWO-BATHROOM HOUSE...**

MID-CENTURY HOUSES,
ROSLYN HARBOR, LONG ISLAND.

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Architect: Alvin Cassens, Jr.,
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Plumbing and heating contractor:
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NO BATHROOM CONGESTION . . .
IT'S A TWO BATHROOM HOUSE!

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Gypsum Sheathing replacing old style sheathing just as Gypsum Lath replaced old wood lath!

★ SAVES TIME. Gold Bond Gypsum Sheathing comes in one easy-to-handle size, 2' x 8'. Workman can place these in position in one-fourth the time required to handle four 6' x 8' wood boards. One man can do an average size small house in a single day!

★ SAVES LABOR AND NAILS. One panel of Gold Bond Gypsum Sheathing requires only 28 nails compared with 56 for wood sheathing covering the same area. This means 50% less time needed to drive half as many nails. Up to 60% fewer man hours than needed for wood sheathing.

★ LESS WASTE. No random lengths, no lap loss... each panel 2' x 8'. 1000 sq. ft. of Gold Bond Gypsum Sheathing covers 1000 sq. ft. of area.

★ PERMANENT FIRE PROTECTION. The gypsum center of Gold Bond gypsum Sheathing is fireproof. It can't burn.

★ GREATER STRUCTURAL STRENGTH. Rock-like panels of Gold Bond Gypsum Sheathing add greater structural strength to houses by actual test... they can't buckle, warp, contract, expand or twist.

Today when every nickel counts, Gold Bond Gypsum Sheathing is one sure answer to real savings for yourself and your customers, plus extra benefits for both of you. See your local Gold Bond Lumber and Building Materials Dealer today!

NATIONAL GYPSUM COMPANY
BUFFALO 2, NEW YORK


MARCH 1952

You'll build or remodel better with

Gold Bond
Prefabs in the Field—
A report on builder-experience with factory-built houses

LEADERS in the prefabricated housing industry say this industry has now reached the place where it is no longer swimming upstream. The practicality of the prefabrication idea has been demonstrated. Public acceptance has widened rapidly, and the next step in the industry's development will be the working out of greater efficiency of operation methods. Up to now, the concentration has been on establishing merchandising techniques, building up organizations and creating acceptable designs, working with code authorities and government housing agencies. Greater economies will come next.

The prefabricated house production graph reads as follows: Total production in 1946 was 37,200; 37,400 in 1947; 30,000 in 1948; 35,000 in 1949; 55,000 in 1950; and an estimated 50,000 in 1951.

In a period of restricted materials and problems of high costs, the potential for factory-built houses appears to be greater than ever. Richard U. Ratcliff, land economist and housing research expert at the University of Wisconsin, sees no apparent reason why the inherent advantages of prefabrication cannot lead this industry to a position of dominance in home building, "in 10 years to the producing of half the houses built; in 20 years to two-thirds. And perhaps most important of all, to a better-housed America, in finer, more adequate homes at lower cost."

Without attempting any crystal-ball predictions on the future of this house type, the American Builder has gone into the field and taken a look at case-histories of construction operations using prefabricated houses in nine states, mainly in the Central West but including also Connecticut, Georgia and Florida. The nine reports which follow reflect what we have found to be true about factory-built houses in the experience of builders themselves. Included, too, is a complete list of the names and addresses of all manufacturers now producing prefabricated houses.

Gunnison Homes

ALBERT-BUILDERS, Inc. of Grand Rapids, Michigan, was established over 30 years ago. Headed by the three Albert brothers, Silas, Samuel and Harold, the organization has grown to a position of leadership in the western Michigan area. This organization employs over 20 people, and consists of three divisions: Albert-Builders, Inc., which builds nearly 225 homes a year; Albert-Mortgages, Inc., one of the largest private mortgage companies in Michigan and a pioneer of both FHA and VA loans in the area; and Albert-Realtors, a sales organization of 25 persons which has averaged better than a sale a day for the past 12 years. The organization covers practically every field of real estate sales, construction, financing, land development, property management, and insurance.

Why did this vigorous organization decide to build prefabricated homes? The principal reason was that the Albert brothers felt that prefabricated housing would satisfy the need for quality low-cost housing, particularly as these homes could be sold with very small downpayments on loans from Albert-Mortgages, Inc. Long experience in building and real estate sales served to strengthen the Alberts' conviction that prefabricated housing would grow to become an important factor in the home construction field.

EDUCATING THE BROKERS was part of the Alberts' sales program. The company made a special point of holding an open house for Grand Rapids real estate brokers, who on the whole were at first prejudiced against prefabricated housing.
gypsum wallboard, gable-end sections with louvres in place, stairs, mantels, roofing, asphalt shingles and either flush-board or plywood siding. Trim comes in well-sealed corrugated paper containers.

Arthur Olson, Sr., head of the building firm, who was one of American Houses' pioneer builders in 1937 and has built about 3,500 units since, finds pre-cut prefabrication methods highly desirable in his operation, since he can place an order and figure on delivery in 30 days, without the trouble an individual builder encounters in gathering together needed materials. He subcontracts all plumbing, heating, electrical and painting work to local firms.

Concurrent with the apartments, Olson is completing five ranch-type houses in the $20,500 range at Darien. Later this spring, he is planning another group of approximately 40 dwellings at $14,000-$15,000.

Before Olson entered the private home building field, in conventional as well as prefab construction, he served as president of several Fred F. French corporations and was in charge of constructing most of the vast French projects in New York City, including Tudor City and Knickerbocker Village. In this connection, he also managed more than 5,000 apartments for several years.

Olson believes that extravagant claims made by some irresponsible operators in the early days of the industry were responsible for considerable resistance to prefabricated housing. But today, he finds a steady demand, attributable partly to the pressing need for housing in his area, near the big industrial centers of Bridgeport and Stamford, and equally as much to the wide variety in appearance, type and size of the accommodations provided.

Majority of his sales and rentals

OLSON is building single-family prefabs with American Houses materials in a development next-door to Sylvan Knolls lately have come through word-of-mouth from present owners to their friends. He placed a small advertisement once in a Stamford paper at a time when he was completing a few unrented suites and receive applications for five times the space available. Since then, his rental commitments have remained far in advance of his completion dates.

Events subsequent to his completion two and three years ago of hundreds of homes in the vicinity of the apartments has convinced Olson there is no longer any particular resistance to prefabrication. Several of the original owners have sold houses built for $10,000 to $13,300 for profits of from $2,500 to $4,000.

ANOTHER HOUSE in the Miles Road development, adjacent to Sylvan Knolls. Olson is finding a steady demand for prefabricated houses in his area.
THE Skogman Construction Company of Cedar Rapids, Iowa, has been in the building business for three generations. Since the war, the company has built more than $1 million in housing in Cedar Rapids alone, and its activities extend into Nebraska as well as Iowa. The company is headed by Erick Skogman, who was born in Sweden in 1888. His son, Le Roy E. Skogman, is vice-president.

The Skogmans had had their eyes for some time on prefabrication as the answer to a house-type for large project work. Late in 1938, these builders decided to experiment, using the Harnischfeger Corporation's P & H houses. They built a 32-house project on 31st Street in Cedar Rapids.

Twenty-four of these houses were sold within one week from the time they were offered in the market. The success of this experiment made Skogman's conversion to prefabricated housing "uneventful and quite simple," as Le Roy Skogman describes it.

The 32-house project dissipated Skogman's early fears of code trouble, sales resistance and acceptance by lenders. The Cedar Rapids code is strict and its building inspectors are efficient, yet the company had no code trouble whatever with the P & H houses. Sales appeal was promptly a proved fact, and banks and insur-
PREFABRICATED HOUSING

OPEN HOUSE IN EVERGREEN PARK. Sometimes furnished, sometimes not, the open house, backed up by newspaper announcements, is the Baldwin company's sales method. Each open house adds to the pool of prefab prospects. The company has an office on the project and assigns two salesmen to it, full-time.

national Homes merchandising program, its very cooperative attitude toward dealers, the care with which it picked dealers who were community leaders and could be counted on to establish prices on a legitimate 10 per cent profit basis. Baldwin felt that the National Homes system of factory construction was sound and that the house was engineered for simplicity and ease of handling on the site. All the dealer has to add to the package is plumbing, wiring, and finish painting for the exterior.

The house is delivered by truck to the lot at the beginning of a working day and by the end of that day has been roughed in under roof by a crew of six carpenters and two or three laborers. The slab foundation has of course been poured in advance. This remains as the finished floor of the house. Baldwin pays cash for the house on delivery, and two days or so later, after the second inspection of the job, can make the first drawing on his construction loan. He subcontracts for the plumbing, wiring, and painting, and normally it takes about four weeks for this work to be completed. Baldwin's production is geared roughly to two finished houses a week during the winter, five a week during the summer; but he is keeping only about 20 houses ahead in sales because of the difficulties of cost control in the present market.

Baldwin points out that this system of home building makes possible real saving in labor cost, which in turn is reflected in the small down payments. He figures that his labor cost for this house is about $800, while carpenter labor alone on such a house built conventionally would be about $1200.

Code Trouble

Baldwin began his prefab operation in 1949 with a program of 10 Thrift houses erected in near-by Griffith. The town was dubious about prefabricated houses, but was willing to let Baldwin test public reaction to the 10 houses. Three thousand people went through Baldwin's first open house and took all 10 houses to its collective heart. But even after this demonstration, the town fathers got cold feet and Baldwin had a job of education on his hands before he could proceed. He indoctrinated Griffith officials with the National Homes method of construction. Once they understood what it was all about, they seemed more convinced, but it took a threatened mandamus action before Baldwin finally got the green light. Such action would have proved in court that the house was safe and sanitary and met performance requirements of the state building code. Baldwin built 12 more Thrift houses in Griffith, then introduced the National Homes line to Highland, another suburban area, where he met no code resistance. In Highland he

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erected thirty-seven of these houses.

In 1950 he brought National Homes to Hammond proper, opening up a subdivision of some 200 sites, called Evergreen Park. He ran into real opposition from members of the city planning commission and was again forced to take a stand for prefabrication by educating public officials and again threatening a manifest action. The mayor of Hammond jumped into the picture on the side of Baldwin, stressing the need in Hammond for new housing with

103 Sales Last Year

Baldwin has so far erected some 150 Thrift homes in Evergreen Park, and in 1951 sold 103 houses. This year he is opening up a new tract and expects to sell from 150 to 175 of these houses.

The Thrift line consists of 27 styles in 13 floor plans, with 2 to 4 bedrooms. Of these models, the Baldwin Realty Co. has worked mostly with the Newport (2 bedrooms), the Fleetwood (3 bedrooms), and the Riviera (4 bedrooms). Under Regulation X, Baldwin sells the Newport with lot for $8,350, with $1,450 down and monthly payments of $49, which includes everything. The Fleetwood with lot sells for $9,275 in Hammond, with $1,675 down and monthly payments of $52. These are all FHA 25-year mortgages. The Riviera model (4 bedrooms) is sold for $12,000 on a 20-year FHA mortgage, with $2,550 down and payments of $52 a month. These prices all include a slab-floor foundation (although Baldwin does build basements if the buyer wants this extra, which costs about $1,500 more). Lots for the 2- and 3-bedroom models are 40 feet wide, while the Riviera is placed on a 60-foot lot. FHA financing is used exclusively.

Selling the Slab Floor

Baldwin has found the slab floor creates the only real customer resistance to this house. Most people have a prejudice that such a floor is cold and damp. Baldwin meets this by carefully explaining how such a floor is constructed. A curtain wall is first sunk below the frost line, the forms are filled with concrete, and the area inside the wall is filled with pea gravel at least four feet deep. A Sisal kraft blanket is then applied over the whole area to seal out moisture, and fiberglass blocks two inches thick and three feet across are placed around the rim of the foundation to seal out the cold. Then the inner surface is covered with wire mesh and concrete is poured over the whole area. A finish coating of concrete gives a smooth floor surface to the whole slab.

Baldwin also points out that if the buyer wants the floor covered with asphalt or cork tile, this can be done for about $150 extra for a 3-bedroom job, about $210 extra for a 4-bed-

THE TRUSS ROOF, common to most prefabricated house types, makes for greater strength as well as freeing the plan for any arrangement of interior partitions. This roof will carry weight equal to 10½ feet of snow and will withstand pressure resulting from a wind of 165 miles an hour. Plywood sheathing covers the rafters and is the base for the roofing paper and asphalt shingles which are applied at the site.

small downpayment. The fact that there was no public opposition to factory-built homes was a big factor, as was FHA's approval of the National Homes system. The planning commission finally backed down, but to save face insisted that the plastic-covered marine plywood used for side wall sections be covered either with shingles or conventional siding. This adds about $300 to the cost of the house in Hammond, but undoubtedly produces a more substantial looking house, and is no trouble for the dealer since National Homes will furnish pre-stained shingles for siding as part of the package.
SEPARATE DINING ROOM, utility room, and large kitchen are features in this three bedroom home. This six-room Knox Emerson sells for $10,500 including lot.

SEVEN ROOM Knox Franklin with two baths sells for $14,500. Four bedrooms, separate dining room and storage room are included.

LOW-COST Knox Wyckliffe. Model 400 features convenient room circulation. Ths economy 2-bedroom house sells for $6,750.

for "H" Bomb Workers

ing and trim work are required to finish.

Unusual subcontractor procedures account for the smooth flow of scheduling operations. Multiple subcontracting, where one sub will have many allied operations was found to save time and produce better results. For example, one subcontractor handles floor tile, floor finishing, painting and wall papering. The multiple contract assures the builder that all is correct when the operation is finished. This relieves the builder from assuming the role of a referee between the various subs. The builder feels that there is less need for supervision when subcontractors are used. Carpentry is the only trade not subcontracted by the Knox-Georgia, Inc. builders.

A 12-point operation list is used to determine scheduling, cost, and multiple subcontracting. The 12 points include all phases of house construction in related groups. A once-a-week check of the various operations keeps the builder informed of progress.

All homes are sold with a one year warranty against defective workmanship and materials. In each subdivision a resident repair man services the sales and rental units.

MARCH 1952
Prefabrication Attracts Businessmen-Builders in Milwaukee

PREFABRICATED HOUSING

To David Reikin and Arnold M. Mayer of Milwaukee, the General Industries house looked like the prefab deal for them. Reikin was in the building supplies business and Mayer was an accountant with considerable experience in building operations.

As the two men watched new home building slow up in the Milwaukee area due to tightened credit restrictions and price rises, they came to the conclusion that the only so-called "low-cost" new housing today is prefabricated housing. They decided to get into the field, and started out on a tour of prefabricated-home manufacturers, but never got farther than the General Industries plant in Fort Wayne.

A New Builder Enters the Field

Choosing a name for their new firm—Long Island Homes—from the "Long Island" elevation of General Industries' Edinburg de luxe models, Reikin and Mayer made a cautious start early last summer with two model homes erected on lots in northwest Milwaukee.

In reserve the partners had a 40-site tract, also on the northwest edge of the city, which they called North Thurston Forest. They advertised the two model homes at $9,500 for the 2-bedroom plan, $10,750 for the 3-bedroom. Public response was overwhelming. Some 9,000 people visited the houses. As Reikin and Mayer point out, you can't say there is any real public opposition to prefabricated houses when such a new house is the only one you can get for the money.

Orders began stacking up for Long Island homes on lots in North Thurston Forest, at the prices of the two model homes. However, by the time the last few deals had been closed, prices had to go to $9,950 for the 2-bedroom house ($2,300 down, $65 a month), $11,200 for the 3-bedroom ($2,600 down, $70 a month). Building began in the subdivision last June, and in six months Reikin and Mayer had erected 43 homes—"several being lot fill-ins outside the subdivision." By the beginning of 1952, 22 families were moved into their new homes in North Thurston Forest, and by April the company expected to have 40 houses finished.

The only building code difficulty with the house turned out to be the wiring. Milwaukee required a heavier cable than comes with the General Industries package, and this change was worked out smoothly enough. General Industries installs the heavier wiring in the Long Island Homes packages at the factory, at extra charge to Reikin and Mayer. FHA-insured mortgages were used in this project, and FHA required a few changes in construction details before the houses would be accepted. These were accomplished with a minimum loss of temper on all sides.

The models used were the Edinburg and Lawrence de luxe—some 2-bedroom, some 3-bedroom, and all on slab foundations. The biggest seller has been the Edinburg de luxe 3-bedroom. Difference between the "de luxe" and the "standard" model is that the latter dispenses with the utility room—a gesture which Reikin and Mayer think is completely impractical and never indulge in. The 2-bedroom houses are on 40-foot lots, the 3-bedroom houses are on 44'/2-foot lots.
Built Stimulates Land Development

133 feet, finish grading, city sidewalks and wide access walk to a large concrete front stoop, combination storm and screens for doors and windows, 3/4-inch birch kitchen cabinets, twin compartment sink with spray and linoleum counters, door chimes, outside lights, box galvanized gutters and rectangular downspouts, rolled roofing covered with composition shingles exposed only four inches, select or clear oak floors, full thickness.

All Pollman Homes by Drobnick have a full basement, which the Drobnick's prefer to call a "sub-room." They feel that a house this size in the Waukegan climate just isn't practical without a sub-room. In it are placed a Williams Oil-O-Matic heating unit (with a grill which heats the sub-room); twin laundry tubs; 30-gallon automatic hot water heater; plenty of space for overflow family activity.

Handling the Package

Drobnick has been erecting these houses speculatively in units of 10. The Thyer truck locks up to a foundation, the house units are unloaded, exterior wall sections are placed and nailed around, wall by wall. Any in-the-way material from the package, such as trim and cornices, is taken to Drobnick's warehouse and kept there until needed. The unloading takes about two hours. After the walls are in place, the gables go on. Then the roof trusses are placed, 16 inches on center, and the roof boards are placed on the truss and nailed. At the end of that day, the house is under roof and the front door locked. This is done by a crew of 10. Finish work can be completed in three to four weeks, normally takes longer.

The Drobnick's have developed certain variations in handling the Pollman package. Instead of taking the Sheetrock, roofing, and finish flooring that comes in the package, they buy these items locally as needed, and thus avoid having to store these materials until actually handled in the finish process. Floor joists and floor capping have sometimes been bought locally, when it was advantageous to have several basements completely ready and waiting by the time the houses were delivered. Also, the Drobnick's do not use the chimney that comes in the package, but build chimneys in the conventional way. The customers seem to like it better this way.

Thyer Corporation offers a 30-day interim financing plan which only requires a $200 deposit for each house ordered by the builder, plus a letter from the lending institution stating that it will honor the Thyer invoice when the house is roughed in and under roof. However, the Drobnick Realty Company pays for the package (plus the freight bill) on delivery, thus taking advantage of Thyer's 1 per cent discount.

TWO MODELS IN THE 3-BEDROOM POLLMAN HOUSE. In Waukegan, Illinois, this house, with full basement, is sold for $14,500 on a 60-foot lot. The package house features R.O.W. removable windows, factory assembled truss roof, interior trim of single member 3/4 by 1 1/4 inch white pine, finish flooring of 25-32 birch or beech end-matched and laid conventionally, 3/8-inch Plaswood for flooring in bath and kitchen, 1/2-inch recessed edge Sheetrock for interior finishing, furnished in 4 by 8 feet, together with tape, joint material and nails. Aluminum foil insulation (Alfoil) in rolls comes in the package for ceiling installation on the site.
Mixing Prefab and Conventional Types

Ohio builder secures land in a former Federal resettlement project and starts an 1100-home development program at the $12,000-$16,000 level

Kenneth Hammond, a builder in Hamilton, Ohio, has taken aggressive steps to help provide much-needed housing for his area. Using a building program which combines the PeaseWay house prefabricated by Cincinnati's Pease Woodwork Co., with conventional houses, Hammond recently closed a deal involving 1100 home sites on 300 acres of vacant land purchased or optioned in Greenhills, a former resettlement project established 17 miles north of Cincinnati by the Federal government. The government project was built in the mid-1930's at a cost of $8,000,000, and was later sold to the occupants for $3,500,000. Hammond obtained the land from their organization, the Greenhills Home Owners Corporation.

Kenneth Hammond's project is $15,000,000. Half of the houses will be prefabricated. Planned for immediate construction are 60 houses on streets already improved. Other streets will be built in the near future. Hammond plans a 5-year program of development, with houses ranging in price from $12,000 to $16,000. His construction program covers $500,000 worth of building, and is designed to go forward on the basis of 50 building permits obtained at one time.

Hammond's Greenhills project created a stir of publicity in the Cincinnati newspapers, and when ground was broken for the first house, Charles P. Taft, candidate for the Ohio governorship and brother of Robert Taft, Republican Presidential candidate, was on hand to inaugurate the project. The news value of this event assured front-page coverage. Hammond believes in issuing promotional releases to the newspapers, and in promoting the houses in Greenhills will feature releases covering new products used in the houses, and unusual aspects of the construction program.

Hammond has gone into Greenhills from an unusual development in Hamilton. This is his nearly completed subdivision, St. Clair Park. In this case, he entered into an inter-
AIR VIEW of Greenhills shows the modern site planning and the large land areas adjacent to the existing apartments which were part of the Federal resettlement project here.

existing selling agreement with the General Electric Company. The company needed housing, as the organization had just moved to a new plant, bringing many workers from Oak Ridge, Tenn. General Electric set up a relocation center, for which Hammond supplied details concerning St. Clair Park. Any person working for G-E and interested in purchasing a home under $16,000 was shown Hammond's subdivision. All but two or three houses built in St.

Clair Park during 1951 were sold to G-E employees. Hammond believes this cooperative deal is largely responsible for keeping the area off the critical list. However, he warns other builders who see possibilities in this kind of tie-up to investigate the company first and be sure of their ground.

Mixing Prefab and Conventional

Scheduling completions rather than starts relieves Hammond of using interim financing. His plan is to complete a house a week and to receive payment for it. This keeps the till full and allows a steady flow of money for operation. About 20 per cent of Hammond's construction is in conventional houses; the rest is Peaseway. Hammond uses the complete Peaseway line, and erects his houses with full basements. The price range is from $12,000 to $16,000. He maintains his prefabricated operation on a 90-day delivery basis.

THE PEASEWAY EASTWOOD, 828 sq. ft., has considerable storage space for its size. The large open living-dining area is the main feature.
Contracts have an escalator clause that allows the house cost to be increased if costs rise. The unusual thing about the contract is the provision whereby the purchaser can back out if he doesn’t care to pay the increase.

Hammond rates prefabricated building as easier than conventional, because both labor and management know the cost and time of operations involved.

A policy of the Hammond company is to have a meeting of the entire organization every two or three weeks. Here company problems and new government regulations are discussed. The men are told how the regulations affect them.

PEASEWAY WESTWOOD. 1084 sq. ft. has ample closet space in the three-bedroom arrangement. Large living and dining "L" are features.
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Remember, he is an important part of a nationwide network of selected sales and installation engineers. See the wide choice Ro-Way offers in standard and special garage door sizes and styles for practically every Residential, Industrial and Commercial need.

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# Directory of Prefabricated Home Manufacturers

## In the United States and Canada

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<th>Manufacturer</th>
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<td>200-427 Church St., Toronto, Ont.</td>
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Call your Weldwood salesman for Weldwood Hardboard or Tile Board today.

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INTERNAL THREAD

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Explosive charge imbeds stud solidly. Open Stud Driver with a twist of the wrist, eject empty shell, load next stud. Whole job takes seconds!
Do your construction fastening up to 100 times faster with the NEW CARTRIDGE-POWERED MODEL 450
REMINGTON STUD DRIVER and do it safely!

LOOK AT ALL THESE FEATURES

COMPACT AND PORTABLE—Weighs only 5½ pounds, ideal for scaffold, ladder, overhead work, inaccessible places. Comfortable to use in any position.

SPEED—One man can set up to 5 studs per minute, as much as 100 times faster than other methods. Sets stud at whatever depth is required up to 2½ inches, depending on material.

ELIMINATES INVESTMENT in outside power source—Self-powered. Especially useful in isolated places.

FOUR WAYS SAFE—Plainly visible red dot indicator shows when it’s cocked; safety lever must be depressed before and during squeezing of main trigger; permanently attached safety shield must be compressed against work before Stud Driver will operate. Stud Driver will not operate if tilted at more than a slight angle. Slight recoil. Low noise level.

RUGGED—All working parts of the Stud Driver are made of heat-treated alloy steels, housing of strong, light weight aluminum that carries no operating stress. Lining of safety shield is a solid block of tough, resilient Du Pont neoprene.

PRICE for Model 450 Remington Stud Driver complete in rugged steel carrying case—only $119.50.

Firmly fastens steel or wood to concrete or steel in seconds!

With the amazing new Remington Stud Driver you can set fastening studs up to 100 times faster than with conventional methods... and cut costs, too. This revolutionary fastening tool easily sets as high as 5 studs per minute... with no outside power source—no other equipment needed!

Easy to operate, the Remington Stud Driver weighs only 5½ pounds. It’s compact, rugged and safe! With one lightning-fast operation, this self-powered tool firmly fastens steel or wood structural pieces and fittings to concrete or steel surfaces... a squeeze of the trigger and the job is done!

Test-proved to be the world’s finest and speediest fastening system, the Model 450 Remington Stud Driver is made by Remington Arms Company, Inc., America’s oldest and foremost sporting arms manufacturer. To obtain detailed information on this time-and-money-saving tool, and for the name of your nearest distributor, fill out and mail the coupon below.

Remington Arms Company, Inc.
Industrial Sales Division
956 Barnum Ave., Bridgeport 2, Connecticut
I am interested in obtaining descriptive literature on the Model 450 Remington Stud Driver.

Name

Firm

Position

Address

City

State

"If It's Remington—It's Right!"
FROM COAST TO COAST AMWELD IS THE PREFERRED STEEL DOOR, FRAME AND & SLIDING CLOSET DOOR UNIT

Steel Door Frames
Underwriters "B" Label Door Frames
Underwriters "B" Label Doors
Flush Steel Doors
Sliding Closet Door Units
One-piece welded frame
Single or Double Swing Flush Doors
Sliding Closet Door Units
Knocked-down frame
Steel Door Frames Trimmed Openings

YOU CAN INCREASE YOUR BUSINESS
with AMWELD

INTERIOR STEEL DOORS — FRAMES
AND SLIDING CLOSET DOOR UNITS

We know of no other door, frame and sliding closet door unit that can match the appearance and quality of AMWELD. All steel construction, precision made, these products are the ultimate in modern construction where owners demand the best. Home owners prefer AMWELD because their attractive, modern flush design matches all types of interior trim—they're easy to clean and keep clean—they require no maintenance from year to year, and the cost is low. Builders like them because installation time is faster.

AMWELD Building Products meet every dealer requirement . . . high quality, low cost and a comfortable profit margin. The AMWELD Dealer Service Department will assist you with product promotion, literature, sales aids. If you are interested in establishing your company as an AMWELD dealer, write for details.

AMWELD BUILDING PRODUCTS DIVISION
THE AMERICAN WELDING & MANUFACTURING CO.
310 DIETZ ROAD • Founded 1918 • WARREN, OHIO

MR. DEALER
AMWELD Building Products meet every dealer requirement . . . high quality, low cost and a comfortable profit margin. The AMWELD Dealer Service Department will assist you with product promotion, literature, sales aids. If you are interested in establishing your company as an AMWELD dealer, write for details.

BUILDERS SAY—
"We like to build when AMWELD products are in the specs. We can save our customers on installation costs, and you know you get the best quality product in AMWELD."

OWNERS SAY—
"AMWELD doors, frames and sliding closet door units actually saved us money, space and time. They never need any maintenance, and they are so attractive."

DEALERS SAY—
"AMWELD Building Products meet every dealer requirement—high quality, low cost, adequate assistance and a comfortable profit margin."

AMERICAN BUILDER
If you know Briggs Beautyware plumbing fixtures, you undoubtedly know about the years of pioneering development work—the intensive program of product improvement—responsible for the tremendous popularity of these fast-selling, top-quality fixtures.

Now Briggs gives you new beauty—extra smartness—added eye appeal—sure to increase this popularity still further. Many of the Briggs porcelain enameled, formed steel lavatories and each of the tubs have been completely redesigned—restyled throughout! Several entirely new lavatories have been added. This dramatic new line is ready now to take its place with the superb Briggs vitreous china water closets, lavatories and urinals—to make doubly certain that Briggs Beautyware keeps out in front as the most brilliant, most desirable line on the market!

Remember—Briggs Beautyware bathroom fixtures are available in Sky Blue, Sea Green, Ivory and Sandstone, as well as sparkling white. All Briggs colors are non-fading; all Briggs fixtures are stain-proof and acid-resistant.

See the new Briggs Beautyware now!
Seal of Approval for the

Under-$20,000 House

Now in its fifth year, the Southwest Research Institute’s hallmark of quality housing has been won by many builders all over the country. One of the latest houses to be awarded the Institute’s Quality Design seal of approval is this model built by the B-D Development Company of Birmingham, Alabama, and designed by architect Nelson Smith. This is the first of a series of Certified Quality Design houses which the American Builder will publish throughout 1952.

MAKERS of food, household items and other products are well aware of the importance of a seal of approval given by a recognized authority to products which measure up to advertised standards. In the mind of the public, a seal of approval backed by rigid qualifications, has commanded confidence and influenced sales. Carefully used by an organization with authority, the idea is a potent one. Five years ago it was applied to home building by the newly established Southwest Research Institute of San Antonio, Texas.

Set up as a non-profit organization with funds given by Tom Slick, Texas oil producer and rancher, the Southwest Research Institute is dedicated to industrial and agricultural research which will benefit national as well as regional economy. One of the Institute’s fields is housing, and activities in behalf of this industry are carried out under a Housing Research Foundation whose funds come from two sources: (1) sponsoring corporations—so far, these include Revere Copper and Brass, Inc., Crane Co., and Owens-Corning Fiberglas Corporation; (2) fees from individuals, corporations, associations and government agencies for whom special investigations are conducted.

Although the Housing Research Foundation is involved directly with construction research problems, its specialty has turned out to be the correlation and application of new knowledge to current building practices. Its chief function has been to relate the findings of housing research generally to the common problem of how to build more house for the money. As C. W. Smith, director of the Foundation, puts it: “Many of the things we are passing on to merchant builders we do not develop ourselves. We are gathering information from successful builders and from research laboratories all over the country, and we are making this information available to builders in the form of practical suggestions which will enable them to build houses of superior quality and value. That is our primary function.”

To the Foundation a “merchant builder” is anybody who builds 10 or more architect-designed houses for sale in one year, and the Foundation’s dissemination of housing knowledge has taken the pattern of a Quality House program aimed at houses in the moderate-price bracket—preferably under $15,000 and not over $20,000. Under this program, a builder who uses a registered archi-

$18,000—or $16.60 per square foot—for this Certified Quality Design house featuring a full range of equipment, many clever ideas to increase amenities within a compact plan, and sliding panels which make possible multi-use space. Total area including porch, carport and storage, is 1417 square feet. Lot is 80 by 140 feet. Principal rooms are at the rear. Off-street parking for guests is provided at the front. The property was expensive to develop due to its low elevation. Approximately four feet of fill had to be moved in where the house is located, and firm bearings for footings are about seven feet below floor level. A wood frame floor would have been less expensive, but the builder had decided to standardize his construction of this plan, using a slab-on-grade. So reinforced concrete and grade beams were poured (unheard of in house construction in the Birmingham area). Additional support was provided at center of the fill by columns and drop-slab.
SLIDING PLYWOOD PANELS hung on ceiling track with guide at floor make it possible to throw living room, dining room, and study together, providing the kind of entertainment space usually found only in large houses. The split bath feature also proved to have great customer appeal. The house is brick veneer. The raked joint used-brick exterior is backed up with wind-tapered profile sheathing. Walls and ceilings are insulated. The house rests on a 1400 square foot, reinforced, insulated concrete slab. A trussed roof makes possible 1¼-inch Cemesto splined panels to replace interior stud walls except the one containing plumbing between toilet compartment and bath compartment. Use of G.E. remote control wiring simplified the problems of concealing high voltage conductors. The gas-fired warm air furnace is placed in the attic; so is a 36-inch attic fan.

The house for sale, and the seal may be used in connection with advertising the house or project. The Foundation also has materials available which help the builder stimulate local publicity.

While not concerned primarily with architectural style, the Foundation's awards have so far gone only to houses in the so-called functional style, with all superfluous ornamentation and finery details eliminated in favor of more livability for the money. Last year, 15 builders in 10 states qualified 18 housing developments under the Foundation's program. One of the last of the 1951 Certified Quality Design awards went to this house on Fairway Drive.

PRIVACY was an important point, since the property faces north on a heavily traveled suburban drive, with a large garden apartment group across the street. Accordingly the principal rooms were made to face south and look onto a living yard at the rear. A 10-foot minimum side yard and a fine tree near the driveway made it necessary to tilt the house on the lot. This had the advantage of throwing the outlook of porch and living room (shown here) more to the center of the property, which is nicely wooded. The screened porch has been planned for living, dining, or future conversion into bedroom and bath. The yard is screened from adjoining property by an expanded metal screen on pipe support, a masonry wall, and by landscaping and existing trees.

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DESIGNED FOR COMPACTNESS YET ALSO ADAPTABILITY, the plan makes possible various interpretations, as these drawings show. Architect Smith claims that 80 or 100 square feet could be added to the house at a relatively small cost.

in suburban Mountain Brook, Alabama, as built by the B-D Development Company on a design by Nelson Smith, A.I.A.

Callender's Comments

The design was commended by John Callender and his board for the following features:

1. The internal flexibility afforded by the sliding plywood partitions.
2. Precision for future expansion.
3. Wooded lot with most of trees retained.
4. Orientation of house with major rooms facing south.
5. Privacy from the street by means of setback and by placing major rooms on rear; privacy from neighbors by means of fence and wall.
6. Entry permits access to all rooms without passing through living room.
7. Divided bath with two lavatories.
8. Well-designed kitchen conveniently located in relation to front entrance, carport and porch.
9. Adequate and well-designed storage spaces.
10. Screened porch.
11. Glass wall in living room and study, facing south and having 50 per cent of its area openable for ventilation.
12. Good insulation.
13. Extraordinarily full equipment including range, refrigerator, dishwasher, garbage disposer, washer, dryer, ironer, exhaust fan, attic fan, remote control lights, floodlights, four telephone outlets, built-in safes, bookcases, desk, drawers, mirrors, and other conveniences.

15. Service entry with provision for garbage cans.

On the other hand, the design was criticized for several points, the most serious of which was the very high price. The unit price of $16.60 per square foot was the highest ever submitted to the Foundation, even from the highest cost areas. Callender found it hard to account for this price even after making full allowance for the extraordinary amount of equipment included. Other points noted unfavorably were:

1. Lack of roof overhang over glass wall on rear.
2. Entrance narrow and dark.
3. The use of four different types of windows in one small house results in confusion and lack of unity; this is especially disturbing in bedroom No. 2.
4. Kitchen door swivels against refrigerator door.
5. Use of No. 2 lumber and galvanized pipe and flashing.

In spite of these criticisms, the Foundation considered the house to be of outstanding quality and bestowed its award.

The Builder Said:

The Fairway house was a refinement on a 3-bedroom plan from which the B-D Company has built 15 houses in a low-cost development between Birmingham and Bessemer. With the Fairway model the company was invading a high-value neighborhood, and the intention was to develop a prototype from which the company could sell for construction on the purchaser's own lot. To this end, B-D enlisted the decorating service of Bromberg's of Birmingham, and the Fairway house was furnished with taste and skill. Commenting on the whole experience, Richard Hail Brown, B-D's president, said:

"Public acceptance was far beyond our hopes. Bromberg's really made the house look twice as big and exquisite; so much so that the buyers stepped right up as soon as they saw it. The one who did buy took the rugs, drapes, and some of the furniture. We could have sold the house over and over the first day, and we believe we have enough prospects to sell the house as fast as we can produce it. We have five of these houses already under construction, with several improvements in the plan, thanks to Mr. Callender's help. We started these five houses with the idea that we could cut some of the trimmings and reduce the price. But the public seemed to have no complaint at what seems to be a high price of $18,000;"
DEN AND LIVING ROOM are really one and were furnished accordingly, although the den can be converted into an emergency bedroom simply by closing its sliding panels and raising the back of the built-in divan to make it into a comfortable double-decker bed. If it is necessary to use the den as a bedroom permanently, the panels can be sealed shut. The two bath compartments are tiled. Bedrooms have large closets with sliding doors and built-in dressers. Other space-saving features include: doors with small jambs set tight into the corner, using less floor area for swinging; sliding doors in closets, kitchen, hall and carport do not require swing space, and permit full opening; thin walls; folding shoe racks in closets; plywood closet partitions; large cupboard over clothes closets makes use of 80 ordinarily lost cubic feet; built-in desk and bookcase; furnace placed in the attic.

A DINING ROOM is still hooked on as desirable by Birmingham home buyers. This arrangement—enclosing a dining space with sliding wall partitions—recognizes this market factor and at the same time keeps living space flexible. The dining area can be screened off before and after the meal when guests are present, and yet visual benefit of the space is available at other times. The asphalt tile floor used in this house met with enthusiastic public response. Sturdy door frames running from floor to ceiling consist of only three pieces. Thresholds are metal.

UNUSUALLY COMPLETE is the all-electric kitchen. By bolting the dryer on the wall above the washer and sliding the ironer into space below the wall panel, laundry space is double used. Working space in the kitchen doubles for a back hall. A normally dead corner in the bath produced 12 square feet of shelves.

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BRAND NAME PRODUCTS USED

<table>
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<tr>
<th>Product</th>
<th>Specification</th>
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<tbody>
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<td>Adjusto shower</td>
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<tr>
<td>Bendix laundry</td>
<td>100,000 BTU</td>
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<td>Biltwell blower-type gas furnace</td>
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<td>Coppo rot preventative</td>
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<td>Crane plumbing and fixtures</td>
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<td>Daniels clay tile baths</td>
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<td>Florence electric range</td>
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<td>General Electric low-voltage remote control wiring</td>
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<td>Homasote sheathing</td>
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<td>International Harvester refrigerator</td>
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<td>Mayer Electric Co. fixtures</td>
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<td>Miami windows</td>
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<td>Owens-Corning glass wool insulation</td>
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<td>Pittsburgh Plate Glass Co. points</td>
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<tr>
<td>Reverse copper piping</td>
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<td>Russe windows</td>
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<td>Sherwin-Williams wall paper</td>
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<td>Slatkraft vapor seal</td>
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<tr>
<td>Tiletex asphalt floors</td>
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<tr>
<td>Youngstown electric kitchen with dish-washer, garbage disposer, exhaust fan and stove hood</td>
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A PORTION of the 325 registered builders attending a session in one of the assembly halls on the University campus

Midwest Builders Go Back to School

Research into basic problems confronting the home builder was the theme of the Seventh Annual Short Course, conducted for contractors and builders by the University of Illinois Small Homes Council. A new type of roof truss was assembled during a session.

CONVENTIONAL roof framing and "Fibber McGee" closets will be out of style, if builders and contractors accept suggestions of the University of Illinois Small Homes Council staff, offered at the Seventh Annual Short Course in Residential Construction.

This organization is working in conjunction with the University and operates under grants extended to them by manufacturers interested in further development in their particular fields. The Council has become research minded and has carried on a series of experiments designed to bring contractors and builders up to date on recommendations and new developments.

Chief among the many subjects that were discussed, such as the use of space, color, etc., in the two-day session, were roof trusses which can be used for spans varying from 20 to 32 feet. Closets designed with full access fronts and engineered so they can be built with studless walls, were features which met with universal approval. They will be covered in a special article in a forthcoming issue of the American Builder.

The "W" truss that is shown on the following pages is designed to offer many advantages.

1. It may be used economically at any span from 20 feet-8 inches to 32 feet-8 inches out to out of wall plates.

2. It allows the use of ring connectors at the highly stressed joints without the need of working to close tolerances that this would ordinarily require. (The sliding laps in all the main members make this possible.)

3. It eliminates the need of splice plates, gussets or filler blocks.

4. It allows the trusses to be sub-assembled (by semi-skilled labor) without concern about "lefts" and "rights," and with simple visual checks as to the correctness of the assembly.

5. While sub-assembled, the trusses may be stored in a minimum space until needed.

6. It is possible, in this manner, to
1. Truss is assembled on subfloor of house with blocks nailed to floor along chalk line for guidance in placing members.

2. Lay out horizontal chalk line as shown, with perpendicular line at its approximate center.

3. Rotate upper chord until steel square shows a slope of 5-12. Tack with one nail to hold slope. Place chords against blocks 1, 2, 3 and 4.

4. Cut members for one truss as shown in the diagram for combination of top and bottom chords. Member lengths provide sufficient lap for the nails required.

A demonstration of truss assembly

Details of completed truss described by Council staff member during session.
Material must be 1100 per square inch stress grade or better. (Equivalent to Coastal Region Douglas Fir #2.)

It should be noted that the length of the bottom half of the top chord has been computed and the cutting diagrams for that member have been drawn for a 30 inch horizontal overhang.

A "camber" of ½ inch is shown at the center of the bottom chord for all spans. This is an estimate of the amount this point will drop as the truss adjusts itself under load. Putting this camber in will help preserve a smooth horizontal ceiling in the finished structure.

The height to which the guide blocks are built up has been left to the discretion of the builder. It is advised, however, that those blocks which fit the top chord notches be built up sufficiently to keep the

5. Cut members for one truss shown in cutting diagram.

6. Sub-assemblies are shown complete. Bring bolts up finger tight. If cut and drilled correctly they cannot be assembled wrong. (There are no "lefts and rights"—the two heel joints are identical)

7. Nail each member as placed according to nailing schedule

8. and 9. Schedule of member sizes for trusses having a span from 20'8" to 32'8" out to out of plates. No. 8 is designed for use where no attic storage is possible. No. 9 is designed to carry an attic load of 20 pounds per square foot.

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<tr>
<th>SPAN</th>
<th>NO ATTIC STOR</th>
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<tr>
<td>20'8&quot; &amp; LESS</td>
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<td>22'9&quot; - 24'8&quot;</td>
<td>17-10d</td>
<td>26-10d</td>
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<td>26'9&quot; - 28'8&quot;</td>
<td>20-10d</td>
<td>31-10d</td>
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<tr>
<td>30'9&quot; - 32'8&quot;</td>
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<td>30'9&quot; - 32'8&quot;</td>
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<td>12-10d</td>
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<td>30'9&quot; - 32'8&quot;</td>
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<td>24-10d</td>
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The trusses have been designed to withstand uplift. In nailing trusses to exterior wall plates, use metal framing anchors.

This truss may be used for any span from 20 feet 8 inches to 32 feet 8 inches if the cutting diagrams and member sizes are followed. However, there are some spans at which there will be a minimum of unnecessary lap when the individual members are cut from standard lumber lengths. If a free choice of span is possible, careful study of Table II will indicate the span that will give the minimum amount of wasted lap.

### Table I: "W" Truss Member Sizes

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<th>28</th>
<th>32</th>
<th>32</th>
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<tbody>
<tr>
<td>UPPER TOP CHORD</td>
<td>1 - 2&quot; x 4&quot;</td>
<td>1 - 2&quot; x 6&quot; x 16'</td>
<td>1 - 2&quot; x 6&quot; x 16'</td>
<td>2 - 2&quot; x 6&quot; x 10 1/2'</td>
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<td>LOWER TOP CHORD</td>
<td>2 - 2&quot; x 4&quot; x 18'</td>
<td>2 - 2&quot; x 4&quot; x 18'</td>
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<tr>
<td>BOTTOM CHORD</td>
<td>2 - 2&quot; x 4&quot;</td>
<td>2 - 2&quot; x 4&quot; x 14'</td>
<td>2 - 2&quot; x 6&quot; x 16'</td>
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<tr>
<td>SHORT DIAGONAL</td>
<td>1 - 1&quot; x 4&quot; x 8'</td>
<td>1 - 2&quot; x 4&quot; x 8'</td>
<td>1 - 2&quot; x 4&quot; x 10'</td>
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### Table II: "W" Truss Member Sizes

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<td>1 - 2&quot; x 6&quot; x 16'</td>
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<td>SHORT DIAGONAL</td>
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**Table II, continued - Member Sizes "W" Truss**
Developers, with 1,508 orders for new homes during first month, are already planning to expand beyond original goal of 16,000 units

**“SKY’S the LIMIT”**

**OPENING** a new development in strange territory two weeks before Christmas would generally be considered the most foolish thing a responsible builder could do. But even Levitt & Sons, Inc., long accustomed to doing the unusual with highly successful results, did not anticipate the tremendous outpouring of buyers which was to take place the minute three models were opened in a vast semi-rural area 20 miles north of Philadelphia.

The public got its first peek at Levittown, Pa., on a rainy Saturday, last December 8. More than 300 deposits of $100 each were taken that weekend. Nearly every day since has seen a hastily constructed parking area in front of the exhibit section virtually filled. Each Sunday, traffic...
as Levittown, Pa., Sets Unprecedented Sales Record

built in three years. Now the 16,000 figure has been dropped, the population potential has been raised to 70,000 and the building firm is endeavoring to buy or secure options on more land.

"The sky's the limit," explains William J. Levitt, 44-year-old president of the Levitt organization. "We will buy whatever land we can." By late March, total land acquisition was expected to exceed 5,200 acres.

Market price of such land, including both farm and wooded tracts, is said to have averaged $400 an acre two years ago, before United States Steel announced its plans for the $400,000,000 Fairless Works now under construction one mile away. The average price of the Levitt assemblage, estimated at more than $1,200 an acre, has been dwarfed in two recent tract sales to unidentified building interests who are reported to have paid at a rate of more than $2,500.

In the event the company finds it impossible to buy enough contiguous land to meet the demand, Bill Levitt

was stalled for miles in both directions on the adjoining Bristol Pike.

One month after the opening, the Levitts had disposed of more than 1,500 dwellings, with a completed value exceeding $15,000,000. This valuation was five times higher than that of all the dwelling units for which the city of Philadelphia issued building permits during December. By the next week, total sales zoomed to 1,774.

Originally, the sponsors had anticipated a slackening off in sales after enthusiasm attendant to the opening had subsided. They were confident that once the first homes were completed and their own-given possession, buyers would be plentiful. Results so far have exceeded their fondest hopes. It is now freely predicted that the entire 1952 output, estimated at 5,000 homes, will be sold by April 1, a month before completion of the first house. Engineers are now said to be seeking ways whereby the company will be able to step up the schedule from 150 starts per week.

Opening announcements of the new Levittown described it as a planned community for 16,000 families—a population of about 60,000—to be used in the Leavittown. Scale model with roof raised attracts many, while in the background six salesmen sign up buyers.

THREE-WAY FIREPLACE and continuing tract wall highlight the living room, along with the adjoining wall of wide, double glazed windows.
predicts it will purchase sites on other areas of Bucks County and proceed with "a North Levittown or an East Levittown."

**$9,900 Model Heavy Favorite; No Rental Demand Yet**

Interest in the three basementless exhibit homes is centered primarily on a one-story 1,000-square-foot type with three bedrooms, occupying a 70 x 100-foot plot and priced at $9,900. Three variations in exteriors are planned for the unit, named the Levittowner, but the floor plan will be the same in each style.

Half again as large, the $16,900 Country Clubber is to be reproduced in six different exterior types, all using the same floor plan. With its 20-foot-wide double carport and expansion attic for two more rooms and bath, this deluxe model will be established on 100 x 120-foot lots.

One surprising thing is the complete lack of interest in the Budgeteer, two-bedroom, semi-attached house for rent solely to defense workers at $65 per month. Of all the 1504 applications accepted during the first month, Levitt reports just one was for a rental. The answer, he said, is simply that immigration of defense workers to this critical defense area has not yet begun and will not before next fall when the Fairless Works is operating and the Kaiser Metal Products' Fleetwing plant expansion is completed. Thus, the rental program will be put aside until at least late this year.

Incidentally, Federal financing regulations actually place the Levitt organization in competition with itself as far as the rental operation is concerned. To obtain a rental unit, the worker must sign a one-year lease and deposit a cash security of $130. But to buy a much larger Levittowner, the defense worker who is also a veteran has no down payment to make and therefore pays a monthly carrying charge of approximately $59, or $6 less than the established rental. Under this system, the veteran-defense worker actually gets a refund of his $100 deposit at the time he takes title.

Three other purchase plans involve the Levittowner, and in all cases the carrying charges range around $59 to $60 per month. The home is available for a down payment of $900 to the veteran who is not a defense worker; the defense employee who is not a veteran may acquire it for $1,000 down, while to all others, the initial payment is $1,500.

**All Deposits Are Taken In 'House of Materials'**

Adjoining the model houses in the seven-acre exhibit center is a long and rectangular, glass-walled structure called the House of Materials. As one is about to enter it, he passes by every shrub, plainly marked, which is utilized in the landscaping. Experience has taught the firm that many an otherwise proud home owner is inclined to be rather thoughtless in the care of trees and shrubs and, accordingly, hardy varieties which can shift for themselves have been selected.

Within this glass building is every piece of material and equipment used
in construction of the Levitowner, 
the display showing the quantities 
required and revealing brand names. 
To see all of the show, one must walk 
around the outside of the building as 
well as through it, and he inevitably 
sees the tour near the long 
counter where Moe Biederman, sales 
director, and the company's five other 
salesmen, are kept occupied constantly 
accepting applications with $100 de- 
posits.

Procedure following this first step, 
Biederman explains, is to call in 
buyers by groups about two months 
later, show them maps of the particu-
lar section under immediate develop-
ment, plus large renderings of the 
various available exteriors, and in-
vite them to select their site, style and 
color combination. This program is 
worked out on a first-come, first-
served basis, he points out, but if any 
buyer cannot have the house he wants 
on the site he has picked, he will be 
invited to try again two months later 
when the next group is called up. The 
$100 deposit is declared to be return-
able at any time up to contract sign-
ing.

**Larger, Better Designed**

**Home Than L. J. Models**

In designing the Levitowner, Al-
fred Levitt, 40-year-old "kid" brother 
of Bill and the firm's architect, made 
it 200 square feet larger in floor area 
than units in the 17.449-family Levitt-
town just completed on Long Island. 
He improved its kitchen arrangement 
by providing a separate dining space 
off the living room.

Storage areas were enlarged to 
three closets of six-foot length, a 
four-footer and the featured 7½-foot 
space in the master bedroom with a 
center tier of built-in shelves. To save 
room and add to accessibility of all 
closet space, basswood screens which 
fold in accordion style were suspended 
from metal tracks on the ceiling. The 
same screens are installed to shut off 
the kitchen and shade windows of the 
dining section.

Among other features is a three-
way red brick fireplace on the end of 
a brick wall of mantel height, which 
separates kitchen from living room. 
Atop the long mantel shelf are wide 
bookshelves in the living room and 
kitchen wall cabinets.

Three 4x8 sliding doors made of a 
new composition hardboard with 
soundproofing qualities comprise one 
wall of the multi-purpose or third 
bedroom. These panels slide out of 
the way on ceiling and floor tracks 
whenever a 27-foot living room is 
wanted. The latter room has a rear 
door opening onto a flagstone terrace 

**BATHROOM DETAIL**

includes a 24x-
foot shell closet mostly enclosed by two 2x2-foot 
mirrored sliding panels, 
A 4-foot fluorescent fixture is overhead

and three floor-to-ceiling tiers of in-
sulated windows which assure plenty 
of light and air.

Equipment in the all-electric kitchen 
includes a deluxe model washer, 
8-cubic foot refrigerator, exhaust fan, 
5½-foot sink cabinet with stainless 
steel top and numerous steel cabinets, 
including a base type housing the oil 
burner.

Built on a 25x40-foot slab, the 
house is radiant-heated. According to 
Bill Levitt, lead-coated steel tubing 
has proven a highly satisfactory re-
placement for restricted copper and 
presents no problem to obtain in large 
quantities, needed for this project.

Considerable interest in the larger 
Levitt home, designed for a "country club" section, has been indicated by 
the large crowds which have passed 
through the model, but the builders 
have as yet not revealed its sales 
record. It is known that the develop-
ers feel they have actually driven 
owners out of Levittown, L.L., be-
cause they had nothing better to offer 
when a resident who had established 
roots in the community sought out 
a larger home. To prevent that situa-
tion from developing in the Pennsylva-

**BASSWOOD SCREENS**

suspended from ceiling tracks can be used to separate 
the kitchen from dining area and to cover wide window in dining room

**MARCH 1952**
was developed. In general room placement, the floor plan resembles that of the Levittowner, but all room sizes are considerably expanded. The living room is 29 feet long, with the exterior wall virtually all glass. Two of the bedrooms are 16 feet long and the master bedroom has its private bath and a closet area 12½ feet in length. The kitchen is enlarged to include a 10 cu. ft. refrigerator, push-button electric range, dishwasher and clothes dryer; in addition to features found in the smaller home. Described as a playroom foyer, the dining area has a built-in bar adjoining the two-way fireplace.

Purchase terms for this house under Regulation X require down payments of $4,950 from veterans and $5,800 from all others, with no special consideration permitted for defense workers. Carrying charges approximate $90 to $92 per month.

Both plans provide for expansion, the larger unit in attic space for two additional rooms and bath, and the Levittowner by means of breaking through an exterior wall and spreading horizontally.

**Vast Improvement Made In Over-all Planning**

Houses in Levittown, Pa., are only part of its fantastic story. Unlike the Long Island “city” which grew like Topsy from an original quota of 1,000 dwelling units, the entire project is part of a central plan, which even takes care of future expansion.

Locating an address will no longer be practically impossible, for the community will consist of numerous “neighborhoods” of 700 to 1,000 families each to be surrounded in more or less circular or oval fashion by a principal boulevard named after a tree or flower. For instance, in the Sprucewood section, Spruce Boulevard will be the main thoroughfare. Every other street within its borders will begin with the letter S and connect on the boulevard. To locate any S-street, a stranger has only to be directed to the S-section. Once there, he merely drives along the boulevard until he reaches the street he seeks.

This planning has other advantages. Each section will have its own neighborhood shopping area and schools will be located so that no child has to cross a main street. Other sites will be devoted to large swimming pools, athletic fields, playgrounds, parks and the town community hall. Church sites are to be dedicated to all religious denominations.

Among the parks, one of the largest is being considered for the company’s sand pit which, when its pres-
Millions Spent Before First House Is Built

Before starting their first Bucks-County home, the Levitts estimated they will have expended more than $14,000,000 to acquire land and prepare the site. Tremendous changes must be brought about, not the least of which is construction of a $2,000,000 sewage disposal plant, to be operating by May when the No. 1 resident gets the keys to his home. Added to that cost is the task of installing sewer connections to each house. A $75,000 water pumping and filtering station on the banks of the nearby Delaware River is another expensive item. Two 20-inch water mains will carry the water to large storage tanks within the development.

Carrying on preliminary work at model-opening time were about 300 men, according to Edwin V. Ludlow, general superintendent at the site. Among their tasks are erection of precutting and storage sheds along the railroad sidings, where as many as 40 cars are unloaded daily, dredging of a canal through the property, construction of drainage ditches and laying out street and sidewalk plans. Work for most begins at 7 A.M. and ends at dark, except for emergency periods, when temporary lights have been string and activity continued as late as midnight.

Ludlow and other key personnel worked with the project into shape for an early spring start are Long Islanders who have been with the organization many years. At first, they commuted by Levitt-chartered planes, but as winter weather set in they have set up housekeeping for themselves in a large old farmhouse on the site.

Much of the land is wooded with large oaks, maples and beeches, but any which happen to be in the way of homes spotted on the maps will be removed. Ludlow pointed out. A former practice of attempting to save as many trees as possible to the point where house sites were shifted, was found "not good for production," he said. However, it was thought likely that a considerable number of trees would be preserved.

Bill Levitt realizes he's taken on the biggest job of his life. The man who has habitually guaranteed occupancy to his buyers on a certain day and is reported never to have missed meeting such a date, says of Levittown, Pa.: "We are where Long Island was 40 years ago. It's been unexploited . . . . The sky's the limit!"
NEW KAWNEER BARS

Engineered for Fast and Speedy Installation of Large Lights of Glass

Builders today are faced with new installation problems as a result of the increased use of large lights of glass.

To help builders solve these problems, Kawneer has developed an entire new line of sturdy, easy-to-install, horizontal and vertical bars, stiffeners, and anchors.

Write for details and information. The Kawneer Company, Dept. AB-110, 1105 N. Front St., Niles, Mich., or 930 Dwight Way, Berkeley, Calif.
Mr. May's latest home in the Hollywood foothills is farmhouse style. The Electric Water Heater is located next to the automatic clothes washer in the utility room, which allows short hot water lines.

says Los Angeles builder ED MAY

"Electric Water Heaters were one of the first appliances I installed in my homes," says Mr. May. "Since then I've gradually added one electrical appliance after another—but home buyers still indicate their preference for electric hot water convenience. They know it gives them an unfailing, automatic supply. They like the economical operation, due to the fully insulated tank and the short hot water lines that reduce radiation losses. We, ourselves, find installation easy because there's no flue or vent to worry about—so we can locate the heater at the most convenient and efficient place. I can recommend Electric Water Heaters to other builders, as I do to my customers."
Modular Design for the Project Builder

Designed for American Builder
by K. Roderick O'Neal & Associates
Architects & Engineers

This house is a good example in the use of the modular method in design. Fixed units of measurements permit a wide range of variations (in this case more than 52 different setups) through the interchange of wall and window panels of similar sizes. Prior to the use of the modular method, variations in design were confined to change of wall materials and color. In this house color and material changes can be added to the panel changes to provide an infinite number of variations, without altering foundation lines.

Modular dimensioning starts here with a multiple of 4 inches forming a grid, each 3/4" wide. Interchangeable panels are a multiple of four grids or 1 3/4", which forms the width of each room unit. A perusal of the accompanying drawings shows the extension of the grid lines to the roof plan and the details, so that their application can be made directly to individual framing members.

The large number of variations possible in this design are due in part to the position of the bath and utility room and kitchen wall. The fact that these units are placed in the center of the house as a unified core, leaves the exterior walls free for the placement of major rooms having similar window fenestration.

This potential four-room house and garage contains a total of 1463 square feet; 1127 for the house proper and 336 square feet for the garage. The total cost is estimated not to exceed $10,000 in the Chicago area.

Economies in this design are obtained through the use of floor slab on grade, plank and beam construction for the roof with all members exposed in the rooms below, a minimum amount of dividing wall partitions, and the use of wardrobes as room dividers. Masonry walls are of the cavity type with the inner masonry wythe left exposed in the rooms in which they occur. The greatest economy obtained is in the reduction of labor required to build and set up the wall and window panels on the periphery of the house.

No attempt has been made by the designer to embellish the exterior other than through structural lines of walls and roof. On several of the walls, the roof line has been lightened by extending roof beams beyond the line of the normal overhang to form an open trellis. This, together with the horizontal lines of the ventilating louvres, of fixed windows, and the minimum height of the roof cove from grade, make for a pleasing appearance.

Modular co-ordination works to the advantage of both the architect and builder. Some of the specific advantages are, (1) simplification of the planning of buildings in the drafting room, resulting in a saving of time. It permits easier substitution of alternate materials and changes in specifications without the necessity of replanning, (2) It simplifies taking off a list of materials, (3) it results in easier and more economical field erection.
A remarkably useful unit with dozens of applications

MODINE Cabinet Units meet the requirement for fast, positive and quiet distribution of heated or cooled air — where the expense and elaborateness of unit ventilators or air conditioners are not warranted.

Models for heating with steam or hot water . . . cooling with chilled water. Cooling models may be used for both chilled water cooling and hot water heating.

Exceptionally attractive in appearance and versatile in application, Modine Cabinet Units offer many interesting possibilities for new buildings and remodeling jobs. Available in five sizes from 120 to 640 Edr.

GET FREE ILLUSTRATED BULLETIN 550 TODAY and find out how you can profitably use Modine Cabinet Units. Call your Modine representative listed in the classified section of your phone book. Or write direct to Modine Manufacturing Company, 150 DeKoven Ave., Racine, Wis.

MODINE CABINET UNITS FOR HEATING & COOLING

Type C — basic Modine Cabinet Unit for wall mounting where off-the-floor installation is desired.

Attractive louvered plenum base — with or without fresh air damper — makes Type C a floor mounted cabinet.

Type C with optional inlet grille for ceiling use (heating only). Duct connectors also available.

Type CR with face outlet grille and plenum base for recessed installation. This unit for heating only.
"No fat," said Sprat
—but he wasn't mixing concrete!

The particular degree of "fattiness" which proper air-entrainment imparts to concrete mixtures to produce rich, smooth- working plasticity cannot always be obtained with air-entraining cements. In many instances the harsh, bony leanness of the "Jack Sprat" mixes developed by locally available materials cannot be adequately "fattened" by the rigorously standardized air-entraining cements. Only by adding the necessary amount of one of the well-known air-entraining agents to the mix can it produce the creamy fat required for adequate air-entrainment.

It's another case of the necessity for avoiding an arbitrary diet and feeding the individual what is best for his proper development.

Fortunately, the diet provided by air-entraining cement develops enough fat for most concrete mixes to "get by," but only by studying each set of conditions and furnishing just the right diet of air-entraining agent can the best results be obtained from any concrete mixture. The excellent results obtained are well worth the effort. If, however, you are certain the conditions are right for using a manufactured air-entraining cement, there's none better than Marquette Air-Entraining Cement.

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.

Correct air entrainment prevents the kind of deterioration shown on this pavement slab. Always be sure your mix will produce the air-entrained concrete the job requires.

Marquette Cement
MANUFACTURING COMPANY
SALES OFFICES: Chicago • St. Louis • Memphis • Jackson, Miss. • PLANTS: Oglesby, Ill., Des Moines, Ia. • Cape Girardeau, Mo. • Nashville, Tenn. • Cowan, Tenn. • Brandon, Miss.
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AMERICAN BUILDER
A NEW CONCEPT OF CO-OPERATION WITH BUILDERS
BY THE MAKERS OF "THE PREFERRED PLUMBING"

Starting this month, Crane is offering a new service to the public which also offers a new and substantial assistance to the designers and builders of homes.

We call this new service "Come to CRANE for ideas."

As featured in national advertising, this service offers scores of new, practical and satisfying ideas for bathrooms, kitchens, laundries, and utility rooms—both in new construction and in remodeling.

In addition to colorful illustrations of these exciting rooms Crane also provides the plans and decorating suggestions.

Ask your Crane Branch or Crane Wholesaler for complete details.

CRANE CO.

MARCH 1952
"Why I'm Building Electronic Moduflow Homes All Over Cleveland"

A recent report from L. M. Gunderson, Shaker Heights, Ohio, one of Cleveland's leading builders

"I'm not in the mass-production housing business. I build houses one at a time, custom-made, for people who want really comfortable living. And I've found, through experience, that Honeywell's Electronic Moduflow system provides the answer, plain and simple, for home-owners who want the best in heating comfort at reasonable cost.

"Several years ago, when I first heard about Electronic Moduflow, I decided to try it out in my own home. It was one of the wisest decisions I ever made—we spent the most comfortable winter of our lives. So I began recommending it to every customer who came to me with plans for building a house.

"Today I'm putting up 'Electronic Moduflow Homes' all over the greater Cleveland area. And the Honeywell custom-comfort idea, far from being hard to sell, has made selling easier for me. It has also increased the value of the homes I'm selling—satisfied a lot of customers—and helped enhance my reputation as one of the better builders in these parts."

Another Plus Profit
Idea From Honeywell
"It's easy to sell Electronic Moduflow to customers who want the best"

"I often take new customers out and show them a typical home I have built, using the new Honeywell Electronic Moduflow system. It never fails to impress, and you can see why.

"First I show them the Electronic Weathercaster... it's a swell place to start talking. This control, no larger than an ordinary thermostat and located on the exterior of the house, works electronically with the inside thermostats to sense weather changes.

"Then I take them inside the house, and go over the completely automatic functions of the system. I point out that the temperature is regulated by a clock thermostat—the Electronic Chronotherm—and always assures of getting up in a warm house every morning, regardless of how cold it is outside.

"I wind up by telling them how a system governed by the latest thing in electronics is bound to be greatly superior to ordinary heating systems—and is, in fact, something like 84 times more sensitive.

"After that kind of demonstration, I rarely fail to get the go-ahead on Electronic Moduflow for my customer's new house."

R. P. Zimmerman, Wilmette, Ill., says:
"Our dining room, under which there is no basement, could never be heated, it seemed. It took Moduflow to solve the dining room heating problem completely. Today we are enjoying even heat throughout our entire house with never a variation."

E. L. Wirth, Lincolnwood, Ill., says:
"I can't say enough about the Electronic Moduflow control system installed in my home last year. It has kept our home at a nice, even, uniform temperature ever since—regardless of how cold or mean the weather has been outside."

For additional facts and application data on Electronic Moduflow (the system that will help you better satisfy your customers) call your local Honeywell dealer. Or write Honeywell, Dept. AB-3-36 Minneapolis 8, Minnesota.

MINNEAPOLIS

Honeywell

First in Controls

MARCH 1952
140,000 See “Parade of Homes” in

Outstanding showmanship featured National Home Week in Milwaukee and helped earn the builder association an honorable mention award in Group I of American Builder’s 1951 contest

PAST experience with its annual “Parade of Homes” has helped guide the Milwaukee Builders Association in increasingly effective observances of National Home Week. Last year’s Parade, the sixth, was well-planned and smoothly executed, with approximately 140,000 persons visiting 26 homes.

The 1951 Milwaukee project was concentrated in a three-block area, an idea which the association said paid off in increased attendance. Featuring a good variety of design, the homes ranged in price from around $11,000 to $17,000. Five prefabricated units were included. Twenty-two builders took part.

Several of the homes were completely furnished. Some featured special lighting techniques sponsored by a utility firm.

The city cooperated, not only furnishing a mayor’s statement calling public attention to the Week, but also announcing the event with a lighted sign in city hall tower.

A home show at the Parade site included exhibits by such groups as the school board, city and county planning departments, Red Cross, fire department, and vocational school. Appliances and equipment were shown by firms in the fields of millwork, heating, plumbing, electricity, gas, and various building materials.

Another association-sponsored feature was an attractive plan book placed on sale at the exhibition. Included in the 74 pages were floor plans and renderings of all homes in the Parade, an article on home ownership, “how to do it” hints and other information.

Preliminary Planning

The builder association general committee met first in late May to make early plans for the event. The arrangements agreed on at that time were given good publicity in the local newspapers. Other notices, telling of both the national and local aspects of the Week, appeared from time to time. The Milwaukee Journal pub-
Plan Your 1952 National Home Week Observance Now!

Give your community an opportunity to participate in the greatest merchandising and promotion program that has ever been conceived for the home building industry. Follow this series of articles on cities which won awards in American Builder's 1951 National Home Week Contest. (See January and February, 1952, issues.) Watch for details on how builders and dealers can capitalize on their observance of National Home Week in your May American Builder! Also in May—announcement of American Builder's 1952 National Home Week Participation Contest for National Association of Home Builder chapters and retail building material dealers.

Milwaukee

Established a special section on opening Sunday and the Milwaukee Sentinel devoted its real estate section to news of the event.

Considerable publicity was given to Parade visitors from both in- and out-of-state. These included H. Leslie Hill, past president of the Home Builders Association of Dallas, Texas; Grover Godfrey, Dallas executive vice president; Gus Fields, manager of the Oklahoma City Home Builders Association; E. B. A. Sokolowski, Madison, president of the state-wide Wisconsin Builders Association; and Glenn Webermeier, Beloit, state secretary.

In addition to general chairman Dwyer, the Milwaukee NHW committee included: Alfred Weter, vice chairman; Mrs. Henny Mollgard, chairman, plan book committee; Clem Schmidt, design committee chairman; Roy F. Healy, executive vice president; Harris K. Evans, association president and honorary chairman; and Finis McCoy, chairman, exhibitors committee.
SIDING is 4-inch tempered hardboard cut into 16-inch widths at the factory.

Here Hardboard Serves as Lap Siding

In the case of Wallace B. Wilson, manager of the J. F. Anderson Lumber Co. at Mason City, Iowa, imitation was not only the sincerest form of flattery but also the source of some profitable volume business. When Wilson built the first home in the city using tempered hardboard as lap siding, four other families liked the result so well that they placed orders for similar ones. Moreover, the yard manager expects other families to follow suit.

Located in a beautiful wooded section overlooking a creek, the six-room, one-story house was built by Charles Wilson, general contractor, for $15,000. Construction time was 90 days.

The 4-inch tempered hardboard was cut into 16-inch strips at the yard. After the strips were conditioned, they were applied with 3/4-inch shadow strip under the bottom edge. Wood wedges were used at end joints, at the corners and at the ends of all strips where they butt against the casing. End joints were set in caulking compound.

Shadow line strips were first nailed into the stud wall with 16d common nails, allowing smaller nails to be used for finish nailing.

Several reasons were given by the owner and contractor for selecting the wide hardboard panels for the job. Architecturally, the house required a wide siding for contrast with the narrow Roman brick at the entryway and chimney. Contractor Wilson added that the material is easily applied and has excellent appearance.

Although the wood wedges were cut on the job, the contractor expressed the conviction that application time was less than it would have been with bevel siding.

Among the features of the residence are the brick fireplace-wall in the living room, a second fireplace in the basement, and the gas-fired Lennox Stoway heating plant.

SIX ROOMS, one-story with basement, built for $15,000 in Iowa. The plan features a brick fireplace-wall running the width of the living room. There is a second fireplace in the basement.
Motel is set back from the road more than 70 feet, looks like a subdivision of small, comfortable homes.

**Here Concrete Helps Solve a Problem**

*A motel designed for quietness and a home-like atmosphere*

The Country Manor Motel in Safford, Arizona, was designed to appeal to motorists in two special ways—by presenting the appearance of a group of small, comfortable houses and by offering a maximum of quiet and privacy.

To minimize noise, the first row of buildings was placed 70 feet from the highway, the second row 100 feet. Space between units is 10 feet on all sides. The construction material is heavy 4x12x8-inch concrete block.

For a home-like effect, each unit has a 2½-foot planting area, a decorative lamp post, balcony, railing over breezeway, and is surrounded by a concrete walk. The "weeping" joints of the exteriors are painted gray and the roof is red tile.

Interiors are exposed block, painted in all rooms except the dressing room and bath, which are plastered. The concrete floor is covered with asphalt tile. Heating is with wall gas heaters. Each unit is equipped with an evaporative cooler.

The two-story owner's apartment is located in the center, near the entrance. The motel's attractive neon sign is placed above a block-enclosed planting area. It is flanked by a ranch fence built of 6x6 posts 12 feet apart and 2x6 stringers.
NEW TYPE SCREENS ADD
10 PLUS VALUES!

NEW
ALUMINUM
FRAMELESS
TENSION
SCREENS

Sealed Tight...
Held by tension.
Exclusive sill bar adjusts
to off-level sills.

1. INCREASE SALES APPEAL
   of homes, apartments, motels,
cottages, etc.

2. NEAT APPEARANCE . . .
   CONVENIENT

3. LOW COST—LONG LIFE

4. EASY TO INSTALL

5. EASY TO HANDLE

6. NO PAINTING—WON'T
   RUST OR STAIN

7. SEALS TIGHT
   with exclusive free floating
   sill bar . . . assures snug fit at
   bottom . . . adjusts screen to
   uneven or off-level sill.

8. EXTRA STRONG VERTICAL
    EDGES
   are 3-strand selvage, of special
   flat wire, to keep edges taut.

9. PATENTED TENSION
    CATCH
   at sill holds Keystone
   Screen securely in place.

10. EASILY REPLACED

You can add a whole lot of
sales-appeal to homes and
apartments—at low cost—with Keystone
Aluminum Tension Screens on all
double-hung windows!

Saves 25 minutes per window in
installation time. Easily installed
—no heavy frames to cut or fit. No
painting—no rust. A neat and
attractive full-length, low-cost
screen of outstanding long life!
Users everywhere praise Keystone
advantages! Send today for details!

SEND COUPON!

Keystone Wire Cloth Co.
Dept. C-16 Hanover, Pa.

Without obligation, send me complete
details, prices and discounts on NEW
products, making Keystone Frameless Tension Screens.

Name ________________________________

Address ________________________________

City ____________________________ State ________

No. G-29
Section Through
Show Window

The problem involved in the re-
modeling of the store front shown in
drawing and photographs on the
opposite page, was to design a spa-
cious and well illuminated window
for the display of men's clothing. In
this connection it was necessary to
use materials and colors that would
lend themselves to a man's point of
view.

Although redwood and Crab Or-
chard stone have been used for
finish in men's, women's and children's
shops, the designer held to the darker
shades of the stone and produced a
darker finish on the redwood to em-
phasize the masculine characteristic
of the store. The Crab Orchard stone
contained more of the brown and
light tan shades, while the redwood
was stained dark red. The vestibule
ceiling was painted dark green. The
floor is made of Verdiolite light do-

temocratic terrazzo and white portland
cement with color pigment added.

Both fluorescent and incandescent
lighting were used. The fluorescent
strip lighting is placed behind a white
enamel, egg-crate designed, lowred
ceiling in the show window area.
with divisions of egg-crate spaced
6 inches on centers. This type of
ceiling continues for the full width
and length of the show window. The
incandescent lighting fixtures are re-
cessed type "High Hats" spaced 16
inches on centers and are arranged
to use 300 watt lamps.

The show window sash and sill
mouldings are stock aluminum mem-
ers.

The bulkhead from vestibule floor
to floor of show window, and the red-
wood valance extending down into
the show window were framed with
wood studs and plywood panels. Ply-
wood was also used for show window
floors and ceiling of store front.

Marking Lines on Pipes

A strip of gasket material carried
in the tool-box makes it easy to mark
a straight cutting line around a pipe.
—W. W. Howe, Longview, Wash.
Among the extraordinary engineering features of popular, new NATIONAL LOCKset is the firm yet instant slot-engagement of latch body to lock body during installation on the door. This one step alone saves valuable minutes, which become valuable hours, when projected against almost any job.

Here is just one of many solid reasons why NATIONAL LOCKset is the best unit for you to buy, sell, specify and use. Write us for illustrated lockset catalog. It is reproduced in color and gives complete details.
Small Investment
Minimum Space

Requiring minimum dollar investment and minimum counter space, this beautiful, burgundy-colored board will prove a consistent source of profit for you. Cabinet hardware in assortment is Steel and Die Cast with Bright Chrome finish. These are selected items, the very choicest in the extensive National Lock line. They are not affected by present government regulations. Immediate delivery.

Order from your supplier
Open Stock, if desired

Get Ready For Spring by Ordering These "In-Demand" Items Now

NATIONAL TUTCHE LATCH
N65-220 SASH LIFT
N65-4201 SASH LOCK
N65-161 SCREEN HANGER
N65-160 SASH ADJUSTER
BUILDERS BUTTS

distinctive hardware...all from 1 source

NATIONAL LOCK COMPANY
Rockford, Illinois  •  Merchant Sales Division
Redwood in the News

The functions of fences have become almost as varied as their decorative design in recent years. No longer merely a boundary marker, the fence today has uses ranging from garden compartmentation to localized climate control.

Illustrated plans and diagrams showing the adaptation of redwood to attractively designed fences for the modern functions can be obtained by writing the California Redwood Association, 405 Montgomery St., San Francisco 4, Calif.

No. D-88
Two Cupolas

Cupolas located on garage roofs, such as are shown on the opposite page, can be made a distinct architectural feature where the garage is attached or becomes a part of the main body of the house. They are usually confined to the one-story or ranch type house.

A unit of this type is also of practical value. The open louvers on the sides allow the gases and other impurities to escape. Louvers are sealed against insects by installing a screen on the inside face.

The two types of cupolas that are detailed, while assuming approximately the same form, are quite different in their use of materials. One has an octagonal shape with wood facing applied to wood framing members. Diagonal boards are placed flush with the facing to form louvers. Roof of cupola is framed with 2x8's cut out on top side to form curved surface which receives plywood backing and metal deck.

The other one is square in plan with metal louvers extending completely around the unit. Louvers are secured to wood framing composed of 2x4 corner struts, and 2x4 intermediates. An interesting arrangement of wood moldings placed at top and bottom of metal louvers accentuate the design. Roof is framed in approximately the same manner as the other cupola except that the metal roof has a standing seam at the intersection of roof surfaces.

Install Sash Cord Quickly

Use a small chain; install a small wire hook in chain. Punch a hole through cord, attach hook in cord and start chain through pulley and feed to weight pocket.—John R. Jones, Georgetown, Ky.
The Lock with a Million Friends

DEXTER

THE Lifetime LOCK

DEXTER TYPE "E" LOCK

DEXTER LOCK COMPANY
GRAND RAPIDS, MICHIGAN

A SUBLIARY OF NATIONAL BRASS COMPANY

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

MARCH 1952
SAVE INSTALLATION TIME AND MONEY...
hold up to 10,000 lbs. in any Solid Material

When you find it necessary to fasten objects such as machinery, shelving and electrical equipment to solid floors, walls and ceiling, you can save yourself time and trouble by using Paine Expansion Screw Anchors No. 900 (screws are not included). These anchors are quickly set in place to make a permanent anchorage that is capable of supporting up to 10,000 lbs., depending on the size used. They can be used in stone, marble, concrete or any other solid material. They are rust proofed and vibration resistant. A Setting Tool comes in every box. The anchors are stamped with size and thread of bolt or screw to use and have a directional arrow identifying which end goes in the hole.

Use a Paine Sudden Depth Rotary Drill bit for quick, accurate holes or, for the occasional user, use a Paine Hand Hammer Star Drill.

*Dimensions in first illustration apply to Paine 90-20 only.

THE PAINE COMPANY
2959 Carroll Avenue Chicago 12, Illinois

OTHER PRODUCTS

Spring Wing Toggle Bolts
Expansion Anchors
'Sudden Depth' Drills
Wood Screw Anchors
Pipe and Conduit Clamps and Straps

WRITE FOR CATALOG

NEW PRODUCTS
(Continued from page 154)

SASHLESS WINDOW AB35218
An all glass window uses a redwood frame and no hardware except for a pull latch lock. The unit is manufactured by a California builder who has used it in 3000 installations over a five year period. The one size, 4 feet by 3 feet, is shipped in seven prefabricated parts. The glass is used is 3/16-inch crystal, and is not included in the package. Glass can be obtained from local glaziers. Ernest Person Co., Dept. AB, Eureka, Calif.

WATER SOFTENER AB35219
Easier to service, this unit features the Quadra-Flow controller. All control units are in one valve operated by one lever. A timing valve is optional equipment. The 48-inch tall model also eases the servicing operation. The control unit can be assembled or disassembled in a matter of minutes and has a multi-pored valve body. Available is a shut-off valve that prevents the passage of hard or salty water into the lines during regeneration. Superior Ball-OMatic Water Softener, Reynolds-Shorter Co., Dept. AB, 12100 Cloverdale, Detroit 4, Mich.

SAW HORSE BRACKET AB35220
A new assembly bracket and five pieces of 2x4-inch lumber make a staunch saw horse. The device is a simple formed steel bracket, zinc coated to prevent rust, and double cold riveted. The unit knocks down quickly and only the brackets need be transported to another job. Intended for carpenters, painters, and masons the brackets have found many uses around the home. Thomas Products Co., Dept. AB, Detroit, Mich.

New Products continued on page 158

AMERICAN BUILDER
New SOLID Success!

NATIONAL

SOLID

Success!

Sensational, New Sliding Doors

They're Solid...
Made of United States Plywood Corporation's Amazing, New novoply.

Constructed with United States Plywood Corporation's amazing NOVOPLY, SLI-D-O-O-RS are guaranteed not to warp. They are solid throughout and slide silently on precision-engineered, ball-bearing rollers.

From every point of view, SLI-D-O-O-RS offer every advantage...

- Adjustment and construction procedures have been reduced to the simplest minimum.
- SLI-D-O-O-RS are a combination of NOVOPLY and hardwood jambs, headers and saddle for completely warp-proof, easy operating, sliding action. Oak saddle blends with finished hardwood floor.
- SLI-D-O-O-RS are supplied with fascia so that only the handsome sliding doors are visible.
- NOVOPLY takes paint beautifully. It will not bleed or produce an unsightly "orange peel" effect.
- Priced right for builder and customer.
- When properly adjusted, rear slide guides permit removal of door or fasten securely to prevent door from falling from casing. Doors are as attractive from the back as from the front.

Write for complete, informative folder

DIMENSIONS:

Two Door Openings...
Outside jamb to outside jamb: 2'0", 2'6", 3'0", 3'6", 4'0", 4'6", 5'0", 6'0", 7'0", 8'0".
Outside header to outside saddle: 6'9½" or 8'0".

Three Door Openings...
Outside jamb to outside jamb: 6'0", 7'6", 9'0", 10'6", 12'0".
Outside header to outside saddle: 6'9½" or 8'0".

SPECIAL SIZES WILL BE MADE TO ORDER IF QUANTITIES WARRANT IT.

*Trade Mark Registered. Patented. Other Patents Pending.

MARCH 1952
It's equipped with Dura-seal . . . the combination metal weatherstrip and sash balance! It provides the best weather protection and the easiest window operation!

Dura-seal's jamb member is made in one piece and its concave back surface provides flexibility which maintains a constant air seal and smooth window operation even when the sash expands or contracts due to changeable atmospheric conditions. (Springs are completely covered—photograph shows cover down on lower sash to illustrate spring.)

Full jamb weatherstripping provides better weather protection, eliminates paint-stuck windows, and improves window appearance.

Because Dura-seal is self-adjusting, it assures trouble-free operation with no replacement or maintenance costs.

BUILDERS! Ask your lumber dealer about Dura-seal or see Sweet's File, Builders, Section 34.

ARCHITECTS! See Sweet's File, Architectural, Section 19b.

Zegers Dura-seal

Combination Metal Weatherstrip Sash Balance

Manufactured by

Zegers Incorporated
6090 South Chicago Avenue
Chicago 17, Ill.

Dura-seal is cut exactly to the pitch of the sill—another feature that helps make a more attractive and efficient window.

NEW PRODUCTS

(Continued from page 158)

DADO TOOL AB35223
Recently introduced is a new dado tool that cuts depths of one inch and widths of \( \frac{1}{4} \) to 1 1/4 inches. The nine inch Quick-Set dado can be set for the proper width by loosening the arbor nut and turning the graduated dial. Manufactured by the Consolidated Machinery and Supply Co., Ltd., Dept. AB, 2031 Santa Fe Ave., Los Angeles 21, Calif.

OIL VAPORIZING BURNER AB35224
Built on a new principle for introducing air to the burner chamber is the Dual Air oil vaporizing burner. The manufacturer claims the unit practically eliminates soot formations that are common with pot-type oil burners. Draft requirements are sharply reduced by the new unit. Shell-o-Well oil floor furnace and central heating systems manufactured by the company will have the new burner. Oman Co., Dept. AB, 2222 So. Third St., Columbus 7, Ohio.

IMPROVED CAULKING CARTRIDGES AB35225
Improved design for metal and paper caulking cartridges includes a self-forming plastic nozzle. The nozzle can be permanently shaped by the use of flame or hot water. The metal cartridge, used with the wire-bail, or twist-type caulking guns, will take up to 10 lbs. of air pressure and 55 lbs. of hydraulic pressure. The paper cartridge is used with the wire-bail or barrel type guns. Gibson-Humans Company, Dept. AB, Cleveland, Ohio.

VENTILATORS AB35226
A ceiling-type fan adaptable to bath and powder room, or any room where wall space is limited or not available. Units available in 8 or 10 inch models and are either manual or automatically controlled. Fumes, steam, and odors are drawn outside. Unit prevents condensation on windows and walls. The 8-in. model handles 500 cu. ft. of air per minute, 10-in. unit expels 650 cu. ft. of air per minute. Shepley Mfg. Co., Dept. AB, 1312 Sheffield St., Pittsburgh 33, Pa.

New Products continued on page 162

AMERICAN BUILDER
One of today's outstanding projects is the 1,000-house job at Fort Bragg, North Carolina.

This military housing project is being built by T. A. Loving and Company of Goldsboro, N. C. and W. H. Weaver Construction Company of Greensboro, N. C.

The houses and apartments in this project were pre-fabricated by American Houses, Inc., who have over 60 DE WALT SAWS in operation in their three plants for precision cutting and mass assembly of a wide range of house models and designs.

This example of the use of DeWalt for precision cutting for multiple construction should interest all builders.

The building market is rapidly changing. You may want to devote your future efforts to other types of building: defense housing, military housing, low-cost rental housing, special wood structures, etc.

No matter what type of building you do—whether for a single structure or for a thousand—you have a valuable asset when one or more DeWals are on the job. You build faster...better...more accurately...and at lower cost.

DeWalt models are available from 1/2 H.P. to 7 1/2 H.P.

Shown on this page is the newest DeWalt GR—the "builder's saw." This model has 5 new features, including low dead rise motor which permits deeper cut. See what all five features mean to you by seeing an actual demonstration! Your DeWalt dealer will show you. Send coupon below for full information.

MAIL THIS COUPON TODAY!

DeWalt, Inc., 13 Fountain Avenue, Lancaster, Pa.

Please send me literature and complete specifications on the new DeWalt GR.

Name: .................................................................

Address: ............................................................

City: ................................................................. State:.................
NEW PRODUCTS
(Continued from page 160)

OIL FIRED BOILER AB35208
The gleaming white cabinet resembles a refrigerator but actually is an oil fired boiler. Called the National Packet, it houses boiler, oil burner, hot water circulator and controls. The National Radiator Co., Dept. AB, Johnstown, Pa.

ELECTRIC RANGE AB35217
A new 6-inch range has a white enamel finish throughout the interiors of the storage compartment and drawer. Other features include a newly-styled backguard with add-on lamp ensemble and precision clock. Deepwell cooker, giant oven, and smokeless broiler are other features. Home Appliance Division, Murray Corporation of America, Dept. AB, 1900 S. Washington St., Scranton, Pa.

WINTER AIR CONDITIONER AB35207
The low-boy unit is available in 90,000 and 110,000 BTU inputs with the use of all types of gas fuel. The unit can be obtained for automatic alternate operation of natural and LP gas. The unit is compact and easy to install. A large 13 inch blower can be run at slower speeds to assure quiet operation. L. J. Mueller Furnace Co., Dept. AB, 2005 W. Oklahoma Ave., Milwaukee 15, Wis.

HEAVY DUTY BOOM AB35211
A boom designed for lifting and loading with the manufacturer's 5-ton shovel-crane is available in 25 foot length. Five foot extensions are also available. New bracing and heavier reinforcing makes this unit a heavy duty boom. Schiell Bantam Co., Dept. AB, Waverly, Iowa.

VIBRATOR AB35213
An air vibrator to be mounted on the side of the 20-ton capacity dump truck. The unit speeds up unloading of all materials that have a tendency to pack down in transit. The vibrator unit operates only intermittently, enough to keep the bulk moving. Cleveland Vibrator Co., Dept. AB, 2870 Clinton Ave., Cleveland, Ohio.

AIR DRILLS AB35204
A new series of small, lightweight portable air drills have been introduced by the manufacturer. Outstanding features of the drills are, one piece housing providing a compact, balanced, short, and lightweight drill; a more powerful redesigned five-vane air motor to provide a constantly smooth flow of power; built in lubricator; a throttle valve design eliminates air leakage. Ingersoll Rand Co., Dept. AB, 11 Broadway, New York 4, N. Y.

INDUSTRIAL FLOOR AB35201
The addition of pulverized natural rubber to an industrial floor material consisting of asphalt, rock limestone, and cold asphalt emulsion greatly increases the life span of the floor. Resistance to loads, impact, and shock is three times as great as for the same material without the rubber. It is particularly desirable for areas subjected to crushing action of steel-wheel vehicle traffic. Suitable for large area floor resurfacing with a relatively thin 1/2 inch layer. "Immediate-Set," is factory mixed and requires no additives or processing before use. Flash-Stone Co., Inc., Dept. AB, 30 E. Rittenhouse St., Philadelphia 44, Pa.

FLOOR LEVEL CLEANOUT AB35212
This cleanout has been designed for easy access to drainage lines in areas of heavy traffic. Featured is the plug which forms a gas and water tight seal. This is so constructed that it will never freeze to the body. The possibility of damage to the plug or body of the unit is reduced by this removal feature. J. A. Zurn Co., Dept. AB, Erie, Pa.

USE THIS COUPON FOR MORE INFORMATION
ON NEW PRODUCTS IN THIS ISSUE
Save Time—Just Insert Key Numbers and Mail To:
American Builder, 79 W. Monroe Street, Chicago 3, Illinois

Name
Address
City..................State
No. ...............No. ...............No. ...............No.
No. ...............No. ...............No. ...............No.
No. ...............No. ...............No. ...............No.
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No. ...............No. ...............No. ...............No.

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

AMERICAN BUILDER
"Choose ceiling radiant heating," says Bundy to future home owners—for you

Like having the sun in your ceiling—Bundyweld ceiling radiant heating

It is the conviction of Bundy Tubing Company that radiant heating systems rightly belong in ceilings.

Bundy tells future home owners why in an intensive, full-page, four-color campaign appearing in Better Homes and Gardens and American Home—magazines carrying immense weight with consumers interested in buying, building, or remodeling homes.

Are you ready?

Interest in radiant heating has spurted sharply upward since the end of World War II. The all-new Bundy campaign is designed to give future home owners important information on ceiling radiant heating and on the Bundyweld Tubing features that help assure a perfect, long-lasting, economical system.

This campaign, of course, will help pave the way to even stronger consumer acceptance of ceiling radiant heating and Bundyweld Tubing. Result for architects and builders: Those who offer Bundyweld ceiling radiant heating systems will have a powerful, convincing, and much-wanted sales feature to speed sales to receptive buyers. Result for plumbing and heating contractors: Continually increasing business and good, sound profits from the installation of Bundyweld ceiling radiant heating systems.

Advantages of Bundyweld Tubing

Bundyweld is the only tubing double-walled from a single strip. It's steel, copper brazed through 360° of wall contact, copper-coated inside and out. It gives perfect radiant heating performance. Bundyweld transmits heat quickly. It's leakproof. Its smoothness and freedom from scale promote unimpeded water flow.

Bundyweld gives major fabrication savings, too. Bundyweld comes in 20' lengths for easy handling, one end expanded (when specified) for easy joining. Ductile Bundyweld bends easily on simple fixture. Lightweight, rigid grids of Bundyweld are easily, quickly mounted on ceiling.

First ad in new national campaign directed to future home owners.

Radiant Heating Division
BUNDY TUBING COMPANY
Detroit 14, Michigan

The Bundy consumer brochure on ceiling radiant heating, to be offered in every national radiant heating ad, was written with you in mind, too. Let us send you a copy. It's packed with meaty facts.

Radiant Heating Division
Bundy Tubing Company, Detroit 14, Michigan
Send me the free literature I've checked:
- Bundy consumer brochure on ceiling radiant heating
- Bundy technical brochure for the trade

Name
Company
Address
City Zone State

MARCH 1952
White Fir

One of 10 Woods from the Western Pine Region

Light weight, softness, straightness of grain and uniformity of texture make this lumber easy to handle, cut, saw, shape and nail — thus saving costs on the job. Widely used for framing, sheathing, subflooring, etc. Select grades are excellent for interior and exterior trim, millwork and many industrial uses.

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

These are the Western Pines

Idaho White Pine
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 White Fir.
Address:
Western Pine Association,
Yeo Building,
Portland 4, Oregon.

Catalogs (Continued from page 164)

201 — Air-Entrained Concrete—A 6-page folder describes a liquid concentrate for concrete and explains its advantages. Scientific tests and practical uses are fully illustrated. "Foamasil" Onyx Oil and Chemical Co., Industrial Division, AB, 100 Warren St., Jersey City 2, N. J.

202 — Plaster Mixer—A 6-page folder shows one of the plasterer’s newest helpers. The informative sheet explains the 11 advantages of the plaster mixer. "Limestir," E-Z-On Corporation, Dept. AB, 1725 W. Pershing Road, Chicago 9, Ill.

203 — Portable Heaters—A 20-page booklet shows the versatility of the manufacturer’s product. Photographs and typical case histories are described to show the heater’s use. Winter construction is also discussed. Herman Nelson, Division of American Air Filter Co., Inc., Dept. AB, Moline, III.

204 — Architectural Metal—A 16-page booklet gives the full line of storefront materials manufactured by Kawneer. Diagrams, photographs, details and other informative material is included in the booklet. The Kawneer Co., Dept. AB, Niles, Mich.

205 — Machine Tools—A 32-page catalog of production machine tools and their accessories is now available from the manufacturer. Drill presses, grinders, lathes, sanders, band saws, circular saws, combination units, joiners, scroll saws, and shapers are included in the catalog. Delta Power Tool Division, Rockwell Manufacturing Co., Dept. AB, Milwaukee 1, Wis.

206 — Garage Doors—Carved raised panel doors are described and shown in a 4-color folder. Sixteen designs are available in many combinations that blend with modern architecture. Raynor Manufacturing Co., Dept. AB, East River Road, Dixon, Ill.

(Continued on page 168)
Architects and builders everywhere are finding a way to combat today's top-heavy building costs by using Steelcraft building products. Low in first cost, they are easy and quick to install... speed up construction... help reduce overall building costs. A complete line of steel building products from one source... with prompt shipping schedules.

**BONDERIZED STEEL RESIDENCE CASEMENTS**

Made of hot rolled steel sections, Steelcraft steel residence casements are available in all popular sizes. Picture windows, frames and combinations are standard items. Steelcraft steel casement windows are preferred by progressive architects and builders because they combine modern beauty with all these advantages:

- **Easy to Operate** Precision built, die-cast roto-type under screen operators and locking handles make them easy to open... easy to close. They will not stick, rattle or warp.
- **Easy to Clean** Extra long reinforced extension type hinges allow more clearance at jamb permitting easy outside cleaning from the inside.
- **100% Ventilation** Full opening ventilators can be adjusted to deflect the breeze into the room insuring maximum ventilation at all times.
- **More Light** The trim narrow lines permit maximum amount of light to enter the room.
- **Weatherproof... Water-Tight** Double weathering contact on both inner and outer edges provide two weather seals on all sides. Locks tight—stays tight.
- **Minimum Upkeep** Bonderized for permanent protection with a baked-on prime coat reduces maintenance cost.

**STEELCRAFT PRECISION BUILT STEEL BUILDING PRODUCTS**

| Steel Basement and Utility Windows. Armless ventilators are easily removed. |
| Basement Sash Frame. Easy to use, saves time.—reusable. |
| Steel Door Frames. One piece, welded construction. Reinforced mitered corners won't open. |
| Aluminum Inside Storm Sash for all metal casement windows. No measuring... standard sizes... easy to install. |

**MAIL THIS COUPON TODAY**

The Steelcraft Manufacturing Co., Dept. AA-352 9017 Blue Ash Road, Rossmoyne, O. (In Greater Cincinnati)

Please send literature on full line ( )
I am particularly interested in

Name ____________________________
Company Name ____________________
Business Address __________________
City ____________________________
Zone __________ State ____________

**THE STEELCRAFT MANUFACTURING COMPANY**
ROSSMOYNE, OHIO (IN GREATER CINCINNATI)

MARCH 1952
No Profits, No Capital

The following comments, written by George W. Eckelberry,* were published in a recent issue of "Human Events," a weekly letter of news and opinion published by Human Events, Inc., Washington, D.C. They cover such a broad and complex subject so concisely and completely that the entire article is being reproduced here for the benefit of American Builder readers.

Karl Marx managed to make "profits" the most horrible word in the English language. With nothing more than this misconception as the basis for their thinking, many who lay claim to the title of "economist" have built up a whole system of thought. What is taught in a number of our universities as economics is nothing but an elaboration of the bad reputable into which an innocent word has fallen, and much of our legislation is similarly based.

Right now, labor union "economists" are taking advantage of the Marxist connotation to facilitate their demands for increased wages: If only the capitalists were satisfied with less profits (that is, with less loot), they could pay the workers more wages; the higher wages need not come out of the consumer's pocket by way of higher prices.

In view of this trend of thought, a recent report of the Securities and Exchange Commission is very illuminating. It tells the arbitrary fashion that profits have a very useful function in our economy and, far from being a form of robbery, they serve to keep the machinery of production from disintegrating.

In the second quarter of 1951, the report says, our corporations spent $6.8 billions on their productive capacity. Of this amount, $5.6 billions went into plant equipment, the balance into inventories. On the basis of this experience, the SEC predicted for the year a total expenditure of $2.8 billions for tools and raw materials.

Where will all this money come from? From that horrible thing called profits. Only $800 millions of the above $6.8 billions came from the sale of new shares. (If one could trace back to the source of this $800,000,000, one would come to profits again.) Long-term borrowing accounted for $1.6 billions (which came out of profits saved up for this very purpose). The other $4.4 billions that was put into the expansion program of the corporations came from their own profits. That is, the expansion was internally financed to the tune of 63 per cent.

These figures do not give an exact picture of what happened to the profits of the corporations. Our accountancy methods are not quite up to detailing economic phenomena. There is the matter of inflation which makes bookkeeping look foolish at times.

The depreciation of plant and equipment is figured on the basis of original cost, and is usually quite inadequate when replacement becomes necessary. In addition to depreciation accruals, the corporations must dip into their current profits to help pay for new machinery. Rising prices of raw materials make inroads into profits necessary for replacement.

That is to say, some of the $6.8 billions which the SEC tells us went into plant expansion really went into paying more for the new equipment than was expected, and this increase had to come from profits.

All of this means that the improvement in the American productive machine is due entirely to plowing back into it these evil profits.

"Ceiling on Profits"

Currently under consideration in the Washington maelstrom is a proposal to put a "ceiling on profits." Labor leaders blame the inflationary trend to excessive corporate profits. Also, the late Labor Government of England considered a tax on profits. With profits the principal source of funds for the increased productive capacity which alone can combat inflation (hurting a decrease in government spending), this attitude is downright wicked.

It should be clear that a tax on profits is a tax on capital. When fund-ear-marked for expansion are confiscated, the expansion simply will not take place. Whatever the Welfare

(Continued on page 172)
this is the only rock wool batt with a fire-resistant vapor barrier!

Carey

FIRE-GUARD

available now to give any home a great new defense against fire!

No other rock wool batt of any kind combines top-quality mineral wool with a vapor barrier that resists fire . . . has earned Underwriters' Laboratories, Inc. rating for fire-safety!

Underwriters' tests prove that Fire-Guard batts actually help stop the spread of fire . . . won't feed the flames, as do ordinary paper vapor barriers. And Fire-Guard batts appeal to progressive builders and architects for other reasons, too. They're resilient, yet firmly felted, uniform in thickness. Moisture and vermin do not attack them. Made with flanged vapor barrier, in sizes to fit between standard framing, they save installation labor and time.

Shouldn't you give your clients proper protection, as well as maximum comfort and fuel savings the next time you specify insulation? Better get all the facts on Fire-Guard from your Carey dealer or mail the coupon and we'll send you informative literature and a free sample of this great new advancement in insulation!

FROM THE HOUSE OF CAREY — Fire-Chex Asbestos-Plastic Shingles • Bathroom Cabinets and Accessories • Carusoite Asbestos Cement Wallboard • Caruso Siding • Ventilating Fans • Other Famous Products for Home, Farm and Industry

THE PHILIP CAREY MFG. CO., LOCKLAND, CINCINNATI 15, OHIO
IN CANADA: THE PHILIP CAREY CO., LTD., 277 DUKE ST., MONTREAL 3, P.Q.
Balanced design — easy operation

HANSEN — the Tacker with 1001 uses —

Tacks insulation, ceiling tile, metal lath, etc.

Zip! Zip! Fast as you grip!

CEILING TILE, with flanges, can be fastened to furring strips easily, speedily with HANSEN. You hold the tile with one hand — tack with the other. Zip! Zip! fast as you grip — single-leg, 1/2" T-head Tacks are driven thru the flanges of the ceiling tile. No denting hammer blows to damage, mar or break tile while being applied. T-head Tacks hold securely without being visible. Many other uses for HANSEN — tacking insulation, metal lath, screens, building paper, etc. REQUEST BOOKLET T-40.

A. L. HANSEN MFG. CO.
5059 Ravenswood Ave.
CHICAGO 40, ILL.

HOMEBUYERS LIKE THE KITCHEN-AIRE EXHAUST FAN BECAUSE IT’S DIFFERENT

Different, because it is FIRE-SAFE, grease laden air is NOT drawn over motor.
Different, because intake grill may be mounted above cooking range even on inside wall.
Different, because ordinary 6" stove pipe will serve for making connection between intake grill and exhaust fan.
Different, because it is OUTSIDE the wall, operating mechanism is housed in corrosion-proof aluminum.

Yes, the Kitchen-Aire is different. Electrically operated, easily installed, the Kitchen-Aire adds that plus-value which makes new homes saleable. It is the last word in Kitchen ventilation, a feature your buyers will like. Underwriters Approved. Advertised in Better Homes and Gardens.

STEWART MANUFACTURING CO.
320 E. St. Joseph Street,
Indianapolis, Indiana

No Profits, No Capital

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State may do with these funds, the net result must be a reduction of the productive capacity of the nation. Is the nation in better shape because it has less machinery?

In 1948, the Roosevelt Administration put through Congress the capital levy on profits not paid out in dividends. This was known as the tax on undistributed profits. It was a "pump-priming" measure, the idea being to get more money into circulation by consumer spending, following from the notion that a nation is enriched by spending rather than by production. A corporation could deduct from its income the amount paid out in dividends, but it was heavily taxed on the income it retained for expansion or contingency expenses. The tax was so high that it made retention of profits practically prohibitive.

At that time, it will be recalled, most corporations were in financial difficulties. Some were actually insolvent. New capital could not be attracted by stock issues, and the only source of capital funds for many companies was the earnings they could retain; yet this source the law practically closed up.

Some companies were so hard pressed that they induced stockholders to enter into a scheme to circumvent the dire consequences of the undistributed profits tax. The stockholders signed "consent dividends" certificates which committed them to report as income the dividends they had not received, so that the corporations could avoid the heavy penalty on undistributed profits.

At a time when the recovery of its industry was the country's greatest need, the undistributed profits tax actually worked toward its prevention. The law could well be described as an "enemy act." The disastrous effects of it were so obvious that it was repealed, after being in operation two years.

"7% Per Cent Rule"

In 1948, corporate income tax blanks carried a request for a full explanation, in the event the corporation did not pay out to stockholders at least 7% per cent of its profits for the year. The Treasury Department announced that if less than 7% per cent were paid out, the presumption was that the corporation was accumulating profits so as to avoid giving its stockholders in evading the tax on dividends. This 7% per cent rule was

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HELP SELL YOUR JOB
WITH THESE TWO
Inexpensive Luxuries

**Coronet**
PLASTIC WALL TILE

The better appearance of Coronet Plastic Wall Tile is proof of extra value...the home owner is sure to be pleased with its lustrous surface and beauty. ... A range of colors to suit all tastes...unique pastel shades...plain or marbleized...exclusive deep-beveled edges...light and easy to install. THE INEXPENSIVE LUXURY TO HELP YOU SELL THE JOB.

**HAKO**
Asphalt Tile FLOORING

When you say you furnish HAKO Asphalt Tile Flooring you’re talking about the best...there is no question of “that extra value”...and, what a selection you can offer in colors...pastel shades...plain or marbleized. You can be sure of precision square cut tiles...factory quality control. A truly durable and inexpensive luxury...MAKE SURE YOU INCLUDE HAKO TO HELP YOU SELL THE JOB.

ATTENTION LUMBER AND BUILDING SUPPLY DEALERS

Hako Products will mean much to you in making you more valuable to your contractor-builder customers. There is a Hako distributor near you. Write for information.

Mail Coupon, Today!

HACHMEISTER-INC.
Dept. AB-3
Pittsburgh 13, Pa.

I am interested in more information about
CORONET Plastic Wall Tile
HAKO Asphalt Tile Flooring

Have a Hako representative call on me.

Name
Address
City Zone State

MARCH 1952
He's the Classified Directory Representative of the Telephone Company. He'll be coming around to see you. He can prove to you that advertising in the 'yellow pages' pays. He is familiar with all types of retail establishments in the community, has a good knowledge of the shopping habits of the people and knows a lot about their buying habits. He can offer valuable suggestions for helping you reach more prospects economically.

Watch for the Directory Representative. He's helped hundreds of dealers in many lines build their businesses. Let his knowledge and experience get more sales and service orders for you.

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an administrative decree, not a provision of the law.

The policy of the Treasury Department in the administration of this rule is now easier than it was in earlier years. However, penalties are still imposed on corporations which cannot convince the income tax examiners that the profits being retained are reasonably necessary. Some corporations, to avoid difficulties with the Department, pay out 70 per cent of their net incomes even though prudent management is against it.

The purpose of Section 102 of the Income Tax Law, with the 70 per cent rule, is admittedly to increase the taxable income of the stockholders; the government is concerned with its "take," not with the productive capacity of the nation. It is always out to take "another whack at profits," regardless of the consequences to industry; and each "whack" is rationalized with some mumbo-jumbo about Wall Street.

This confiscatory attitude is perhaps best illustrated in the double taxation of profits, first on corporation income and again on dividends received by the stockholders; even the left-wing economist (unless he is an out-and-out Marxist) has difficulty in justifying this two-way absorption of capital.

Loans Not Stock Issues Are Financing Expansion Programs

Another fact reported by the SEC should be a matter of great concern; namely, less than 12 per cent of the funds needed for the expansion program of American corporations during the second quarter of 1951 was obtained by new issues of capital stock. In the year 1950, a supplemental report shows, total securities issued by all corporations amounted to $6.4 billions, of which only $811 millions represented shares of common stock—less than 13 per cent. Nearly 77 per cent represented borrowings in the form of long-term bonds and bank loans.

This trend has been noticeable for some years. More and more, corporations are resorting to borrowing funds that would normally be obtained from the sale of new stock. One reason for this is that interest paid on borrowed capital is deductible for income tax purposes; it is a cost of business and therefore evades application of the 70 per cent rule.

Thus, the opportunities for the common stockholder are definitely

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Important Chicago Area Builder tells why he chooses DELCO-HEAT!

“We installed Delco-Heat Reverse Flow Conditionairs in our popular "Farwest" ranch-type homes,” writes Mr. Richard Smykal, President, Richard Symkal, Inc., Wheaton, Ill., “and they are doing an outstanding job. Their efficient performance coupled with the unquestioned public acceptance of the Delco-Heat name is the reason we will continue to specify Delco-Heat equipment in our future building programs.”


Builders everywhere are finding that Delco-Heat adds sales appeal to the homes they build. That’s because Delco-Heat equipment has the quality construction and economical operation demanded by home owners.

General Motors engineering experience and manufacturing skill keep prices well within any budget. And the completeness of the Delco-Heat line, with its flexibility of installation, solves many builders’ problems.

Get the facts about Delco-Heat now! And remember there is a gas or oil-fired Delco-Heat unit for any size house—any type heating system. Send coupon below for complete information.

CLIP AND MAIL TODAY!

DELCO APPLIANCE DIVISION, Dept. AB
General Motors Corp., Rochester 1, N. Y.

Please send me complete details and specifications on all Delco-Heat units.

Name ____________________________
Address __________________________
City ________ Zone ________ State ____

For a good deal DEAL WITH DELCO
New 718-unit project provides cool comfort for Air Force families

It is unusual for a low-cost housing development to offer so much in the way of modern beauty, high quality materials and extra features for the comfort and convenience of tenants. One of the most popular features of this Keesler Housing Project are the Hunter Attic Fans which will keep occupants cool and comfortable on hottest summer nights.

Cool comfort at low cost

The sponsors of Keesler Housing selected Hunter Package Attic Fans because of their dependable performance and low-cost installation. Fan, motor and suction box are all in one unit that requires only a ceiling opening in hallway and 18" clearance in the attic. Four models, ranging from 4750 CFM to 9700 CFM (ratings certified) fit any home size and any climate. Quiet, powerful, dependable, these fans are guaranteed by Hunter—exclusive fan makers since 1886.

Wall switch starts fan and opens automatic shutter to pull in the cool night air and drive out the oven-like heat that accumulates throughout the day. In only a few minutes it's 10 to 20 degrees cooler inside.

Write for 36-page booklet, "How to Cool for Comfort" and complete data.

HUNTER FAN AND VENTILATING COMPANY
381 S. Front St., Memphis 2, Tenn.

HUNTER Package Attic Fans

No Profits, No Capital

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limited. In the final analysis, he is the real risk-taker. Any dividend paid to him must come out of profits remaining after the claims of the bondholder and preferred stockholder are satisfied. He shares in the excess profits, but he also ranks last in case of liquidation or bankruptcy. It might be properly said that the virility of our economy is in proportion to the opportunities offered to common stockholders. Today, thanks to our taxing policy, the opportunities are few. Business is being financed by profits and borrowing, not by taking in new partners.

Earnings Are Lifeline of Industry

The facts brought out by the SEC indicate that the life of American industry is dependent on the earnings it can plow back into its plant equipment. It has practically no other source of needed capital. Any law placing a ceiling on profits will be fatal to our industry—which is another way of saying that it will be fatal to our economy. The deterioration that must follow from such a law may not be immediately evident, but the eventual outcome is inevitable.

But, a ceiling law is not the only way to effect the same result. Corporation and excess profits taxes can eat into the heart of our business structure, even without any increase in the present rates. The erosion of capital through taxation, and the accompanying discouragement of private investment, cannot be denied; the consequence of this process must be the dependence of industry on government financing. There is already far too much evidence that the government is approaching the status of a national financial institution. This is the type of creeping Socialism that has been fostered by the persistent attacks on business profits by the last two administrations. The disease can be stopped only by the abolition of the double tax on corporation profits; that would automatically kill section 102 and the vicious 70 per cent rule. Such a measure would restore to industry the freedom without which it cannot live—the freedom to manage its funds. Without this freedom, how can the drift of Socialism be stopped?

* George W. Eckelberry is Professor of Accounting, Ohio State University, Columbus, a member of the Ohio Bar and a Certified Public Accountant.
New! 4 closet combinations by Richmond

The actual appearance and features of these 4 new closet combinations are your best reasons for specifying and installing them. Their addition to the Richmond line of plumbing fixtures now makes it even more modern, even more complete than ever before.

Whether it's a vitreous china closet combination, lavatory, urinal or an enameled cast iron bathtub, lavatory, sink in "whiter white" or pastel colors, you'll find Richmond offers the widest possible selection in size and style, the finest quality in design, engineering, and manufacturing skill.

PLYMOUTH Close-co
G-212-14" Tank wit

LARCHMONT Close-co
G-206-12" float val
Type cov

KENT Close-co
G-218-14" Tank wit

CORTLAND Close-co
G-213-12" Tank wit

Roddiscraft
ODDIS PLYWOOD CORPORATION
MARSHFIELD, WISCONSIN

MARCH 1952
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**New! 4 closet combinations b**

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This Contractor's Phone Number
Is His Best Sales Tool

The medium-sized building contractor will often find that his telephone number is more important in his sales promotion than the name of his firm, according to David M. Rosenfeld, president of Associated-Liberty Construction Co., Chicago. "The telephone is just about everything in our business," he said, "and the easier it is for the customer to reach us, the better."

Started in 1932, the firm underwent a merger in 1939 when Associated Construction Co., headed by Rosenfeld, was combined with Liberty Construction Co., headed by Benjamin Galpern. With Rosenfeld responsible for construction work and Galpern looking after sales, the company's general contracting operations have grown steadily in dollar volume.

Several hundred jobs a year are handled by the firm, the bulk of them in commercial remodeling. Currently, apartment house conversion is the job most in demand.

Use Six Separate Headings

"Every contractor knows that many of the calls he gets come from people who are just shopping around," Rosenfeld said. "We may be one of half a dozen companies to give an estimate. The first thing, therefore, is to place ourselves squarely into this competition.

"A variety of sales promotion methods can serve this purpose, but from our experience the classified pages of the Chicago telephone directory produce the best results, particularly if the ads are of the kind that command attention. This is not a recent discovery, for we've used this medium successfully since we started in business."

At present, Associated-Liberty appears under six separate headings in the "yellow pages." The company regards the "Contractors—General" section as its most important listing, and accordingly maintains a quarter-page display advertisement there.

Appealing to one important market is the firm's bold-face listing and one-eighth page display ad under "Store Fronts." Under "Carpenters" there is a half-inch ad within the regular column.

Directory users can also find the firm in the sections for "Concrete Contractors," "House Raisers and Movers," and "Mason Contractors." All three of these listings are in bold-face type.

"We want especially to let the customer know our estimates are free," Rosenfeld said. "The telephone directory brings us a lot of such inquiries, and after that, of course, our reputation and our offer of better service or lower prices determines whether or not the sale is made.

"In this connection, we pay close attention to the problem of sales training. A skilled tradesman will know construction, but he may lack selling ability; a salesman, on the other hand, may lack technical knowledge. The answer, of course, is a man who combines the two qualities."

Canvassing Discontinued

The company discontinued the practice of door-to-door solicitations 10 years ago. "It's part of the growing pains of the contracting business," said Rosenfeld, "but no longer practical once a company is securely launched on its way. Besides the directory, our other major sources of business are favors word-of-mouth recommendations and calls from architects' offices."

A small percentage of the firm's work is new homes—single-family units built on direct order from architects or developers. For steady week-to-week orders Rosenfeld said he depends on the telephone directory as the mainstay of the advertising program.

Directory ads list an extra telephone number on Chicago's far south side, from which calls are relayed to the firm's central office. This system, according to Rosenfeld, has helped the organization to expand over the years and to handle jobs in every part of the city and in suburbs.

QUARTER-PAGE ad under "Contractors—General" has proved an excellent business-getter

AMERICAN BUILDER
ONE DEPENDABLE SOURCE
OF SUPPLY FOR A WIDE
VARIETY OF MATERIALS...

ONE HIGH STANDARD OF
Roddiscraft QUALITY...

...CALL Roddiscraft

Your Roddiscraft Warehouse is a prompt and dependable source of supply for the things you need — a wide range of materials — all of recognized Roddiscraft high standard of quality — available through one order from you. Trained Roddiscraft Warehouse men will assist and advise, if you wish. Simplify your buying — be sure of high quality — call your nearest warehouse.

NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Cambridge 39, Mass...227 Vasser St.
Charlotte 6, N. C. .123 E. 27th St.
Chicago 21, Ill...3865 W. 41st St.
Cincinnati 2, Ohio...836 Deoet St.
Dallas 10, Texas...2800 Medallion St.
Detroit 14, Mich...11955 E. Jefferson St.
Houston 15, Texas...2403 Sibley St.
Kansas City 3, Kans...55 Southwest Blvd.
Los Angeles 58, Cal...2670 E. Vernon Ave.
Louisville 10, Ky...1201-5 S. 12th St.
Marshfield, Wis...155 S. Palomar St.
Milwaukee 8, Wis...6051 W. State St.
New Hyde Park, L. I., N. Y....
Piazza Ave. & 8. 18th St.
New York 55, N. Y...920 E. 14th St.
Newark 3, N. J...103 Marsh St.
Philadelphia 34, Pa...Richmond & Twenty-First Sts.
St. Louis 16, Mo...3544 Monroe Road
San Antonio 6, Texas...727 N. Cherry St.
San Francisco 34, Cal...345 Williams Ave.

RODDIS PLYWOOD CORPORATION
MARSHEILL, WISCONSIN

MARCH 1952
Whether you use Dodge Reports or not...

Do you sell a product or service used in Construction?

Then read about George Green...

"Years ago I did a great deal of wasteful calling, chasing down rumors and making routine calls on regular customers. These consumed much valuable time, both mine and theirs. If it had not been for the longer hours people worked I would have had little time left for beating the bushes, as we had to, in order to find prospects with a current need for our product. "When my firm started providing me with Dodge Reports, I was a little skeptical, felt I knew everything that was going on in my territory. But I soon found that without the reports I would have missed some good sales opportunities and been too late on others. I began to cut down on useless calls and yet my customers sometimes credited me with mind reading when I called at just the right time. Those Dodge sleuths are really something in performing the first step in my sales, discovering a prospect with a current need for my product. Over the years Dodge Reports have helped me make many contacts of lifetime value. I might otherwise never have made. Dodge Reports are today an indispensable part of my way of doing business."

Whether you use Dodge Reports or not...

If you have not seen this book, send for it at once. It will help you sell more and sell more easily. No obligation, just send us your name, your company, your address, your title, if any. Do it NOW. We want you to have this book, the result of 60 years of service to salesmen in the construction field.

George Green is not the name of any one salesman. The statements above are a composite of what many successful salesmen in the construction field have told us.

DODGE REPORTS

119 W. 40th St., New York 18, N. Y.

Dodge Reports tell you whom to sell — when to sell.

DODGE REPORTS

Tell you who to sell — when to sell. Timely, accurate, comprehensive construction news service. The First Step in Every Sale.

Why contractors switch to Bostwick Corner Beads

Expanded Corner Bead

Scientically formed throat located at proper angle to the tubular bead.

Truss-Wing Corner Bead

Corrugations run full length of wing for rigidity and straightness. 8 B perforations for perfect plaster key. Bend and Denton combine for easy bending.

Bostwick

The Bostwick Steel Lath Co.

103 Heaton Ave. • Miles, Ohio

Combination Flooring

Especially Adapted for "Problem" Surfaces

A new flooring material, Roc-Wood, composed of hardwood fibers chemically treated and bonded together with a plastic binder, is applied permanently to almost any substructure without underlayments, according to the manufacturers, Roc-Wood Flooring, Chicago.

The material can be laid with a trowel, using pre-mixed ingredients. It hardens by chemical action and is reported to be ready for unlimited use within 24 hours. In appearance, Roc-Wood resembles cork flooring. Advantages claimed for the new material include:

1. Withstands vibrations. — The flooring has been laid in heavy cargo trucks, around vibrating machinery and in other installations where it stayed smooth and crack-free after being subjected to constant jarring and vibration.
2. Resiliency. — Because it is basically hardwood fibers, the material is resilient, restful for walking.
3. Skid-proof. — Said to be completely slip- and skid-proof even when damp or completely covered with water.
4. Termite and rot-proof.
5. Acid and chemical resistant.
6. Needs no underlayments. — Goes right over old or badly worn floors, filling holes and depressions.
7. Feather-edges easily and quickly.
"Red-Tip Pilot" Line, at reduced prices, leads the way to still greater economies in steel and concrete fastenings . . .

"Better than ever" say building contractors, about the newly developed RAMSET® Tru-Set Fasteners. "They set straight as an arrow and slick as a whistle. With that Red-Tip Pilot and those reduced prices, we'll stick to RAMSET for our fastening work in steel and concrete, and wherever else we can use it."

Lower prices on this latest technological development are gained from the new design and greatly increased sales volume. Then, a close-to-perfect percentage of accurately-seated fasteners results from the elasticized Red-Tip Pilot, which guides the fastener straight through the barrel into the work. For construction fastenings, nothing sets like RAMSET.

Fasten $\frac{15}{1}$ Faster with RAMSET SYSTEM

You beat the time by 15 to 1 for most fastening jobs by using RAMSET SYSTEM instead of old-fashioned methods. If you are not already profiting from these time-saving, money-saving advantages, ask for demonstration. Our nationwide network of capable dealers provides fast, on-the-job service and suggestions. Take a moment now, to ask for details.

Ramset Fasteners, Inc.
Pioneer in powder-actuated fastening
12117 BEREA ROAD • CLEVELAND 11, OHIO
appliances is ending. The greatest success is coming to those who put their entire weight behind the full line of quality appliances needed for today's pushbutton kitchens and automatic home laundries.

Builders have been quick to realize this trend and many have included one or more major appliances in new home and apartments as added sales features. The more enterprising, aggressive builders have gone a step further and included complete kitchens and laundries to capitalize fully on this new "package" selling trend. There is no more receptive market for multiple sales ensemble selling than in the builder market, and the surface has hardly been scratched.

### Dollar Volume of Building Tops Steel and Iron

The building industry is now, by all odds, America's largest. In 1950 its dollar volume exceeded steel and iron by four billion dollars; all passenger and freight revenue by over seven billions; oil and coal by almost eight billions; and natural gas by 12 billions; and exceeded total textile value by 50 per cent.

No other industry employs so many people and involves so many different skills. No industry is at once so local and so national, and none can equal it for long-term capital investment. Each year more money is invested in new mortgages than in all new corporate, state, and municipal bond issues combined.

Building is both a cause and result of general prosperity because a chain reaction of sales is set off every time a new apartment, house, school, hospital, home, factory, or office building is completed.

In the five years from 1946 to 1950, building's annual volume jumped from $12 billions to almost $28 billions. One out of every four dollars in the $65 billion increase in the gross national product during this period was for building.

Although the long-range forecast is for the construction of upwards of 800,000 units a year, there have been very few years since 1926 when the total units built have equaled the number lost through fire, obsolescence, condemnation, and old age. During the same period, the marriage rate has jumped, the number of families increased, and the population grown by over 20,000,000.

In addition, basic changes have occurred in the economic and social phases of American life. The principal
Carpe diem. As the saying goes, the only attic stairway equipped with Roller Bearings make raising and lowering stairwayally effortless. Life time, factory packed Roller Bearings make raising and lowering stairwayally effortless.

Gas-Actuated weights eject steps. Steps are not spaced to waste space.
The proved engineering principle of the arch has stood for centuries as one of man's most beautiful and useful creations. This is why HASKO ARCH-KOR DOORS, utilizing the strength of the arch, and only the finest of materials and craftsmanship in their construction, have been of similar value in building and upholding the wholesalers' and retailers' reputations as suppliers of quality materials. Because there is always a demand for quality, HASKO DOORS have risen to a position of top leadership in their field . . . another proof of their worthiness of your endorsement and use. Ask your supplier for HASKO DOORS. Write for complete information.

HASKELEITE MANUFACTURING CORP., Grand Rapids 2, Mich.

Hasko ARCH-KOR and SOLID-KOR Flush Doors are available faced with birch, mahogany, oak, maple, walnut, and gum.

One of the world's largest manufacturers of plywoods, metal clad plywood, and other laminated materials for use in industrial and consumer products.
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 doubleguards valuable crops, livestock and machinery against damage and destruction for years and years. It’s the first choice of farmers.

For STAYABILITY
Galvanized roofing holds at the nail holes... stays leak-proof and solid year after year with a minimum of maintenance. Farmers say it cuts down overhead by staying overhead—often for the life of the building.

For ECONOMY
Consider the economy of any roofing material with these three long-time cost factors in mind: (1) original price; (2) repair and upkeep; (3) years of serviceable life. Galvanized sheets are first choice of farmers because they know that the roof that gives them the longest, trouble-free service is the cheapest in the long run.

DON’T FORGET
Proper care pays! Material shortages are limiting new construction and replacements. Careful maintenance of present structures is indeed essential more than ever before. Expanding production of zinc and steel means ample supplies of galvanized sheets with the return of more normal conditions. For future reference, a few simple steps with very little labor can extend the useful life of your galvanized roofing. The valuable booklet described below will tell you how.

Send for FREE Booklets

AMERICAN ZINC INSTITUTE
35 E. Wacker Drive, Room 406
Chicago 1, Ill.
Without cost or obligation, send the illustrated booklets I have checked.
☐ Facts About Galvanized Sheets
☐ List of Metallic Zinc Paint Mills
☐ Directions for applying Galvanized Sheets
☐ Repair Manual on Galvanized Roofing and Siding
☐ Use Metallic Zinc Paint to Protect Metal Surfaces

NAME________________________
ADDRESS_______________________
TOWN AND STATE_________________

DON’T FORGET

“PACKAGED” HEATING system assembled for shipment to purchaser

Complete Heating System Sold in One Package

A new program of merchandising heating systems has been developed by Indoor Climate Engineers of Cleveland, Ohio, in which the firm engineers a complete heating system for either a new or existing home, packages the components with full installation and operating instructions, and guarantees the results with a performance bond.

The system is described by the company’s slogan, “Packaged Comfort.” Heating equipment used is selected from three nationally known manufacturers’ lines. Interest in the program has been indicated by prefabricated home manufacturers and building material distributors, the packaging firm said, through whom it is intended to distribute standard packages for small homes of less than 1,000 square feet.

All that Indoor Climate Engineers requires for its packaging service is a blueprint plan for new construction or a diagram of a home that is already built, in which the heating system is being converted to a modern one. The purchaser is shipped all the equipment required for a completely modern heating system, including the furnace unit, either gas or oil, all the piping and ducts, necessary registers, as well as fittings and wiring. The detailed instructions for installation are designed to make that job as simple as possible.

O. K. Aluminum Nails to Prevent Red Cedar Stains

The Red Cedar Shingle Bureau has officially approved the use of aluminum nails to prevent nail staining of cedar shake and cedar shakes, according to an announcement by Nichols Wire and Aluminum Co., Davenport, Iowa.

The bureau’s approval came after the Aluminum Research Laboratories of New Kensington, Pa., had completed extensive tests on aluminum alloy nails in red cedar siding, shakes and shingles, the announcement said.

Don’t forget
FIBERGLAS* PERIMETER INSULATIONS

...a must for your basementless homes!

Uninsulated concrete slabs feel cold and damp, waste fuel. Make sure of warmer, more comfortable floors and you make sure of happier, more satisfied buyers!

Easiest and most efficient solution is Fiberglas Perimeter Insulations. Made of ageless fibers of glass, they offer you and the owner all these advantages:

- **High Insulating Efficiency**—extremely low heat conductance (not over .26 Btu/hour/sq. ft./°F for 1-inch thickness at 60°F mean temperature) reduces heat losses, cuts fuel bills.
- **Resist exposure to soil acids and moisture.**
- **Act as expansion joints to protect slab.**
- **Life-of-the-Building Permanency**—do not rot or decay, provide no sustenance for termites or rodents.
- **Meet FHA's Minimum Property Requirements.**

Part of a famous family of building insulations, Fiberglas Perimeter Insulations are available through our own Branch Offices and the dealers of these five national distributors:

For complete information, phone your dealer or the Fiberglas Branch Office nearest you. Or just fill in the coupon below and we'll send descriptive literature.

OWENS-CORNING FIBERGLAS CORPORATION
Dept. 62-C, Nicholas Building
Toledo 1, Ohio

Gentlemen:

Please rush me the following:

- [ ] "More Comfortable Floors"
- [ ] "The Story of Perimeter Insulation"

Name:

Street Address:

City Zone State
Important Points in Planning Showers

Although the shower has become America's most popular way of bathing, according to the Tile Council of America, too often it is planned without full regard to safety, convenience and its place in the bedroom decor.

Listed below are seven points which the council says are some of the principal considerations in planning any bath with a shower:

1. A grab bar is essential when the shower fixture is located over the tub, and should be installed as part of the tile job. It will prevent serious falls when the bottom of the tub becomes slippery, or a bather loses a bar of soap.

2. A mixing valve is convenient and provides water of just the desired temperature. It costs little more than separate controls for hot and cold water.

3. Waterproof materials such as oil for walls around the shower will prevent damage from steam and save redecorating bills.

4. In a small bath, the tub enclosure or the shower stall should be finished in the same color as that of the walls. Use of more than one or two colors in a small room makes it seem even smaller.

5. A towel rack should be located near the shower, so that it can be reached easily by bathers.

6. Usual practice is to run the waterproof enclosure around a tub-shower to the height of the shower curtain bar. A better plan is to carry it to the ceiling so walls will not be cut up with two different finishing materials.

7. The shower curtain rod should be fastened with long screws into the studs, not just into the lath and plaster. Then someone who slips in the tub and pulls on the curtain won't loosen the rod in the process.

Sees Expansion of Market For Portable Power Tools

The portable power tool industry, with a current business estimated at $100 million annually, will expand at least 50 per cent in the next three years, an industry official has predicted.

Much of the growth will be due to military demands, particularly in 1952, according to Paul Watts, vice president in charge of sales for Skill Saw Inc., who made the forecast. He said the defense market, both direct and indirect, will more than offset any decline in building industry demand.

SOLVAY CALCIUM CHLORIDE

TO YOUR CONCRETE

- Cuts setting time in half.
- Reduces curing period, permits quicker use.
- Increases both early and ultimate strength.
- Offsets effects of low temperatures.
- Can be used with regular or air entrained, high early, colored or low heat cement.

FREE BOOK GIVES FULL DETAILS. "The Effects of Calcium Chloride on Portland Cement" is offered by Solvay to architects, engineers, contractors—anyone who works with concrete. It is filled with authentic information and answers all your questions about the use of Calcium Chloride in concrete. For your free copy, write on your business letterhead.

SOLVAY SALES DIVISION
Allied Chemical & Dye Corporation
Dept. 34-3, 40 RECTOR ST., NEW YORK 6, N. Y.
The Most Complete Prefab Package on the market!

$2,750
f.o.b. Port Washington, Wis.

NOW you can crack the big, profitable low-cost housing market. You'll be able to sell ruggedly-built, handsomely styled homes in the $7,000 range, practically anywhere with the $2,750 P & H Enterprise Home.

This 2-bedroom home (PH1-EA228S-52)—the most complete prefab package on the market—is just one model in the new low-cost Enterprise Line. This line offers you 2 or 3 bedroom models, 672 to 864 square feet, in 18 different exterior designs.

All the Enterprise models have the same quality construction and floor plans as the luxury P & H Capitaline homes. All offer you the advantages of P & H prefabrication—volume sales, project savings, minimum risk, prompt delivery and financing.

Take advantage of the booming low-cost market now. Sell P & H. Write for details today.

P & H CAPITALINE HOMES... for luxury living

Architect-designed, these P & H Homes have all the styling, construction and convenience features that buyers look for. And they have all the features that mean higher sales and lower costs for you. 44 elevations, 6 floor plans, all reversible. Basement or utility room models, 2 or 3 bedrooms. Write for free booklet today.

P&H HOMES DIVISION
HARNISCHFEGGER CORPORATION

MARCH 1952

PH4-8336-52—Capitaline
**New Regulator Controls Warm Air Circulation**

A solution to the cold floor problem is claimed by the engineering research department of Perfection Stove Co. Their answer: a simple device which graduates the circulation of warm air according to the amount of heat in a furnace. In order to provide a smooth, even distribution of heat throughout the dwelling.

When the reservoir of heat in the furnace reaches a pre-determined setting, the engineers said, a single-speed blower comes on. The control mechanism, regulated by a thermocouple arrangement, opens gradually, delivering just the right amount of air in coordination with the amount of heat in the furnace.

Wide open for full flow at peak output, the valve reduces this air volume as the furnace heat is reduced, but only shuts off the blower when all the warm air has been drawn from the furnace.

The new mechanism was said to make it possible to obtain from a single-speed blower an evenly graduated flow of warm air not previously obtained even by a multi-speed blower, and also to make possible a gradual, heat-building distribution of warm air without the customary cold blast at the start of the heating cycle.

The control has but a single moving part, built into the forced air furnace at the factory.

**Report Substantial Gains In Forest Conservation**

Some of the greatest gains in the 50 years of forestry conservation in the United States have been made in the last five years, a survey of the American Forestry Association indicates.

The survey was conducted by a 12-man association committee with the help of many public and private organizations and is now available in a 90-page report, "The Progress of Forestry."

Notable achievements highlighted in the report for the five-year period include: an additional 56 million acres put under organized forest fire protection; reduction by 16,000 the number of forest fires yearly; over one million acres planted to tree seedlings; a 12 per cent gain in management practices on private forest lands; and expansion in research and education.

On the darker side, the survey indicated a heavier loss to forest resources from insects and disease than from fire, with the latest damage estimated at $133,000,000 annually—approximately three times the fire loss.

Copies of the complete report are available from the American Forestry Association, 419 17th St., NW, Washington 6, D.C.
NOW! FIVE GREAT FORD TRUCK ENGINES!

- Proved 112-h.p. BIG SIX.

New FORD TRUCKS for '52
Engineered for modern, low-cost Speed Hauling

NOW FIVE great Ford Truck engines permit better "tailoring" of truck power to your specific hauling job! Over 275 series power combinations. Only FORD in the low-price field gives you so many power choices, series for series, in 1/2-ton to 3-ton trucks!

3 NEW ULTRA-MODERN HIGH-COMPRESSION, LOW-FRICTION, OVERHEAD-VALVE ENGINES!

New Ford short-stroke LOW-FRICTION design saves up to 14% on gas! Two V-8's, one Six! Fully-proved! High-compression punch with regular gas!

FREE
MAIL THIS COUPON TODAY!
FORD Division of FORD MOTOR COMPANY
3269 Schaefer Road, Dearborn, Michigan

Please send me without charge or obligation, complete details on the new Ford Trucks for '52 and the 5 great Ford Truck Engines!

Full Line □ Light Models □ Heavy Duty Models □ Extra Heavy Duty Models □

Name ________________________________
Address ________________________________
City __________________ State __________

Check here if student □

See "Ford Festival" starring James Melton on NBC-TV

MARCH 1952
Civic Group in Michigan Acts to Spur Housing

When the city's need for at least 400 new houses was blocked by property improvement problems, businessmen of Adrian, Mich., stepped in to clear the way for builders by forming a non-profit corporation to assume the financial responsibility for the improvements which neither the contractors nor the city commission felt they could take.

This was the situation:

The Adrian city commission will not give its approval to any new subdivision without assurance that minimum improvements are installed, such as sewer, water, curb, gutter and in some cases paving. Builders undertaking housing projects, involving 40 to 100 houses, were not in a position to pay for such improvements in advance. The commission took the stand that it could not, as trustees of taxpayer money, assume the risk of builders being unable to meet their obligations.

Until the new corporation was formed the builder-city commission impasse had virtually halted all project building. Now the non-profit group, organized with 27 members, guarantees the city, with respect only to any new housing subdivision, that if special assessment districts are created to cover the minimum essential public services it will see that the taxes are paid. This would be done in the event a builder failed to meet his commitments.

New FHA Plywood Ruling

Recent action by the Federal Housing Administration which permits acceptance of thinner Douglas fir plywood (Plywood grade) for roof decking over rafter spaced 24 inches O.C. is expected to afford significant cost savings in small home construction. FHA had previously accepted only 3/8-inch plywood in such construction.

The move was announced in a letter to Douglas Fir Plywood Association by Curt Mack, assistant commissioner of the FHA underwriting office in Washington, D. C. Mack said that a revision of FHA Minimum Construction Requirements is planned on this basis.

The association pointed out the plywood decking 1/8-inch thick is about 25 per cent cheaper than 3/8-inch plywood sheathing; and that comparing this construction against 16-inch rafter spacing shows additional cost reduction. Other savings would result in material costs, since these develop in proportion to the size of the rafters, and labor costs.
NEW STYLE AND BEAUTY
All types of STRAND Doors now have the new, smart, horizontal-line styling. In keeping with the latest architectural trends, it adds beauty to the garage.

EXTRA DURABILITY
Galvanized with a heavy zinc coat for lasting rust protection and oven-baked to provide a clinging base for paint. No prime coat needed. Steel stands up under shipping and handling—won't warp, shrink, rot, or splinter.

GREATER STRENGTH
Heavy, diagonal steel braces, welded to the deeper, sturdier frame, form the kind of structure used for strength in bridges and prevent sagging and weaving.

CHOICE OF 5 TYPES AND SIZES:
8' x 7' Receding (track) and Canopy, 9' x 7' Receding (track) and Canopy, 16' x 7' Receding (track) only. Order from your dealer, or mail coupon for information and dealer's name.
More and more builders are discovering this popular "packaged" top-quality wood awning window...so easy and economical to install...so profitable to handle.

During 1952 millions of prospective builders will see this slogan advertised in national publications.

Local promotion by Gate City Dealers will also reach these prospects...your prospects!

Over 14,000 architects will receive literature each month, illustrating the advantages and adaptability of Awning Windows.

For complete information...refer to SWEET'S FILE 4d-GA, see your Lumber Supply Dealer or send the coupon today!

GATE CITY SASH & DOOR CO.
"Wood Window Craftsmen Since 1910"
P. O. Box 901, Fort Lauderdale, Florida
MEMBER OF THE PRODUCERS' COUNCIL, INC.

Association News, cont'd

Here Are Features
Home Seekers Say
They Want in '52

What does the average American family want in the 1952 house it buys?

The magazine, Living for Young Homemakers, took a survey of 40,000 families, 56 per cent of whom have bought houses since World War II, and the remainder "prospective" buyers.

Results of the unusual survey were made public for the first time at a convention general session.

On the basis of their replies, these are the principal "must" items wanted in the 1952 home:

1. Well planned living space.
2. Elimination of "features and frills."
3. Space and quality should take preference over equipment.
4. Clean-cut, straightforward contemporary designing.
5. Prices that can be afforded.

Edith Evans

The typical house built since World War II, according to Miss Edith Evans, editor, is a one-story, two or three-bedroom house with one bath and limited equipment, costing between $10,000 and $15,500, and was built during the last four years.

So far as architecture is concerned, 20 per cent of the postwar houses were traditional types, 22 per cent ranch style and 33 per cent modern. "Here is the shocker," said Miss Evans; "35 per cent were unbearable by any architectural style."

How happy are the buyers with their houses? "Perhaps the best answer is the fact that 62 per cent hope to sell them," said Miss Evans. As revealed by the survey, here are some important likes and dislikes of the postwar new house:

Likes and Dislikes

1. About 50 per cent of the families have basements, and would not sacrifice them for other features.

Cleans Pipes, Drains, Sewers Simply!

HYDRAULIC WATER RAM

Operates safely, succeeds in minutes where all other methods fail. Not only remedies ordinary drain sluggishness, but meets major emergencies. The Water Ram operates with IMPACT—not PRESSURE. Capacity up to 6" Sewers.

Write NOW—

THE HYDRAULIC MFG. CO.
KIEL, WISCONSIN
Eastern Office
616 W. Toft Ave., Bridgeport 4, Conn.

CONTRACTORS—save money!
Mix plaster and mortar in a MULLER 3 FOOT MIXER

• An investment that will give you better plaster and mortar at far lower costs than old hand methods. Ideal for both inside and outside use. Holds full bag batch of most mixtures.

PRICE $312 (with electric motor)
$330 (with air-cooled engine)

FOB Metuchen, N.J.

Also available in 6, 9 and 12 cubic foot sizes

Write for name of nearest distributor.

MULLER MACHINERY COMPANY, Inc.
Metuchen 4, N.J. Cable Address MULMIX

MIXER
Silver Line means "new design"—from rip guide to switch—gives you the safest, easiest handling, most powerful saws on the market today. Write for Thor No. 39 electric tool catalog Independent Pneumatic Tool Co., Aurora, Ill.

SAFETY-LOCK SWITCH—positive protection against accidental starting.

EXTRA WIDE REENFORCED STEEL SAFETY BASE for better balance—easier to handle, safer to use.

LONG-SHAFT TRANSVERSE MOTOR MOUNTING transmits as much as 25% extra power, supports blade on oversize ball bearings from one side of the tool clear to the other.

UNIQUE SHOCK-ABSORBER GEARING harnesses the added power of these great new saws, gives extra life to motor, gears, spindle and blade.

PROTECTED DEPTH AND BEVEL SCALES. In plain sight when you use them—out of the way when you don't. Always accurate.
Association News, cont'd

(Continued from page 196)

2. The same is true of separate dining rooms.
3. A great many are not satisfied with their heating.
4. Few who have expansion attics have finished them.
5. Most families prefer to buy their own kitchen equipment, and about 60 per cent had some equipment when they moved into their own home.
6. A majority feel their lot is adequate, and would not sacrifice an inch of house for more land.

This picture of the postwar house to the present time is quite different from that which may be expected in the future. Miss Evans says that prospective buyers expect to pay more for new houses than their postwar predecessors, and nearly all want an architect-designed house.

"A large percentage of those wanting new houses have investigated small homes developments, and, I regret to say, the majority of them have not been favorably impressed," she added.

Most Want Three Bedrooms

She said most 1952 buyers will want one-story houses with attached garages, and 51 per cent want three bedrooms. At least 41 per cent will insist on a separate dining room.

Full or partial basements are wanted by a large majority in New England and the eastern seaboard and the Midwest, by over half in the Far West and approximately 40 per cent in the South.

Paint instead of wall paper is predominately the preference for interior finishing.

Active Building Year Seen
By New S. California Leader

Home building in Southern California will continue active in 1952, according to Mark A. Thoreson, newly-elected president of the Home Builders Institute of Los Angeles, who warned, however, that the industry would be subject to increased costs and scarcities of building materials, which would become increasingly acute in the spring.

Thoreson, who succeeds Milton J. (Continued on page 200)
HOW TENNESSEE BUILDER INCREASES PROFITS BY PRECUTTING

IN DELTA-TOOLED SHOP

Framing members cut to exact size fit perfectly, reduce construction time; and making own case and cabinet work, trim and other special millwork means extra profits.

MOUNT CONSTRUCTION CO., old established builder of residences and industrial plants in and around Jackson, Tennessee, operates a sizable woodworking shop equipped with Delta tools—with conspicuous benefit to its annual profit picture.

A Delta radial saw, mounted on a continuous bench, cuts joists, bridging, studs and rafters to proper length for shipment to the job-site. It is used for cut-off, mitering and dadoing in making shelves, cabinet doors, window frames, etc.

A Delta 12" tilting arbor saw, most-used tool in the shop, is used for ploughing and dadoing jambs, rabbeting sills, tenoning and for making hundreds of moldings. 15 different cutters are used.

A Delta 20" band saw handles all curve cutting jobs—scrolled motifs, circular window frames, valances and ornamental pieces—as well as ripping and reasewing.

Other Delta tools are an 8" jointer and a 14" drill press.

Whether your business is small or large, you, too, can win increased profits through well planned use of Delta tools—tools built for precision work and long life. Talk to your Delta dealer; and send for the Delta Idea Book with many practical saw suggestions—use the coupon.

There's a Delta Power Tool for Your Job—
WOOD OR METAL WORKING

53 MACHINES • 246 MODELS
MORE THAN 1300 ACCESSORIES

DELTA POWER TOOL DIVISION
Rockwell MANUFACTURING COMPANY
635C EAST VIENNA AVENUE • MILWAUKEE 1, WISCONSIN

☐ Please send Idea Book  ☐ Send the name of my Delta Dealer

Name ____________________________
Position ____________________________
Company ____________________________
Address ____________________________
City ____________________________ Zone ____________________________ Style ____________________________
**The Best IN KITCHEN VENTILATION**

**EXCLUSIVE IN TRADE-WIND VENTILATORS**

- **ISOLATED MOTOR**
  - Keeps clean • lasts longer

Look at the location of the motor in every TRADE-WIND Ventilator—in a separate, isolated compartment. This extra construction is another exclusive advantage. The motor is completely protected from the hot, greasy air. No dust or steam or grease are blasted at the motor. It always stays clean and cool in its own compartment—needs less frequent oiling—lasts years longer. You can count on TRADE-WIND for quality performance.

The only ventilator that gives you
- Centrifugal Blowers • Interchangeable Horizontal and Vertical Discharge
- Isolated Motor • Five-year Guarantee
- Dripless Grille • Easier Installation

**PRICE OFFERS AN INDUCTENCE BUT QUALITY OFFERS A REASON**

**TRADE-WIND MOTORFANS, INC.**

5705 S. Main St., Los Angeles 37, Calif.

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**Association News, cont’d**

(Continued from page 198)

Brook as institute head, has been a land developer and builder in Southern California since 1924. Prior to that he was in the real estate and banking business in Fargo, N. D.

In spite of rising costs, Thoreson said, shelter is taking less and less out of the family budget dollar. Quoting government figures, he indicated that shelter costs took 38.1 percent of the family dollar in the 1935-39 period, and now takes only 11.2 percent.

Other officers named to serve in 1952 were K. Sande Sennema, first vice president; Arthur C. Wright, second vice president; Walter W. Keunder, third vice president; and Charles W. Getchell, treasurer.

**Tulsans Choose Skaistis As 1952 President**

Charles "Eddie" Skaistis, 1951 vice president, is the new president of the Tulsa, Okla., Home Builders Association. Associated with the building industry for many years, Skaistis has built homes in Tulsa since 1945. Previously, he built in Illinois, Michigan and Mississippi.

Charles Skaistis

The retiring president is I. A. Jacobson. Other 1952 officers are Ed. F. Rice, vice president; Vernon L. Mudd, secretary; and Morris W. Turner, treasurer. Charles McKinney, public relations counsel, was named to the new post of executive vice president.

In 1951 Skaistis served as general chairman of the annual Tulsa Home Show, entertainment chairman for the National Association of Home Builders' regional conference in Tulsa, and chairman of the Christmas party.

**Millerburg New President Of California Contractors**

C. J. Winn, Millerburg, an active builder in the Los Angeles area for more than 26 years, was recently elected president of the Building Contractors Association of California. Millerburg

(Continued on page 204)
New Coleman HEATER-IN-WALL installs easily in small homes

Automatic—
takes no room space—
cuts building costs.
Makes homes easier to sell

THE COLEMAN GAS WALL HEATER is especially designed for small homes, apartments, upstairs or basement rooms, for motels and tourist courts and other small construction. Takes no basement, no excavating, no air ducts, no major installation. Quick and easy to put in—a simple vent job is all that's needed to finish up.

SAVES SPACE—It extends less than four inches into the room from the wall, so takes no living space. Ideal for slab-floor construction because there's no ripping up floors. Attractive in any setting, it has modern styling and smart Hammerloid neutral finish that harmonizes anywhere. Safe with children. And the Coleman name assures ready acceptance, making sales easier.

THREE COST-SAVING MODELS—Coleman makes two Single Wall Models, one 25,000 BTU input (fitting between center studs), one 35,000 BTU input for greater warm air flow. The Dual Wall Model has 45,000 BTU capacity. Manual or non-electric controls without costly electrical installations. Solve your low-cost heating problem with Coleman Gas Wall Heaters. The Coleman Company, Inc., Wichita 1, Kansas.

DUAL WALL MODEL
fits in wall or partition and heats adjoining rooms at the same time. Warm air flow into both rooms is easily adjusted on one side. Easy to install, automatic in operation, a complete, safe and economical heating unit.

Comfort costs so little with a

Coleman
America's leader in home heating

The Coleman Company, Inc.,
Dept. AR-552, Wichita 1, Kansas
Without obligation please send complete information on Coleman circulating Gas Wall Heaters.

Name
Street
City Zone State
Easier Sawing

PORTER-CABLE Machine Co., Syracuse 8, N. Y.
because the Handle is on Top!

Speedmatic — The True BALANCED Saw

"Prove Speedmatic’s balance yourself. Loop a piece of string under Speedmatic’s handle, then lift. Notice how the saw stays level. True balance! And that means easier sawing."

"Speedmatic’s handle is on top, directly over the center of gravity. Weight is evenly distributed—a Speedmatic won’t lean or tip. Your cuts are straight."

"Handle on top means easier lifting, easier guiding on the work. There’s less strain on your wrist and arm... less fatigue at the end of the day."

"You can hold a Speedmatic with one hand—grasp the work with the other. This allows ‘pendulum’ sawing for quick cut-offs of moulding, 2x4’s, etc."

"Top-position handle makes Speedmatic easy to use in awkward locations. On ladder and scaffold work that free hand is a lifesaver!"

"When you’re cutting 2x6’s and stair stringers on saw horses, you don’t have to nail the lumber down. You can hold it, move it along with your free hand."

"With a Speedmatic, you’re over the work, not behind it. Cutting line is always visible—you see where you’re sawing."

"You don’t have to lay the Speedmatic down to change the depth of cut. A quick twist of the patented depth adjustment knob does it—fast."

MAKE A BALANCED DECISION!

When buying an electric saw ask yourself these important questions:

IS THE HANDLE ON TOP? Is it a true one-hand saw, with the weight evenly balanced for easier operation?

IS THE BLADE ON THE RIGHT? Will the saw remain steady and easy to manage, without tip or tilt?

IS IT MECHANICALLY BALANCED? Does it have helical gears for efficient power... that smooth the drive? COMPARE—and you’ll choose the balanced SPEEDMATIC!

Get all the facts. Ask to see the "Key Man" at your Porter-Cable distributor’s—he can give you many practical tips on easier, faster sawing.

Distributor’s name and address in your Classified Telephone Directory under "Tools—Electric."

Manufacturers of SPEEDMATIC and GUILD Electric Tools

In Canada, write: Strongridge, Ltd., London, Ont.
Follansbee Seamless Terne Metal is the ideal weathersealing material for built-up, composition, wood, asphalt or asbestos shingle, slate or tile roofs. Tough, durable and malleable, Terne Metal should be used for copings, eaves troughs, flashings, gravel stops, gutters and valleys.

Properly installed and maintained, Terne Metal will last as long—or longer—than any roofing material with which it is used. Terne can be installed easily and quickly. Write us for additional information.

Remember, with Follansbee Terne Metal, no provision need be made for expansion and contraction.

Association News, cont’d

(Continued from page 200)

has held many association offices in the past. His home and business offices are in the suburb of Sherman Oaks, in the San Fernando Valley.

Millerburg has divided his work between tract development and custom homes, the latter prominent in many of Los Angeles’ better residential districts.

C. J. W. Millerburg

A native of St. Paul, Minn., he began his career with a Los Angeles Realty firm, formed his own building firm in 1924.

In addition to the time he devotes to the Building Contractors’ Association, Millerburg is active in civic affairs. He is an officer and founder of the Valley Youth Foundation which is currently raising funds for a $200,000 youth center.

The San Fernando Valley chapter of PCA recently built the “Valley Life Home” as a donation to the foundation.

Television Tells Story of Good Home Construction

Television is proving the perfect medium for telling and showing the story of good home construction in Southern California, according to the Building Contractors Association of California.

Working with KNBH, the Hollywood television outlet for the National Broadcasting Company, the association launched its TV career in November with a weekly half-hour show called “The Home Building Clinic,” which reports indicate has “caught on” very well.

Each week, one Southern California home-owning or prospective home-owning family appears on the program to place its construction and upkeep problems in the hands of a panel of building experts. In addition, a portion of the show is devoted to answering the problems received by mail.

Whenever possible, visual material is used to aid explanations. Another portion of the program features the “Home of the Week,” a pictorial tour of a distinctive home.

(Continued on page 206)
**Distinctive Shadow-lines**

...with

SHAKERTOWN SIDEWALLS

- give homes that "PLUS-VALUE" look!

Here's the sidewall that puts "sex appeal" in home exteriors! Colorful, rich and attractive, Shakertown Sidewalls combine the advantages of distinguished beauty with the economy of double-coursed cedar shingles.

There's no secret about the phenomenal demand for factory-stained Shakertowns. They mean lower construction cost, even lower cost per year of service — with better insulation, less upkeep and added property value. They're architecturally right, too.

Whether you're building one home or one thousand, if it's good profit you want, you'll be ahead with Shakertown Sidewalls. It pays to stock and sell them!

Get the facts! Find out why shake homes, in project after project, have sold for ahead of any other homes built of standard materials. Write today for prices and architect-selected color samples.

West Coast Plant at Chehalis, Wash.

The PERMA PRODUCTS Company

5455 BROADWAY AVE. CLEVELAND 27, OHIO
Association News, cont'd

(Continued from page 204)

Besides the service offered in answering specific problems, the builder group takes advantage of the broad publicity medium to "plug" the story of the homebuilders' general contributions to community life.

Arrangements of the series of programs were made with NBC by William M. Baines, president of the Building Contractors Association; Edward M. Sills, executive vice president; Russell Loesch, chairman of public relations; and W. Richard Latta, public relations counsel. Production of the program is directed by Latta and Company.

10 Years of Advancement Marked by Long Island

OTTO J. HARTWIG (center) is presented sterling silver tea and coffee set to mark 10th anniversary of Long Island Home Builders Institute's formation and also 10th anniversary of his service as the group's executive officer. G. A. Merzer (right), first president of the institute, makes the award, while Frederick E. Gibson, current head, looks on. In 1941, 22 men founded the institute; its membership is now 1,000.

Cedar Shingle Group Heads Compare Notes on Industry

MUTUAL CONGRATULATIONS are in order as R. S. Miller (left), newly-elected president of the Stained Shingle and Shake Association, greets W. H. McLellan, re-elected head of the Red Cedar Shingle Bureau. Looking on is W. W. Woodbridge, Bureau manager. Both groups met in Seattle during December.
A Better Buy in Trim Hardware!

Priced for Houses Under $12,000

Low-Cost Corbin Locks, too

Corbin Tubular Latches and Key-In-Knob locks are perfect for small homes! Easy 2-hole installations! 5-pin-tumbler security! Reversible for all doors! Low in cost ... lovely to look at ... long-lasting!

Corbin Advertising is Working for You!

Frequent advertisements in Better Homes & Gardens, The Saturday Evening Post, Small Homes Guide, House Beautiful's Building & Maintenance Manual, House & Garden's Book of Building are telling home-buyers about the advantages of Corbin Hardware! Point out to your prospects that you use Corbin Hardware! It's a mark of quality construction!

Made of pressure-cast aluminum with beautiful smooth-textured brass finish or satin aluminum finish!

Can't rust!

High-strength!

Furnished with brass screws!

Don't use cheap-looking hardware when — for the same price — you can get sash lifts, sash fasteners, coat hooks, stair rail brackets and door stops with superior finish, superior strength, superior quality! Your hardware supplier has these Corbin Pressure-Cast Aluminum items in stock now, or he can get them for you quickly. But — remember this — be sure to ask for CORBIN PRESSURE-CAST ALUMINUM. It's another new Corbin product to help you build better low-cost houses!

GOOD BUILDINGS DESERVE GOOD HARDWARE

P. & F. Corbin Division
The American Hardware Corporation
New Britain, Conn., U.S.A.
and you’ll BUILD THE BEST!

Just off the press! Our new folder, "The Story of Modern Homes," tells you everything you want to know about our builder advantages, shows many floor plans, photos of recent homes, gives specifications and reasons why we offer outstanding prefabricated homes of character, individuality and charm. In addition, there's our new catalog of Modern Homes, with full details on the advantages of our conventional construction and attractive contemporary architecture. With it come bulletins describing six of our models. Altogether, the package makes a valuable selling tool for Modern Homes builders and a complete picture for you who are investigating the market.

If you're a quality builder concerned with maintaining a hard-earned reputation and still make a profit in this competitive market, write us on your letterhead for this packet of real information.

Changes in "City of 1960" Forecast by Realtor Survey

The city of 1960 will have more parking space than the current one, relieving one of the sharpest modern urban problems, according to Alexander Summer, 1951 president of the National Association of Real Estate Boards.

Summer based his forecast on the results of a recent survey by NAREB in which 2,095 realtors in all 48 states prophesied the characteristics of American cities in a decade.

About nine of ten of the reporting experts foresaw more parking space for their own cities, including both added facilities and great relative reapportionment, Summer said. In cities of more than 500,000 population, where the parking pinch is most seriously discouraging shopping and inconveniencing workers, the predictions were almost unanimous for more space by 1960.

More freeways from the center of town to add accessibility to downtown areas are also expected in cities of all sizes, it was reported.

Decentralized Shopping

Despite the probable relief for downtown areas, the repeating realtors forecast that the most profound physical change that may be expected by 1960 in the typical American city is an appreciable shift of retail business volume and spread of industrial areas out from present city centers.

"It is automotive transportation, electrical power transmission, and other technological developments seeping into every pore of daily life that will cause the slow but sure change," Summer added. "Already for more than a decade decentralization has been recognized as the outstanding internal force changing the physical pattern of cities and affecting real estate values. Fear of the atomic bomb may also have some influence in augmenting this trend, but it is purely secondary to the deep causes long at work. Not even compulsory measures that may be taken by government for most critical areas and industries will be more than an extra push."

Business volume for downtown areas of their cities is expected to be greater in 1960 than today by only one-third of those reporting. The only areas are expected to get the major expansion from normal population growth and an expanding national economy.

Nineteen of every 20 persons surveyed predicted that 1960 will see higher business volumes in the sub-

(Continued on page 212)
You can cut building and remodeling costs with this new low-cost, top-quality panel by the foremost manufacturer of prefinished wall panels. Produced by a new exclusive Marlite high-heat-baking process, lustrous Marlite HI-GLOSS panels combine outstanding beauty and durability...sell in the same low price range as Marlite Velvetex!

Now it's two for '52!

These two new low-cost Marlite high-heat-bake panels will save costs, add quality and customer satisfaction for you in '52!

NEW MARLITE WOOD PANELS...authentic reproduction of fine wood grains, costing far less than most unfinished fine woods.

NEW MARLITE HI-GLOSS...a high quality, low-cost panel, available in many striking colors and patterns.

Made possible through revolutionary manufacturing techniques, Marlite HI-GLOSS and WOOD panels bring economy and sales appeal to all types of interiors. The quick and easy installation of wall-size panels reduces your cost. The durable, easy-to-clean walls in decorator correct colors will please your customers.
BUILDING BOOK
ORDER SERVICE:
Here's an easy way to get new essential information that will help you increase your income. Every volume a standard work by leading authority. Remember—it's the informed builder who is the successful builder.

ESTIMATING

1. THE BUILDING ESTIMATOR'S REFERENCE BOOK and Vest Pocket Estimator (not sold separately). By Frank R. Walker. Contains latest estimating and cost data on everything that goes into house construction. Most complete compilation of estimating and cost data available. $12.00.
2. SIMPLIFIED CARPENTRY ESTIMATING. By J. W. Wilson and Clell M. Rogers. Everything needed to take-off a bill of materials from set of plans and specifications for a frame house—with many helpful quick-reference tables and short-cut methods that simplify the work. $3.75.
3. CONTRACTOR'S MATERIAL LIST. A 10-column take-off form for complete listing of materials and labor costs. $1.00.
4. SPECIFICATIONS. Full set of detailed house specifications (and item index), with spaces for inserting the pertinent description data. $5.00.

CARPENTRY AND BUILDING

6. HOUSE CARPENTRY AND JOINERY. By Nelson L. Burbank. Every step of carpentry in and around a house, clearly explained and illustrated. Covers every job from foundation forms to interior trim. $4.50.
8. FUNDAMENTALS OF CARPENTRY. By Walter E. Durbahn. Complete house carpentry course in two volumes. Outstanding value. $7.50.
9. STEEL SQUARE. By Gilbert Townsend. This how-to-do-it steel square instruction book provides fundamentals plus step-by-step house construction problems solved by proper steel square use. $2.50.
10. STAIR BUILDING. By Gilbert Townsend. Fully illustrated explanation of every problem in design and construction of stairs. $2.50.

PLAN BOOKS

11. SUNSET WESTERN RANCH HOUSES. Authoritative book on the California ranch house, with thorough pictorial descriptions and ground floor and site drawings. $3.00.

PAINTING AND DECORATING

13. PAINTING AND DECORATING CRAFTSMAN'S MANUAL. Sponsored by the Painting and Decorating Contractors of America. $2.00.

HEATING AND PLUMBING

15. HOW TO DESIGN AND INSTALL PLUMBING. By A. J. Matthiessen. Every step in the design and installation of the plumbing system, to fulfill requirements indicated in blueprints and specifications, explained and illustrated. $2.50.

BRICKWORK AND MASONRY

16. THE ART OF BRICKLAYING. By J. Edgar Ray. Basic brick-laying job instruction, many illustrations, glossary, special scaffolding and cement block chapters. $4.00.
17. MASONRY SIMPLIFIED. Vol. II. Practical masonry procedures in the various phases of construction, from building forms for concrete to constructing fireplaces and septic tank systems. Includes discussion of handling new products such as glass blocks, waterproofing mixtures and insulating blocks. $3.00.

ELECTRIC WIRING

19. WESTINGHOUSE HOME WIRING HANDBOOK. By A. Carl Bredahl. A guide for planning the wiring of moderate-price homes, with emphasis on safety, effectiveness and efficiency. $1.00.

MISCELLANEOUS

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23. MODERN METHODS OF HOME HEATING. Standard heating systems illustrated with 17 floor plans showing heating outlets. 40 photos of equipment and installations. 25 boiler and piping connection diagrams, and 11 heat loss calculating tables. $0.50. Your copy sent FREE if your Order totals $5.00 or more. Use coupon below-mail today!

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“I’m giving you Thermopane in every window”

You know how big that would go over with your prospects. Some builders are proving that point right now!

They’re doing it in moderately priced homes—doing it by planning from the start to get this appealing feature in their homes. Plans include these steps:

1. Use of standard sash that take standard sizes of Thermopane* insulating glass made of economical DSA window glass. Savings thus are made on both sash and Thermopane.

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The pay-off comes from promoting Thermopane as a feature. Thermopane is the most-wanted, best-known double glazing. It can help you move houses faster—help you get better prices. Add this sure-fire selling feature to your homes and tell the world about it! Then watch things move.

Your L-O-F Distributor or Dealer can tell you more about it—and give you information on types of sash for Thermopane standard sizes. Or write us for further information, including detail sheets showing a low-cost way to offer your prospects Thermopane throughout the house.

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Please send me complete information on installation methods for low-cost windows of Thermopane

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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 Rollscreens 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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PELLA CASEMENTS  ROLSCREENS  VENETIAN BLINDS

ALSO MAKERS OF FAMOUS PELLA ROLSCREENS AND VENETIAN BLINDS

“City of 1960”

(Continued from page 208)

centers and neighborhood shopping areas. Cities of more than 500,000 population, where getting downtown is an inconvenience will be most generally affected, they forecast.

Industrial locations of 1960 will be farther out than at present to some measurable degree. Two-thirds of those reporting saw for their own cities. These will largely be new industries, new branches, and lighter industries—not established heavy ones—Summer said.

Street Railway System Out

The hometown street railway system will be gone by 1960, if there ever was one, said 75 per cent of the prognosticators. The remainder believed that their city's system may take longer than 10 years to go, but is on the way out.

"An airplaine passenger looking down at American cities in 1960 will, for all of the reasons mentioned, see more and longer ribbons of urban development running out of every city into the countryside," according to Summer. "In some areas this trend has already connected neighboring cities with continuous strips of urban developments.

"This is our normal way to seek pleasurer, safer living while holding on to the advantage of accessible urban facilities and services. It is decentralization by normal slow stages. As the ribbons grow longer, there will be occasional knots in them for trade centers.

"In both the largest and smallest cities, more than three-fourths of the realtors expect increase in this 'ribbon development.' In the middle-sized cities, the expectation is stronger yet, since these areas can get the maximum advantage from and have the maximum need for stretching out."

Small Acre Farms

Part-time farming on small acreage will be even more popular 10 years from now than it is today, the survey indicated. Here again flight from the atomic bomb is a factor, but only incidentally, Summer said.

The trend to the small farm was noted by 91 per cent of those reporting from New England, by 71 per cent of the observers from the Middle Atlantic and South Atlantic states, by 85 per cent of those from the East North Central States, by 78 per cent from the Pacific area, and by 70 per cent or more from all remaining regions.
Lots of shops — both small and large — need doors that are ou-time in various ways. Wider than normal, higher than normal, high rise required to clear crane, extra low headroom, all glass, no glass, special design sections — all these problems, and many more, are familiar experience to Barber-Colman engineers and representatives. Barcol OVERdoors are made in sufficient variety, and have sufficient modifications, to meet practically every unusual condition we have found in over two decades of designing and manufacturing "improved overhead doors". Where power operation is required, we have good equipment of our own for that, too — with a full supply of controls including the surprising Radio Control. For full information, see one of our...
You can't make a profit on an unsold house

"Let's look at the kitchen." You've heard that phrase countless times from the woman considering making your house her home. And you'll get her name on the dotted line faster when you show her just what she wants... a pleasant, conveniently arranged kitchen featuring sparkling, easy-to-work-in, and easy-to-clean ARBORITE on counter-tops and walls.

ARBORITE gives YOU trouble-free, labor-saving, on-the-job installation

You get ARBORITE in light, builder size panels 4' x 8' and 2'6" x 8' which are easily applied with little waste. Mastic adhesives and standard trim moldings hold it firmly in place. In fact, with ARBORITE you don't have any of the costly troublesome installation problems common to conventional pre-finished Plastic Surfacing Material. Your own carpenters can easily install it.

Double-thick MELAMINE Surface adds years of wear

ARBORITE'S double-thick melamine surface resists abrasive wear, boiling water, acids, alkalis, and moisture, the banging of pots and pans. It's cigarette-proof! The colors stay bright for years.

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J. A. DAVIES & COMPANY 314 STRAIGHT AVENUE, S. W. GRAND RAPIDS 3, MICHIGAN

26 Lumber Yard Employees Visit West Coast Mills

Twenty-six employees of Lampert Yards, St. Paul, recently completed a 10 day trip to Montana and the Pacific Coast, where they inspected logging camps, mills, and a vermiculite mine. The trip is believed to be the first of its kind ever sponsored for a large group by a retail lumber firm.

Main purpose of the tour, according to W. B. Lamp, vice president of the company, was to give the managers an insight into production methods and mill problems, and to provide mill men an opportunity to gain direct knowledge of the retail lumber yard manager's problem. The results were so successful, Lamp said, that other groups of the same size will probably be taken out.

At Libby, Mont., the group visited Zonolite Co.'s vermiculite mine and the J. Neils Lumber Co. logging camp, mill and pole treating plant. At Bellingham, Wash., there were tours of the operations of the Columbia Valley Lumber Co., guided by Columbia president E. E. LeValley, and the Georgia-Pacific Plywood Co.'s plant. In Seattle, the group saw the mill of the Phoenix Shingle Co. At both Bellingham and Seattle, new residential construction was checked for comparison with Midwest standards.

Built-in Ranges Feature Small Kitchen Remodeling

The use of built-in gas cooking units to modernize and help solve the space problem in a group of small kitchens was described in the February issue of Woman's Home Companion magazine.

The units used in the Park Lane apartments in Toledo, Ohio, are the In-a-Wall stainless steel ovens and In-a-Top "drop in" three-burner units, manufactured by the Chambers Corp., Shelbyville, Ind.

The magazine article pointed out that the built-in ranges and eye-level ovens are well adapted for use in the small kitchen and permit custom-built storage below.

Story of Mahogany Veneer Told in Sound-Slide Film

How mahogany is felled, processed and sliced into veneers is shown in a new color and sound slide film produced by the Veneer Department of the Mengel Co., Louisville, Ky. Included are slides of the company's operations in West Africa. Running time of the film is 20 minutes. Full details about showings can be obtained from: The Mengel Co. (Veneer Division), Louisville 1, Ky.
WHAT KIND OF FLOORS ARE YOU GOING TO USE ON THIS REMODELING JOB?

KENTILE ASPHALT TILE. THEY LAST FOR YEARS AND WILL BE A BIG SAVINGS TO THE OWNER.

Owners know that Kentile Floors mean long range economy

The long life and continued good looks of easy-to-clean Kentile Floors are selling points no architect or builder can afford to overlook . . . because prospects and buyers recognize the nationally-advertised name and know they can count on the low-cost quality.

Kentile Floors can be installed over any smooth, firm interior surface . . . even below grade over concrete in contact with the earth . . . and no type of floor is better suited for installation over radiant heating . . . or on the ground level of today's popular non-basement homes.

Once down, Kentile's wide range of modern, decorator colors are part of the floor for its long life . . . can't wear off because they go clear through to the back of the tile . . . resist dirt, stain and wear for years . . . stay fresh and new-looking with only minimum maintenance effort.

Colorful Kentile Asphalt Tile Floors like this bring beauty to any room . . . add sales' appeal to new or remodeled homes.

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It’s a sign that you’ve built with the best materials.
It’s proof you haven’t overlooked important minor details.
That’s how Lumite plastic screening adds sale-ability to a house!

Longest-lasting screen cloth you can buy!

In actual comparison tests under the worst exposure conditions, Lumite resisted the effects of weather outdoors better than all other kinds of screen cloth! Salt air, humidity, city smoke, acid fumes cannot harm Lumite.

Here are more Lumite advantages:
- Strongest, as proven in impact tests
- Needs no protective paint or varnish
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Gentlemen: I am interested in the rustproof, stainproof, long-lasting qualities of Lumite saran screen cloth. Please send me free sample and further information.

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Sold through Hardware, lumber, and building supply dealers and screen manufacturers.

This Dealer "Family" Had Time to Get Acquainted

The A. W. Burritt Co., lumber and building material dealers of Bridgeport, Conn., was host to 270 of its employees and their guests at a recent party to honor 37 of the group who have completed from five to 50 years of service with the firm.

Service pins were awarded the honorees, who had marked their first five years with Burritt, or had entered another five year bracket. Of these, three had passed the 50-year mark; one each had 45 and 40 years’ service, and three had 35. The other awards were: 30 years, one person; 25 years, six; 15 years, one; ten years, seven; five years, 14.

In addition to their pins, those in the top service bracket were presented $50 bills.

To put even greater emphasis on service at the "family" party, awards were made by William F. Severn, company president, a 59-year man; H. Almon Chaffee, a vice president, a 36-year Burritt veteran; and Stanley C. Burritt, also a vice president, who had 42 years service.

An interesting sidelight: Andrew Medvecky, a cabinet maker, got a 50-year pin; his son, Edward, got a 25-year one. The younger Medvecky, who learned the business from his father, is now assistant mill superintendent.

Dexter Lock Co. Joins Rice Leaders of World

An invitation to join the Rice Leaders of the World Association has been accepted by Dexter Lock Co., Grand Rapids, Mich., a subsidiary of National Brass Co., Lou Dexter, president of the parent firm, has announced.

The association, founded in 1912, performs a service to American dealers and consumers by endorsing a leading manufacturer in each industry. Only one manufacturer in each industry can become a member and membership is by invitation only.

Listed as requisites for membership are maintenance of high business ethics, quality of product, and service.

An emblem is used by the association to attest to endorsement of member firms.

Head Industrial Designers

Stewart Pike of Philadelphia has been elected national president of the Industrial Designers Institute, succeeding Paul MacAlister of Chicago. Other new officers are Robert L. Green, New York, vice president; Henry Hagert, Philadelphia, secretary; and Kurt Versen, Englewood, N. J., treasurer.
WADSWORTH HOMES ARE NOT "PRE-FABS"!

They Are Conventionally Built — For Builders! — From Full Dimension Materials Of First Quality And By Skilled Union Craftsmen. They Can Help You Build And Deliver More And Better Homes Each Year!

There is a tendency among the home buying public and the builders alike to look upon any house that is not built completely on the site as a "pre-fabricated house." There are many builders of pre-fabricated homes who do deliver products of good quality. But, Wadsworth Homes are not "pre-fabs."

Wadsworth Homes Are "Pre-Built!"

A Wadsworth Home is built for builders, according to conventional methods. The one single difference is that the work of building is done in our factory and not at the site. We employ the modular system of design and construction.

What Pre-Building Means To You

By building a home section by section in our factory, we can maintain greater accuracy and better control of materials. These pre-built sections delivered to your building site mean that your crews can go right to work erecting the building. A 5-man crew can rough in a standard 28' x 32' house in just one day.

Wadsworth Homes Are Gaining Favor

In city after city, home buyers, home builders and leading lending agencies have come to know a Wadsworth Home as a quality home. Buyers get more for their money in a Wadsworth Home. Builders can build more homes using our method, and they can build the year 'round. Banks, building and loan associations and other financing institutions accept Wadsworth Homes readily as a good investment.

Learn The Difference And Profit!

We invite you to learn more about Wadsworth Homes and this new method of building. Get our new FREE BOOK “30 Reasons Why Wadsworth Homes Are Not Pre-Fabs.” It shows you how Wadsworth gives you all the economy advantages of pre-fabrication plus the quality advantages of conventional building methods. For complete details, write to us today on your letterhead and a factory representative will call on you.
MODERN HOME is nearly all concrete; blocks for exterior were cast to resemble siding; floors and roof are concrete slabs; partitions are 4-inch concrete blocks.

**Baseboard System Solved**

**This Heating Problem**

The problem of heating this five-room concrete house, with three rooms each having three outside wall exposures, was solved by use of baseboard radiation in conjunction with an oil-fired boiler.

The builder, T. K. Nitterhouse of Chambersburg, Pa., found that the baseboard system provided adequate radiation in small rooms with high heat loss, as well as warm floors.

Fastening of the radiation units to the concrete wall was accomplished by drilling into the concrete blocks. Expansion plugs were inserted. Screws were then driven into the back panel of the baseboard to hold it snug against the plaster wall that had been laid on furring strips. These

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From the time of our first President, Bird & Son has made quality products. That is the reason Bird now can offer you the finest asphalt shingles in the world today—and at no extra cost.

* Heavy shadow lines and new pastel colors add massive beauty to your roof.
* Thick butt construction, with extra layers of asphalt and firmly embedded mineral granules give added years of wear where it counts...on exposed tabs.
* Fire-resistant, of course—certified by Underwriters' Laboratories.
* 215 lbs. of working weight protect every 100 square feet of roof.

For more information write Bird & Son, inc., Dept. AB-3, East Walpole, Mass.
Here's what you gain

when you specify ATLAS PANELS and ATLAS DOORS

Atlas-made has a meaning not often encountered in the complicated inter-relations of modern business. Here is a fully integrated company—from the standing tree to the finished product.

Atlas is one of the world's largest makers of plywood—every type, every grade, every size. We sell no plywood product not of our own manufacture. The fields we serve vary as widely as the architectural, the trailer manufacturer, the user of plywood containers, those who build with concrete, the cabinet maker.

The significance is this... Since the requirements of the fields we serve are as varied as the fields themselves, there is very little that we don't know about plywood and its countless uses. Every Atlas Plywood product—whatever its use—is exactly as graded—or better.

Any plywood or veneer that does not measure up to a given specification, is immediately diverted to a use it can honestly serve.

Your gain—when you specify Atlas Panels and Atlas Doors—comes from many contributing factors. Every step of processing and manufacture is under one ownership, one control, one responsibility.

Long research with every type of wood and wood-handling method, the constant development of adhesives and bonding agents—all contribute to a quality that is completely obvious in every Atlas Plywood product.

Let us send you illustrated literature on Atlas (hard and soft wood) Panels—Architectural Grades, Journeyman Grades, Utility Grades and Concrete Form Grades... And on Atlas Flush Doors—both solid and hollow core. Kindly address your inquiry to Department 48.

18 MANUFACTURING PLANTS

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ATLAS PLYWOOD CORPORATION

STATLER BUILDING, BOSTON 16, MASS. * Telephone: Hancock 6-0016 * Teletype: BS-644

MARCH 1952
MARBLE PATTERN plastic-laced paneling features lobby of new Marsh offices. Plain color panels are used for upper walls.

**Walls of New Offices Show Use of Firm's Products**

The dealer sales technique of displaying products where customers can see and feel them can be equally effective in manufacturer-selling, executives of Marsh Wall Products, Inc., Dover, Ohio, believe. To prove the point they have made wide use of their plastic-finished wall and ceiling panels in the firm's new office building.

Application of the Marlite paneling was planned to show the versatility of the product and the variety of colors and patterns.

The outer lobby, for example, is paneled in an authentic reproduction of imported marble. Seen from the lobby are the general offices; here, the lower walls are covered with gray-wood pattern Marlite, including file cabinets, doors and center posts, while upper walls are white Marlite.

WALNUT PATTERN wall panels set decor for offices of V. R. Marsh, executive vice president.

Gray and white panels, trimmed in blue, were used for the accounting room. Private offices feature walnut, mahogany, and natural wood-pattern finishes.

Maintenance costs throughout the building have been materially reduced, according to company officials. Advantages cited for the plastic-finished panels were: elimination of plastering, painting, and periodic decorating. Dirt, grease, and smudge problems were said to be solved by occasional cleaning with a damp cloth.

Pastel panels designed for bathroom and kitchen remodeling are used in the office's five rest rooms. Residential use of Marlite is also demonstrated in a model kitchen and bathroom in a large display room which also serves the firm as a meeting hall.

Dealers have picked up the idea by installing panels in rest and show rooms and have reported increased sales. Marsh executives said.

---

**WONDER PLASTER & MORTAR MIXERS**

America's Finest Hoe Type Machines

Choose a "Super Six" or a "De Luxe" and you'll get a lightweight unit with quality features usually found only in expensive, heavy-duty installations. Sealed hoe, jack shaft bearings, renewable blades, triple mixing hoes minimize repairs and guarantee money-making performance. Send TODAY for illustrated, descriptive Bulletin MM 5491.

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5:50 x 16 pneumatic
Wisconsin 4-5 HP air cooled

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4:00 x 16 pneumatic
Briggs & Stratton 3-4 HP air cooled

- LOWER SHOVELING HEIGHT
- BUILT IN SAFETY GRATING
- CASTER TYPE WHEELS FOR WORM TO SIDE IN FOR INSIDE WORK

CONSTRUCTION MACHINERY COMPANIES
WATERLOO, IOWA
General Electric laundry lighting recipe eliminates glare and shadows over work areas, making the room seem larger, too.

Kitchen Light Conditioning recipes call for under-cabinet and oversink lighting, shown above, to reduce shadows, make work easier.

General Electric laundry lighting recipe eliminates glare and shadows over work areas, making the room seem larger, too.

Shaving is easier when lighting follows the G-E bathroom Light Conditioning recipe. Sunlamps on walls are "extras".

New sales-clincher for builders

...G-E Light Conditioning

LIGHT CONDITIONING in the homes you build gives you a double-barreled 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.

Based on lighting recipes developed by lighting experts (see examples above) General Electric Home Light Conditioning has already been adopted by scores of leading builders. These comments from builders 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 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

MARCH 1952
Save 60 Tons of Steel in Lightweight Plaster and Concrete 3-Story Building

Sensational reductions in dead load and consequently in structural steel requirements have frequently been reported in the past decade through the use of lightweight plaster and concrete in buildings from 10 to 35 stories high. Maxwell Reid, president of The John J. Moore Co., general contractors of Oakland, Cal., has now demonstrated what can be done in comparatively small Class A structures.

In the new 3-story headquarters of the Alameda County-East Bay Title Insurance Co., recently completed in Oakland, 60 tons of structural steel were eliminated with lightweight plaster and concrete, which at roughly $250 per ton amounted to a saving of $15,000. An additional 25 per cent, or $7,000, was saved in the cost of foundations, cut down in size since they would carry less weight. A further economy of $12,500 was made by integrating the acoustical treatment with the lightweight ceiling fireproofing.

NEARLY COMPLETE. Oakland, Calif. title insurance building shows impressive front of marble, granite and glass.

Bids on the structure as originally designed were appreciably in excess of the insurance company’s appropriation; and at their request, Reid re-designed the building, the contractors being specialists who design and engineer the jobs they erect. The result was a building identical to the original in appearance and quality of construction, but which cost 25 per cent less than the original figure.

The handsome structure is 70 by 130 feet, of steel and lightweight masonry block, faced with marble and granite in front, and finished with cement plaster on the side and rear walls. The steel is fireproofed with vermiculite plaster, 1 1/2-inch thick on columns, 3/4-inch thick on ceilings plus 3/8-inch of vermiculite acoustical plastic. This is one of the first buildings anywhere to take advantage of the 4-hour fire rating issued late in 1950 to this fireproofing combination of vermiculite plaster and vermiculite acoustical plastic on ceilings.

It is also the first building in Oakland in which each steel beam was not wrapped with metal lath and plastered. Such costly individual fireproofing for beams and girders has heretofore been necessary under the city code.

“Our beams were on 15 feet centers,” Reid said. “And fireproofing them individually would have been a very

(Continued on page 224)
Concrete floors on ground often are specified for houses, garages, farm buildings, commercial and industrial structures. Such floors usually must be warm and dry to fulfill service requirements. How to build such floors that keep water out and heat in is shown here. Never build a concrete floor on ground in low-lying areas that are damp or in danger of being flooded. Surrounding ground should slope away from building and should be at least 6 in. below finished floor level.

1. Compact soil thoroughly to prevent unequal settling of floor slab. Then add a coarse granular layer (usually 6 in. thick) of either slag or crushed stone or gravel, 1 in. or larger in size.

2. Compact granular fill. Cover with layer of stiff concrete at least ½-in. thick to provide smooth surface for moisture barrier. When the concrete hardens mop surface with hot asphalt.

3. Before asphalt cools apply layer of 15-lb. roofing felt, with edges well lapped. Mop granular layer (usually 6 in. thick) of either slag or crushed stone or gravel, 1 in. or larger in size.

4. Granular fill and dampproofing reduce heat loss to subgrade. To reduce heat loss off edge of floor, first place rigid, waterproofed insulation board 4-in. wide and 1-in. thick on edge against outside wall on wide insulation board (see diagram at top).

5. To complete the insulation of the floor perimeter place the same type of rigid, waterproofed insulation board 4-in. wide and 1-in. thick on edge against outside wall on wide insulation board (see diagram at top).

6. Place carefully proportioned concrete over dampproofing and insulation. Add metal reinforcing weighing at least 40 lb. per 100 sq. ft., positioning it 1½ in. from top of 4-in. slab.

7. Strike off to the proper grade and then work to a level, gritty finish with a wood float. Allow concrete to harden partially until all the sheen or surface water has disappeared.

8. Finishing with steel trowel will produce smooth surface. Avoid excessive troweling. Moisture floor at least two days. If finished floor is to be exposed moist cure at least five days.

PORTLAND CEMENT ASSOCIATION
33 WEST GRAND AVENUE, CHICAGO 10, ILLINOIS
A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work

MARCH 1952
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for by-passing doors
3/4 to 1-3/4" thickness

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for interior doors
— any thickness

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ACME slidding door hardware

ACME APPLIANCE MANUFACTURING CO.
35 SOUTH RAYMOND AVENUE
PASADENA 1, CALIF.

STRUCTURAL STEEL going up. Steel columns were fireproofed with vermiculite plaster. Ceilings with a vermiculite plaster and vermiculite acoustical plastic combination.

(Continued from page 222)

expensive item. We called the attention of city officials to the fire ratings for vermiculite protection, and got permission to hang our metal lath to the edge of the bottom flange of the beams, and fireproof with the vermiculite plaster and acoustical combination. This not only meant a tremendous saving in individual wrapping, but we got sound control with our fireproofing. We saved 50¢ a foot in labor and material for the 25,000 feet of acoustical treatment needed."

A sand float finish was used on walls and partitions.

Floors are cellular steel topped with lightweight concrete and finished with asphalt tile. The roof is an insulated steel deck finished with standard composition built-up roofing. Interior paneling and trim are hardwood. Ceilings are 18 feet high for the main floor; 10 feet on the mezzanine and third floor. Windows are sea green sun-resistant glass, and interior lighting is fluorescent.

The handling of the heating system is another instance of Reid's emphasis on cost-cutting. Had the unit been installed on the roof, as originally planned, the main duct would have had to be 3 x 5 feet. By putting the system in the middle of the building, on the mezzanine, the duct size was reduced to 2 x 3 feet, or better than 50 per cent, and construction was simplified, as well. Heat is supplied by a city main.

Total cost was $400,000 for the completely air-conditioned building.

Gains for Oak Flooring Anticipated

The hardwood flooring industry hopes to gain a greater share of the available residential market in 1952, president Milton Craft of the National Oak Flooring Manufacturers' Association declared at the group's recent annual meeting in Memphis.

Craft reported that 1951 was the second biggest year in the industry's history, and said that the volume of shipments indicated oak flooring was gaining popularity among home builders and buyers.

Final 1951 shipment figures for the Southern and Appalachian regions, source of about 90 per cent of the nation's hardwood flooring, were expected to approach 950 million board feet.
Newton Builders Give Selling Tip...

Names famous for quality like **YALE**
sell customers on the value of our homes

Says: Mr. Harmon White and Mr. Edward Greene

---

Gives your homes the extra sales appeal of famous YALE hardware

**Why is it** that many real estate promoters and builders show appreciable gains despite evidence of buying resistance? One important reason is they take full advantage of the selling power of distinguished trademarks. That's why the smart merchandisers in the home building field invariably specify Yale. They know Yale stands for superior styling, finer construction and more dependable service. And, their prospects know it, too! Because, Yale is the finest and most famous name in hardware. Many years and many dollars invested in national advertising have made the quality of Yale recognized the world-over. For additional information, call your supplier or write The Yale & Towne Manufacturing Co., Stamford, Conn. (In Canada: St. Catharines, Ontario.)

YALE... the finest name in Hardware!
Moisture condensing on window parts can present a real problem for homeowners. But wood window parts discourage condensation—retard the moisture drip that can so easily damage costly draperies, wall finishes or paneling. Remember, too, that these windows can be treated at the factory with modern water repellent processes to increase their resistance to moisture and decay. You add quality and value to the homes you build when you use wood window units. Wood Window Program, 38 South Dearborn Street, Chicago 3, Illinois.

**Protection**

with wood windows

---

**Reaches Lower-Income Market With Semi-Finished House**

By building a semi-finished home on the buyer's lot for no downpayment, or on one of his own lots for $250 to $300 down, with monthly payments running from $40 to $45, a Fort Worth builder is successfully providing housing to an income bracket—$200 to $300 a month—often overlooked by the home building industry.

In his operation, Ralph G. Campbell, who owns the two-yard Johnson-Campbell Lumber Company in Fort Worth and is active in both home builder and retail lumber dealer association activities, finishes the house on the exterior, installs plumbing, and turns the house over to the buyer for interior finishing.

He builds the houses (around 400 during the past three years) on the buyer's lot for $2,975; the price on his own lots is $3,595. Attached garages are available for an additional $400.

Customers who have done all their own work estimate it cost them from $1,000 to $1,500 to finish the houses, depending on how economically they bought materials and other factors. If a buyer is willing to work, Campbell said, he can have a finished 4½- or 5-room house complete with plumbing, hardwood floors, on a lot 75x140 feet, for less than $5,000.

Varying in size from 750 to 900 square feet of liveable space, the homes are built from good lumber and materials, on concrete, steel-reinforced foundations. Wood or asbestos siding, composition shingles, No. 1 hardwood flooring are used.

(Continued on page 228)
GREATEST CEILING PRODUCT EVER!

New UPSON
pre-finished Ceiling Tiles

WATERPROOFED WASHABLE
For Repairing, Remodeling and New Construction!

A new product... already with a nation-wide appeal, increasing every day!

Compare! See why!

- Six-ply laminated construction in 12" squares, \( \frac{1}{8} \)" thick—many times stronger than most other ceiling materials.
- Pre-finished and waterproofed with plastic-like Syntho surfacing compound—equal to two coats of lead and oil paint. Stands repeated washings. Moisture content controlled at 8% by weight; will not absorb more than 13.5% by weight when immersed in water for 24 hours.
- Apply on furring strips right over old plaster or direct to joists in new construction with color pins that match the tile finish. For information, see your lumber dealer or mail the coupon.

Shad-O-Beveled edges give popular modern look ceiling. No mouldings needed except at cornices. Ceiling is forever crackproof.

UPSON CEILING TILES come securely packaged in cartons for ease in handling and storage.

THE UPSON COMPANY, 813 Upson Point, Lockport, N.Y.

Mail me full information on Upson Ceiling Tiles.

Have your representative call to give me full information on Upson Ceiling Tiles.

NAME
TYPE OF BUSINESS
STREET
CITY STATE

MARCH 1952
The secret of the total cost-savings, according to Campbell, is that up to the point where the buyer takes over, the cost of materials is about four times the cost of labor; and from then on labor cost is about twice as much as material.

"The main idea," he said, "is to let the buyer save the cost of labor, since labor is one of the largest items in the total home cost. And, most buyers of our semi-finished homes are skilled or semi-skilled men who are quite capable of finishing the home in a manner to maintain the standards we prefer."

Campbell adheres to four basic floor plans for simplicity; each plan can be reversed and has several room arrangement possibilities. Ways of avoiding monotony in design include variation in colors of roofing, siding and trim, changes in gable and roof lines, occasional picture windows, double windows, front door designs, and roofs extended to cover porches.

Although the predominant bulk of his market is in the $200 to $300 income group, he has had buyers who made more than $10,000 a year, as well as a Negro man who earns $180 a month and who paid cash for the home and finished it in record time.

Twenty per cent of Campbell's market is among the workers of Consolidated Valve's B-36 plant in Fort Worth. Only 15 per cent among building tradesmen professionally qualified to finish a home. Other buyers include factory workers, office workers, municipal employees, military personnel, and a few persons who own their own businesses.

He attracts his buyers by a 12 column-inch advertisement each Sunday in the Fort Worth Star Telegram, by television programs, signs on houses under construction, and by brochures.

Financing, Campbell said, is the key to the entire program. Through a careful educational program among investors during the past few years, he has developed several sources of mortgage financing. Johnson-Campbell Lumber

TAPING and bedding gypsum SECTION of living room.
Company carries the homes until the buyer has increased his equity by completing some of the work on the interior. Then a group of notes is put up as collateral on a loan.

After three years of promoting his program extensively, Campbell believes it is one of the best ways to provide economy houses; that most people are surprised they can do the work; that it discourages interest in public housing; and, further, that by catering to a neglected market, the home builder gets a very profitable business.

"TROUBLE SAVER"
SCAFFOLDS
Save Time and Man-Power
on Light Construction Jobs

Even on small jobs, "Trouble Saver" Sectional Steel Scaffolds are profit-makers for you. Prefabricated frames fit into place quickly and securely. This, strong, safe scaffold can be erected and dismantled in minimum time. Indoors and out, it is more efficient than old-fashioned built-on-the-job wood scaffold.

With "Trouble Saver" you erect a scaffold to fit the exact needs of each job. Time-saving and efficiency features include extension legs for levelling and built-in ladders.

Get the facts! Write for Bulletins PSS-15 and PSS-24. See how other contractors use "Trouble Saver".

Approved by Underwriters' Laboratories, Inc.

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THE PATENT SCAFFOLDING CO., Inc.
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MASON TYPE FRAMES
Strong 5' wide, many-purpose mason frames are handy units in "Trouble Saver" assemblies. Separate working and material storage levels are provided for faster, easier work. Rungs may be used as a ladder.

228 AMERICAN BUILDER
As a Peaseway Franchise Builder, you can build homes to suit any taste—any pocketbook!

Shown is the low-cost Peaseway home, "The Lakewood", 691 square feet, 2-bedroom plan, designed especially for budget-wise buyers and for the large building projects in critical areas.

There are 8 basic Peaseway designs, ranging up to the contemporary luxury home, "The Archwood", of 1410 square feet, with 4 bedrooms and 2 baths. The flexibility of the Peaseway line of homes is such that variations are practically unlimited.

There's a Peaseway Home for every buyer.

Prices range from $7000—FHA accepted.

Unsurpassed livability, quality, durability and salability.

It will pay you to investigate the fine profit possibilities the Peaseway line of homes offers. Write today for complete information.

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"In business in Cincinnati since 1893"
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Up to 60%
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CONCRETE FORM TIE
WITH SPREADER!

Tested!

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FASTEST...SIMPLEST
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Saves
Time • Labor •
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We have now used your 'Form Ties' in one thousand homes and intend to use them in all our building operations. CHARLES T. GORE National Director of NAHB

Take advantage of the savings possible only with Gates Concrete Form Ties. This patented method is used BY OVER 80% OF HOME BUILDERS IN DENVER. Write today for full details and location of your nearest Gates distributor.

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$3,500 House Attracts Wide Interest in Texas

CONTEMPORARY-STYLED low-cost house in San Angelo has drawn many favorable comments from building experts. Here are (from left) W. B. Milstead, president of the Lumbermen's Association of Texas; John Armstrong, one of the developers; John Moss, largely responsible for originating the plan; and Gene Ebersole, lumbermen's executive vice president

A San Angelo, Texas, builder's $3,500 two-bedroom home, hailed in that section as a solution to the low-cost housing problem, has elicited favorable comment from a number of prominent persons, including U. S. Senator Lyndon Johnson of Texas and leading state home building authorities.

The builder, John Moss, realizing the needs of all classes of people in the low-income group, began several months ago to formulate plans for modern, well-constructed homes which these families could afford.

Modular principles and numerous other cost-saving features enabled him to design and build a home which sells for $3,500, including lot.

One of the cost-saving features, for example, can be found in the window frames and door jambs which are common two-by-six dimension lumber, set into place with

(Continued on page 322)

COMBINATION kitchen-living and dining room was furnished for "open house" after home was completed in 12½ working days. Folding screen can be used to close off kitchen. Note modern effect of swivel torpedo-style light
The farthest projection of Beauty and Performance

REYNOLDS  
Lifemine  
ALUMINUM  
BUILDING PRODUCTS

Reynolds Lifetime Aluminum Gutters project beauty and performance years ahead. Rustproof and stain-free without painting, they cost much less than other rustproof metals; save further by slip-joint installation.

Reynolds Aluminum Windows carry farther the acknowledged superiority of aluminum...maintenance-free beauty, trouble-free performance. Made of Reynolds own extruded shapes, corner-welded for greater rigidity and weathertightness, their satin finish is outstanding.

Besides these visible enhancements, you will want the invisible magic of Reynolds Aluminum Reflective Insulation...efficiency without bulk, perfect vapor barrier. And Reynolds Lifetime Aluminum Flashing will cost you less, look better, last longer.

Write for literature.
Reynolds Metals Company, Building Products Division, 2003 South 9th Street, Louisville 1, Kentucky.

Reynolds Lifetime Aluminum Gutters come in ogee and half-round styles, smooth and stipple embossed finish, with matching downspouts and complete fittings.

Reynolds Aluminum Windows comprise a complete residential line: Casement, Double Hung and Awning Windows with Auto-Lok hardware; Fixed and Picture Windows. Write for catalog.

Reynolds Aluminum Reflective Insulation is a superior lamination of embossed foil on kraft paper. Double-faced (Type B) and Single-faced (Type C). In rolls of 250 sq. ft., 25", 33" and 36" wide.

Military demands for aluminum limit supply of these products, but Reynolds is rapidly expanding aluminum capacity. Keep checking your supply source.

REYNOLDS ALUMINUM

"The Kate Smith Evening Hour" on Television, Wednesdays—Tallulah Bankhead in "The Big Show" on Radio, Sundays—NBC NETWORKS

MARCH 1952
KITCHEN MAID CABINETS IN
Natural wood finish
AND 7 OTHER ATTRACTIVE COLORS

Now famous Kitchen Maid Cabinets are available to you in a handsome Natural finish in addition to seven other carefully selected colors. Lovers of the friendly, informal kitchen will find it hard to equal the effect created by the Natural-Line. Hard-to-mar transparent finishes accentuate the beauty of hardwood grains, and give the kitchen an atmosphere of warmth and hospitality that only wood can provide. Like other Kitchen Maid cabinets, the Natural-Line is readily adaptable to use of the new built-in range and oven units, both gas and electric. Specify Kitchen Maid cabinets for your next project. Write for catalog.

COMPARE THESE FEATURES
Strong, Hardwood Construction • Hard-to-mar Factory Finish • Modern Flo-Line Styling • Quiet, Rustless Aluminum Drawers • Scores of Convenience Features • Seven Colors and White • Experienced Dealer Assistance

“MODERN LOOK” has been achieved by exposed interior masonry wall, one of many cost-saving features. Flooring is asphalt tile, applied directly to slab.

(Continued from page 230)

the studs. Setting and trimming out all openings in one operation constitutes a saving; at the same time giving a pleasing, contemporary appearance to the square edge of the 2x6 window frame and door jamb.

The pilot house, built in 12½ working days, is located in the Latin-American and Negro section of San Angelo. Although actual construction has not begun on more units in this section, several orders have been turned in and are being considered by the San Angelo Federal Savings and Loan Association, who have agreed to finance the mortgages for qualified individuals.

Immediately upon completion of the first unit a large demand from the middle-salaried Anglo-Americans warranted the opening of a 52-unit addition.

John Moss has entered into partnership with A. L. Turner and John Armstrong to form the T&M Development Company. They have started on the construction of the first eight houses in the Anglo-American addition. Completion is expected the first of December. Additional houses will be started from time to time.

Senator Johnson, who inspected the pilot house soon after it was completed, said, “I am amazed and thrilled. This house is the beginning of what should be a revolution in housing development and probably some day will be known as the ‘San Angelo Plan.’”

W. B. Milstead, president of the Lumbermen’s Association of Texas, who inspected the house, said, “It is modern, compact and has more living area in a space of its size than I’ve ever seen.

“It goes to prove that private enterprise has the ‘know how’ and can take care of the lower-income group without public housing and government subsidy.”

“It is better than anything that has been brought out in this country before,” was the opinion of Gene Ebersole, executive vice president of the state association.

Ebersole was especially impressed with its adaptability. “Not only does it give the people in the lower-income group an opportunity to own a home,” he said, “but it is the answer for working girls, young couples or old people.”

Joe Driskell, Fort Worth, president of the Texas Home Builders Association, who also inspected the pilot house, said, “I think you have one of the nicest set-ups here I have ever seen and I’m for it 100 per cent. It is durable, economical and neat. It is nice enough for anyone. It is a job well done.”

(Continued on page 234)
a **NEW** reason for building homes with **BRICK** and **TILE**...

**THE S C R**

**INSULATED CAVITY WALL**

with **Fiberglas**" Cavity Wall Insulation — **Pouring Type**

Building homes with cavity wall construction of brick and tile has long been a sound, economical method of creating a barrier against the penetration of moisture and heat.

Now, you have added reason for doing so — the **S C R** Insulated Cavity Wall. You get all the advantages of cavity wall construction *plus* even greater protection against heat loss where needed.

The **S C R** Insulated Cavity Wall with Fiberglas Cavity Wall Insulation — Pouring Type — has a tested U value of .12.

This **S C R** Insulated Cavity Wall is easy to build with no change in construction technique and building code specifications. The Fiberglas Insulation is light, pours easily and resists settling and moisture absorption.

The **S C R** Insulated Cavity Wall requires no furring, lathing or even plastering. It costs less to build — you can price your structures to sell better in a competitive market. You build a better, more comfortable house — give your customers more for their money.

Build *better* homes, stores, housing projects or industrial buildings at *less* cost with **S C R** Insulated Cavity Walls. For technical data or "how to build it" information, please write us on your own letterhead.

Address Dept. AB-3.

**STRUCTURAL CLAY PRODUCTS INSTITUTE**

1520 18th Street, N. W., Washington 6, D. C.
New Plastic Building Material
Has Variety of Applications

Corrugated fiber glass sheeting and flat plastic laminate offer a wide variety of structural and decorative applications in commercial, industrial and residential structures.

Fiber glass reinforced plastic may be cut with a power or hand saw or shears, or drilled with ordinary tools. Fastening may be accomplished with nails, bolts, screws or mastic.

**TRANSLUCENT** plastic sheeting can be cut with ordinary shears. It also can be cut with power or hand saw, or drilled

**TRANSLUCENT** plastic sheeting in corrugated panels is shown here in use in a greenhouse. Either flat or corrugated panels could be used

**TRANSLUCENT** qualities of flat plastic laminate is shown here with man's hand and handkerchief partially showing through the panel

**TRANSLUCENT** plastic sheeting provides ample, well-diffused light admittance, but is not transparent. Here it is shown used in door panels

**TRANSLUCENT** plastic sheeting in corrugated panels is shown here in use in a greenhouse. Either flat or corrugated panels could be used

**THE STRENGTH** and light-transmitting qualities of translucent plastic laminate have been used to improve the patio

It is now available for general use in flat sheets or in three standard corrugations: 2 1/4 inch, 1 3/4 inch, or 4 1/2 inch. Curved sheets, for such applications as quonsets, are

*(Continued on page 238)*
is the word for

Tracy QUALITY

KITCHENS

Heavier steel and finer workmanship are put into TRACY sinks and cabinets for sound reasons which are important to YOU!

1. Superior TRACY quality assures user satisfaction, protects your good name and good will.
2. TRACY quality eliminates complaints and service problems.
3. TRACY quality is a master selling point—because your prospects SEE and FEEL it.
4. TRACY quality puts you on top of the "light-weight" type of competition.
5. TRACY quality, IN VOLUME, gives you advantages in both price and profits.
6. (And incidentally) TRACY doesn't know how to make anything but top quality equipment.

Add these up for a very unique PLUS in the kitchen business.

BIG is the word for DEALER Opportunities

If YOU are sincerely interested in a profitable kitchen business TRACY offers EVERYTHING you could ask for.

"EVERYTHING" includes the broad and complete line of sizes and styles, and the service that keeps an active dealer making money, and the promotions and advertising support to put continuous POWER behind his business.

Never has the kitchen business been more flourishing, and never has there been a more promising opportunity for the TRACY dealer.

Ask for your distributor’s name, and we’ll put you in touch with a live-wire proposition.

THE QUALITY-VOLUME LINE

TRACY MANUFACTURING CO., Division of Edgewater Steel Co., Pittsburgh 33, Pa.
smart in style • weatherproof
both sides identical

#846 DOOR OF THE MONTH

(One of 48 Styles)

ANGEL DOORS SPECIFICATIONS

- 48 Styles. Two Sizes: 2'8" and 3'0" x 6'8" x 1 5/8"
- Faced (both sides) exterior grade plywood, bonded under high heat and pressure
- Raised moldings on both sides around glass (Use either side out)
- Solid-Core construction
- Water resistant
- Shipped unfinished in individual dust-proof cartons
- Nationally advertised and available through Lumber Dealers everywhere.

CORRUGATED translucent plastic sheeting installed in a patio in both permanent and hinged roof sections affords diffused light, protection from the elements and flexibility of ventilation. (Continued from page 236)

obtainable in lengths from eight to 12 feet, and widths from 26 inches to 42 inches. Among the colors available are opal, rose, green, aqua and yellow.

Heat transmission tests show the material permits about half as much heat transmission as glass.

PERMANENCE of translucent plastic sheeting permits a wide variety of uses. Here it is shown in corrugated form being used as a fence around a swimming pool.

Adequate Storage Program
Mapped by LP-Gas Group

Objectives of an adequate storage program which has been especially developed for the liquefied petroleum gas industry include relief from local winter fuel shortages, proper tank sizing, a balanced winter-summer delivery ratio and stimulation of summer uses of LP-gas.

Cooperating to produce the industry-wide plan now being advanced by the National Committee for LP-Gas Promotion were heating engineers, weather experts and LP-gas producers, marketers and manufacturers, according to Lee A. Brand, committee chairman.

Brand said kits of materials explaining the program are now available, free of charge, to LP-gas marketers. Key item in the kits is the “LP-Gas Storage and Ratio Manual,” which contains instructions for figuring customer consumption and determining proper tank sizes as well as degree day data and calculation sheets.

Also included is a sample of a new consumer folder called “Facts about LP-Gas Storage” which can be used as a direct-mail piece or showroom handout.

AMERICAN BUILDER
On job after job, in every part of the country... the RUSCO PRIME WINDOW is making big savings in construction time, labor and materials!

HERE ARE

4 BIG REASONS WHY...

1 A COMPLETE, PRE-ASSEMBLED UNIT, FACTORY PAINTED, HARDWARE FITTED, READY TO INSTALL
2 CAN BE FULLY INSTALLED IN AS LITTLE AS 5 MINUTES
3 CONVENIENCE OF COMPLETELY REMOVABLE AND INTERCHANGEABLE GLASS AND SCREEN PANELS
4 NO COSTLY CALL BACKS FOR ADJUSTMENTS

RUSCO HOT-DIPPED GALVANIZED PRIME WINDOW

AVAILABLE WITH OR WITHOUT INSULATING SASH
Made of Hot-Dipped Galvanized Steel, or Equal, Bonderized and finished with baked-on Outdoor Aluminum Enamel
For additional information or specifications write or wire...

F. C. RUSSELL COMPANY, DEPT. 7, AB-32, CLEVELAND 1, OHIO

MARCH 1952
KNOW WHAT THEY'RE SAYING

ABOUT

BERMICO®

The Root-Proof Pipe For Outdoor, Underground, Non-Pressure Use

“In Big Demand!”

Bermico is a real money-maker. It is easy to stock and stack. Its fibrous, pitch-impregnated construction enables it to absorb jars and jolts without damage. It is a profitable, fast-selling pipe that turns over quickly.

“Handles Like A Dream!”

Bermico pipe is a cinch to install. Its convenient, 8-foot lengths, complete line of bends and couplings, and simplicity of assembly, make installation quick and easy. A few hammer taps seal joints tight—no joining compound is needed.

“No More Pipe Troubles!”

Users are delighted with Bermico’s dependable, trouble-free service. It is corrosion-proof, unaffected by soil settlement, and is ideal for house-to-sewer connections, septic tank disposal units, downspouting and farm drainage.

Write Dept. HB-3 at our Boston office for information

BROWN Company

Berlin, NEW HAMPSHIRE

NEW HEATING SYSTEM USES

Small Ducts for Economy

Up to 35 per cent reduction in heating installation and labor costs have been achieved with the newly-developed “Janitrol Save-way Air System,” according to the Surface Combustion Corp., Toledo, Ohio.

In the system, the continuous air circulation feature of the firm’s equipment is combined with the perimeter principle of heating, utilizing four-inch round ducts for distribution. Warm air is circulated from outside wall registers of the diffuser type.

The normally colder room surfaces are blanketed with warm air to prevent cold drafts.

TYPICAL FLOOR PLAN of one-story house with enclosed crawl space, planned for perimeter heating, continuous air circulation

ONE-STORY HOUSE using attic installation. Only two return air grilles are required, reducing installation costs

More efficient use is made of the distribution system through circulating air continuously, rather than in relatively high volumes for short periods of time, and this permits reduction in size and cost of ductwork, the company said.

Advantages cited for use of the small-diameter duct were: faster, simpler installation; saves critical metals; eliminates cutting into main supports and members; reduces layout planning and detailing work.

The system was said to be ideally suited for various types of construction, including single and two floor houses with basements, and single floor homes with crawl space.

A manual giving details of the system is distributed through district representatives upon request to the manufacturer.
TWO TYPES OF ATTACHING BRACKETS — Tension is applied DURING installation by winding hinged bracket arm (on "L" type); AFTER installation by turning tensioning screw on both "L" and "Cup" types.

QUALITY PRODUCTS FOR OVER A CENTURY

HIDALIFT DIVISION

Gentlemen:

Please check:

☐ Dealer  ☐ Builder

Name ____________________________

Address ____________________________

City ____________________________ Zone State ____________________________

MARCH 1952

HIDALIFT OFFERS THESE ADVANCED AND EXCLUSIVE CONSTRUCTION FEATURES...

100% CONCEALED — No part protrudes or is otherwise exposed to view.

DESIGNED for EASY, FAST INSTALLATION — smooth, lifetime operation.

EASIER TO TENSION — Tensioning can be applied before or after installation without special tools.

 FITS WINDOW with or without weatherstripping.

POSITIVE LIFTING POWER provided by highest quality coil spring.

NATIONALLY ADVERTISED Hidalift Offers New Profit Opportunities

Dealers and builders make money on time-saving installations. Patented after-installation adjustment feature and non-jamming action eliminates future troubles.

SEND THIS COUPON FOR INFORMATION FOR BUILDERS

KAYTITE COMPANY BOX 550 WEST ORANGE, N.J.

PLEASE SEND BUILDERS INFORMATION:

NAME OF COMPANY ____________________________

STREET __________________________________

CITY __________________________________ STATE ____________________________

ATTENTION OF ____________________________

KAY-TITE COMPANY

WEST ORANGE, N.J.

ELEVEN FAR WESTERN STATES CONTACT KAY-TITE COMPANY

1717 WESTLAKE AVENUE, NORTH, SEATTLE 9, WASHINGTON

More than 20 years of satisfactory performance
How to construct
SHOP and WAREHOUSE
BUILDINGS in fast time,
for permanent service,
at low cost...

You may build permanent buildings with maximum econ-
omy, good appearance and open floor areas with glued
laminated beams of Timber Structures, Inc.

These members are dimensionally stable and stronger
than sawn timbers of equal size. They are formed to any
desired length and section, and camber may be introduced
as needed. Delivered pre-cut and pre-fitted, glued lami-
nated beams save both labor and material. They are adapt-
able for both single and multiple story buildings.

By cantilevering beams as shown above, loading canopies
are provided, and it frequently is possible to increase size of
clear floor areas and reduce the number of interior columns.

Get detailed information on glued laminated beams from
your nearest Timber Structures office, or fill in and mail the
coupon for new booklet, "Industrial Buildings".

Early American Kitchen
Finished in Knotty Pine

Knotty pine was used as the wall and cabinets in this
early American kitchen which is equipped with modern
appliances and materials for maximum efficiency. Built
into the 14x16-foot kitchen is a small fireplace. Used
brick give authenticity to the Colonial atmosphere.

A sectional cooking unit, installed at a convenient
height, lends a modern touch. The range hood is equipped
with an exhaust fan. Early American atmosphere is ac-
ccentuated in the kitchen by the use of special wallpaper
and antique furnishings.

The house, located in Glendale, California and owned
by Glade Porter, is finished with standard V-joint tongue
and groove knotty pine. Narrow colonial trim millwork
was used in the finishing. Cupboard doors are mounted
flush with battens nailed to the backs. Drawer and cup-
board fronts are made of the same knotty pine material as
that in the walls. All the cabinets were built on the job.

A golden maple finish was obtained by using white
paint mixed with umbers and siennas, applied and wiped
off. The surface was then shellacked.
ATLAS MORTAR

“stays workable...gives a sharp, tight joint”

says C. O. Bunkoff, mason contractor of Albany, N. Y. You can see what he means as work progresses here on a warehouse. It’s just one of many jobs which have made Mr. Bunkoff enthusiastic about reliable Atlas Mortar.

PLASTIC AS BUTTER — Masons like the smooth, even workability of Atlas Mortar. It’s like butter under the trowel. Skilled hands know this is the feel of really plastic mortar.

TRUE, TIGHT JOINTS — Experience proves that masonry units are strongly bonded with Atlas Mortar; strong walls and watertight joints are obtained; hardening is satisfactory and color is uniformly good.

“A JOB INSPECTOR” — With Atlas Mortar, it’s easy to get a smoothly workable mix. Atlas Mortar is such a well-balanced masonry cement that mixes get too “short” to work if too much sand is added. Because of this safety factor, contractors say, “Atlas Mortar is like a job inspector.”

ATLAS MORTAR has proved itself on both large jobs and small...and in the laboratory as well. It complies with ASTM and Federal Specifications for masonry cement. For further information write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N. Y.

SKILLED HANDS PREFER

ATLAS MORTAR CEMENT

“THE THEATRE GUILD ON THE AIR”—Sponsored by U. S. Steel Subsidiaries—Sunday Evenings—NBC Network

MARCH 1952
two SPACE-SAVING WOODWORKING MACHINES
FOR YOUR PLANT

Whitney 105 SURFACER — 24" wide. Planes stock 1/16" to 8" thick. Feeds 20 to 60 ft. per min. with Micro-feed Selector and Feed Indicator.

THESE Whitney Machines are accurate, dependable, economical. They have been developed especially for the contractor's and builder's shops and the average woodworking shop to do the job and to save space. They are the result of over 100 years' experience producing precision woodworking machinery. These machines will give BIG machine performance, occupying small floor space.

Write today for complete information. Ask for bulletins P2 and S2.

BAXTER D. WHITNEY & SON, INC.
Winchendon, Massachusetts, U. S. A.

IN OUR 115th YEAR

Whitney WOODWORKING MACHINERY

INDUSTRY BRIEFS

Promotion of Cecil B. Brewer, formerly of Atlanta, Ga., as general sales manager of market development and distribution for Gunnison Homes Inc., was announced recently. Brewer, who formerly served as a district sales manager for southeastern states, will be located at the Gunnison general offices in New Albany, Ind. He was a Marine flyer in World War II.

United States Plywood Corp. has announced opening of a sales and distribution unit at Sacramento, Calif., the 24th placed in operation by the company. The new branch occupies a new building containing 20,000 square feet of warehouse space.

Appointment of F. F. Duggan as assistant general sales manager of the Crosley Division, Avco Mfg. Corp., has been announced by W. A. Blees, Avco vice president and Crosley general sales manager. Duggan has been general sales manager of Avco's American Kitchens Division since 1949. Succeeding Duggan at American Kitchens is Charles K. Clarke, formerly in charge of field sales.

A group of 113 men and women was inducted in the Quarter-Century Club of Kohler Co. at a recent dinner in Kohler, Wis. Each new member was presented a medallion, watch and chain by Herbert V. Kohler, president. The 25-year service club, organized in 1924, has 805 living associates, 703 of them still active with the company.

Herbert W. Angell, for the past 13 years a member of the technical staff of American Lumber and Treating Co., Chicago, has been named technical director of the company and will assume responsibility for management of its technical department, laboratory, and license quality-control. Angell, widely known in the field, was given credit for many advances in wood utilization during World War II.

Makers of Evans Folding Rule and "The Folding Yardstick"
For Builders Concerned with Costs...

HOMELITE Cost Cutting

PUMPS,
GENERATORS, CHAIN SAWs

Why let water waste time . . . which is money . . . on a job, when you can get rid of it fast with a Homelite Gasoline Engine Driven Pump. Light enough for one man to carry, your Homelite can be put into operation quickly at any spot on the job. No transportation problems. No delays. With fastest self-priming, it handles up to 15,000 gallons per hour and keeps seepage down to strainer level automatically. It has a 28 foot suction lift. Non-clogging. Completely dependable in all kinds of weather.

Operating power tools or floodlights with a Homelite Gasoline Engine Driven Generator gives you maximum possible savings. In the first place, you eliminate the cost and delays involved in having local power installed. But of even greater importance, with your lightweight Homelite set up right where you’re operating tools, you eliminate long power-hungry cables that reduce the efficiency of your power tools and cause excessive repairs. Built for heavy duty service, a Homelite supplies plenty of power. It has a large overload capacity and is famous for its dependability.

Clearing construction sites is a fast, low-cost operation with a 27 pound, 4 horsepower Homelite Chain Saw. In fact, one man with a Homelite Chain Saw can cut more trees in a day than several men could cut with axes or hand saws. Lightweight, easy to handle . . . on every type of cut, felling, bucking, notching or trimming . . . a Homelite cuts through an 18 inch pine in 16 seconds . . . an 18 inch oak in 28 seconds . . . and it handles trees 48 inches or more in diameter.

Write today for complete information or free demonstrations.
YOU GET A BIG LOAD OF BENEFITS
with the powerful PRIME-MOVER!

Building contractors—large and small—use Prime-Movers—simply because P-M's are valuable machines to have on the job. The 10 cu. ft. bucket carries concrete and aggregates, plaster and like materials. The interchangeable platform with stakes handles large bulk items. 5 H.P. engine with forward and reverse climbs steep ramps.

THE ORIGINAL POWERED WHEELBARROW

Get the facts and helpful information on the benefits Prime-Mover can bring you. Write today.

THE PRIME-MOVER CO., Muscatine, Iowa

INDUSTRY BRIEFS

Donald W. Tait has been appointed advertising manager for the Perlite Division of Great Lakes Carbon Corp., Donald H. Gott, general sales manager, reports. Tait's headquarters will be in the company's executive offices in New York. Before joining Great Lakes, Tait was associated with the Chase Copper and Brass Co. at Waterbury, Conn.

Frank C. Flentye of Topanga, Calif., has been placed in charge of Youngstown Kitchen sales to builders in Mullins Mfg. Corp.'s newly established western division, sales manager D. F. Rooks has announced. The division, headed by manager M. D. Durham, includes 11 far western states. Offices are in the Western Merchandise Mart in San Francisco.

Edward J. Detjen was named sales manager of the Owens-Corning Fiberglas Corp., general products division in a recent reassignment of personnel. Ben S. Wright, vice president since 1949 and general sales manager since 1947, was named vice president in charge of purchasing and trade relations, while E. W. (Pat) Smith, appointed vice president and director of merchandising last May, was reassigned as vice president in charge of sales branches and training programs.

Gerald W. Coleman, who has been with Fleet of America, Inc., aluminum window manufacturers, since its organization, has been named eastern sales manager. Robert M. James, Jr., has been appointed Buffalo district sales manager, succeeding Coleman. The announcements were made by Tom Y. Smith, president of the Buffalo, N.Y., firm.
Ruberoid's new ShadoWedge, a tapered asphalt undercoursing strip, is a brand new building product designed to add sales appeal plus economy to new homes or remodeling jobs. The principle is a simple one... ShadoWedge provides a unique, inexpensive way of "double-coursing" asbestos-cement siding shingles. It is a tapered asphalt strip approximately $\frac{3}{8}$" thick at the head and $\frac{1}{8}$" thick at the butt. This thick lower edge of the ShadoWedge strip thrusts the lower edge of the siding shingle forward... thus creating a rich, deep-shadow, thick butt appearance which is so desirable for shingled sidewalls.

Improved appearance is only part of the story, however. ShadoWedge, which is essentially an asphalt weather strip, gives added insulation and more effective protection against weather. Further, it makes a more durable wall because it provides a cushion for the overlapping course of siding, which leads to tighter nailing and minimizes breakage of shingles during and after application. The large 12" x 36" strips go up fast and eliminate any necessity for sheathing paper or the joint strips otherwise required with asbestos-cement siding.

ShadoWedge may be applied over any type of board lumber, plywood, gypsum, fibreboard, or other type of sheathing material. This is because the same fasteners or nails that secure the siding secure the ShadoWedge. Conventional types of asbestos siding face nails or special fasteners are used, but they need to be a little longer to accommodate the thickness of the ShadoWedge strips.

Designed primarily for use with asbestos-cement siding, ShadoWedge may also be used with any other type of shingle or lapped siding. But the real pay-off comes when ShadoWedge is combined with Color-Grained Siding. It's a natural! Ruberoid Color-Grained Siding has proved a sensation in the siding market by itself. But, believe us, you've never seen a more beautiful sidewall than Color-Grained Siding applied over ShadoWedge. Ask your Ruberoid dealer about it today.
Here's a Boom that REACHES for Extra Jobs

The Bucyrus-Erie Hydrocrane with hydraulically telescoping boom reaches into windows and box cars... over fences... under beams and overhanging branches... between wires and rafters—without moving crane an inch! Boom extends and retracts a distance of eight feet.

The outstanding advantages of telescoping boom plus precision hydraulic control combine to make the Hydrocrane ideal for handling forms—placing concrete slabs, steel beams, wooden trusses... erecting pre-fabricated housing sections—hoisting brick, concrete buggies, fixtures—dozens of jobs.

Here is the crane that's right from every angle for building. Travels at 50 mph on open road, squeezes into close quarters, has cushion smooth hydraulic system, is extremely simple to operate. Write now for full details or see your Hydrocrane distributor.

BUCYRUS-ERIE HYDROCRANE DIVISION

INDUSTRY BRIEFS

Fred L. Nonnenmacher has been named manager of Chicago District sales for American Steel and Wire Co., according to an announcement by John Graham, general sales manager of the firm, a subsidiary of the United States Steel Corp. Taking Nonnenmacher's place as manager of the manufacturer's product sales department in Chicago is S. W. Goodenough. R. H. Hauger succeeds Goodenough as assistant manager of manufacturer's product sales.

Three new district sales managers have been named by Timken Silent Automatic Division of Timken-Detroit Axle Co. They are Olaf G. Beestrum, district manager for Iowa, former manager for a St. Louis dealer; Hilmer J. Hasenohrl, who rejoins the firm as manager for Southern Illinois, Missouri and Kansas after a year's active duty in the Army; and Wesley C. Robinson, former Canadian sales engineer, who will direct sales in Ontario.

In personnel changes at Wyerhaeuser Sales Co., David H. Bartlett, associated with the firm for 42 years, the past 12 as manager of the Twin City Yard, has been named executive assistant to R. S. Douglas, vice president and general manager; A. W. Clapp has been appointed executive assistant to C. J. Mulrooney, vice president in charge of sales; and Arthur Lahey has taken the post of manager of product lines, under T. L. O'Gara, vice president and merchandising manager.

A new company, Manufacturers Corp. of Ohio, with headquarters in Mansfield, has been established to furnish plastic pipe and fittings to distributors in the plumbing and heating, mill supply, electrical, hardware, plant equipment, oil, and building material fields. The president, C. E. Leadbetter, has announced. Leadbetter was formerly with the Barnes Mfg. Co. as manager of contract sales. Vice president of the new firm is William R. Hite, former vice president of Johnson Water System Co., Mansfield.
Sturdy, durable cartons — give full protection from factory to customers; simplify shipping, handling, stock operation.

Bold, easy-to-read labels — all essential information in large, clear type . . . legible even in dim warehouse light. Reduces possibility of error in handling, and inventory control.

— just another reason why it pays to use Milcor.
are automatic in our house plans" says a typical builder.

...and when we're on a job we always suggest replacing basement sash with a panel of Insulux Glass Block®.

Figure it out for yourself and it's easy to see why! Compare the cost of sash, screen, and in cold climates the storm window, together with maintenance against that of a lifetime panel of maintenance-free Insulux Glass Block.

A glass block panel can't rust nor rot; never needs to be painted. Insulux Glass Block makes a sound, weathertight, insulating panel that's extremely hard to break.

Supplies of Insulux Glass Block and all of the installation materials needed are non-critical and immediately available in quantity. Installation can be made at the time the mason puts in the foundation (the 8" sizes fit 8" concrete blocks perfectly) or as replacement for old-fashioned sash in houses already built. In either case, installation is simple and easy... requires only ordinary mason's tools.

Want more information about Insulux Glass Block? We'll be glad to send you all the details. Just write: Daylight Engineering Laboratory, Dept. 1, 1035, Toledo 1, Ohio. American Structural Products Company, Subsidiary of Owens-Illinois Glass Company.

INDUSTRY BRIEFS

Appointment of James N. Crawford as assistant to the president of Affiliated Gas Equipment, Inc., has been reported by president Lyle C. Harvey. During the past seven years, Crawford served as director of sales for Bryant Heater of Cleveland, one of Affiliated Gas’ three operating divisions. A graduate of Case Institute of Technology, he has been with Bryant since 1932. Also announced was appointment of W. H. Wise as director of sales, Bryant Heater Division.

Organization of two new Kimberly-Clark Corp., sales divisions and appointment of division managers has been announced by John R. Kimberly, vice president. R. B. Sawtell was named manager of a new merchandising division and Abbott Byfield will head a new product development division. Sawtell joined Kimberly-Clark in 1933, had both engineering and operation experience, and moved into sales in 1939. Byfield has been with the firm 13 years.

Arthur Temple, Jr., was elected president of Southern Pine Lumber Co. to succeed his father, and executive vice president of Temple Lumber Co., in recent board meetings of the two companies in Dallas, Texas. Elected president of Temple Lumber Co. to succeed the late Arthur Temple was W. Temple Webber of Texarkana. Webber was also named executive vice president of Southern Pine Lumber Company.

Lewis R. Sanderson, who entered the gypsum industry upon his graduation in 1914 from Iowa State College, is the new president of National Gypsum Co. Sanderson joined National Gypsum in 1936 when the firm purchased the New York plant of Atlantic Gypsum Co., of which he was plant manager. During World War II Sanderson directed the Bluebonnet Ordnance Plant which National Gypsum built and operated for the government in MacGregor, Texas. In 1945 he returned to Buffalo, N. Y., as director of construction and reversion. He was elevated to executive vice president in 1950.

A. Temple, Jr.

"WALLS OF DAYLIGHT" — by the leaders of Daylight Engineering

INSULUX

TRIGGER FAST!

"1. CEILING TILE & PANEL BOARD
2. BLANKET & BATT INSULATION
Reduce application costs!

FREE FACTORY SERVICE
Tackers Completely Overhauled
New Parts
Returned Immediately
To Users of Markwell Tackers and Markwell Staples
Catalogue on request

MARKWELL

Manufacturing Co., Inc. Industrial Products Division
200 Hudson St., New York 13

PROVED BY INSULATION BOARD MANUFACTURERS IN APPLYING CEILING TILE AND PANELS. THE MARKWELL "L3D" (9/16" Leg) STAPLE IS DRIVEN FLUSH INTO THE NAILING TONGUE OF THE TILE. THE MARKWELL GUN TYPE TACKER ELIMINATES DAMAGED EDGES ON TILE.

TRIGGER ACTION DRIVES STAPLES FLUSH INTO RAFTERS, JOISTS AND STUDS. A GUN TYPE INSULATION TACKER ELIMINATES DANGER OF PUNCTURING PAPER BACKING ON BATTs AND BLANKETS. USE "L3D" STAPLE IN PUTTING UP BACKER BOARDS.
Here's The Whole Story:

EASY OPENING. Copco's Kitchen Window glides open and shut with fingertip ease—especially desirable for that "hard-to-reach" area over the kitchen sink.

MORE LIGHT AND FRESH AIR. Approximately 33% more glass area and 20% more opening area than the ordinary kitchen window (a pair of 28"x16" sliding sash).

BETTER CONTROLLED VENTILATION. Copco's "Air-Deflector" ventilator catches breezes from three directions. Flow of air easily controlled.

EASIER CLEANING. Copco's extension type hinge permits safe, easy cleaning of both sides of the glass from inside the room.

LIFETIME SCREENS. Copco metal frame screens on inside of window are protected from weather ... do not interfere with curtains or blinds ... and can be put up or removed from inside the room—safely, quickly, easily.

QUALITY CONSTRUCTION. Made of specially designed, hot-rolled solid steel sections with welded construction ... Duranized and finished with baked-on coat of rust-resistant paint ... the same high quality as all other Copco residence casement windows.

Copco's complete line of residence casements offers builders the most satisfactory window units for every room in the home. Get complete information from your local retailer of lumber and building materials ... or mail coupon below.

$13.40
INCLUDING METAL SCREEN

Copco Economy Kitchen Window Unit (Catalog No. 2313-L) with complete hardware ... Lever Type Adjustor. (Rotary Type Adjustor $1 extra.) Prices F.O.B. factory. Transportation and local Sales Tax extra.
INDUSTRY BRIEFS

Clarence Hitzeman, Buffalo, N. Y., representative of the Martin - Senour paint company, has been named the firm's "Salesman of the Year." William M. Stuart, president, has announced. A plaque and cash award which go with the annual recognition were presented to Hitzeman at the company's recent annual employees dinner at the Palmer House, Chicago, at which time he was also made a member of the Martin-Senour 25-Year Club.

Roddis Plywood Corp. has announced the opening of a new mill for the cutting of veneers at Sault Ste. Marie, Ontario. Located immediately adjacent to the firm's Canadian timber reserves, the new operation will serve principally as a feeder plant for the hardwood plywood and door factory at Marshallfield, Wis.

Appointment of William I. Campfield as sales manager of building products for Steelfraft Mfg. Co. of Cincinnati has been reported by the company president, Al Levinson. Campfield has been associated with Steelfraft for two years as assistant sales manager. He has been in the steel building products field since 1939 and was formerly with Richmond Fireproof Door Company.

Three promotions in the sales organization of Universal Atlas Cement Co. have been announced by Fred T. Wiggins, vice president and general sales manager of the firm, a United States Steel subsidiary. Mac H. Hull, assistant to the vice president, was appointed assistant vice president, as was James C. McClure, sales manager of the firm's Dayton, Ohio, territory. Named new sales manager at Dayton was David H. Deacon, former assistant.

WEATHER-BLOC

Single Unit VENTILATOR FOR GLASS BLOCK PANELS

WHY NOT GIVE BOTH?

WHEN PLANNING—New buildings . . . or remodeling old buildings, be sure to get full information about WEATHER-BLOC Single Unit VENTILATOR for glass block small panels.

WIDE APPLICATION—Homes—Kitchens, bathrooms, stairwells, fruit cellars, STORES—show window fronts, side windows, store rooms, OFFICES for ventilating inside as well as outside walls or panels.

WEATHER-BLOC FEATURES—Blends with glass block. The outside presents a series of horizontal louvers, which maintain the continuity of design, simulating a glass block. The inside offers finger-tip control of ventilation with adjustable louvers. The body is stainless steel. Aluminum screen. All parts can be cleaned and replaced from inside the room. Available in three sizes of standard glass block.

WEATHER-BLOC MODELS—There are 3 models available. STANDARD WEATHER-BLOC with glass louvers outside and inside. UTILITY WEATHER-BLOC has stainless steel louvers outside and glass louvers inside. ECONOMY WEATHER-BLOC with stainless steel louvers outside and inside, 6 and 8 inch only.

WEATHER-BLOC takes no more time to install than single glass block. In old or newly completed glass block panels where ventilation is required, break out single glass block and replace with WEATHER-BLOC.

PURCHASE THROUGH YOUR GLASS BLOCK DEALER OR JOBBER
ALSO NATIONALLY DISTRIBUTED BY
WINCO DISTRIBUTING & MFG. CO., INC. 533 Bittner Street St. Louis 15, Missouri

WEATHER-BLOC

Air Rectifiers, Inc.
3734 North Southport Avenue
Chicago 13, Illinois

Please send complete information and prices.

Name ____________________________
Address ___________________________
City ____________________________ Zone ______ State ______
It's easier to build a fireplace around a Heatilator* Fireplace unit. This famous unit comes complete from floor to chimney flue...with firebox, throat, downdraft shelf, damper and smoke dome...fully assembled and ready to install. It standardizes construction without limiting mantel design or decorative treatment. There is a real saving in time, labor and materials, too.

It's easier to sell a house that has a Heatilator Fireplace. The unit's scientific design assures trouble-free operation and eliminates the common causes of smoking. It circulates heat throughout the room instead of wasting it up the chimney. This is the kind of extra-value feature people are looking for these days...and it costs you less than almost any other important feature. So specify the famous Heatilator Fireplace...the name home buyers know and respect. Heatilator, Inc., 323 E. Brighton Ave., Syracuse 5, New York.

*Heatilator is the reg. T.M. of Heatilator, Inc.
FOAMGLAS is the only insulating material composed of millions of tiny glass bubbles containing still air. And glass, in this cellular form, has exceptionally high resistance to moisture and many other elements that cause ordinary insulating materials to deteriorate. This makes FOAMGLAS ideal for insulating perimeters and the under side of floor slabs, especially in connection with radiant heating systems.

Note the eight features of FOAMGLAS mentioned above. Together they constitute a logical explanation of why FOAMGLAS has proved to be such an effective, long lasting, economical insulation, in walls and ceilings, on roofs and under floors, in many modern homes.

When next you figure on insulation, be sure to get all the advantages you enjoy only with FOAMGLAS. Send the coupon for sample and informative booklet.
Nurses' home of the Angelus Hospital, Amber & Eva Sts., Pittsburgh, Pa. Designed and built by Michael Cozza, Pittsburgh.

MARCH 1952

Designed for comfort, every detail of this new "home away from home" is planned for the nurses' comfort.

Lupton Windows are used to make rooms brighter, more attractive. Trim slim lines offer minimum light interference, present attractive appearance inside and out. They feature maximum ventilation control. Never shrink, swell, warp or rattle—always easy to operate.

Management will like Lupton Metal Windows too. Sturdy metal means long life with low maintenance costs—efficiency through the years.

Lupton Windows are made in steel and in aluminum. Backed by over 40 years experience in the window industry—you can specify them with confidence. You'll find the Lupton Catalog in Sweet's—or write direct for your copy.

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METAL WINDOWS
BIG!
Rips 4 Ft. Panels

Atlas 10" SAW

This is the practical portable table saw for handling all your trimming out work. Two men can take it into the job and you're set to make 1 minute equal 10 compared to hand sawing costs.

The precision-ground table and extensions provide a 45½" x 25" working surface — 24¼" wide between blade and fence, and 12½" ahead of blade. It handles both rip and cross cutting faster than any other saw because patented fence lifts off or on, and slides to position. (Has Vernier control for fine adjustment — locks securely at both ends — releases instantly.)

Important features include: tilting arbor, sealed-for-life ball bearings, dual V-belt drive, motor mounting on the saw, and rugged construction throughout for years of dependable service.

The Atlas will help you make more money on every job. Send for latest catalog with complete details. 8" Tilt/Arbor saws also available.

ATLAS PRESS COMPANY
339 North Pitcher Street
KALAMAZOO, MICHIGAN

DEPENDABLE QUALITY TOOLS SINCE 1911

INDUSTRY BRIEFS

Promotion of two salesmen to supervisory capacity, along with a territory reorganization and increase in sales force, have been reported by the Zonolite Co.'s Detroit Division. Paul Sylvester was named sales and plant manager of the new Pittsburgh district, and Robert Upchurch was promoted to Michigan sales manager. A force of 22 salesmen now serves the territory, which is comprised of Michigan, Ohio, West Virginia, Western Pennsylvania and Western New York.

The Quiet Automatic Oil Burner Corp. recently announced completion of construction on additional factory and office facilities in their Montclair, N. J., plant.

Purchase by Mueller Brass Co., Port Huron, Mich., of all outstanding stock of the Valley Metal Products Co. of Plainwell, Mich., has been reported by Fred L. Riggin, Sr., Mueller president. The new subsidiary will operate as a division of the parent company, although retaining its own trade name, VAMPCO.

Plywood production from a new mill at Gardiner, Ore., has been announced by the Long-Bell Lumber Co. Principal products of the new plant, operated under the name of the Gardner Lumber Co., Long-Bell subsidiary, will be Douglas Fir interior and exterior types of plywood. Capacity of the plant was given as 4,500,000 square feet of 3/4-inch basis per month.

Coming in April
AMERICAN BUILDER’S
Builder-Dealer CATALOG DIRECTORY
featuring
5 Special Directory Sections
26 Product Reference Sections
It’s a Buyer’s Guide—furnishing in one handy, easy-to-use volume, over 30,000 product listings, several thousand brand and trade names, plus names and addresses of hundreds of manufacturers.

Don’t Miss It!
Although building looks good for years to come, we will inevitably see increasing emphasis on value and the merchandising of value by the builder. Even today’s builder must look to merchandising solid values in his current homes if he is to build and protect his reputation to insure future volume.

True, costs must be kept down. But cutting heating corners is false economy. Today you can build extra value without extra cost with Janitrol heating equipment. The complete versatility of the 92 models and sizes that make up the Janitrol line lets you standardize on this one famous brand in either oil or gas-fired equipment... priced competitively for any type of construction or system.

Ask about the new 4” round duct Janitrol Save-Way Air System that saves up to 35% on scarce materials and labor.
WHAT ARE THE MOST IMPORTANT THINGS ABOUT SAWS?

A "COMPLETE WORKSHOP"
- It Cuts, Mills, Planes, Rams. Greatest! Only Boice-Crane Make a Tilting Arbor Saw-Jointer.

10" Tilting-Arbor Saw and a 6" Jointer driven by one, rather than two motors. Both machines can be used simultaneously, and have exclusive features providing more capacity for their size.

BOICE-CRANE HEAVY DUTY JIG SAW

The only 24" Jig saw that cuts materials up to 5" thick and accommodates blades 5" to 9" long.

Wider range of tensioner correctly tenses up to heavy duty ½" blades to guarantee a square face or plumb curve. Blades may be turned 90° for ripping long stock. Two adjustable blade guides.

50° longer blade stroke (1½")

Does accurate, clean contour and straight cutting, inserted blade work, die filing, saber sawing and sanding.

Oversee, precision ground, highly polished cast iron work table (20" x 24") tilts 45° two ways.

Self-bearing, Powerful dust blower.

Overall: 36" high, 20" wide, 38" deep.

Capacity, durability and precision, we believe you will agree. That's why extra capacity, unusual sturdiness and real precision have been built into the

BOICE-CRANE 10" TILTING-ARBOR SAW

Square off work up to 12 inches wide without costly front extensions.

Precision is MACHINED into every part. Important parts, such as the ripping gauge, aren't stamped or die cast but MACHINED FOR ACCURACY. The 10" cast iron rip fence is precision ground both sides. Large extensions assure super-accurate blade alignment.

Gauges are accurate, easy to read.

The ½-inch arbor and bearings the heaviest of any 10" saw. Handles heavy overloads. The only 10" saw which can be driven by low cost standard motors or lineshaft (even gas engines). The motor is entirely separate from machine and away from dust, keeping vibration from the arbor, eliminating needless wear on trimmers. Powerful V-belt drive transmits up to 3 H.P.

Front fence aligner saves operator reaching over blade to set. Accurate alignment on first lock-up. One-hand, tightening fast, automatic control of both front and rear fence locks.

Conveniently grouped controls quickly tilt, raise and lower blade. Positive locks. Free miter-gauge, with patented setting and adjustable stops for 45° and 90°. Approved safety guard shields entire saw blade, tilts with blade.

Dust chute encloses blade, discharges dust away from motor. Table 20" x 27". Blades: 10" dia. max.—(3" Hands 6" dia. x 7½" wide. Depth of cut: Saw Vertical 3". Saw Tilted: 2½". Bench or floor models.

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Versatility...cuts, sands, grinds any material...accurately...smoothly.

Speed: 2,000 to 4,000 f.p.m. Vibrationless.

Capacity...Up to 37" dia. 7½" thick, blades 1½" to 8" wide.

Safety...Entirely enclosed, except at cutting point. Single control blade guides safely adjustable, even when running.

Size...over height of floor model 83" x 15" x 15½" on double trunnions. Sealed motor compartment in base.

Sturdiness...strong, one-piece, welded steel frame. Balanced, light, molded Tufalite wheels. dia.: 14".

12 MODELS Simple and 6-Speed Backgauge.

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966 Central Avenue

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- Saw-Jointer
- Band Saw
- Jig Saw

NAME

STREET

CITY & STATE

Student Loan Fund Gets Lumber Dealer Backing

Contributions of retail lumber dealers and dealer associations are playing a major role in maintaining the Sigma Lambda Chi loan fund for students in the light construction and lumber merchandising course at Michigan State College. The fund, inaugurated in June 1951 by the students themselves, has been instrumental in helping a number of students to finish their college work.

Sigma Lambda Chi, the first national college honorary fraternity in the light construction and lumber merchandising field, was founded at Michigan State College in January 1949. Recently, chapters were installed at Virginia Polytechnic Institute and the University of Wisconsin.

The loan fund is one of the Michigan State chapter's principal functions. It is an unusual lending agency in that the only collateral required is the reputation of the student. No interest is charged to undergraduates. For graduates, interest at the rate of 4 per cent accrues until the principal is paid.

In addition to the lumber industry contributions, donations have been made by alumni, student body, and other interested agencies.

Recent contributors to the fund are: Kenney Lumber Co., Detroit; Forest City Material Co., Cleveland; McCall Lumber and Fuel Co., Battle Creek, Mich.; Genesee County Lumber Dealers, Flint, Mich.; and Miller Freeman Publications, Seattle.

Renew Your Subscription

W. R. Gibson, Leading L. I. Builder 58 Years, Retires

William R. Gibson, whose Gibson development in Valley Stream, N.Y., is generally considered to be Long Island's first completed integrated home community, has stepped down as head of the Gibson Corporation, after 58 years' activity in the construction business.

His son, W. R. Gibson, Jr., has been elected president of the organization, while Frederick E. Gibson was designated as a director.

The community boasts its own shopping, educational and recreational facilities as well as a company-built railroad station, named "Gibson" by the Long Island Railroad.

Gibson, a pioneer in the cellars house, is credited with having produced more than 12,000 dwelling units of all classes.

Student Loan Fund Gets Lumber Dealer Backing

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Latches automatically. Screen and Storm Sash are applied in same manner as No. 79 (above). No rattling. Made of wrought steel. Each set separately packaged complete with screws. Japanned, Hot Galvanized and Cadmium finish.

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