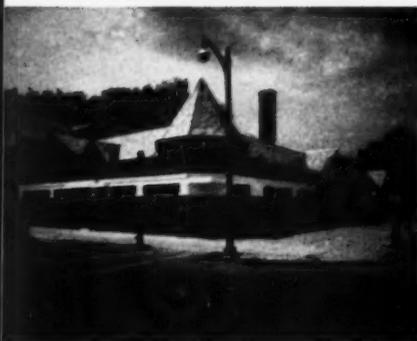


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OCTOBER 1953

75 CENTS



IT WILL BE STORES IN '54 Page 32



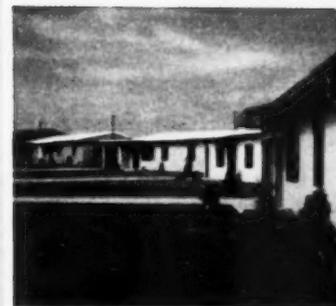
What Every Builder should know about Land Planning Page 37



How to Build in Winter
10 pages of ways to beat
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For experience with roofing
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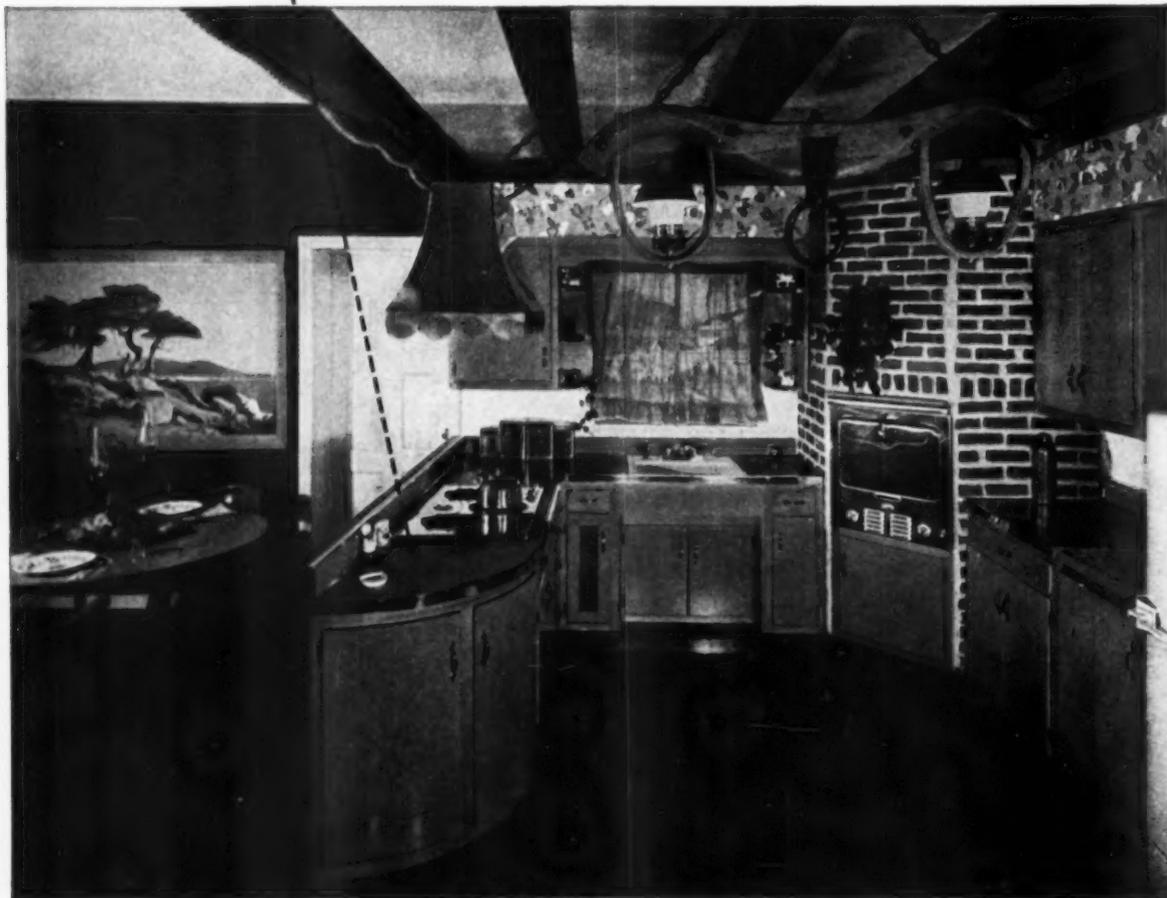
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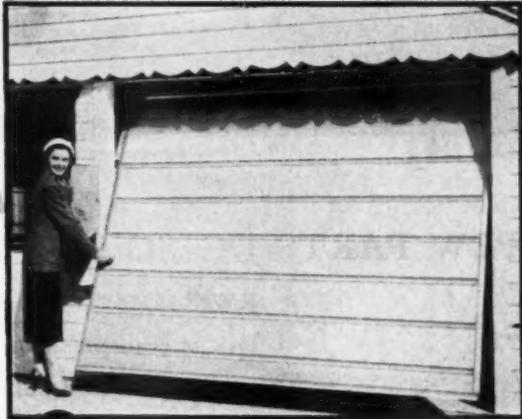
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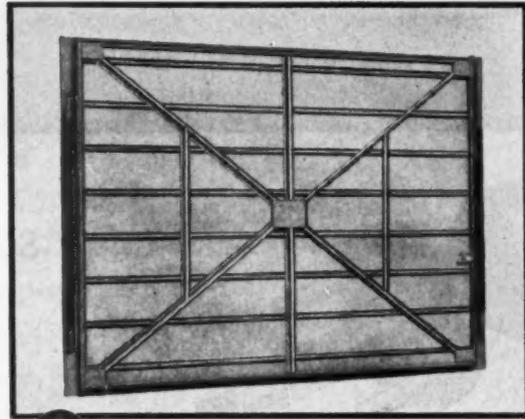
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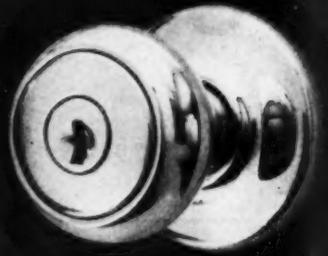
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IT WILL BE STORES IN '54



What Every Builder Should Know about Land Planning



ON THE COVER—The \$729 million spent on commercial building in the first half of '53 shows that the big opportunities now being predicted for this type of construction are no empty dream. We analyze a set of five of the new store structures, beginning on page 52.

The pleasant, curvilinear street of well-placed houses (lower left) is in Wedgwood Park, one of Albert Balch's planned communities in Seattle. It is a fitting symbol for the art of land planning as wise builders are practicing it today. For a checklist of major principles of land planning, see pages 92-93.

Lower right: this group of reinforced monolithic concrete houses is the work of builder-manufacturer Tom Jelks of Lawton, Oklahoma. The precision forms which he has developed for this type of construction are described on pages 144-146.

Last but not least—the last word on winter building procedures came from the upper peninsula of Michigan where building procedures in the face of snow and 30 to 40 degrees below zero temperatures. See pages 108-116.

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What, Another Crisis?

SEVERAL years ago Dick Hughes, NAHB's capable and popular veev. delivered a typical Hughes speech. The basis for the speech was an enumeration of the number of times various well-known figures had "viewed with alarm," and proclaimed current problems to be grave crises upon the turn of which depended the entire future of the home building industry. While Hughes poked a little fun at the viewers with alarm and the crisis proclaimers, he did so with no intention of discrediting them, but instead to drive home the point that this industry always will have problems, and that we had better accustom ourselves to meeting and handling them.

Early this summer Dick revised the speech by adding several later crises to it. One of these was the mortgage problem or crisis. In both the original and revised speeches he has always called attention to the labeling of each crisis as more formidable than any of its predecessors, or than any problem of the future can be.

Now, there is the budding of another crisis. It is the public ground swell of revulsion at slums and neighborhood deterioration, already resulting in a growing demand that somebody do something about urban redevelopment. It is inevitable that the demand will spread and soon embrace rural and farm redevelopment. But this new spawning ground for a brand new, first class crisis need not and probably will not provide Dick Hughes with a new chapter for his speech. Even the viewers with alarm likely will be found with their mouths hanging open and no words coming out.

The primary reason is that the home building industry, for the first time, is sufficiently organized and vocal to defend itself against the unwarranted charge of being responsible for slums and neighborhood deterioration. That was not true when the unexpected onslaught by the advocates of federal public housing had to be met in the interest of preserving private enterprise. It has not been true in meeting most other subsequent problems.

The second reason is that the home building industry anticipated by a full year the hue and cry against toleration of substandard housing that is about to burst into full voice. Several years of committee study was climaxed by the acquisition of Yates Cook to implement the association's urban redevelopment program. That implementation is under way and gaining great momentum.

So, it is likely that this problem and its companion problems in rural and farm areas will be contained as simple problems to which an effective answer is being provided, and never allowed to reach crisis proportions. If this is true, and it probably is, the fact will mark the turning point of NAHB from an organization forced from its inception to a defensive position, to a positive, dynamic force capable of formulating and directing action aimed at improved housing. Of even greater significance, the industry for the first time goes beyond its primary function of providing new houses, and assumes some responsibility for the use and maintenance of its product. No crisis this time.

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Here's the Home Building

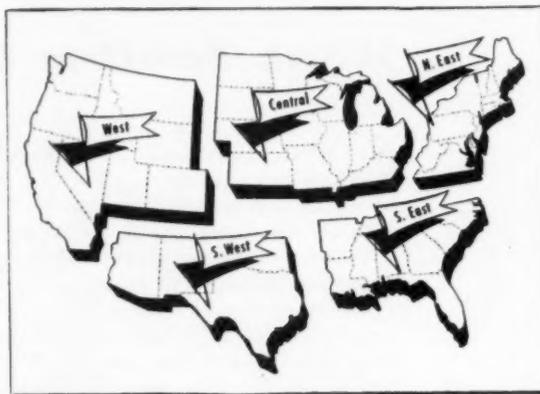
WHAT are the chances for continued home production at a record level? Are there enough prospects in the market to keep up the high pace of housing starts? If so, will there be adequate financing to enable builders to meet this demand?

Last-minute replies to these and other pertinent questions are reproduced below in the *American Builder* quarterly survey. Information is supplied by home building authorities from every section of the nation.

Consensus:

Financing difficulties are threatening to effect the sharpest curtailment of housing starts since the end of a general shortage of labor and of restrictions on the use of materials. Building authorities see a 15 to 25 per cent average cutback in new home production during the next six months, place the blame squarely on two factors: a woefully short supply of mortgage money and, where financing is available, high down payments which bar many good prospects from their goal of home ownership. Few can see much hope for early improvement.

Despite the impending drop in starts, prospects are generally holding firm in number. Given adequate financing, nearly every area would be in line for a 25 to 50 per cent jump in sales activity.



Buyer resistance still begins around the \$12,000 to \$15,000 price range in most areas, but appears to be increasing—another problem considered as a direct result of high down payments.

In some areas the mortgage situation is expected to force down costs somewhat, but in general, the forecast calls for a small rise of 2 to 5 per cent.

Labor and materials continue to be available in adequate supply, except in a few cases where local conditions appear to be creating temporary shortages.



What's the Mortgage Situation for New Homes? Any Improvement in Sight?

Northeast: All types of loans in good supply at Buffalo, which hopes situation "remains as good as it is." Adequate mortgage money also reported in Rochester and Hartford. Fair market in Boston is gradually tightening; ditto in Cheshire, Conn., which attributes difficulty in obtaining VA loans to compliance inspections. Long Island finds situation much tighter in all classes, although old line builders still have no problems. Financing of FHA and VA loans at standstill in eastern Pennsylvania, "very bad" around Pittsburgh. Situation for all types of mortgages is "worst in years" in southern New Jersey. Conventionals are available, but tight, in Baltimore, where large discounts are being asked for VAs. Washington brands financing as its one and only barrier to a healthy market. Northern New Jersey paying 1½-point premium for FHA, 2 to 5 points for limited number VA. No hope for improvement offered anywhere.

Southeast: Conventional mortgages with 5 per cent interest generally available, but no VA or FHA money noted at par. Birmingham reports limited number of FHA loans at 96 or 97; VA at 94 or 95. Jackson, Miss., indicates a similar situation. In Memphis, such loans are limited to homes ready for delivery at price averaging 96. Atlanta finds all mortgage types, even conventionals, have hit "a low stage."

Central: Cleveland and Grand Rapids, Mich., have VA

loans provided the down payment is at least 20 per cent. Elsewhere, VA is either non-existent or practically so, except Lincoln, Nebr., which has one building and loan group still issuing VA as well as FHA mortgages. Only Milwaukee and Sioux City, Iowa, hold out any hope for early improvement. All loans tight in Chicago, Des Moines, and South Bend, Ind. Conventionals adequate in Minneapolis, Indianapolis, Lincoln and Davenport, Iowa; beginning to slow down in Columbus. VAs, FHAs discounted 5 to 10 per cent in Wichita, Kans.

Southwest: Small quantities of FHA and VA loans available in Oklahoma City at 3 to 6 per cent discount. VAs plentiful at 5 to 6 points premium in Tulsa, but local institutions are said to be "thumping their nose" at FHAs. Latter reports many low-priced houses are conventionally financed; expects improvement "when Republicans discover hard-money policy won't win votes—maybe next spring." Dallas demanding 6-point discount for VA money; Houston will take 5. Premiums for FHA loans usually 4 points less. Conventionals extremely selective in Texas Panhandle.

West: Conventional loans only in all reporting cities, though some recent FHA and VA offerings noted in Spokane, Wash., at discount of 5 points and in Salt Lake City at "very large discounts which builders cannot afford to pay." San Mateo, Calif., area reports VAs selling at 93 to 89, FHAs at 95 to 90.

Picture Across the Nation

Are Home Buying Prospects Increasing or Decreasing? By What Per Cent?

Northeast: Prospects remain normal in Washington, also in most New York and Pennsylvania areas. Potential market for home buying is brisk in Baltimore which blames lack of adequate financing for lower purchase level. Slight decrease, 5 to 10 per cent, indicated in most of New England. Drop of 25 per cent seen in Camden-Haddonfield area of southern New Jersey.

Southeast: All centers report prospects are holding steady, only drawbacks being a lack of proper financing and a high cash payment requirement which limits choice. Birmingham notes 10 per cent increase in interest.

Central: Slight increase noted in St. Louis, Minneapolis and Sioux City, Iowa. Chicago believes current activity due to rent control removal and signs of impending shortage due to inadequate financing. Columbus reports 25 per cent drop; Grand Rapids, Mich., 35 per cent.

Davenport, Iowa, facing 20 per cent decline, charges "heavy down payment required on houses of \$12,000 and up removes a class of buyers from the market who represent good income and a desire to buy." Wichita, Kans., says "buyers with \$3,500 or more down have faded by 50 per cent."

Southwest: Texas recognizes decrease brought about solely by high down payment requirements. Tulsa, Okla., reports 15 to 20 per cent increase, while Oklahoma City looks for improved market with proper outlet for loans on trade-in houses and lower FHA down payment.

West: Prospects excellent, but no financing, is Seattle story. Sacramento reports 50 per cent increase. Spokane, Wash., boasts a strong market. Only decreases announced are at Denver and Salt Lake City, the latter by 75 per cent.

By What Percentage Would Sales Increase, Given Adequate Financing?

Northeast: Baltimore and southern New Jersey predict brighter loan picture would boost sales 50 per cent; Pottstown, Pa., thinks sales would double. Pittsburgh sets the improvement at 30 per cent, Washington and northern New Jersey at 20 per cent, Long Island at 10 per cent. Little effect anticipated elsewhere except Chemung Valley area of New York, 30 per cent.

Southeast: Availability of more financing would raise sales total at least 25 per cent throughout region. Atlanta sees improvement of at least 40 per cent; Memphis, 50 per cent; Charlotte, N. C., between 25 and 40 per cent.

Central: Increase predicted everywhere, beginning with 10 per cent at Minneapolis, 20 per cent at Indianapolis, Des Moines and Columbus, and extending to more than

30 per cent in Chicago and Grand Rapids, Mich. Any increase with adequate financing would be negligible unless lowered down payments were also effected, according to Lincoln, Nebr. Rise of 75 per cent possible in Wichita, Kans.

Southwest: Sales increase averaging 25 per cent indicated, provided down payments are lowered. Amarillo and Pampa, Texas set it at 50 to 60 per cent greater.

West: Salt Lake City reports that after taking months to rebuild public confidence, sales could be doubled. Seattle also estimates a 100 per cent rise; Sacramento one of 75 per cent. Denver and San Mateo, Calif., feel that adequate financing will make little difference in the overall sales picture.

Where Are Building Costs Headed in the Next Six Months?

Northeast: No change is the word from Baltimore, Hartford, Conn., Albany, N. Y. and most of New Jersey. Washington and Pittsburgh predict 2 per cent rise; Buffalo, 4 per cent; Boston, Bridgeport, Conn. and eastern Pennsylvania, 5 per cent; Long Island, 4 to 7 per cent.

Southeast: Costs will fall if present mortgage situation continues, believes Charlotte, N. C., but Birmingham feels this condition will be offset by higher wages. Only Jackson, Miss., expects a rise, predicting a gradual increase from 1 to 3 per cent.

Central: Consensus indicates no marked change. Chicago points out that while labor costs are rising, an in-

tensive effort to increase efficiency and to have builders and subcontractors reduce their profit formula may stabilize current costs. Definite increases predicted are 2 to 3½ per cent in St. Louis; 3 to 4 per cent in Cleveland, 5 per cent in Davenport.

Southwest: Costs will go up another 3 per cent, according to Tulsa, Okla. Amarillo, Texas, puts the figure at 5 per cent more. Other reporting cities expect to hold the line.

West: Salt Lake City anticipates slight rise; San Mateo, Calif., one of 3 to 5 per cent to reflect higher labor costs. No change expected elsewhere.

(Continued on page 8)

Are Home Starts Headed Up or Down in the Next Six Months?

Northeast: Only Rochester, Albany and Long Island see activity equal to the comparable period of a year ago. Latter sees possibility of slight slowdown during the fall as result of extended teamster's strike which so delayed starts that some buyers may want to cancel their contracts. Other New York centers and most of New England look for drop of 10 per cent. South Jersey, Baltimore and Pottstown, Pa., fear cut of 50 per cent. Pittsburgh sets reduction at 20 per cent. Washington looks for 25 per cent fewer starts, as does Cheshire area near New Haven, Conn. North Jersey anticipates 15 to 20 per cent less production.

Southeast: Birmingham, Ala., which predicted a 10 per cent increase in last July's survey, expects to do it again. Starts likely to decline 5 per cent in Miami, 25 per cent in Jackson, Miss.; at least 30 per cent in most other centers. Unless money supply improves, the drop may reach 60 per cent in Memphis.

Central: Des Moines alone sees improvement: 20 per cent more starts through first half of 1954. Other Iowa

forecasts range from 10 to 25 per cent decline. Activity to remain about the same in Minneapolis, drop only about 6 per cent in Milwaukee, 10 per cent in South Bend, Ind. Cleveland anticipates a 20 per cent slowdown; Chicago and Grand Rapids, Mich., envision a one-third reduction, while Indianapolis and Columbus believe production may be halved. Lincoln, Nebr., already cut 40 per cent, looks for another 10 per cent slash. Summer work stoppage makes estimate impossible for St. Louis. Exceptional drop of 60 per cent feared in Wichita, Kans.

Southwest: Consensus indicates 50 per cent reduction, with Oklahoma City possibly holding the drop to 25 per cent. Starts may fall 70 per cent in Amarillo, Texas; 60 per cent in Tulsa, Okla., and Pampa, Texas.

West: All centers report fewer starts likely, averaging 35 to 40 per cent. Smallest decline, 20 per cent, is anticipated at Spokane, Wash.; largest 75 per cent, at Sacramento, which barely exceeds the San Mateo, Calif., estimate.

At What Price Does Sales Resistance Begin? Is It Increasing?

Northeast: Whole trouble is down payment, not price, says Pittsburgh. Resistance begins at \$12,500 in most centers and is steady to increasing. Exceptions are Hartford, Albany, N. Y. and Pottstown, Pa., \$15,000; Washington and Bridgeport, \$18,000. Long Island finds sales slowdown, starting at \$18,000, is not so much a resistance as a demonstration that higher price ranges naturally have a lower volume of prospects. North Jersey notes resistance at \$19,000—\$21,000.

Southeast: Jackson, Miss., finds no particular resistance at any price level; Atlanta says it exists all along the line. Down payment requirement has slowed sales in \$18,000-\$25,000 bracket in Charlotte, N. C.; from \$14,000 in Miami. Most areas see resistance increasing unless something is done to ease financing. Sales in Birmingham are affected, beginning at \$12,000-\$14,000 level.

Central: Columbus, Ohio, and Lincoln, Nebr., note in-

creasing resistance in all brackets, but most cities find it starts around \$12,000. Other levels include \$15,000 at Minneapolis and Sioux City, Iowa; \$17,000 at Chicago; \$18,000 at Des Moines. \$16,000-\$23,000 range is slowest around Cleveland. St. Louis finds business good at all prices, with main resistance from \$20,000 to \$45,000 and decreasing. Nearly all centers indicate tendency to higher resistance.

Southwest: Oklahoma City resistance mainly from \$13,500 to \$17,000, but is decreasing. Tulsa finds \$12,000 to \$20,000 range increasingly tough for buyers. General resistance noted in Texas, beginning at \$12,000 in Pampa, \$11,000 in Houston, still lower in other cities.

West: Resistance starts at \$15,000 in Spokane, Wash., and is stable. In San Francisco area, it begins at \$12,500. All other areas report sales are stiffening, from levels beginning at \$10,000 in Denver and extending up to \$18,000 in Seattle.

Are Labor and Materials in Sufficient Supply?

Northeast: Hartford, Conn., reports a labor shortage: needs experienced carpenters. Common labor and skilled cabinet or trim men not too plentiful in Washington. Supply sufficient on Long Island but may be temporarily short during fall because of extra demand occasioned by builders trying to catch up to schedule set back by teamsters' strike. Mason labor short at Albany, N. Y.

Southeast: Labor tight in Charlotte, N. C. South Florida reports 5 per cent temporary shortage of carpenters. No other shortages indicated.

Central: Slight shortage of electricians noted in Sioux City, Iowa. South Bend, Ind., reports labor is generally available, "but must dig to find it and pay price." Minneapolis believes cement shortage may be developing. Labor and materials range from adequate to plentiful elsewhere.

Southwest: No shortages in sight.

West: Sufficient supplies throughout territory. San Mateo, Calif., notes unemployment in various trades.

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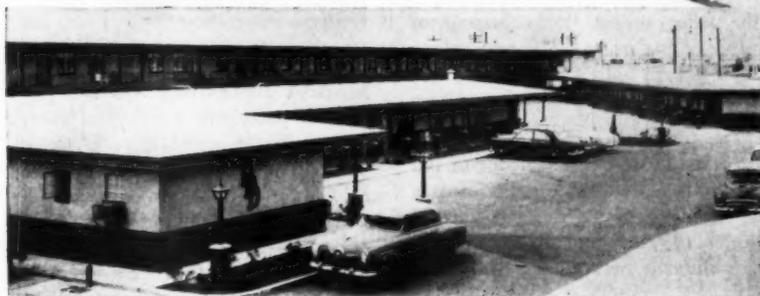
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4261 DIVERSEY AVENUE • CHICAGO 39, ILLINOIS

ON and OFF the RECORD

HERE'S A MISTAKE we are happy to correct—principally because it wasn't ours. The Infra Insulation Inc. advertisement in the July issue carried the wrong telephone number. The correct one is WOrth 4-2241 in New York.

JOEL LIFFLANDER, in calling the error to our attention and asking for a correction, said, "Let me hasten to add that this was OUR error, but don't rub it in."

WE'LL NOT RUB it in. On the contrary, we prefer to take the opportunity offered to congratulate advertising agencies in general on the nearly absolute accuracy of their production.

IT IS THIS FACTOR of accuracy plus a fine ability to highlight facts in a small space that earns such high readership for advertising in this magazine. A rare wrong number is not merely excusable in an advertisement. It means also that the men and women who create these displays are warmly human, especially when, like Joel, they find their own mistakes and call attention to them.

INSECTS, says Westinghouse, can be measurably discouraged from infesting front porches or back yards by using yellow lights instead of white. Tests using white and yellow light side by side have revealed that a white lamp attracts 220 per cent more bugs than a yellow one.

L. J. ROTHFUS, president of the Home Builders Association of Des Moines, recently appointed a committee to work out a program for consolidated listing of new houses for sale. Committee head is E. T. McMurray.

HERE'S HOW THE plan is expected to work. The association office will issue periodic listings of all new houses for sale, with brief description and price. Listing will be on a double postal card. When house or houses listed are sold, builder returns card to association office with listing scratched out.

ADVANTAGES expected are that when a prospect looking at a \$14,000 house, for instance, is found to be unable to spend more than \$12,000, builder, by means of listing, can direct prospect to another builder who has houses within the prospect's budget.

SAME THING is expected to work in the case of a prospect for a three-bedroom house who shows up at a two-bedroom project.

OVER-ALL, the plan is designed for builders' mutual aid and customers' convenience.



MANNY SPIEGEL, NAHB'S personable president, is a man of many talents. We've seen him out-Truman Truman at a piano, play a violin solo in the bottom of a western canyon, acquit himself more than creditably in a nail-driving contest, and here he is in the role of a wrecker. He probably did all you see in this picture by himself.

HAVING TROUBLE FINANCING your association? There's a way to get in the black: have a picnic and pull a dramatic public relations stunt all at the same time.

LAST SPRING the Excavating and Grading Contractors Association of Los Angeles needed some treasury

reserves. So, the association took a contract for \$12,000 to do the excavating for a new Minneapolis-Honeywell plant.

ALL THE MEMBERS assembled with their equipment and moved 23,000 yards of dirt in two days, a job that ordinarily takes nearly a month. Bulldozers, carry-alls, cranes and other equipment were supplied by the more than 30 members without cost. Orders were relayed to the various units by a network of 30 walkie-talkie radios from eight field superintendents. All the proceeds went to the association treasury.

ASIDE FROM the fund raising and fun producing aspects of this venture, isn't there an idea here for cooperation by excavators, and possibly other subcontractors, where an owner wants to speed up his work?



THIS GUY is not an arctic peeping Tom. He's our field editor, Zar, all snow-shoed and mackinawed, getting a winter building story where winter is winter, and snowfalls are measured in feet instead of inches.

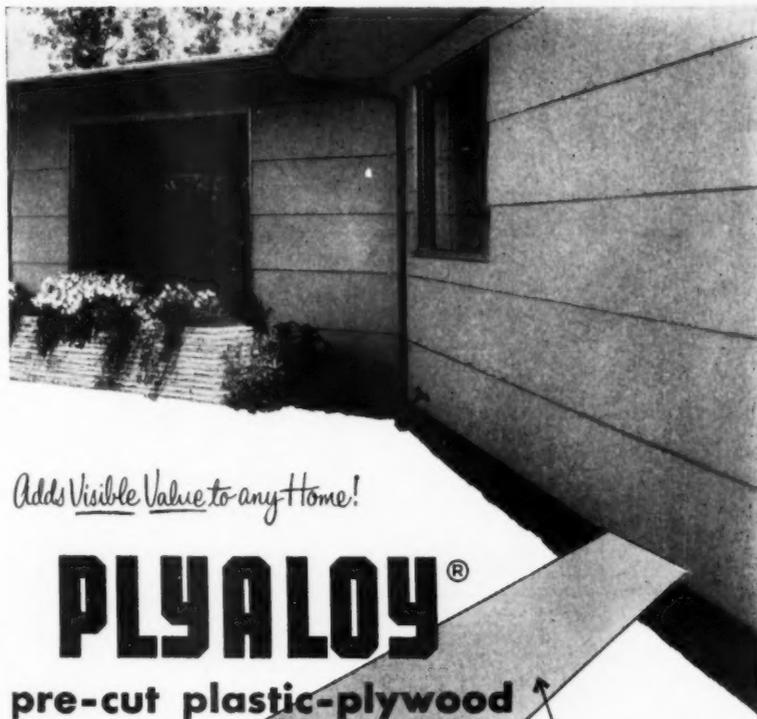
CLIFF MAY has announced that a settlement was made recently on his claim that four demonstration houses built by the Alcap Investment Co., were copies of the NAHB prize-winning \$7,500 house designed by Cliff May and Christian E. Choate and built at Cupertino.

THE CLAIMED infringement of copyrights and designs by May and Choate was disposed of by agreement to pay the architect's fee on each house and lot sold in the tract.

"THE MONEY," said Cliff May, "is not the important thing. What is important is that, up to now,

(Continued on page 12)

OCTOBER 1953



Adds Visible Value to any Home!

PLYALOY®

pre-cut plastic-plywood

SIDING

Plastic-Surfaced
Exterior-Type Fir Plywood
(EXT-DFPA)

★ U.S.A. MANUFACTURED
A Product of the Plywood Industry

Combines the economy, strength, rigidity and workability of DFPA-Inspected Exterior-type fir plywood — the durability, paintability and lasting beauty of a tough, smooth plastic surface. Edge beveled for drip.

**It's Plastic-Surfaced Exterior Fir Plywood Siding . . .
Pre-cut to 12", 16" and 24" widths; Packaged for Protection**



HERE'S everything you want in a siding material. Plyaloy siding saves on-job time because it comes pre-cut—packaged for protection.

Plyaloy siding is easy to install, has one of the finest paint surfaces you ever saw! Gives maximum protection against grain-raise or checking. All panels are standard 8' lengths. Ends are square; lower edge is beveled for drip. No trimming required.

For beauty that attracts buyers, durability that keeps them sold—specify **PLYALOY** pre-cut siding.

Write for DATA on this superior new siding material: (Plyaloy also available in standard plywood sizes.) St. Paul and Tacoma Lumber Company, Dept. AB, Tacoma 2, Washington.



ANOTHER FAMOUS MEMBER OF THE TREE LIFE FOREST PRODUCTS FAMILY



*They're
telling us...
about the
'yellow pages'*

"Our reason for advertising in the 'yellow pages' is to attract the out-of-town business executive who comes to Los Angeles with a building or machinery installation problem."

MacIsaac & Menke Co.
Los Angeles, Calif.

MacIsaac & Menke Co. have ads of varying sizes in the 'yellow pages' under:

- Contractors—Building**
- Contractors—General**
- Hoisting & Rigging Service**
- Millwrights**
- Moving Service—Heavy Hauling**
- Steam Fitters**

Building contractors, like MacIsaac & Menke Co., in all parts of the country tell us how the 'yellow pages' of the telephone directory are helping them reach more prospects than ever.



Most of them advertise under separate 'yellow pages' headings to cover every service they supply... every product they carry.

Are you using all the headings in the 'yellow pages' where prospects are likely to look for you?

To find the best headings for your business, call the telephone directory representative at your local telephone business office.



On and Off the Record

(Continued from page 11)

whenever someone does something good in architecture, many builders, and even architects jump in and copy, tearing it down. If, as a result of this settlement, it can be established that architects have rights to their creations, it can give them the ability to license."

HAWLEY WILBUR, one time boy mayor of Waukesha, Wisconsin, and



since that time, one of the middle west's most progressive and prosperous retail lumbermen, and also wholesaler - distributor and mill-

work head, probably will go gunning for this writer for calling him the grand old man of the retail lumber industry.

BUT THERE'S no denying that he's grand, and I'll eat a 2x4-8 out of his biggest yard if he isn't 70.

CHARACTERISTICALLY, this g.o.m., who could probably throw 90 per cent of the men 20 years his junior—catch as catch can or in a debate—celebrated his 50th year as a lumberman by taking all of his 200 employees to a Milwaukee Braves baseball game.

IT'S ABOUT TIME somebody did something about Hawley Wilbur, and this column has an idea. Anybody interested?

SPENT A DAY with Dick Hansen recently. Dick, who has been building homes in Kenosha, Wisconsin, for the past 26 years, is president of the Wisconsin Home Builders Association. "There are no extras in any of my deals," said Dick. "All of my commitments are firm. I deliver my houses for exactly the price stated on the contract. Everybody in Kenosha knows that, and I never have any trouble selling."

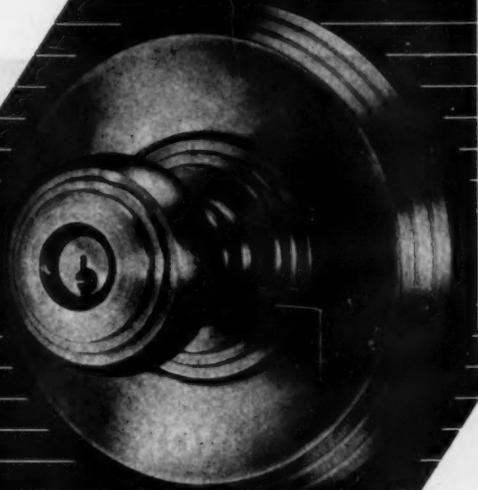
INTERESTING THING about Hansen is that he built two-thirds of all the new homes constructed in Kenosha one year. That was in 1933, when he built two of the three houses that comprised the city's total home building program.

Wilbur photo courtesy Milwaukee Journal

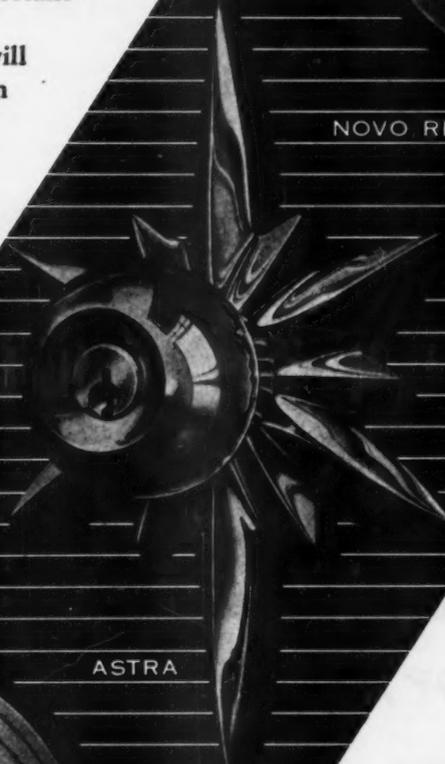
For Homes Designed To Sell

To meet increasing competition, new homes need built-in "sales appeal," created by beauty and discriminating attention to all-important details. Locks are a very important detail.

Schlage locks offer designs that will add distinctive beauty to homes in every price range. They offer modern convenience in the precision-made locking mechanisms. Schlage locks put the stamp of quality on the doors of the homes you build.



NOVO RIVIERA



ASTRA



ZENITH 803



When you show the name **SCHLAGE** on the latchplate, it's proof that your standard is quality

SCHLAGE

SCHLAGE LOCK COMPANY

SAN FRANCISCO NEW YORK VANCOUVER, B. C.

**ALL LOCKS PICTURED ARE
CURRENTLY AVAILABLE**

WRITE FOR FREE LITERATURE!

Schlage Lock Company, 2201 Bayshore Blvd., San Francisco, Calif.

Gentlemen: Please send additional information on the following:

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- Radically New Glass Knob Sets
- Non-tarnishing, Luster Sealed Aluminum Locks
- Simplified Methods for Selecting Lock Types

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City _____ Zone _____ State _____

MAKE *Extra* **SALES...**

WITH THE ELJER

Ledgbak

LAUNDRY TRAY



E-9721 C. P. Faucet.
Swing Spout with Hose
End. $\frac{1}{2}$ " I. P. S. Shanks
to fit openings 3" to
 $3\frac{1}{2}$ " centers.

E-2616-P Ledgbak
Laundry Tray. Cast iron,
enameled inside. Size:
24" x 23", Height: 34",
Depth Inside: 13".

...IN *New or Replacement* INSTALLATIONS

Sales-minded builders and modernization-minded homeowners are quick to see the many conveniences offered by the Ledgbak Laundry Tray. It is cast iron, enameled inside, with generous top ledge and soap depression.

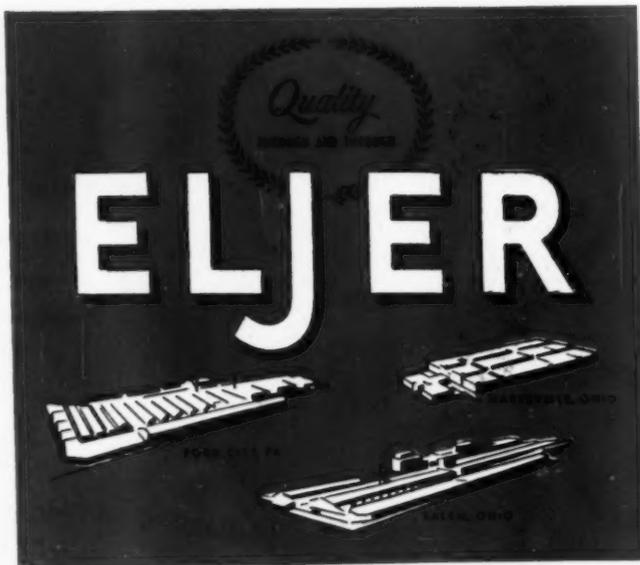
The chrome plated faucet spout swings aside out of the way when not in use and the supply pipes are concealed under the back ledge.

To increase your business, recommend the Eljer Ledgbak Laundry Tray for utility rooms in one story, ranch-type homes . . . or for basement laundry rooms. Ideal for use with an automatic washer. You can reap the profits from the many extra sales that will be made on sight and from builders' repeat orders.

For more information about Eljer Plumbing Fixtures, write Eljer Co., Ford City, Pa.



with **2** Bathrooms Sell Faster



AMERICAN BUILDER

NEWS

Lenders, Builders Split Over Mortgage Money

A fight between lenders and builders broke into the open last month as the two groups split sharply over the cost of mortgage money. Lenders renewed pleas for higher interest rates, while builders warned that demands for "excessive discounts" by the lenders is going to bring on action by Congress.

The National Association of Home Builders called the present shortage of mortgage money "the Number One national housing problem"—a view shared by several government officials in the housing field. The question was how to correct the situation.

According to NAHB, "no definite plan" had emerged by September 1, although several proposals were "under consideration."

The lenders believe, generally, that another interest rate increase would do the trick. As early as mid-August, the Mortgage Bankers Association said restoration of a "satisfactory" mortgage market "demands an increase in the interest rate on government insured and guaranteed mortgages of the FHA and VA rather than the questionable expediency of unlimited mortgage discounts."

Meanwhile, NAHB charges that lenders are requiring discounts that are "excessive."

"Some lenders are demanding all the distressed traffic will bear," the builder association declared. Unless the situation is relieved soon, NAHB added, the buying public will demand that Congress act to secure more equitable loans for home buyers.

Private mortgage lenders do not take kindly to the idea of direct lending by the government—a fact well known by the builders.

The lenders claim that present FHA and VA interest rates are out of line with general money market conditions. Long-term government interest rates of 3½ per cent have, in their opinion, eliminated the traditional "relationship" between mortgages and long-term bonds.

This might be true, NAHB admits, if it were not for the discounts. When discounted, present mortgage yields are relatively higher in comparison to other types of investments than they have been in the past, NAHB declared.

Government officials agree that

mortgage money is tight. HHFA Administrator Albert M. Cole, returning from a round of conferences in six major cities, said builders everywhere were finding it more difficult to line up funds.

FHA Commissioner Guy T. O. Hollyday called the present mortgage situation "painful," but indicated he doesn't plan to recommend any "emergency" solution, including an interest-rate boost.

Hollyday praised NAHB for advising builders "in the present situation" not to start any projects for which they do not have firm (preferably written) financial commitments.

Reserve Board Sees Much Repair and Modernization

Size of the home improvement and maintenance market was pointed up in a survey made public last month by the Federal Reserve Board. The survey showed about four million home owners each spent \$500 or more for home improvement and maintenance in 1952. About the same size demand was expected throughout 1953.

"Plans for improvements and repairs were reported by about three in ten non-farm home owners in early 1953," the board said.

Discussing the current market for houses, the reserve board said "trade reports" indicate that both new and old houses in some places are taking longer to sell, concessions are being given on price and terms, and vacancies are appearing more frequently.

"In this setting, however, purchases of both new and existing houses have continued very large," the board said. "New house buying has fluctuated more than old since 1951, but the general level has changed little."



John Hazeltine of Los Angeles, Calif., is the new Commissioner of Community Facilities and Special Operations, Housing & Home Finance Agency. Hazeltine, 53, succeeded Pere F. Seward on August 3

Home Building Contributes To New Construction Peak

A five per cent increase in expenditures for private housing will help lift total construction outlays to a record peak this year, the Departments of Commerce and Labor predicted.

A joint estimate by the two departments said "close to 1,100,000 dwelling units (private and public) will be started" in 1953. That would compare with 1,127,000 units in 1952.

Residential construction accounts for a third of all construction activity, and in 1953 the residential building outlays will total \$11.7 billion, the departments estimated.

"The five per cent increase over 1952 in expenditures for new non-farm dwelling units will occur in spite of a decline in units started. This results from higher prices and the unseasonably large number of dwellings begun during the latter part of last year, which were still under construction early in 1953."

An estimate for the month of August alone showed expenditures for residential construction were off 1.8 per cent from July. Despite this drop, and a similar one last month, outlays for private residential construction in the first eight months of 1953 still were nine per cent above the like 1952 period.

City of 8,200 Houses Planned 40 Miles Northwest of Chicago

A new Chicagoland Suburban City, comprising 2,200 acres, and named Meadowdale, is now under development. The 150-million-dollar project will take 12 to 15 years to complete, according to the builder, Leonard Besinger. The project is by far the most ambitious program now in the Chicago area.

Houses, shopping center, schools, churches, post office, parks, police and fire departments, power plant, water plant, and industries are planned for the new city. The first houses offered for sale are six-room prefabricated models manufactured by National Homes. Three models are available.



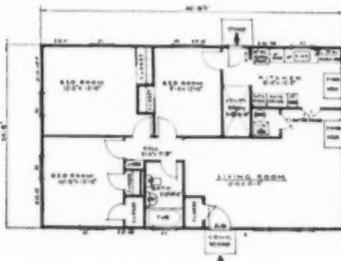
Leonard Besinger owns the 2,200 acres where he plans to build 8,200 houses

each having 960 square feet of floor space including three bedrooms, living room, bath, dining area, and kitchen. Kitchens are equipped with Hotpoint appliances including a 9½-cubic-foot refrigerator, range, garbage disposer, dishwasher, washing machine and dryer. The houses are priced at \$11,445 and require a down-payment of \$1,500. Monthly payments are \$53.50.

An outstanding selling operation has been set up by Besinger. Prospects park in his 600-car parking lot, and leave their children in a supervised playground where they receive free refreshments. The parents then go through the models, one of which is furnished. From the models, the pro-

cession leads to a tent where a color movie explains the "Meadowdale Story." The sales office is nearby and well marked for those wanting additional information.

The first week's sales operation netted 55 buyers. Future development of the area will see higher-priced custom housing for the executives of the proposed industrial development of the new town.



Floor plan has 960 sq. ft. and is standard '53 National Home unit

Home Salesmen Licensed

Employees of development home builders in New Jersey who work as brokers or salesmen, either on a salary or a commission basis, must now obtain licenses and operate under the jurisdiction of the State Real Estate Commission.

This new requirement was authorized in new state legislation extensively revising the Real Estate License Act.



Workmen completing low-cost prefabricated houses that kick off Meadowdale project

Warnecke Proposal on Apartment Mortgages Studied by HHFA

Albert M. Cole, Housing and Home Finance Agency administrator, is studying the Warnecke proposal to take the government out of the business of guaranteeing mortgages on multiple-family housing. The plan, presented by George W. Warnecke, head of the national mortgage investment firm bearing his name and former government housing adviser, was referred to Administrator Cole for his consideration.

The Warnecke Plan suggests three steps to restore private financing for an average of some \$500,000,000-worth of mortgages on apartment houses and other multi-family construction which are now insured by the Federal Housing Administration.

1. Repeal of those provisions of the National Housing Act as amended which provide for FHA mortgage insurance of multi-family rental housing.

2. Establishment of a trust or trusts under private auspices to review mortgage applications for apartment houses and other investment-type properties and issue participation certificates to be traded at stock exchanges throughout the country, carrying interest at the rate of 4½ to 5 per cent.

3. Excepting such real estate participation from "cumbersome" Securities and Exchange Commission registration requirements.

In his memorandum to the HHFA, Warnecke points out that this method of financing essential apartment housing would be superior to government mortgage insurance as being anti-inflationary, flexible, and self-adjusting with respect to demand, supply and interest rates on financing funds, and more in accord with the economic theories of free enterprise.

Coogan Resigns Defense Post

Thomas P. Coogan, assistant to the Secretary of Defense and director of the Armed Forces Housing Agency, has resigned, expressing his opinion that the agency had served its purpose and would probably be absorbed in a reorganization of the Defense Department now under way.

"The critical stage in housing is undoubtedly back of us," he said, "especially in view of the truce in Korea."

Under Coogan's direction, and under terms of the Wherry Act which provides for private financing of housing for military and civilian personnel on military bases, private builders produced about 81,400 units.

Materials Lower Than Labor. Los Angeles Group Reports

Labor now costs more than the material in the average home, compared to previous residential boom eras when materials represented a greater cost than labor. This was the information given the Young Builders Council of the Home Builders Institute, Los Angeles, at a recent educational seminar on the subject, "Organizing and Carrying On the Construction of Homes."

One of the panel members, Earl W. Smith, El Cerrito, Calif., is building 3,000 low-cost homes during 1953 in several communities within 150 miles of the San Francisco area. He described his business methods in building two-, three- and four-bedroom homes. His firm builds a pilot model of each new design, then makes time studies of each operation in order to determine the budget for every operation when construction of tract begins.



Panelists at the Young Builders Council seminar (l. to r.): A. Quincy Jones, A.I.A., Los Angeles; Dave Slipher, Los Angeles, technical director of Fritz B. Burns organization, the panel moderator; Earl W. Smith, builder, El Cerrito, Calif.; and Walter W. Keuser, Los Angeles, second vice president of Home Builders Institute, sponsor of the Council

Panel members were in agreement that controls for construction costs now are more necessary than since the end of World War II because the construction industry is now entering a competitive era in which selling costs are tending to rise.

A. Quincy Jones, A.I.A., Los Angeles, another member of the panel, cautioned against using house plans designed for level lots on sloping or hillside lots.

Hartford Mortgage Market Maintains Strong Level

The mortgage market in Hartford County, Connecticut, is stated to be above that of the national average. There is no shortage of money for home building in this area, in contrast to some sections where builders are reported to be cutting down on new home production.

OCTOBER 1953



Dickerman's Column

John M. Dickerman, Executive Director, National Association of Home Builders of the United States

Housing Industry Can Anticipate Further Expansion Ahead

Once again, the pessimists are being proved wrong about the underlying strength and resiliency of the housing market. At the beginning of 1953, there were many "experts" in and out of the industry who warned that we were in danger of overbuilding, that the unprecedented construction activity of the past seven years had satiated the market.

But today, demand for good housing is still strong, although certainly home buyers are in a highly selective mood, and it appears that 1953 might well have been a record year had it not been for the shortage of mortgage credit. Undoubtedly, that shortage has clouded the immediate building outlook. But for the long pull, all signs point to a continued expansion of home building and home ownership.

A recent survey of consumer finances, conducted by the Federal Reserve Board, reveals that a larger proportion of American consumers were planning to buy homes this year than in either 1951 or 1952—both big building years. Many of these potential buyers have been forced to postpone home ownership because they were unable to obtain financing on the right terms. But this deferred demand certainly will make itself felt whenever mortgage financing conditions improve.

The Federal Reserve survey discloses that the families planning to buy homes are concentrated in the same groups which have been most active in the housing market since World War II. About 60 per cent are younger married couples (under 45), although they make up less than 40 per cent of the population. As in recent years, nearly half are veterans.

Half of the prospective home buyers have incomes of \$5,000 a year or more, before taxes, while 34 per cent are in the \$3,000 to \$4,999 bracket, and 16 per cent earn less than \$3,000 a year. In 1952, 54 per cent of the families who actually bought homes earned \$5,000 or more, 29 per cent were in the \$3,000 to \$4,999 group, and 17 per cent were in the lowest income range.

A continuing strong market for repairs and improvements on existing homes also was revealed by the survey. At the beginning of 1953, about three of every ten home owners planned some such expenditures, and a considerable number intended spending more than \$500 to spruce up their homes. The Federal Reserve Board experts predicted, however, that actual spending for this work would be much larger than was indicated early in the year, because many home owners undertake minor repairs and improvements without long advance planning.

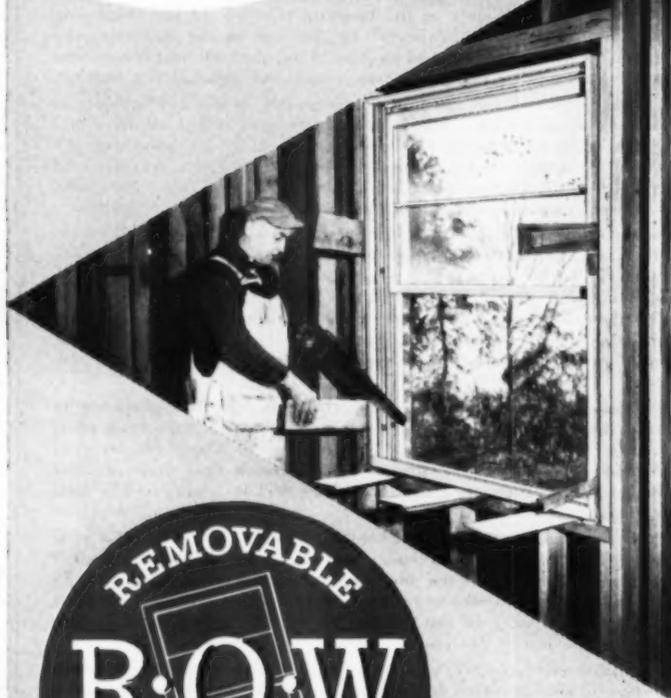
The survey bears out what has long been apparent to leaders of the home building industry; that there still is a great unsatisfied need for new housing and for the rehabilitation and "new conditioning" of the older portion of our national housing inventory.

A glance at the Government's population statistics confirms that this is still a vigorous, expanding nation whose housing requirements will continue to increase for generations to come. Although new family formations are down from the high level of the immediate postwar years, upwards of 700,000 young couples are marrying and establishing their own households each year. They form the solid core of a prosperous nation and a prosperous home building industry.

It is apparent that Hartford County is at this time one of the most active areas in the country for home building. There appear to be many prospective home owners, and extensive plans are under way for some large developments. In addition, there are a large number of single houses being bought

and sold. All things considered, the Hartford County builder is in excellent shape. According to opinions of leading local financial men, this situation should continue in its present state for another six months to one year, since the buyers' market gives every indication of this contingency.

**BUILDERS
choose them**



One man can handle installation of an R·O·W window. Sash lift out entirely to lighten the unit and prevent glass breakage. More important, from the standpoint of builders, homes equipped with R·O·W windows sell faster—build customer satisfaction and—more sales.

you can lift it out entirely

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- COLORADO**
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Denver, Colorado
- CONNECTICUT**
GENERAL WOODCRAFT CO., INC.
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- DELAWARE & DISTRICT OF COLUMBIA**
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- GEORGIA**
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ROYAL OAK WHOLESALE CO.
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Westville, New Jersey

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Rocky Mount, Virginia

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LUMBERMEN'S SUPPLY CO.
Oklahoma City, Oklahoma

OREGON

ACME MILLWORK, INC.
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ADELMAN LUMBER CO.
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JOHNSON & WIMSATT, INC.
Westville, New Jersey
A. ROBERSON & SON, INC.
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RHODE ISLAND

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R-O-W DISTRIBUTORS
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**OWNERS
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Now that buyers have an opportunity to "select" homes, again, they demand the real conveniences—the functional advantages of well planned dwellings. That's why they select homes with the REMOVABLE WINDOW that is built to look better—fit better—last longer.

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NAHB Announces 1954 Convention Plans

The National Association of Home Builders has announced its Tenth Annual Convention and Exposition will be held in Chicago, January 17-21, 1954. Two hotels, the Conrad Hilton and the Sherman, will be required to house convention activities. Convention meetings, as well as exhibits, are scheduled in both hotels. Shuttle bus service will provide delegates with convenient transportation between the hotels.

The association is developing a convention program of unprecedented scope, with emphasis on "how-to-do-it-better" technical sessions and the major national issues confronting the in-

dustry, according to Convention Chairman Henry Fett, of Royal Oak, Michigan. A record-breaking exposition of building materials and home equipment will also be of interest to the delegates.

From Chicago, Convention-Exposition Directors Paul S. Van Auken reported all planned exhibit space had been sold out to manufacturers in August. Additional exhibit areas were secured to provide 25 per cent more spaces than last year, but even this has fallen short of the demand, he said. Nearly 300 leading manufacturers and services will be represented in the big show.

In addition to Fett and Van Auken, members of the NAHB Convention Committee include: Martin L. Bartling, Jr., Knoxville, Tenn.; Frank A. Collins, Bala Cynwyd, Pa.; Joseph B. Haverstick, Dayton, Ohio; Carl T. Mitnick, Merchantsville, N. J.; George S. Goodyear, Charlotte, N. C.; Frank W. Cortright, Berkeley, Calif.; Franklin L. Burns, Denver, Colo.; Wilson H. Brown, Dallas, Texas; and Robert R. Schneider, Canton, Ohio.



NAHB's Convention-Exposition Director Paul S. Van Auken (left) and Convention Chairman Henry Fett discuss plans at a recent convention committee meeting

dustry, according to Convention Chairman Henry Fett, of Royal Oak, Michigan. A record-breaking exposition of

Mortgage Limitations Halt Westchester, N.Y., Project

Strict mortgage policies and inability to obtain 30-year loans for veteran buyers will halt the proposed 143-unit Wyndover Park project in White Plains, New York, after completion of the 25 houses now under way, according to the Carnoy-Wolter Construction Corporation.

Builder of 17 residential developments in Westchester County, New York, since 1945, the firm reported a large demand existed for the new homes, which at \$14,000 to \$17,000 are in a low-price bracket for the area. However, it found that the majority of veterans applying had an average annual income of \$6,000, too small to qualify for a \$14,000 mortgage for 20 years at 4½ per cent interest.

Original plans were to have all 143 homes under roof by September, but Alan Carnoy said that "continued production at this time does not depend on demand but on a change in the government's mortgage policies."

Under more pleasant circumstances, the same builders presented the deed of a two-acre playground site to residents of the 125-home Hillside Ridge colony recently completed in the neighboring town of Greenburgh.

Hendrik Wolter, who made the presentation to David O. Lynch, president of the Hillside Ridge Association, received from the owners' group a framed citation honoring the builders for their efforts in promoting community life in the colony.



Deed for two-acre playground is received by David O. Lynch, president of the Hillside Ridge Association (third from left), from Hendrik Wolter of Carnoy-Wolter Development Corporation, builder of the 125-home group in Greenburgh, New York. Looking on are (l. to r.): Frank P. Tufaro, president, New York State HBA and Alan L. Carnoy of the building firm, holding a citation presented by the home owners

Trade Group Organized by Building Materials Firms

Building Contractors Associates is the name of a new west coast group which is comprised of manufacturers of building products, organized for the sharing of ideas and the creation of improved materials for use in building homes. The announcement was released by the Building Contractors Association of California, Los Angeles, of which the new group is an affiliate.

The new organization has elected Charles Eisenmayer of Sawyer Cabinet Co. as president. Other officers elected at the first meeting were Walter Jennison, Davidson Plywood Co., vice president; Owen L. McComas, Southern California Gas Co., secretary, and Charles Stivers, Land Title Insurance Co., treasurer. More than 30 firms formed the initial group as charter members.

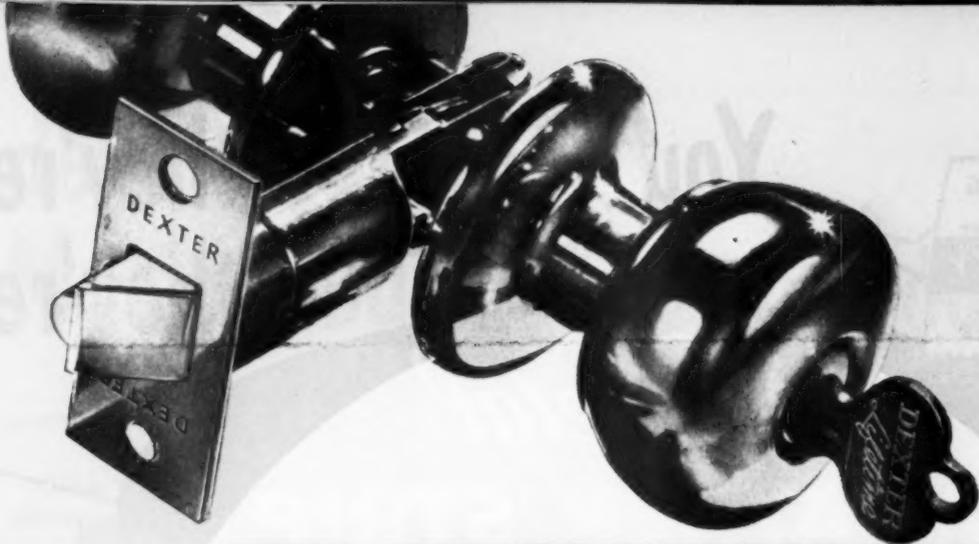
The purposes of the organization are stated to be the promotion of greater unity among the various elements of the construction industry to bring greater benefits to the home buyer; the creation of educational programs of a technical nature for the contractors; the assembling of data on the contractors' needs, and the creation of closer ties between producers and consumers.

Home Building Keeps Pace with Population Growth

The 160,000,000th American has arrived ahead of the starting of the eight-millionth house built since World War II. This eight-millionth house was the 50-millionth residence unit in the national housing inventory. The eight-millionth postwar home was started on approximately September 20—the opening day of National Home Week.

Number of home loans for World War II veterans guaranteed by the GI Bill has just passed the three million mark. There are also two million veterans of the Korean War who represent another vast housing market, since only 20,000 Korea veterans have so far exercised their GI home loan privileges.

Home building has more than kept pace with the large population expansion of recent years. In 1940, the Census Bureau reported a population of about 131 million Americans and a housing supply of 35 million units, or about 3.7 persons per unit. Today there are more than 50 million dwelling units for our 160 million people, or 3.2 persons per unit. In 1940, more than half of the homes and apartment units were occupied by renters; today home owners are in the majority.



DEXTER

Designed for your profit

You can't help but profit when you sell these Dexter key-in-knob sets, with rugged, lifetime service and striking beauty *at popular prices*. And installation is simplicity itself. Illustrated above: No. 600 Pin Tumbler cylinder set for the ultimate in security; and (below) No. 300 Disc Tumbler cylinder set, for dependable security where price is a factor . . . now available *Master Keyed*. Write for a Dexter factory representative to call on you.



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A SUBSIDIARY OF NATIONAL BRASS COMPANY
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Manufacturers of America's First Tubular Lock

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Numetal WEATHER STRIP

for Windows and Doors

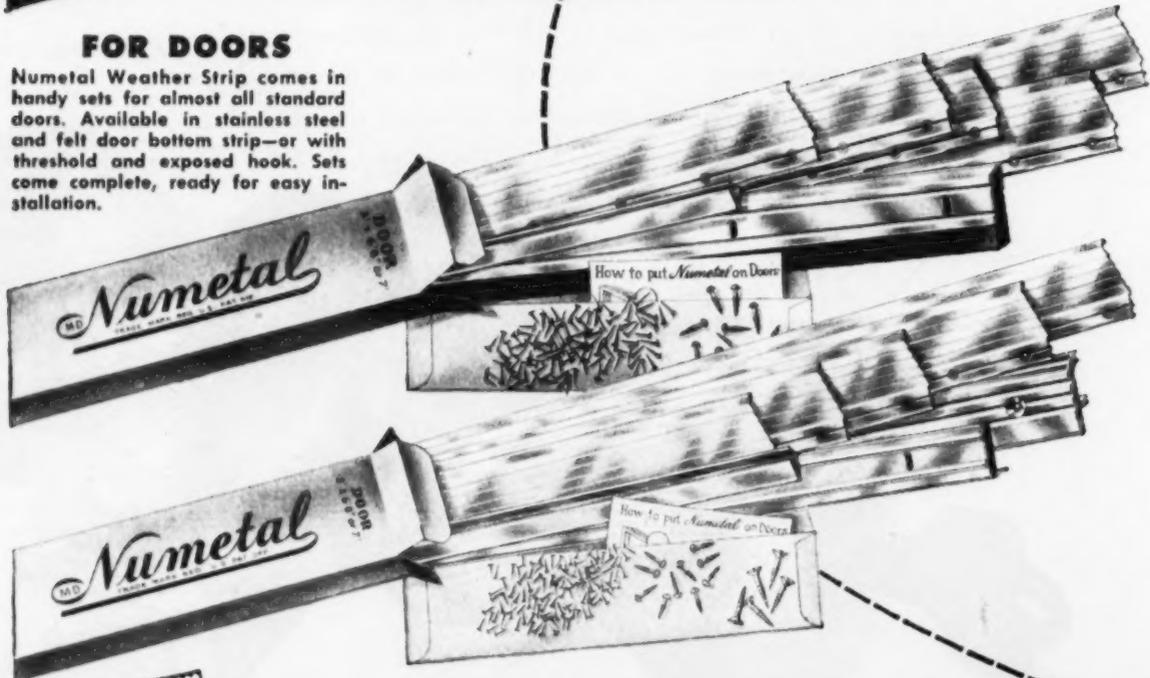


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Packaged for all standard 28", 30", 32" and 36" double hung windows, complete with nails and instructions. Quickly and easily installed by anyone. Makes a complete weather-tight seal.

FOR DOORS

Numetal Weather Strip comes in handy sets for almost all standard doors. Available in stainless steel and felt door bottom strip—or with threshold and exposed hook. Sets come complete, ready for easy installation.



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SPECIALTIES

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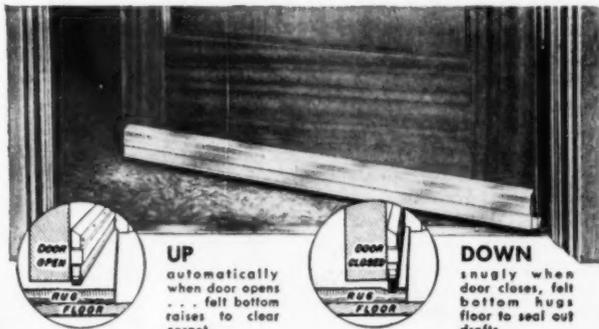
OKLAHOMA CITY, OKLAHOMA

dependable... Macklanburg-Duncan products!

Nu-GARD Automatic

DOOR BOTTOM & DRAFT ELIMINATOR

The perfect answer to drafty doors—inside or outside. Nu-GARD is beautiful with smart, silvery-satin finish—and easily installed, too. Packed in individual cartons in lengths 28", 32", 36", 42" and 48". May be shortened approximately 2". Year-round value stops draft-loss of heating or air conditioning.

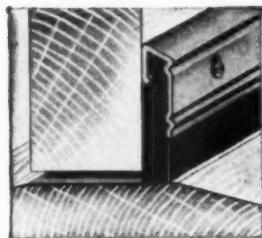


UP
automatically when door opens... felt bottom raises to clear carpet.

DOWN
snugly when door closes, felt bottom hugs floor to seal out drafts.

Nu-WAY WEATHER STRIP

Easiest in the world to put on. Carton contains one 18-ft. roll, with nails and instructions for easy installing. Made of moth-proof, pre-shrunk colorfast wool felt and white metal. Works perfectly on most any type window, storm sash or door.



Nu-CALK CALKING COMPOUND

The "standard of quality" in the calking field, available in 1/2-pint, pint, quart, gallon, 5-gallon cans. Also in 55-gallon drums.



Nu-CALK SPEED LOAD

The world's best calking compound in a ready-for-action load. Non-staining, always pliable, smooth even flow.



Nu-metal DOOR BOTTOM STRIPS

Thick wool felt and heavy gauge brass, alacrome or stainless steel—in lengths 28", 30", 32", 36", 42" and 48". Packed 6 of same length per carton.

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Use Nu-Glaze instead of putty—it's not oily, needs no working up, will not dry out, harden, crack or peel. Packed in cans—1/2-pint, pint, quart, 5 pounds; and in drums from 50 pounds to 880 pounds.

Nu-Phalt PLASTIC ASPHALT CEMENT

Used for sticking down shingles, setting loose floor tiles and dozens of other jobs! Comes in handy load form or in 2 1/2 lb., 10 lb., 50 lb., and 55 gal. containers.



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Look to Macklanburg-Duncan for products of quality—always dependable. Sold at all Hardware, Lumber and Building Supply Dealers!

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Order now! Your order will be shipped the same day it is received. Macklanburg-Duncan products are fast sellers, nationally advertised.

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DUNCAN CO.
MANUFACTURERS OF

QUALITY
BUILDING
SPECIALTIES

"Operation Tornado" Successful in Flint

Over 7,800 volunteers of all kinds worked until dark on August 29 and 30, rebuilding an entire section of Flint, Michigan, representing a total of 193 individual projects. On June 8, a tornado devastated the city, killing 113, injuring nearly 1,000 and demolishing a residential area. The volunteer rebuilding project, called "Operation Tornado," was suggested by a local clergyman.

The volunteer workers were guided and helped by members of the various local building trades unions. The city's mayor, D. W. Riegler, in cooperation with the AFL-Flint Building Trades Council originally sought the help of volunteers. According to General Chairman M. F. Borgman, the response on the part of private citizens was far above that expected. In the two days of work, more was accomplished than was believed possible.

Of the 193 separate projects, many of the demolished homes were framed and roughed in the first day, and completed except for painting and trim on the second day. Other homes which were badly damaged were given new roofs, walls, additions or trim. Where damage was slight, or where owners had already made substantial progress before the "operation" took place, new coats of paint, new plaster, roofs, brickwork or interior trim were added.

Residents who wanted help in rebuilding registered in advance with a civic committee. The volunteer workers signed up with the Junior Chamber of Commerce. In most instances, owners had finished the foundations and arranged to have lumber and other building materials delivered to the job sites. At the close of the two-day

volunteer operation, nearly every one of the 193 projects had been worked on. Completion of the homes, in most cases, will be up to the tornado victims themselves.



Flint Journal photo

Volunteer workers raise a partition of a new home during "Operation Tornado"

An interesting sidelight to "Operation Tornado" included the fact that volunteers by the hundreds registered not only from the tornado-stricken city itself, but also from Saginaw, Detroit and more distant communities.

New Jersey Shifts 1954 Convention Date

The 1954 convention and exposition of the New Jersey Home Builders Association, with headquarters in Camden, has been shifted from the customary April date to November. The postponed date will permit better preparation of convention plans, in the opinion of the executive committee.



Flint Journal photo

These two homes were raised from foundations to near-completion in two working days as part of the 193 separate projects comprising Flint's "Operation Tornado"

Real Estate Writers Qualify for NHW Contest

With National Home Week just over, the National Association of Home Builders is giving real estate editors of city dailies a chance to win honors for themselves and their newspapers, plus substantial personal bonuses. The NAHB is sponsoring a contest to select the best National Home Week special sections which appear in U.S. newspapers. This annual contest has brought recognition to several papers in the past, as well as to a number of real estate editors.

Prizes for the editors placing first, second and third will be \$100, \$75 and \$50 respectively. In addition, each winning editor will receive a certificate suitable for framing.

Contest rules require simply that the majority of editorial content in the appropriate section be devoted to National Home Week and building news. These sections will be judged, on the bases of interest and layout, by a jury of qualified newspaper and real estate promotion men.

Los Angeles Builders Hosts to Sacramento Group

A three-day midsummer inspection of Los Angeles construction was made by 22 members of the Associated Home Builders of Sacramento for the



Sliding wall panels attracted the attention of Sacramento Home Builders on their inspection tour of Los Angeles construction methods; (l. to r.): Richard Ronne, president, Associated Home Builders of Sacramento; Ray V. Carey, executive vice president, Home Builders Institute of Los Angeles, host association; and J. G. Heckes, Sacramento, NAHB director and past president of Sacramento association

purpose of viewing developments and getting ideas to take back home. The tour of construction methods and designs included more than 200 tracts in various stages of construction in the Los Angeles area, which represents one of the largest single building concentrations in the United States.



for everyone who wants

faster, better
installations—at lower cost

BERMICO SEWER PIPE

The Root-Proof Fibre Pipe for Outdoor, Underground Non-Pressure Use That's—

Lighter! Bermico weighs far less than other types of pipe. So light you can easily lift and carry several 8-foot lengths at one time.

Tighter! Bermico has strong, tapered sleeve joints that are root-proof, water-tight, will not pull apart or get out of alignment. A few hammer taps seal joints permanently. No joining compound is needed.

Stronger! Bermico is sufficiently flexible so it will not shatter from traffic shock nor rupture as a result of uneven settlement of the subbase. Absorbs jars and jolts without chipping or splitting.



A complete new line of Bermico Fittings—Tees, Wyes, Bends—is now available for use with Bermico Sewer Pipe.

Write Dept. BH-10 at our Boston office for samples and information.

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OCTOBER 1953

Now...trouble-free RUBBER BLADES for the new MULLER MIXER



Muller 6 Cu. Ft. Plaster and Mortar Mixer.

Don't waste time and money cleaning plaster and mortar mixer drums. New Muller Adjustable Rubber Scraper Blades (pat. pdg.) keep the drum clean always. Also, by by-passing small pebbles, they prevent damage. Available at slight extra cost on all sizes of Muller Plaster and Mortar Mixers.

Product of 45 years of experience in mixer design and manufacture, new Muller Mixers incorporate many excellent features that insure efficient mixing at minimum cost. Among these the newest are: the Muller Everlasting Paddle Shaft Seal (guaranteed for life of mixer), and power throw-out on gasoline-powered smaller models, also built-in disc type clutches on larger sizes.

Muller Mixers are now available in 2, 3½, 6, 6 to 8, and 9 cubic foot sizes. Mail the coupon today for literature and prices.



MULLER MACHINERY COMPANY, Inc.

Muller Machinery Co., Inc., Metuchen 4, N. J.

Please send me information and prices on the Muller Mixer checked below.

- 2 cu. ft. Plaster and Mortar Mixer
 3½ cu. ft. Plaster and Mortar Mixer
 6 cu. ft. Plaster and Mortar Mixer
 6 to 8 cu. ft. Plaster and Mortar Mixer
 9 cu. ft. Plaster and Mortar Mixer
 Prices on rubber blades for above.

NAME.....TITLE.....

COMPANY.....

STREET.....

CITY.....STATE.....

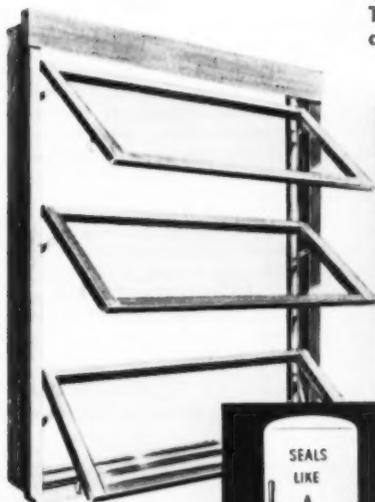


THE TREND IS TO AWNING  WINDOWS

are demanded by more builders and contractors here's why!

Houses equipped with Ludman Auto-Lok Awning Windows are easier to sell! They sell faster, more profitably because Ludman Windows give visible evidence of quality construction. Ludman Auto-Lok Windows do not require time consuming adjustments. They cut labor installation costs and assure life-time homeowner satisfaction.

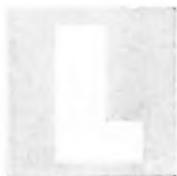
Ludman Windows are engineered to give complete satisfaction to builders, contractors and home-owners. The patented Ludman Auto-Lok mechanism makes them the tightest closing windows ever made. All hardware is concealed . . . eliminates dust and dirt. The Roto-type operator requires only finger-tip effort. There's no wear . . . no maintenance . . . no adjustment necessary as in ordinary awning or other windows.



Each sash automatically locks at all four corners. They're completely weatherstripped. Screens and storm sash are available. Wood or aluminum.



Installation detail for installing Ludman Auto-Lok Windows in SCR Brick Walls are available. Write Ludman Engineering Dept. Write also for complete "Builders File" of sizes and other installation data.



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LUDMAN — WORLD'S LARGEST MANUFACTURER OF AWNING WINDOWS AND JALOUSIES

Good Markets Slow Trade-In Deals But FHA Goes Ahead with Program

The "trade-in-your-home" experiment sponsored by FHA has moved slowly in six test cities, but FHA officials are not discouraged with results to date.

The trade-in program is faced with the still booming market for new houses in many areas. This means local builders don't have to look to trade-ins to help sell new units, and, as a result, they have given trade-in experiments a luke-warm reception.

FHA officials say it is still too early to draw any conclusions, and they expect to continue gathering facts on how the program can be useful to the homebuilding industry.

Pilot studies are under way in New Orleans, Shreveport, Oklahoma City, Columbus, Hartford, and Washington, D.C. The National Association of Home Builders is cooperating in the studies.

The trade-in program has a twofold purpose: To help FHA fulfill its job of improving housing standards; and to open up new markets for the builders.

FHA already has announced a liberalized mortgage insurance plan "to make it possible for builders to do a more economic job on trade-in homes."

Under FHA's new ruling a builder taking in an old house as a trade-in may get a prior commitment from FHA to insure 80 per cent of the first \$7,000 of value, plus 60 per cent of the balance of the valuation. The total mortgage may not exceed \$10,400.

Research Program Under Way for Prefabricated Home Industry

The considered long-range program in the field of home prefabrication has been begun with the formation of an Engineering, Design and Research Committee by Prefabricated Home Manufacturers' Institute, Washington, D.C.

The group is headed by Richard B. Pollman, Detroit, the designer of the "Pollman Homes" made by Thyer Manufacturing Corp., Toledo, Ohio. Other committee members include John L. Morley, president, Midwest Homes, Inc., Mansfield, Ohio; Charles F. Travers, president, Richmond Homes, Inc., Richmond, Ind.; Robert L. Weakley, president, Weakley Lumber Co., Newark, Ohio, and George K. Yetter, president, Yetter Homes, Inc., Savannah, Ga.

This mortgage amount is further limited to the amount of the existing mortgage plus the cost of proposed repairs, minus any cash received by the builder in the trade-in transaction.

FHA Commissioner Guy T. O. Hollyday said this liberalized mortgage plan should encourage more extensive reconditioning of trade-in houses. It will assist in financing such repairs, as well as in refinancing existing mortgages.

"Analyses of trade-in house deals have shown that it pays to do a thorough reconditioning job on the old dwelling rather than just taking care of the bare necessities," Hollyday said. "When the trade-in house is put as nearly as possible in a new house condition the economic value is increased."



Jersey Builders Present Annual Golf Trophy

Over 400 members and associates of the Home Builders Association of Northern New Jersey turned out for its sixth annual outing at the Alderess Country Club, Alpine, N. J. Here George Poydinez of Clifton, N. J., receives the golf trophy from Louis London, outing chairman (left) and Lewis Epstein, president

Dealer's Viewpoint

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



NRLDA's Merchandising Calendar Organized to Stimulate Customer Response

NRLDA has just published its new Merchandising Calendar which is designed to help retail lumber and building materials dealers get better returns from the \$40,000,000 or more they spend each year on advertising, and to guide them in coordinating their displays and other sales promotion with their advertising.

Two years ago there was no perceptible interest in the preparation of an advertising and display guide for the retail lumber industry. The demand mushroomed almost overnight, right after it became apparent that material shortages and product controls were a thing of the past, and that every competing industry could be expected to go out after a maximum share of the consumer dollar.

The Calendar is based on the judgment of a Merchandising Committee composed of dealers experienced in successful merchandising, and on suggestions received from at least 100 other dealers in merchandising conferences held by NRLDA earlier this year.

It shows dealers which themes or appeals are most likely to bring the maximum response from the customers during each season and month of the year. Instead of attempting to

set up separate calendars for dealers in various geographical sections of the country and for dealers who specialize in different types of trade, the Calendar, in its initial form, suggests alternate weekly themes each month to take care of those recognized variations. It leaves up to the individual dealer, who best knows his own local trade and market conditions, the job of adapting these ideas to his own requirements.

NRLDA and its members hope that manufacturers of building products will see fit to coordinate their consumer advertising and tie in their advertising mat services as well as their direct mail and point-of-sale display material with the Calendar. If they do so in sufficient number and volume, the resulting coordination is certain to create additional sales for everyone concerned.

A specific proposal to that end has been discussed with a group of manufacturers, and considerable interest has been expressed. The suggested goal is to have a large number of dealers and a considerable number of materials producers all reach the public with the same appeal at the same time on several occasions during the coming year.



What every builder should know about micarta[®]

PLASTIC SURFACE

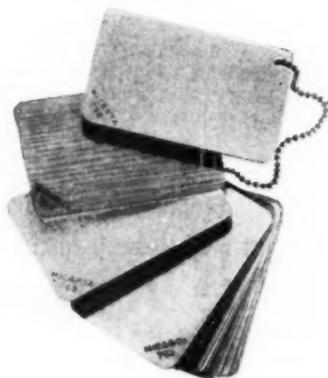
The one big fact you should know about Westinghouse MICARTA[®] is that it helps to sell homes. The wide range of colors, patterns and wood surfaces will give you the versatility you need for satisfying a variety of tastes. This colorful, long-lasting, counter-top and wainscoting plastic will start that sales spark right in the kitchen. And MICARTA is pretested for customer acceptance—nationally advertised. Millions of people have been pre-sold through national magazines and television. They're going to be watching for it in your homes.

MICARTA is easy to install. Pre-bonded to plywood sheets, can be installed by any carpenter without the use of expensive tools or extra equipment.

You'll be able to tell your prospects about the maintenance-free qualities of MICARTA. It never requires waxing, painting or refinishing. A flick of a damp cloth restores its surface to a bright luster.

For further information on MICARTA, see your local lumber dealer or contact the nearest United States Plywood representative. Fill out the coupon below for our helpful booklet.

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*Please send color guidebook and full application
 information on MICARTA.*

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ADDRESS _____

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AMERICAN BUILDER

LETTERS

more about the right-left door problem

Sir: I read with interest a letter from Harvey Behnke in the August issue of *American Builder* regarding determining the hand of a door. Try this simple method:

Place your back against the hinge jamb of the door: if the door swings to the right, it is a right hand door, and if it swings to the left, it is a left hand door.

A right hand door may be hung to swing in or it may be hung to swing out, and the same with a left hand door, so in describing it, the door must be one of the following:

A right hand door swinging out, a right hand door swinging in, a left hand door swinging out, or a left hand door swinging in.

Now put your reverse bevel or whatever you want on the door, but it still remains one of the four types.

Wm. E. Stonebridge,
New York 61, N.Y.

appreciates recognition

Sir: In reading your excellent August issue, we were delighted to see your editor's reference to "Architectural Graphic Standards" (page 28) in regard to "hand of locks." Thank you very much for expressing your confidence in us.

Harold R. Sleeper, F.A.I.A.,
New York, N.Y.

"truth about trade-ins" draws favorable comments

Sir: The writer read with much interest in the July issue the article on home trade-in plans.

It was a very timely article and fitted in well since the local FHA office has been selected as one of four cities in the United States to investigate fully this phase of housing. They were selected on account of their exceptionally good record, based upon all FHA divisional offices of the country. We builders, and the city of Shreveport, are very proud of their record.

One meeting has been held with builders, financiers and realtors, sponsored by the local FHA office.

Others are to follow. In the meantime they and other groups are getting their heads together on ways and means of furthering this much needed plan.

We in the trade should feel indebted to you and your organization for making such an extensive survey.

William H. Schaub,
Designer and Builder,
Shreveport, La.

Sir: Enjoyed your article on Trade-Ins in the July issue (pp. 42-47). How you can state such a clear picture from such muddled waters as received from this end is amazing.

Ken Stowell,
Ken Stowell Co., Inc.,
Wichita, Kas.

Sir: I have read the article entitled *The Truth About Trade-Ins* in your July issue. This article was of considerable interest to me as the Federal Housing Administration is now experimenting with similar methods in four offices throughout the county.

If possible, this Administration would be grateful should you be in a position to furnish this office with a supply of this issue of your magazine. We feel that it will be of great benefit in our experiment.

Harry F. Allen, Director, FHA,
Shreveport, La.

One hundred copies of July issue were sent to Shreveport for distribution to local builders and interested members of the FHA office.

—The Editor

story creates interest in two-room school

Sir: The write-up which appeared in the July *American Builder* about the two-room school we designed is creating a lot of interest. We appreciate very much your interest and cooperation.

Would it be possible to obtain a half dozen or so copies to distribute among interested parties?

Charles F. Wiley, Architect,
Wiley and Alexander Asso.,
Elkhart, Ind.

(Continued on page 30)

more and
more
Builders
Specify

because they
offer MORE
for the
money . . .



Gulfspray Shower Enclosures

- **BE READY TO MEET THE DEMAND!** Have Gulfspray shower doors and tub enclosures readily available to your customers. Gulfspray is the "extra" they're looking for.
- **FEATURING:** smooth, overhead operation or piano-type hinges, scientifically designed drips (drain water back into tub or enclosure), heavy-gauge aluminum or stainless steel . . . and wide selection of clear or patterned glass.

Write for details
and literature

Binswanger & Co.
of Texas

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They provide
more closet space
 in San Francisco, Cal.



"We like Glide-All Sliding Doors for several reasons," says Oliver M. Rousseau, Pres., of Oliver Rousseau Construction Co., San Francisco. "They're simple and economical to install and they provide more accessible closet space." You'll like them for the same good reasons. Choose from overhead or bottom roller types in 8-ft. floor-to-ceiling or 6-ft. 8-in. standard heights.



GLIDE-ALL

Sliding Doors

They divide a room
 in Knoxville, Tenn.



"Glide-All Sliding Doors are not only highly practical," says M. L. Bartling, Jr., of Fonde-Bartling Builders, Knoxville, "they're beautiful as well. It was for both these reasons that we installed them as room dividers in Knoxville's Living House." You, too, will like the eye and buy appeal of these durable, trouble-free doors. They're available in modern flush or recessed panels, which may be painted, papered or waxed in natural finish.



Wherever they're used . . . they're easiest to install



Top track is easily mounted on ceiling with screws.



Aluminum bottom channel is simply screwed to floor.



Doors are mounted by engaging top rollers in top track—then engaging bottom guide in floor channel.

Write today for new low price schedule and specification bulletin.

Glide-All Sliding Doors are a product of
WOODALL INDUSTRIES INC.
 DETROIT 34, MICHIGAN

4 Woodall Plants Coast-to-Coast
 Save You Shipping Time and Costs!

Write to Plant nearest you
 CHICAGO, 3504 Oakton St., Skokie, Ill. • LAUREL,
 Miss., P. O. Box 673 • NEW YORK, Glen Cove Rd.,
 Mineola, N. Y. • SAN FRANCISCO, 1970 Carroll Ave.

Letters . . .

(Continued from page 29)

paint series still in demand

Sir: An employee of our organization has brought to my attention your Volume 73, No. 9, September 1952, issue.

I have been impressed by the comprehensive manner in which you deal with the subject matter of various articles. One in particular, *The World of Color*, is of special interest, and I would like to ask your permission to use the tinting guide on pages 124-125 in that article. It is our intention, with your permission, to print a reproduction of this guide. We would, of course, give full credit to your publication.

If possible, I would like to obtain back copies of all issues containing chapters related to the article.

Charles W. Blacketer,
 Technical Director,
 KWAL Paint Laboratories, Inc.,
 Denver, Colo.

new products and catalogs keep reader posted

Sir: Thank you for your great sections *New Products* and *Catalogs*. What a blessing they are to keep up on the latest equipment.

Could you please inform me as to whether you will notify me when my subscription is about to expire, so I may renew it in time. I wouldn't want to be without my copy of the *American Builder* for one minute.

John G. Saeva,
 Carpenter-Contractor,
 Buffalo 12, N. Y.

liked July issue

Sir: I wouldn't have missed this issue (July, 1953) for anything, not only because of the wonderful treatment you gave the article on the Millar home (*This House Has Been Soundproofed*), but because of the other articles and information of such great current interest. I liked particularly the article on taking old homes in trade—extremely valuable information for the contractor: *Are Bedrooms Necessary?* and *Back to the Two-Room School House*. With the pace you are set-

(Continued on page 32)

Dollars and Cents Wise...

American Kitchens

5 WAYS BETTER THAN OTHER STEEL KITCHENS
10 WAYS BETTER THAN WOOD



Sell your homes faster with American Kitchens!

**COMPARE
 AMERICAN KITCHENS WITH
 OTHER STEEL KITCHENS!**

1. cost no more, yet are of higher grade steel, finest construction
2. beautiful design; well-known name indicates to your customers that hidden construction is also of finest materials
3. easiest kitchen to clean—rounded corners, smooth surfaces with no dirt-catching handles
4. exclusive features that sell homes faster include the 15% larger sink bowl with no dirt-catching ledge, rounded drawers that clean as easily as a bowl
5. exclusive Roto-Tray dishwasher—the one really work-free dishwasher that women want most.

**COMPARE
 AMERICAN KITCHENS WITH
 WOOD KITCHEN CABINETS!**

1. less costly than quality wooden cabinets
2. require less installation time, less planning time
3. no finishing, no painting, no staining required
4. no call-backs or complaints because of warping or swelling
5. no complaints because of faulty catches or doors that stay half open or sag
6. perfect uniformity of sizes means perfect fitting
7. odor-proof, vermin-proof
8. can't rot, can't absorb moisture
9. fireproof, stain-resistant
10. drawers and cabinets far easier to clean with no seams and cracks found in wooden cabinets.



**American Kitchens Division
 AVCO Manufacturing Corp.
 Connersville, Ind., Dept. AB-10**

Please send me complete information about American Kitchens and your new Architects' and Builders' File.

Name _____

Address _____

City _____ Zone _____ State _____

AMERICAN KITCHENS
 DIVISION



CONNERSVILLE
 INDIANA

**A BEAUTIFUL SOLID BRASS KNOCKER
... BUT INSTEAD OF KNOCKING**

It Chimes



**SUBURBAN MODEL
No. 840**

Completely Non-Electrical... No Wiring

A pull on this smart-looking forged brass knocker sounds two rich, resonant chime notes throughout the home or apartment. Installed in a jiffy by simply drilling a single hole and fastening to door (knocker outside, chime inside). Adjustable to any door thickness. Always operates and requires no maintenance. The knocker is finished polished brass . . . the chime (only 6½" x 3" x 2") ivory enamel.

Auth Door Chimes are the **only original Non-Electric Door Chimes**. In use in more than a million homes and apartments. A real buy from two viewpoints . . . they cost so little and they install so quickly and easily. Send for booklet and complete details. Write the **Auth Electric Company, Inc., 34-20 45th Street, Long Island City 1, New York.**

Other Auth Non-Electric Door Chimes

NATIONAL MODEL No. 850

Utilizes a mechanical push button instead of knocker to sound two musical notes on a similar non-electrical chime. Push button escutcheon plate is forged solid brass, with polished finish. Fits all doors or door frames up to 9" thick. The most inexpensive of Auth Non-Electric Door Chimes but extremely efficient with smooth-action push button and decorative escutcheon.

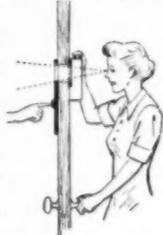


SINCE 1892



METROPOLITAN MODEL No. 890

Similar to the National Model in its operation by a mechanical push button, but with an additional "peephole" feature. An adjustable window in the chime permits the resident to observe a caller through a one-way mirror without, in turn, being observed. Space for name and apartment number on front plate. A beautiful new design, just released, and ideal for apartments.



FURMOST IN THE DESIGN AND MANUFACTURE OF ELECTRICAL SIGNALING, COMMUNICATION, TIME, AND PROTECTIVE EQUIPMENT FOR SCHOOLS, HOSPITALS, HOUSING, OFFICES, SHIPS, AND INDUSTRY.

letters . . .

(Continued from page 30)

ting. *American Builder* need never be concerned about competition from other publications.

Lillian A. Castell,
Vermiculite Institute,
Minneapolis 13, Minn.

advertising results gratifying

Sir: It is time we told you how pleased we are with our advertising experience this year in *American Builder*. The result has been gratifying, and we have done business with a high percentage of inquirers through the *Merchandiser* as well as with individuals writing to us direct.

We enjoy reading your magazine and we plan further insertions for the late summer and fall.

Thank you for the cooperation you give your advertisers.

(Mrs.) Margery C. Moses,
Sterling Paint & Varnish Co.,
Malden 43, Mass.

"old rockin' chair's got me"

Sir: I received your renewal order slip . . . but since I have arrived at the age of 76 years, and Father Time says it is a must for me to take the rocking chair for an evening's rest. I reluctantly pass the sad news to you, and ask you not to renew my subscription to the finest building magazine in the world.

Nothing has aided me as much as the *American Builder* in keeping abreast of building progress, new materials and their uses, better methods of construction, new designs and building engineering. . . I have nothing but praise for a truly great magazine, and shall be very glad to recommend it to all those who are engaged in or interested in the building business.

C. H. Knox,
Overton, Texas

**National Home Week
booklet favorably received**

Sir: I have taken a quick glance through your booklet "How to Plan a Successful National Home Week" and it looks to me like an excellent guide for this important program.

Irvin H. Yackness, Ex-Sec'y,
Builders Assn. of Detroit,
Detroit, Mich.

AMERICAN BUILDER

NEW DUSTLESS FINISHING SANDER



■ You know what sanding drywall joints is like. You raise a cloud of fine, talc-like dust that settles on everything. It gets in your eyes — your nose — your throat. Unless you wear a mask, all you can smell and taste hours after is powdered plaster.



■ Now this new Model 127 Finishing Sander gets the dust before it gets you. Like a miniature vacuum cleaner, it sucks up the dust — traps it in a sealed bag. Keeps the room clean — the air clear. No more masks — no more wheezing and sneezing for you!

Clears the air...and the work...of aggravating dust!



Large-size bag optional.
Costs only \$2.

Porter-Cable DUSTLESS FINISHING SANDER

Model 127

\$59⁵⁰

On drywall joints, plaster, wood paneling, cabinets, built-ins—wherever a smooth, scratch-free surface is essential—nothing quite matches Porter-Cable's new Dustless 127.

This orbital-action sander blends cross-grains without hatch marks. Sands straight grains satin smooth. Whisks away work-dust and abrasive-dust to help prevent scraping and scouring. And, because the abrasive stays cleaner longer, actually removes stock 25% faster.

Its vacuum system is so efficient (91% pickup on wood surfaces) that rooms adjacent to the work area can be painted without fear of flying dust. And on repair and remodeling jobs in the home you're spared an extensive clean-up job afterwards.

■ See your Porter-Cable dealer for details and free demonstration. Or mail coupon today.

Porter-Cable

Quality Electric Tools

Manufacturers of SPEEDMATIC
and GUILD Electric Tools

PORTER-CABLE Machine Co.
1010 N. Salina St., Syracuse 8, N.Y.

IN CANADA send to:
Strongridge, Ltd., London, Ont.

Please send me complete information on the new Porter-Cable Dustless 127 Finishing Sander . . . also name of nearest dealer. I am particularly interested in finish-sanding . . .

- Drywall seams and plaster patches
 Wood paneling and inlay surfaces
 Cabinets and built-ins
 Other _____

Name _____

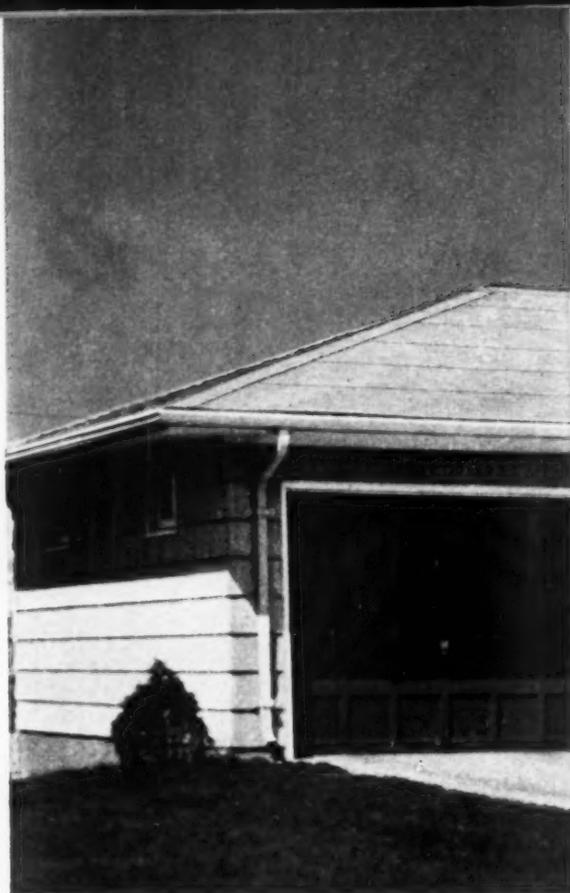
Address _____

City _____

County _____ State _____

**AMERICAN BUILDER
BLUEPRINT HOUSE**

**designed for slope,
this plan adapts
to a level lot**



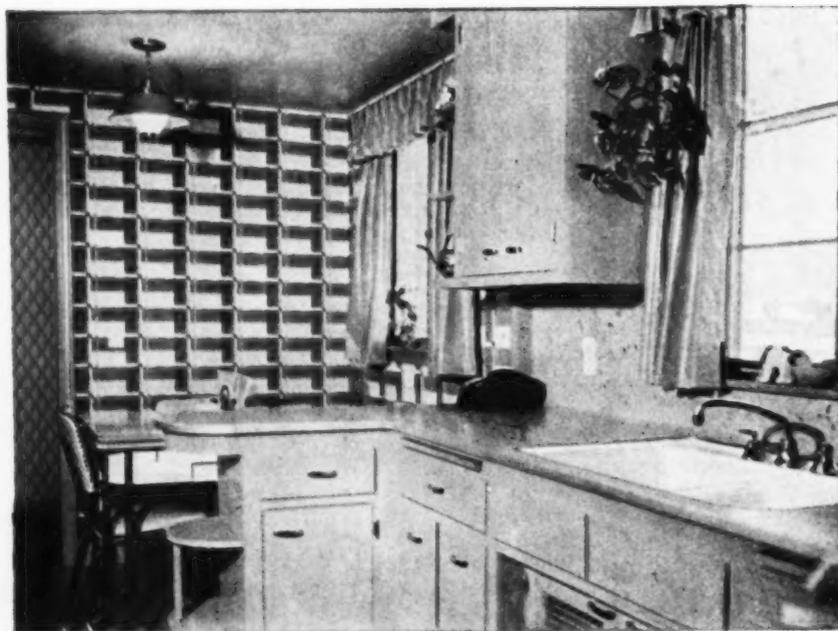
BUILDER:

*E. Harold Johnson,
Minneapolis, Minnesota*

DESIGNER:

*F. G. Theis,
Minneapolis, Minnesota*

SALES PRICE:\$24,000



Good light is available from two large windows in kitchen for the major work area, breakfast nook



The use of stone facing enriches the exterior lines of the house

THIS PLAN is primarily for the site on which it is placed, a level plot across the front sloping down to a lower level at the rear. However, the plan can be changed quickly to accommodate it to a level lot by raising the porch from the basement to the first floor level. To provide access to the porch the dinette window can be changed to a French door.

The site played an important part in the orientation of the rooms. A small lake located at the rear of the property proved to be a focal point of interest. Therefore, the porch and the main rooms of the house were located to take advantage of the view. Service units face toward the street front.

The slope at the rear permits the entire basement wall on that side to be exposed. The wall is equipped with full size windows, allowing ample light for the large basement, which is devoted to recreation. Adjoining this area at the basement



Area over basement stairs allows space for recessed china cabinet with glass sliding doors in dining room wall

MORE



For complete one-quarter-inch working plans of this house, write *American Builder Home Plan Service*, 79 West Monroe Street, Chicago 3, Illinois.

Roman brick laid up in a stack pattern and the narrow wood architrave emphasize the horizontal lines of the fireplace

level is a large porch glazed with jalousies. Access to the porch and lower level is provided by a stair which leads directly to the side entrance of the first floor. Exterior of the house is faced with stone and 10-inch wood siding. Ornamental shutters flank the windows on the front wall. Exposed masonry basement walls are finished with stucco.

A feature of the street front is the 5-foot, 6-inch roof overhang in the recessed area between bathroom and garage. Entrance doors are placed at each end of this recess with a stone planter between. Flush recessed lights are placed in the soffit directly over the doors.

Portions of two walls in the living room contain fixed picture windows with ventilating units at each end. An inside wall of this room contains a large fireplace faced with Roman brick with a continuous wood architrave member on top and sides.

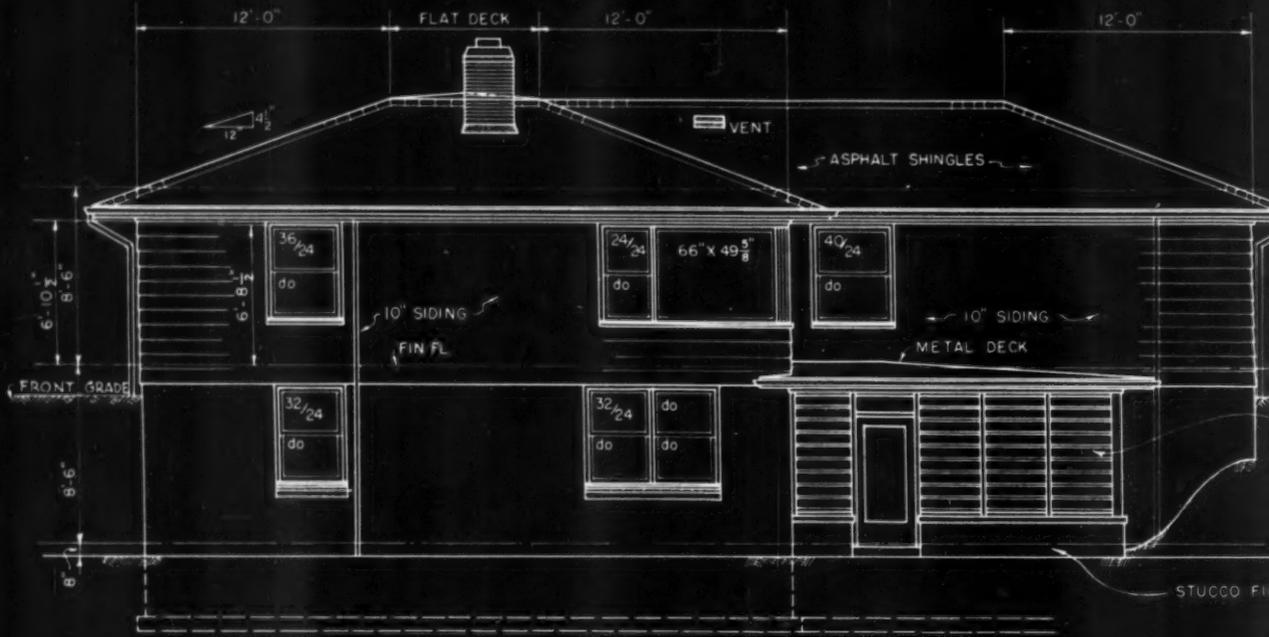


See Gatefold Blueprint
for complete working drawings
—quantity list of materials

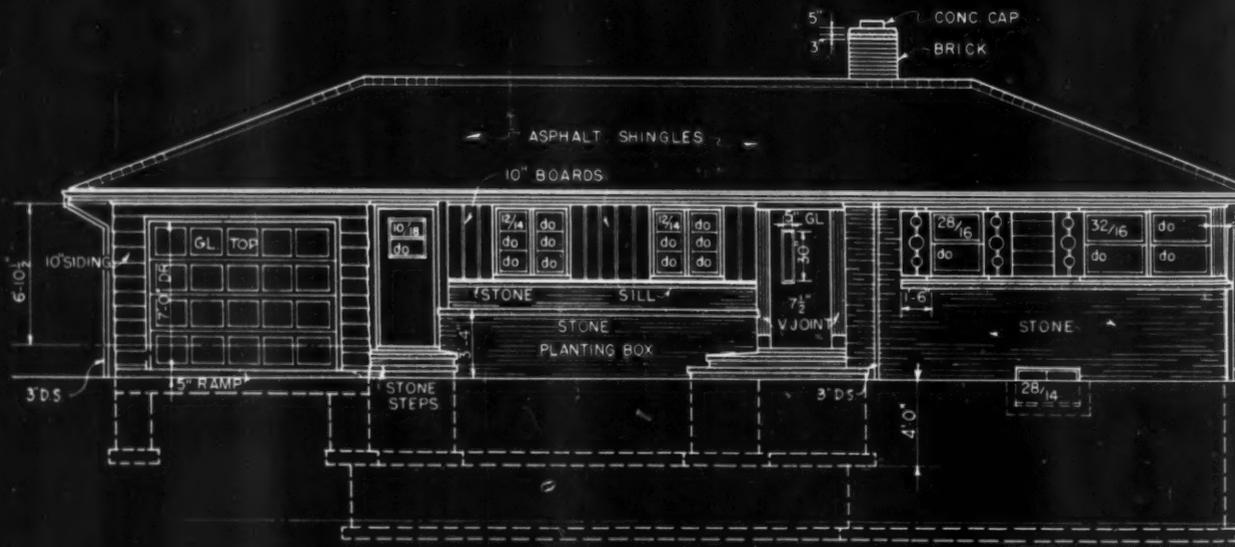
- BRAND NAME PRODUCTS USED**
- Armstrong Linoleum
 - Carey bathroom cabinet
 - Crane hot water heater
 - Fiberglas insulation
 - G-E Disposall
 - Janitrol furnace
 - Kentile asphalt tile
 - Lightolier lighting fixtures
 - McKee garage door
 - Mosaic clay tile
 - Moore's paint
 - Nutone exhaust fan
 - Kwikset hardware
 - Rezo doors
 - Standard plumbing fixtures
 - Thermopane windows
 - USG lath



Rear elevation of the house is a full two stories

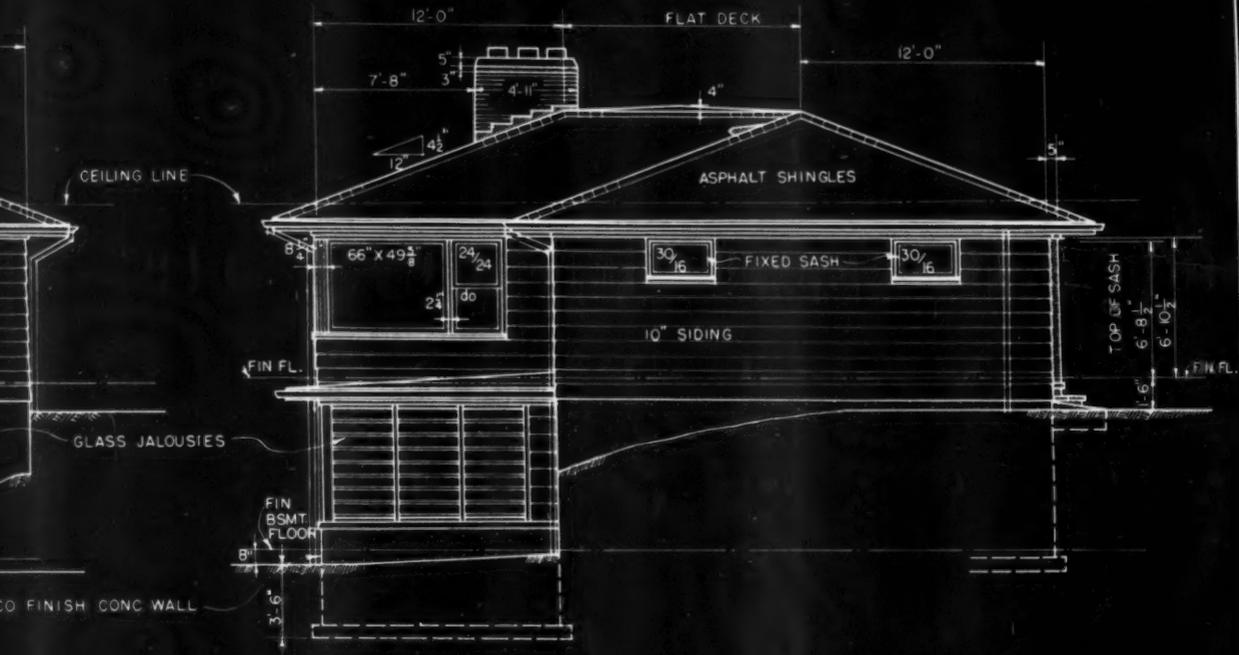


REAR ELEVATION

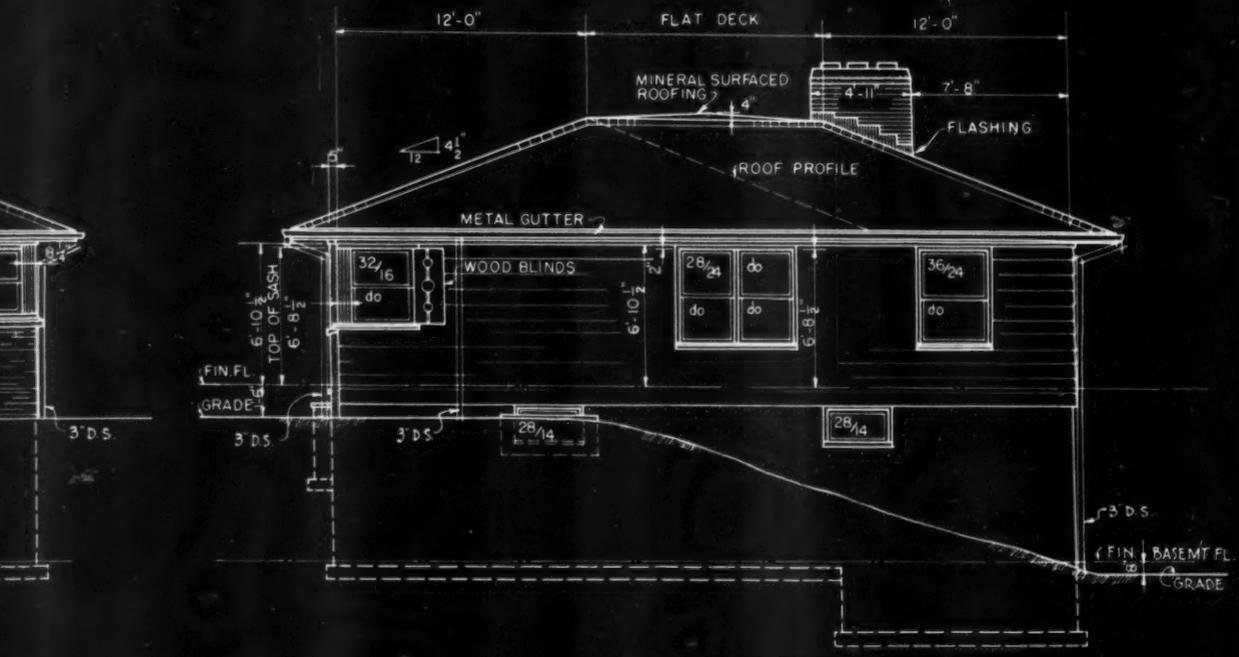


FRONT ELEVATION

SCALES :

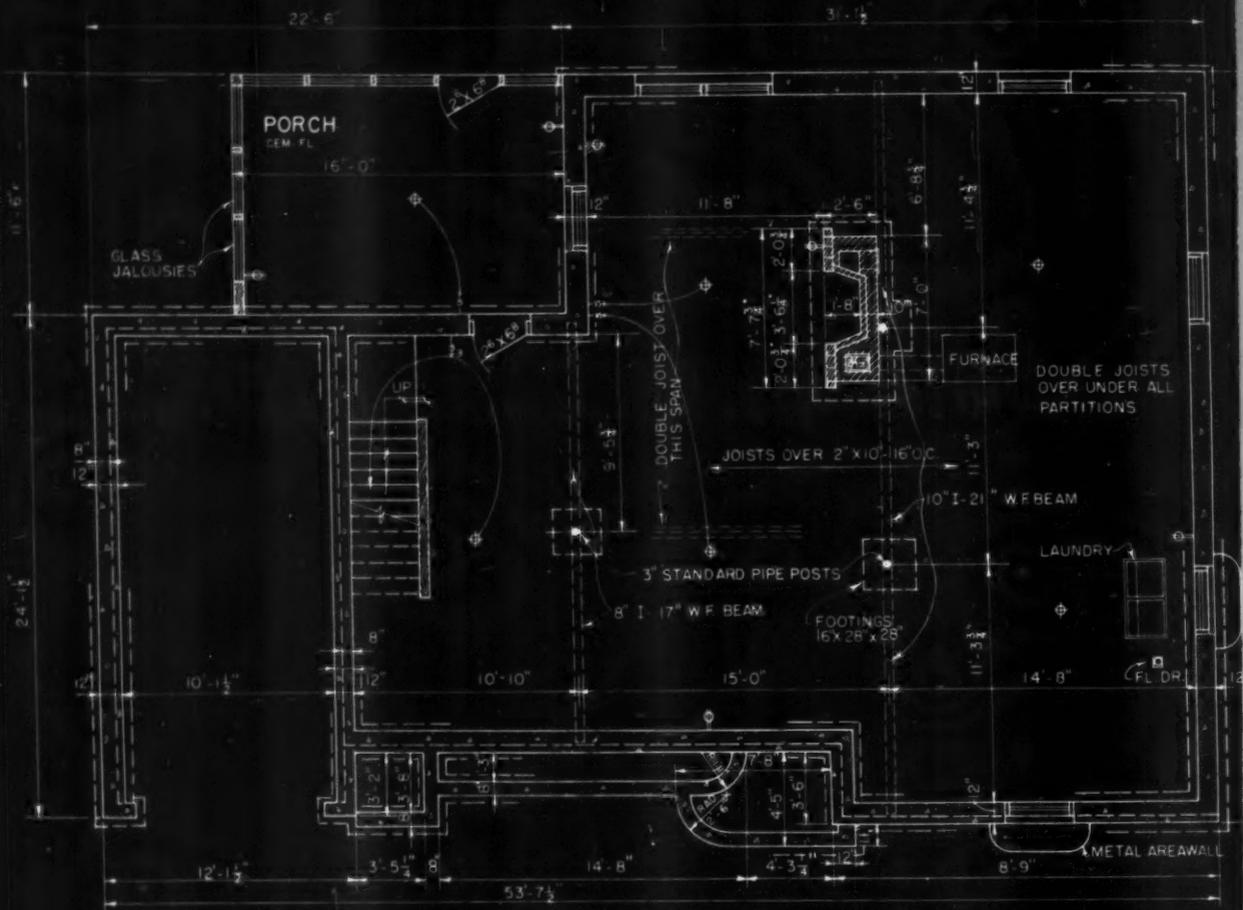


LEFT SIDE ELEVATION



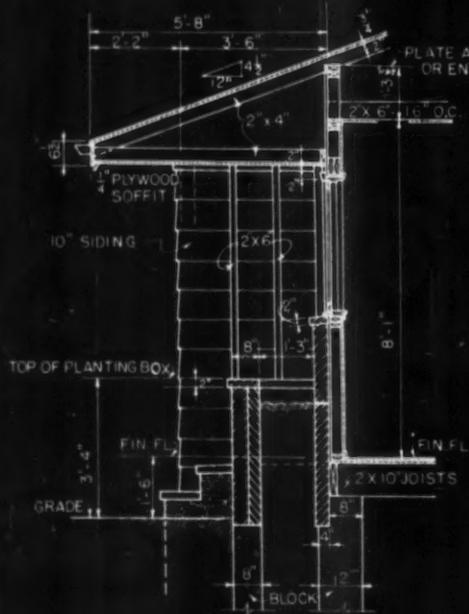
RIGHT SIDE ELEVATION

ES : $\frac{1}{8}'' = 1'-0''$



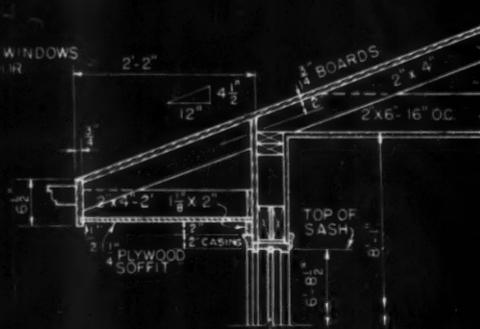
BASEMENT PLAN

SCALE: $\frac{1}{8}'' = 1'-0''$



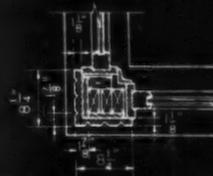
SECTION A-A

SCALE: $\frac{1}{4}'' = 1'-0''$



TYPICAL EAVE SECTION

SCALE: $\frac{1}{2}'' = 1'-0''$



**DETAIL OF LIVING ROOM
CORNER WINDOW CASING**

Quantity List of Materials

For American Builder Blueprint House No. AB 195

F. G. Theis, Architect

General Information

House — Type	combination
Area	1,385 sq. ft.
Cube	25,622 cu. ft.
Height taken for cube was 18 feet 6 inches	
Garage — Area	288 sq. ft.
Cube	3,456 cu. ft.
Height taken for cube was 12 feet	
Porch — Area	184 sq. ft.

Excavating

Trench for foundation	500 lin. ft.
Chimney and column footings	50 sq. ft.
Excavation for basement	65 yds.

Cement Work

Foundations	1,608 cu. ft.
Concrete work	1,550 sq. ft.
Thickness	4 in.
Anchor bolts — none shown, but if wood plate is used at top of concrete foundation	40
Waterproofing	500 sq. ft.
Miscellaneous — Concrete driveway apron	36 sq. ft.

Masonry

Type	stone, stucco and frame
Walls — Stone veneer	200 sq. ft.
Window sills	1 — 12" 1 — 15" 1 — 16"
Planter rail — special	20" wide x 20 lin. ft.
Chimney	masonry — 240 cu. ft.
Flue lining	8" x 12" — 72' 0"
Cap	cement
Fireplace	Roman brick
Throats and dampers	2
Lintels	sets — 2
Miscellaneous — Stucco	490 sq. ft.
Stone steps	sets — 2
Risers — each averaging 6' long (per set)	2
Fireplace hearth	1
Tile flooring in vestibule and living room fireplace hearth	30 sq. ft.

Iron Work

Structural	1,100 lbs.
Lally columns	pipes — 3 — 3" diameter

Millwork

Windows — Type	D. H., casement and fixed
Material	wood
Windows — Glazed including trim	2 — 4 ft. — 28" x 24" 3 — 6 ft. — 32" x 16" 1 — 2 ft. — 40" x 24" 2 — 2 ft. — 36" x 24" 1 — 2 ft. — 32" x 24" 2 — 4 ft. — 32" x 24" 2 — 2 ft. — 24" x 24" 1 — 2 ft. — 28" x 16" Casement
Fixed sash	4 — 3 ft. — 12" x 14"
Fixed — 1/4" plate	2 — 30" x 16"
Basement sash	3 — 2 ft. — 14" x 14"
Exterior doors — Material	wood
Exterior doors — Glazed entry	1 — 3'0" x 6'8" 1 — 2'8" x 6'8" 2 — 2'6" x 6'8" 7 — 3'0" x 5'6" Garage door — upward acting
	1 — 9'0" x 7'0"
Exterior millwork	
Shutters — Bandsawn to detail	4
Entrance fascia — Colonial type	1
Lattices	2 — 2" x 6" x 12'0" 1 — 2" x 6" x 8'0"
Flower box	1
Interior doors — including jambs and trim	8 — 2'6" x 6'8" 5 — 2'0" x 6'8" 1 — 1'6" x 6'8"

Regular sliding doors	2 — 2'6" x 6'8"
Special interior doors — Slide-in-wall-door	1 — 2'6" x 6'8"
Special interior millwork	
Fireplace mantel	1
Upper kitchen cases	18 lin. ft.
Lower work-top cabinets	11 lin. ft.
Snack bar	2 lin. ft.
Closet shelving and pole	18 lin. ft.
Linen closet shelving	12 lin. ft.
China case with pair of glass sliding doors	1

Carpentry

Foundation plates	none shown but 200 lin. ft. required
Joists	61 — 2" x 10" x 16'0" 16 — 2" x 10" x 12'0"
Bridging	1" x 4" — 500 lin. ft.
Studding and plates	
Plates	2" x 4" — 1,300 lin. ft.
Studs	450 — 2" x 4" x 8'0"
Ceiling joists	50 — 2" x 6" x 16'0" 43 — 2" x 6" x 12'0"
Roof rafters	160 — 2" x 4" x 16'0"
Hip and valley	6 — 2" x 6" x 20'0"
Framing lintels	2 — 2" x 6" x 8'0" 4 — 2" x 6" x 10'0" 2 — 2" x 6" x 6'0" 2 — 2" x 6" x 16'0" 2 — 2" x 6" x 12'0" 2 — 2" x 8" x 10'0" 2 — 2" x 8" x 12'0" 2 — 2" x 8" x 14'0"
Subflooring	1,385 sq. ft.
Roof sheathing	2,400 sq. ft.
Side wall sheathing — surface measure	1,050 sq. ft.
Side wall materials — 1" x 10" beveled siding	1,050 sq. ft.
Furring	at chimney only
Carpenter stairs	set of 12 risers — 1
Newel posts	2 — 2" x 4" x 3'0"
Top rail — 2" x 4"	10 lin. ft.
Intermediate rail — 1" x 4"	15 lin. ft.
Flooring — Hardwood	850 sq. ft.
Softwood	170 sq. ft.
Exterior material — Soffits	1/4" exterior grade plywood
Eaves	840 sq. ft.
Porches	200 sq. ft.
Insulation	none shown
Ceiling requires — 4"-thick batts	1,400 sq. ft.
Walls require — 2"-thick blanket	1,000 sq. ft.

Sheet Metal

Gutters	200 lin. ft.
Downspouts	50 lin. ft.
Flashing	at chimney and metal deck
Miscellaneous — Roof vent	2 — 2" x 4" x 3'0"
Metal deck over porch	approximately 200 sq. ft.
Steel area walls	2

Roofing

Type	asphalt shingles
Area	24 squares
Type	mineral surfaced roofing
Area	84 sq. ft.

Interior Walls

Wall area to be covered	4,300 sq. ft.
Ceiling area to be covered	1,400 sq. ft.

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



Deep frame picture windows, large chimney, combined carport and entrance give style to exterior

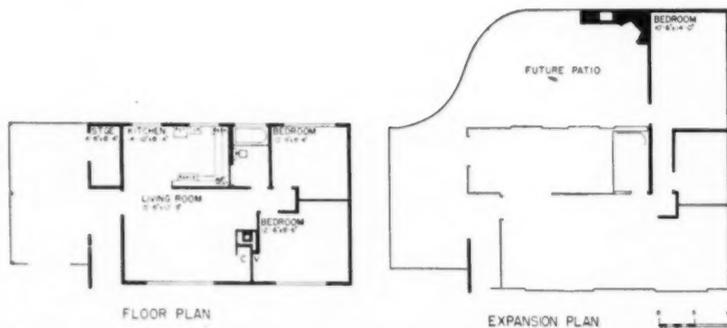
a low-cost house for '54

ADVERTISED as "a year ahead," this two-bedroom design on a slab foundation is being sold in a Seattle tract for \$8,500 on lots 75 by 120 feet. The builders are Al La Pierre and Jack Peterson.

Surprisingly, the house has only one entrance. This idea evolved out of discussions between the builders and FHA. Its advantages: space is saved in the living room and a third wall is left free for furniture placement. Also, it saves the cost of framing an opening and installing a door. As for the customary argument that every house needs two exits in case of fire, it has been recognized in this case that, for emergency exit, the windows of a ranch-type house can be almost as good as doors. Seattle buyers have not shown any marked resistance to this innovation.

Bedrooms have wardrobe walls. Those in the master bedroom include built-in features, and this room also provides a built-in dressing table.

The builders have thought through the idea of expandability for this



Adding a third bedroom would create more outside as well as inside living space. The house proper has 746 square feet

house, as shown by the plan reproduced here.

The following warranty is given with each house and has proved to be a strong selling asset: "The builder will repair or replace to the satisfaction of the owner any and all imperfections in house due to faulty material, construction or latent defects which may develop under normal or proper usage during a period of one year from date of purchase."



Only one entrance—a new idea

AMERICAN BUILDER

THE *Ro-Way* IN A NAME *



You see it happen every day. At sporting events, in entertainment circles, in any field whatever . . . some names are sheer magic. They're the names of the leaders, the star performers . . . the names that draw the crowds like a powerful magnet.

And that's the way it is with products, too!

Over the years, the name RO-WAY on overhead type doors has meant advanced design, skilled engineering, fine quality, top performance . . . solid value through and through.

Today's Ro-Way doors—residential, commercial and industrial—are the finest ever. With such outstanding features as Taper-Tite track and Seal-A-Matic hinges, ball bearing Double-Thick tread rollers, and Power-Metered springs individually matched to the weight of each door . . . smooth, easy up-and-down operation is assured.

With Ro-Way sections rabbeted for weather-tight joints . . . muntins, rails and stiles precision-squared . . . mortise and tenon joints both glued and steel doweled . . . heavy gauge hardware both Parkerized and painted . . . long life is a certainty.

These are the reasons why Ro-Way is America's most wanted overhead type door. And that's the magic in the RO-WAY name.

ROWE MANUFACTURING COMPANY, 732 Holton Street, Galesburg, Ill.

*Nationwide sales and installation service.
See your classified telephone directory
for nearest Ro-Way distributor.*



THERE'S A *Ro-Way* FOR EVERY DOORWAY!

NOW AVAILABLE

KEYSTONE'S

KEYBEAD

GALVANIZED REINFORCING CORNER BEAD

FOR STRONG, ECONOMICAL, "TRUE" PLASTER CORNERS

Yes, Keybead is available. Plasterers have swamped us with orders; say it's one of the most important improvements in corner bead ever made. Machines are running day and night to meet the demand. Now, we're speeding production again.

You'll like the strong, full plaster corners you get with Keybead. You'll like the extra strength and crack resistance that results from the exceptional bond of plaster with the network of galvanized wire. The true-formed steel bead adds still more strength and crack resistance to corners. And, galvanized, it prevents rust.

These are the benefits you can count on when your plasterer says—"How about using Keybead on the next job?" It's your opportunity to get greater value from your plaster dollars.



Keybead is another contribution to stronger plaster by the makers of Keymesh and Keycorner galvanized plaster reinforcing.

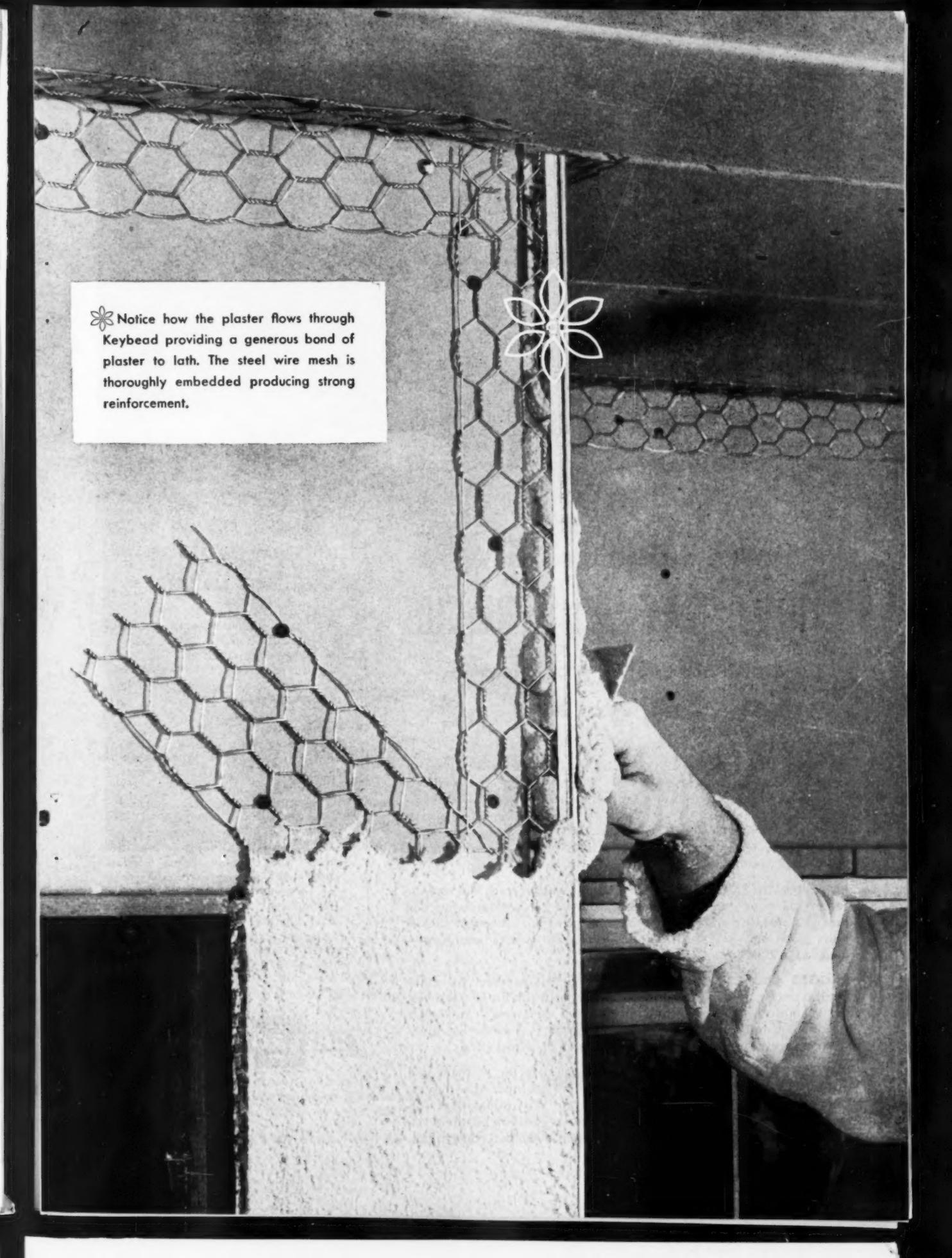
KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

KEYMESH • KEYCORNER • KEYBEAD • KEYSTONE NAILS
KEYSTONE TIE WIRE • KEYSTONE NON-CLIMBABLE FENCE
KEYSTONE ORNAMENTAL FENCE



FILES
2d 11a 3d
Ke Ke Ke



✿ Notice how the plaster flows through Keybead providing a generous bond of plaster to lath. The steel wire mesh is thoroughly embedded producing strong reinforcement.



4 Powerful Reasons Why CHEVROLET ADVANCE- DESIGN TRUCKS work harder . . . work longer . . . work for less!

MORE POWER AT LOWER COST! You can look forward to sizeable savings on gasoline with Chevrolet trucks on the job. In heavy-duty models, the advanced Loadmaster engine with new high-compression ratio of 7.1 to 1 delivers more power than ever—and does it on less fuel! In light- and medium-duty models, Chevrolet's Thriftmaster engine combines top-notch performance, with rock-bottom operating cost.

TAILORED TO YOUR JOB! Of course you want a truck that fits the requirements of your particular job. And you get just that when you buy a Chevrolet truck! You get the *right* power . . . the *right* chassis units from tires to transmission. Chevrolet trucks are *factory-matched* to do your work at lowest cost!

RUGGED AND RELIABLE! These great 1953 Chevrolet Advance-Design trucks are built stronger to stay on your job longer! Frames, for example, are sturdier and more rigid. And you'll find extra strength in other vital places, too. The result is a truck that gives you extra miles and months of low-maintenance operation.

LOWEST PRICED LINE! You start saving money the moment you buy a Chevrolet truck. For, in addition to all its other advantages, Chevrolet is *America's lowest priced truck line!* Why not start saving *now!* Your Chevrolet Dealer will be happy to give you all the facts. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

CHEVROLET ADVANCE-DESIGN TRUCK FEATURES

TWO GREAT VALVE-IN-HEAD ENGINES—the Loadmaster or the Thriftmaster—to give you greater power per gallon, lower cost per load. **POWER-JET CARBURETOR**—for smooth, quick acceleration response. **DIAPHRAGM SPRING CLUTCH**—for easy-action engagement. **SYNCHRO-MESH TRANSMISSION**—for fast, smooth shifting. **HYPOID REAR AXLE**—for dependability and long life. **TORQUE-ACTION BRAKES**—on light-duty and medium-duty models and on front of heavy-duty models. **TWIN-ACTION REAR BRAKES**—on 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. **VENTIPANES**—for improved cab ventilation. **WIDE-BASE WHEELS**—for increased tire mileage. **BALL-GEAR STEERING**—for easier handling. **UNIT-DESIGNED BODIES**—for greater load protection. **ADVANCE-DESIGN STYLING**—for increased comfort and modern appearance.



Believe what you hear...

they are that good!



Ever talk to a carpenter who uses a Porter-Cable Saw? Do it sometime—he'll gladly explain the practical benefits of quality tool design.

He'll tell you, for example, that a Porter-Cable Saw *feels natural*. That it's easy to guide—doesn't twist in the work—doesn't strain his wrist. He'll tell you, too, that he's had his Porter-Cable a mighty long time and wouldn't part with it at any price, unless he could get another.

When you want a *quality* saw, see your Porter-Cable dealer. Seven models to choose from. Shown here is Model A6 (2" cut)—only \$65.00. For name of nearest dealer consult your phone book . . . or write to factory.

• Every Porter-Cable Tool is inspected 100%. That means thorough examination of every bearing, motor, switch, casting, etc. Each tool is guaranteed against defects in workmanship and materials.



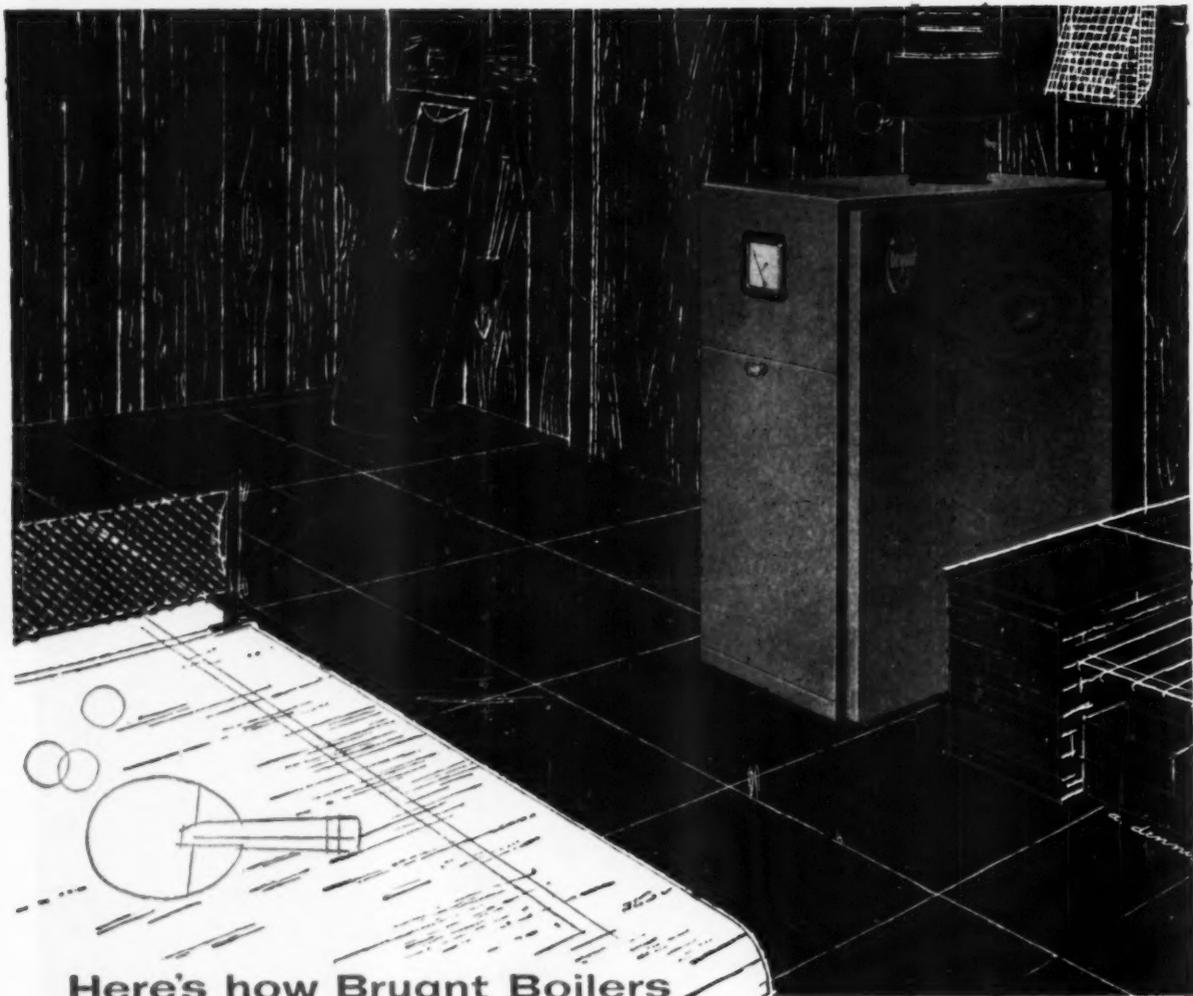
Porter-Cable

Quality Electric Tools

PORTER-CABLE MACHINE CO., 1010 N. SALINA ST., SYRACUSE 8, N. Y.

OCTOBER 1953

47



Here's how Bryant Boilers

add extra sales appeal to new homes

There are four things that you—and home buyers—look for most in a boiler. Note how Bryant Boilers—in measuring up to *all* of these essentials—become an outstanding home sales feature.

1. **Outstanding features**—Only in Bryant Boilers will you find convenience features like “Magic-Action” Valve, “Safety-Sentinel” Pilot and “Finger-Tip” Igniter.
2. **Space-saving size**—Bryant Boilers are extremely compact, requiring as little as 2½ square feet of floor space.
3. **Proved high quality**—Bryant Boilers have been the standard of comparison in the industry for over 40 years.
4. **“Big name” appeal**—Bryant Boilers own a reputation based on superior performance dating back to the very beginning of the automatic heating industry. It's a name homeowners have confidence in.

Your nearby Bryant distributor will be happy to supply you with complete information on the Bryant line. Call him today, or write: Bryant Heater Division, Affiliated Gas Equipment, Inc., 17825 St. Clair Avenue, Cleveland 10, Ohio.

There's no place like home...with a


bryant

HEATING • AIR CONDITIONING
 WATER HEATING

**By All Means, Our New Home
Must be a FIRE-SAFE
All-Masonry Home!**



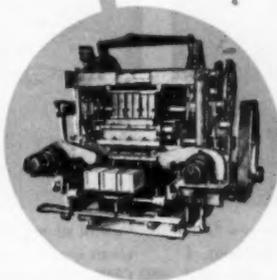
**VIBRAPAC
BLOCK**



**SOFFIT
BLOCK**

**• BOTH Made on a
Besser VIBRAPAC**

Vibrapac Block and Soffit Block are both produced on Besser Super Vibrapac machines. Every block can be made of uniform texture. You can make your selections from a wide variety of block designs and sizes . . . units that will exactly meet your individual requirements. Write on your letterhead for sample pages from new "Block Masonry Homes Plan Book" featuring 116 residential plans . . . also names of Vibrapac-equipped Products Plants in your area.



**VIBRAPAC BLOCK for Walls and Foundations
. SOFFIT BLOCK for Floors and Ceilings!**

When you build a new home, you naturally want to make it FIRE-SAFE. You never can tell when fire will strike, erasing in a matter of minutes, the dreaming, planning and savings of years. An ALL-MASONRY home . . . with Vibrapac Block for walls and foundations and Soffit Block for floors and ceilings . . . assures maximum fire-safety and performance, without sacrificing charm and architectural beauty.

Vibrapac Block are available in a variety of attractive styles for sturdy, fire-resistant walls. The quality of these block can be controlled and varied in both texture and density as required for sound-proofing, acoustical correction or attractive appearance of wall.

Soffit Block give you fire-safe concrete floors . . . warm and dry . . . rigid floors that won't sag or shrink . . . floors that are especially adapted for radiant heating. Soffit Block ceilings produce a surface of acoustical and insulation value that can be left exposed or painted.



BESSER

Complete Equipment for Concrete Products Plants

BESSER MANUFACTURING COMPANY • ALPENA, MICHIGAN, U. S. A.



① **Mr. Hendy of Cincinnati, Ohio, talked to builders from many states.**

He questioned outstanding builders; asked them what was *really* behind their phenomenal sales of houses.

② **He came back feeling very certain that the installation of the General Electric Kitchen in his new houses would really help to sell them fast.**

He found that women *want* the General Electric Kitchen in their new homes. He discovered, too, that this trump selling-feature cost the home-buyer only about \$3.45 per month extra on monthly mortgage payments.

③ **His judgment was right**

He sold 64 houses equipped

Here is Mr. Hendy calling back on one of his new homeowners. Mr. Hendy is convinced—more than ever—that it pays to install General Electric equipment.



"Pleased as punch with my new G-E Dishwasher," says Mrs. T. J. Radley, 1153 Morado St., Cincinnati, Ohio. "The dishes are cleaner than I can wash by hand, and G-E Disposall® is out of this world. No more garbage for us!"



"There's so much room" in my new G-E Refrigerator, and with four children, I certainly need it. I'm glad it's a General Electric Refrigerator, too, because it's a brand I know I can depend upon year after year."



"Look at my wall and you can see how clean cooking by electricity really is. This G-E Range is *wonderful*. Heats up fast, too. And to think that *all these G-E appliances are costing us only about \$3.45 a month extra on our regular mortgage!*"



View of builder Hendy's Price Hill development. These moderately priced homes are all equipped with General Electric Kitchens.

with G-E Kitchens in 60 days —before even one single foundation was completed!

Think about this a minute. Mr. William F. Hendy, builder of Arcose Company Houses in Price Hill, Cincinnati, Ohio, took a tip from the pages of other successful builders—and sold his houses in record time.

And, we say YOU can, too . . . when you install the G-E Kitchen-Laundry.

Two reasons why: First of all, women *prefer* General Electric appliances to any other brand. A 1951 survey shows that 55.7% of the people interviewed believe that G.E. makes the best appliances for the home.

Second: A G-E Kitchen-Laundry can be built right into houses in the \$10,000 or \$12,000 price range—and the monthly cost to the homeowner may be no more than that for a typical telephone bill, because under modern home-financing the cost of these dependable appliances can usually be included right in the regular mortgage.

Start selling your houses faster, just as many other builders are doing from coast to coast. See your local G-E distributor or write to the Home Bureau, General Electric Company, Louisville 2, Kentucky.

GENERAL  ELECTRIC

big opportunities in COMMERCIAL BUILDING

THE upsurge in commercial construction, fully expected after credit and material controls were eased last fall, is exceeding government expectations. Despite gradual and continuing relaxation during 1952, the all-out relinquishing of control came with the "open ending" of the Controlled Materials Plan on February 16.

This development means that for the first time in two years clients, architects and builders can plan, design and build any type of commercial building of any size using any materials available on the market other than nickel-bearing, stainless steel.

The long pent-up demand is now released like a flood.

The \$729 million spent on commercial building during the first six months of 1953 was 43 per cent more than for the first half of 1952.

This condition opens the door to a type of building that is supplementing the activities of the project builder, subdivider, or the builder of fewer than ten homes. The changing population pattern has given rise to widespread suburban development, with its typically smaller and lower structures for business and professional use.

A number of useful ideas are contained in this eight-page study which includes a variety of structures typical of thousands either under way or in the planning stage.

an extension in the modern mode adds new life to old structure

BUILDER:

Clausen Construction Co., Winnetka, Illinois

ARCHITECT:

Ralph Stoetzel, Chicago, Illinois

CUBIC CONTENTS:18,900

COST:\$20,000

BY TAKING advantage of the space devoted to a property setback, the new addition to this old established plumbing concern in Winnetka, Illinois, was built in the area between the property line and the front of the existing building.

The new building which has been made a part of the old is a one-story structure containing a large display space, office, boiler room and lavatory, and a storage area which opens into the old shop building.

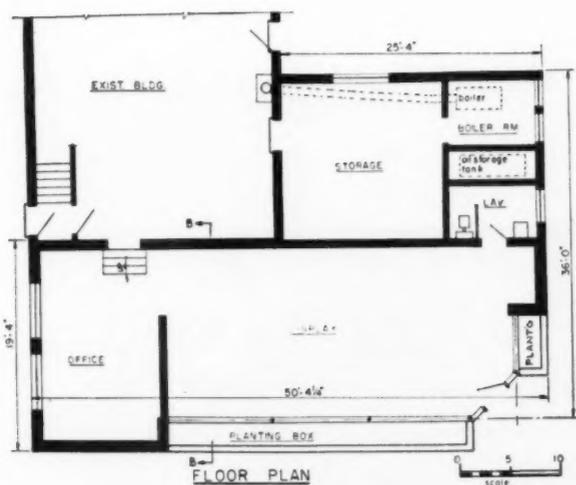
The street front exterior is a combination of glass and a wide range of colorful Lannon stone, one wall of which extends into the store, making an attractive background for fixture display. The extended wood canopy over the windows forms a unit which ties the design together and also provides shelter from the sun. The planters along front and side at grade add a touch of color to the architectural arrangement.



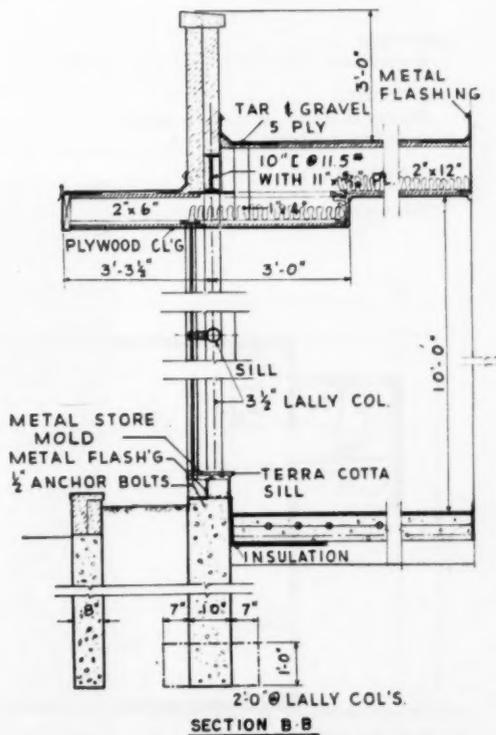
The old building before the new wing was added



New addition finished in Lannon stone and glass with face brick return on end walls. Upper facade of old building provides space for a display sign



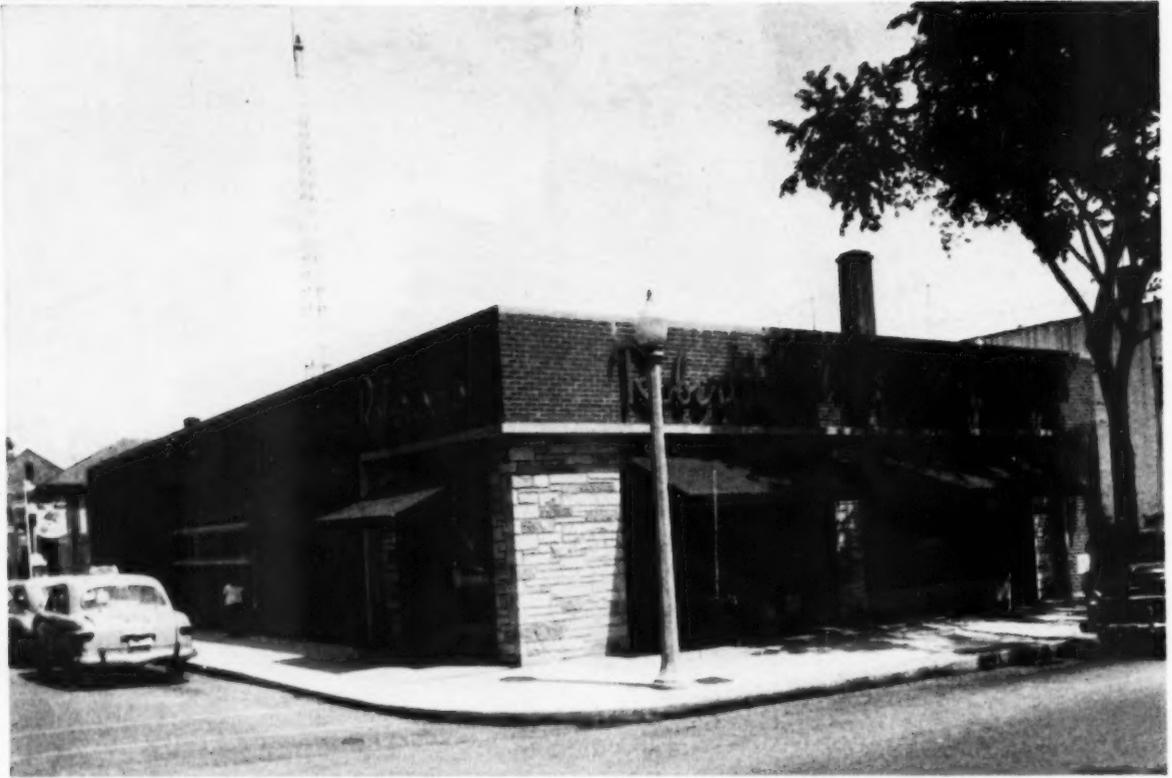
First floor plan of new addition



SECTION B-B

Section through front and rear wall and planter

COMMERCIAL BUILDING



This effective design is the result of good materials used in a dignified manner

men's store for suburban community

BUILDERS:

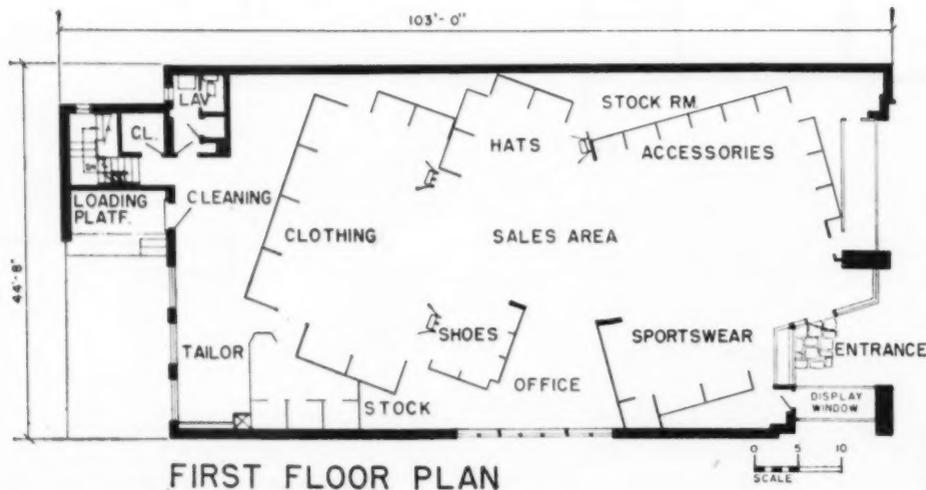
Hansen and Werhane, Lake Forest, Illinois

ARCHITECTS:

Stanley D. Anderson and Associates,
Lake Forest, Illinois

CUBIC CONTENTS:94,635

COST, exclusive of fixtures:\$73,000



Added display area is provided by using a deep, recessed entrance

THIS one story and basement store building in Lake Forest, Illinois, provides complete facilities for an exclusive men's furnishing establishment.

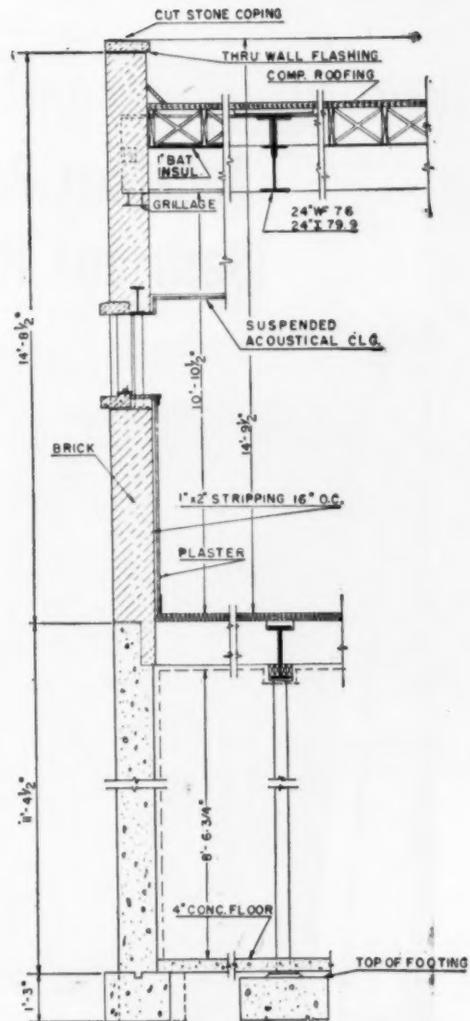
The exterior materials of the two street fronts are red face brick, Lannon stone laid up in a random ashlar pattern and Bedford cut stone trim which forms an eyebrow frame enclosing the entrance and store front windows. The other two walls are common brick.

A feature of the store front is the display window at the left of the entrance which occupies a space nominally set apart for a side-street approach. Large, divided fixed sash with an aluminum planter inside at floor line frames the display case and entrance door. Store front members, doors and frame are aluminum.

The building is heated with a forced warm-air furnace located in a suspended area adjoining the lavatory, eight feet above the finished first floor. Two compressors located in the basement provide summer cooling for all areas.

The building is constructed on concrete foundations with 12-inch brick walls above. The first floor and roof area are divided into equal panels supported by steel members and posts. Wood floor joists and roof rafters 16 inches o.c. are spaced between the beams.

Commercial Building continues on page 58



TYPICAL WALL SECTION



Ample area is provided for window shopping and approach in large recessed entrance to store

Great window combination!

Andersen Pressure Seal with Removable Sash and Handy Storm-Screen Units . . .



EASY TO REMOVE. The Andersen Storm-Screen hangs and opens like any standard screen or storm window.

The Andersen Storm-Screen Unit is built to be the best-looking, most practical, easiest-to-use, longest-lasting storm-screen combination there is. It's built to last a lifetime with reasonable care. Wood parts are treated with toxic and water repellent preservative. Screen wire is non-rusting aluminum. Once installed they're meant to stay on all year 'round.

The rugged Storm-Screen is a part of the Andersen Pressure Seal Unit. Each has its own brand of customer appeal that helps sell its partner. Andersen Pressure Seal Windows with the Storm-Screen Unit form the double hung window combination that's complete in every detail—complete in the details to please every home builder, every homeowner.

Check the Storm-Screen features listed here . . . Then you'll know why the combination of Pressure Seal Windows with the Storm-Screen Unit makes the greatest double hung window package ever!

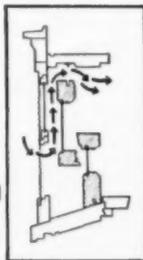
Full length screen; 2 storm panels. Easy to change in a few seconds. Cuts down storage problems. Provides full screen in summer. Up to 25% more insulation in winter. No complicated installation. Quality fine-mesh aluminum screen cloth.

CHANGE STORM PANELS IN SECONDS



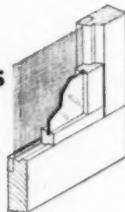
Insert or remove lightweight storm panels from the inside. No stretching or struggling. Easy to store, easy to clean.

RAINY WEATHER VENTILATION

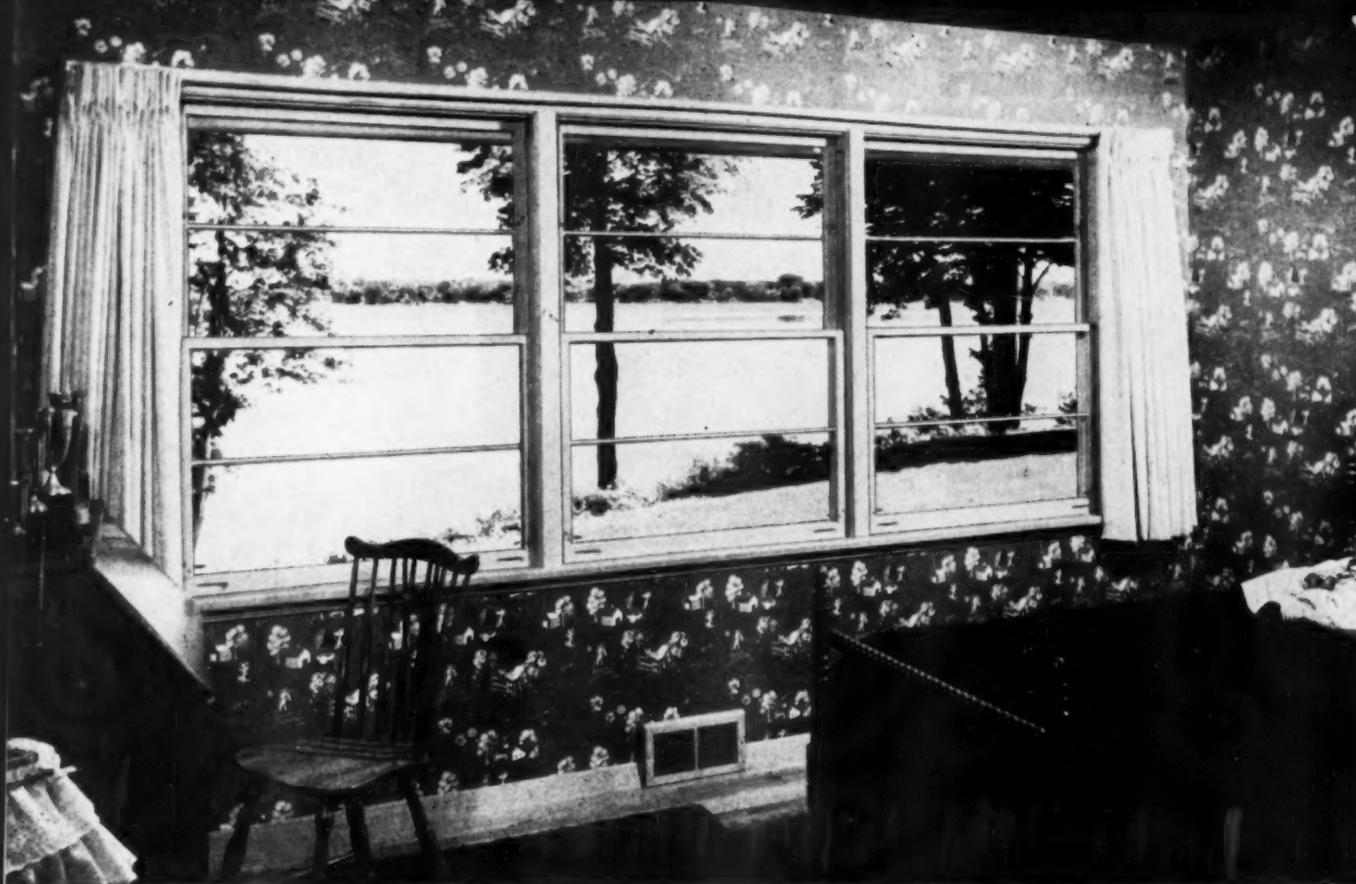


Leave top storm panel on for top-of-window ventilation. Helps avoid rain damage. One less panel to change or store.

STORM PANELS FIT INSIDE SCREEN



Corner detail shows how storm panels fit inside screen. Aluminum screen cloth stays on year 'round to give as much as 25% more insulation than standard storm windows. No screens to store either.



Row of Andersen Pressure Seals in a bedroom... instant sash removability plus weathertightness.

Sash removability makes Pressure-Seal easy to install... easy to operate...



LIFT SASH RIGHT OUT

Strongman tactics are out when you remove Pressure Seal sash. Sash slip out instantly, smoothly with no tools, no struggling. Simply open sash fully. Keep thumb levers depressed. Move sash to left and lift out. Anyone can do it in seconds!

Because sash of Andersen Pressure Seal Windows lift out instantly and easily, they are favorites with builders and homeowners. The removable sash make it a breeze to clean windows and to change the lightweight storm panels on the Storm-Screen combination from *inside* the house. Only Andersen has the wedge-like device that gives instant and *effortless* removability to Pressure Seal sash and at the same time assures a highly weather-tight double hung window.

There's a saving in installation time and costs, too. You can paint the sash out of the opening... wait to put it in till paint is dry. Eliminate paint bind for a quicker installation job with less clean-up.

ANDERSEN
Windowalls
TRADEMARK OF ANDERSEN CORPORATION

For specification data see your millwork dealer, Sweet's Light Construction File or write Andersen Corporation.

Andersen Corporation

BAYPORT • MINNESOTA

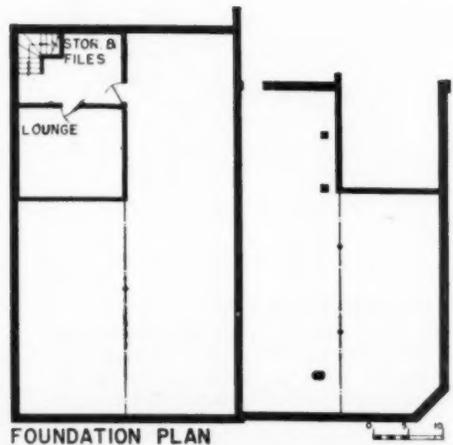
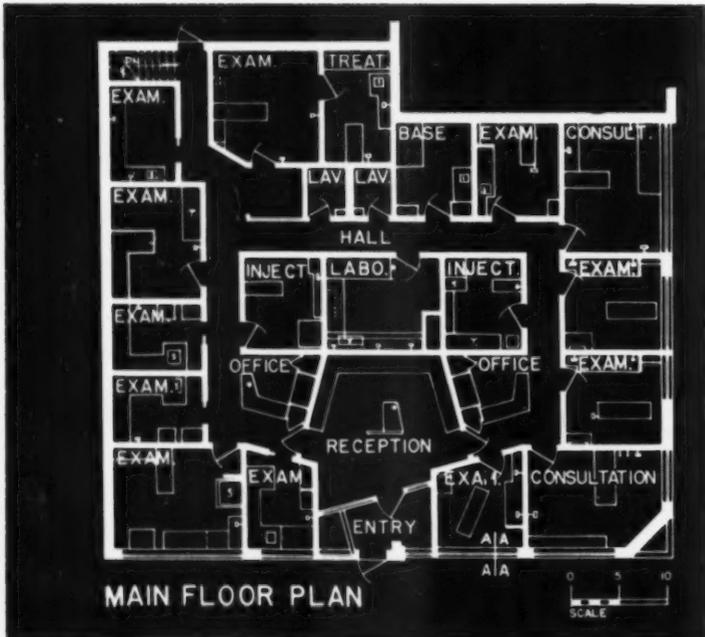
WINDOW SPECIALISTS FOR 50 YEARS

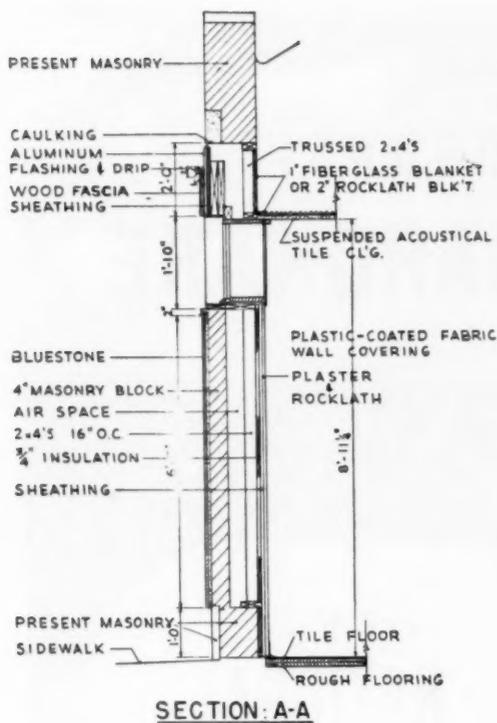
COMMERCIAL BUILDING



The existing half timber work and brick above the store front were left undisturbed except for painting in the remodeling of corner store

the new was successfully blended





Detail view showing the application of the two-inch Bluestone and cement grout applied to the face of the masonry wall

with the old in this remodeling job

BUILDER:

Eugene Goodman, Highland Park, Illinois

ARCHITECT:

Milton Schwartz, Chicago, Illinois

COST, including fixtures and air conditioning:\$50,000

A NUMBER of important factors had to be considered in remodeling one half of this large store building in Glencoe, Illinois, to provide adequate medical facilities for a clinic consisting of five doctors.

First, the design of the original building was suburban in character, in sound condition, and an asset to the community. Therefore, it was decided to retain its general outline.

Second, the intent of the clinic was to limit the remodeling to the store front in order to reduce costs.

Third, the application of a new surface material to the remodeled front would mean an encroachment over the property line.

The photographs show solution to each problem.

The area of wall and roof above the store front in the remodeled section is painted a soft gray, neutralizing the effect of the painted brick and half timber work. The

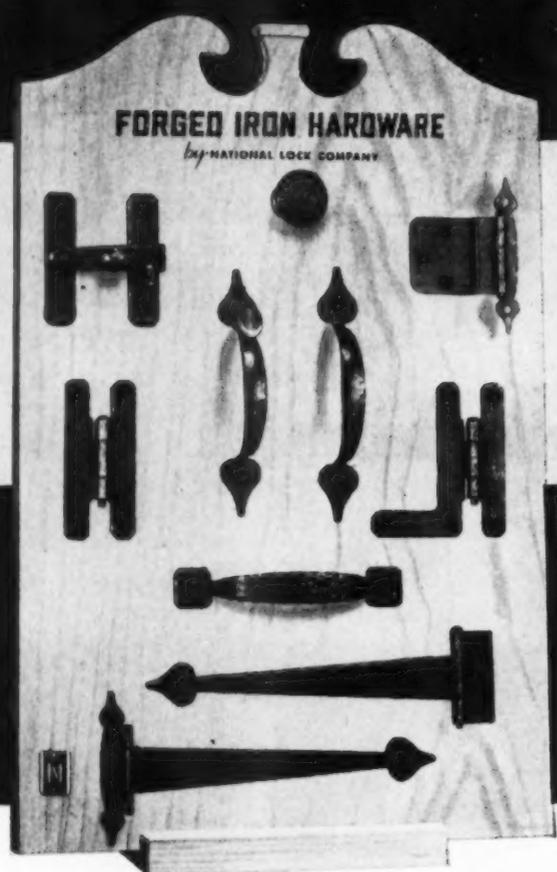
white painted wood surface, together with the strip windows, is a portion of the new work which starts at the top of the old store front but is kept flat with the wall to blend easily with the surface above. The one-inch Bluestone facing below windows is applied to one inch of cement grout. Village authorities granted permission to extend the facing not more than two inches beyond the property line.

Space now devoted to this clinic was formerly occupied by a large chain grocery store. The first floor is divided into a series of offices, examination, injection and treatment rooms and a laboratory. All of these areas are positioned around a centrally located reception room. The basement contains all mechanical equipment including a complete air conditioning plant. Space is also provided for a lounge and large storage area.

Commercial Building continues on page 62



Announcing **FORGED IRON HARDWARE**



...by
**NATIONAL
LOCK**

Display
No. 70

Buy it from your wholesaler

This new 18-piece line of fast-selling forged iron cabinet hardware for use on both natural wood and painted surfaces. Offered in Dead Black, Old Copper and Swedish Iron finishes. Natural 11 x 16" display board is FREE. Order No. 70 display and hardware stock from your wholesaler.

DISTINCTIVE HARDWARE . . . ALL FROM 1 SOURCE
NATIONAL LOCK COMPANY
ROCKFORD, ILLINOIS • MERCHANT SALES DIVISION





LOOK for the BRIGHT ORANGE COLOR and the TRADEMARK CLIPPER

MODEL HD

15 MODELS PRICED FROM \$265

LOOK JOE!... FREE TRIAL
GUARANTEES Your... Clipper
WILL PAY FOR ITSELF! MASONRY SAW

CUT Any MASONRY MATERIAL
Easier - Faster
WITH A NEW CLIPPER MASONRY SAW

HERE'S WHY! . . . The DUSTLESS Clipper operates right beside your bricklayers because the Clipper is PORTABLE . . . easily moved from basement to roof. One Clipper Model HD with a Clipper Diamond Blade will do the cutting of 3 ordinary abrasive saws! This is possible ONLY with such Patented Clipper features as . . . the Pressure Equalizer Spring, the Famous Select-A-Notch, Water Application System, and Adjust-A-Cut which makes possible One-Spot Operation.

INCREASE YOUR PROFITS . . .
Saw Concrete Before Breaking for Patches and Trenches



CLIPPER "CONSAWS"

Save up to 50% in labor and material. Saw repair patches—gas, water, sewer and air line trenches in floors, streets, walks, runways and highways. Save, too, by sawing contraction joints—eliminate costly hand forming and spalling.

5 MODELS, GAS OR ELECTRIC POWERED

MODEL C-130

SAME DAY SERVICE FROM YOUR NEAREST FACTORY BRANCH—



- PHILADELPHIA
- ST. LOUIS
- CLEVELAND
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Cut in
22 SECONDS

VITREOUS BRICK TILE
Cut in
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Cut in
18 SECONDS

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Cut in
21 SECONDS

GLASS BLOCK
Cut in
8 SECONDS

CONCRETE BLOCK
Cut in
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FIRE BRICK
Cut in
4 SECONDS

ROOFING TILE
Cut in
14 SECONDS

NATURAL STONE
Cut in
12 SECONDS

CHROME-MAGNESITE
Cut in
15 SECONDS



OUR ONLY BUSINESS FOR NEARLY 20 YEARS . . . MASONRY AND CONCRETE SAWING!

The unqualified Clipper guarantee of satisfaction is backed by world-wide experience, the ability to select the finest materials, and the "know-how" to put them together.

. . . and Still Delivered to You on FREE TRIAL

ORDER TODAY . . . on FREE TRIAL. Discover for yourself how CLIPPER . . . will increase your profits by increasing your production at reduced costs. CLIPPER'S "On the Job" FREE TRIAL guarantees you satisfaction at no obligation!



DON'T GAMBLE Depend on Genuine CLIPPER SUPERIOR BLADES

. . . guaranteed to "Consistently Provide the fastest cut . . . at the lowest cost . . . with the greatest ease!" Clipper alone can supply all specifications of Abrasive, Diamond and "CBR" Break Resistant Blades to accurately meet your requirements. INVEST IN CLIPPER and YOU'LL GET RESULTS!



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| <input type="checkbox"/> DUSTLESS MODELS | <input type="checkbox"/> WET |
| <input type="checkbox"/> DRY ONLY MODELS | <input type="checkbox"/> DRY |
| <input type="checkbox"/> CLIPPER CONSAWS | <input type="checkbox"/> CLIPPER DIAMOND BLADES |

COMPANY _____
 ADDRESS _____
 CITY _____ STATE _____

COMMERCIAL BUILDING

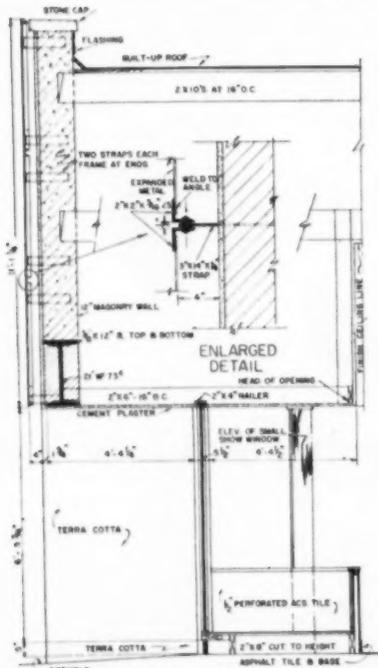


The front of the two old buildings in process of demolition

this is a new idea



This new front reveals an application of standard materials used in a new way to produce a new and fresh design



SECTION THRU STORE FRONT

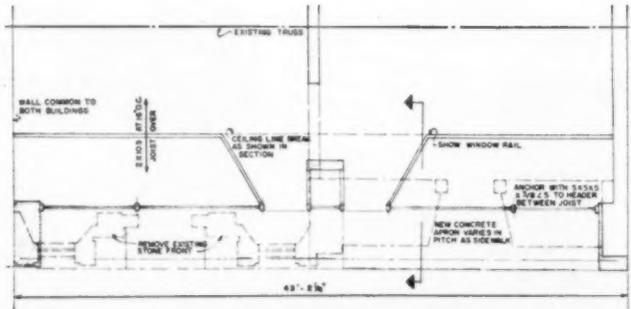
BUILDER:

Henry De Koning Construction Co., Ann Arbor, Michigan

ARCHITECT:

Douglas D. Loree, Ann Arbor, Michigan

COST, including removal of old store fronts:\$8,500



PLAN

in store front design

THIS new store front is the result of combining two outmoded buildings in the business section of Ann Arbor, Michigan, into one store with a unified design.

The old fronts were demolished for a short distance back from sidewalk line, leaving rear of the building intact. Framing for the front, including end piers, bulkheads and masonry wall above, is new.

On the face of the masonry wall above the show windows are secured 15 metal panels which are built of two-inch angle frames bolted to metal straps. These straps are embedded in brick inserts in the concrete masonry wall. The bolted frames are removable for repair, cleaning and repainting.

The panels are formed of 16-gauge expanded metal wire stretched tightly and welded to the angle frames. Metal display signs or individual letters can be quickly and easily secured to the wire.

In the new design, all intermediate supports on the street front were removed and a new steel lintel was installed for support of the masonry wall above. This lintel rests on end piers leaving the entire show window area clear of columns. The masonry wall above is surfaced with a half inch of cement plaster.

A 4-foot, 4½-inch setback of the bulkhead and store windows provides ample space for window shopping. Soffit of overhang is surfaced with cement plaster.

Wood, brick and concrete add up to a neat and compact exterior

BUILDER AND ARCHITECT:

Jones and Duncan, Highland Park, Ill.

CUBIC CONTENTS9,636

COST:\$10,000

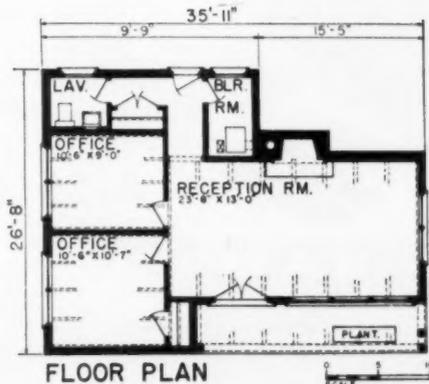


this office has a residential look

LOCATED on the outskirts of the business area of Northbrook, Illinois, and adjacent to a main highway, this small real estate office simulates the appearance of a private home.

The large reception room entered from a covered porch, has a residential appearance. A wood-burning fireplace is located in the center of one side wall. This wall is finished in random pine boards laid vertically. On the other two exterior walls the common brick is left exposed. The ceiling is exposed 4x10 framing members and 1x6 V-jointed t&g boards.

The building is of masonry construction with wood framing for floor, ceiling and interior walls. Crawl space is provided under floor joists for the distribution of warm-air heating pipes.



KNOTTY

Sea Swirl

*Now available
at Associated
Warehouses*

Now there are *two* kinds of Sea Swirl—select and knotty. The demand for this decorative fir plywood grows and grows. With the addition of Knotty Sea Swirl, we hope to increase production to the point where everyone will be happy.

Knotty Sea Swirl comes in interior and exterior types, in 4'x8' panels, 5/16" thickness. Other sizes on special order.

Contact the closest Associated warehouse for Sea Swirl and for all of your plywood needs. We welcome your inquiries.



GENERAL OFFICE: EUGENE, OREGON

*Plywood plants at Eugene and
Willamina, Oregon.*

Lumber mill at Roseburg, Oregon.

ASSOCIATED PLYWOOD MILLS, Inc.

BRANCH SALES WAREHOUSES:

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1026 Jay St., Charlotte, N. C.

Warley Road, Greenville, S. C.
925 Toland St., San Francisco, Cal.
Eugene, Oregon
Willamina, Oregon

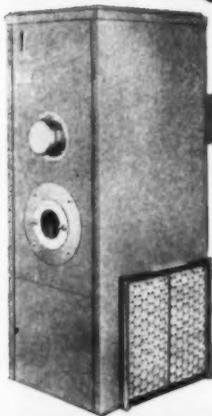
SALES OFFICES:

31 State Street, Boston, Mass.

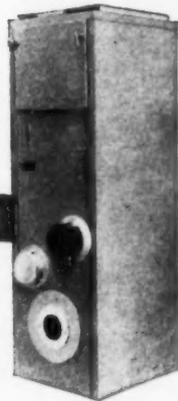
595 E. Colorado St., Pasadena, Cal.



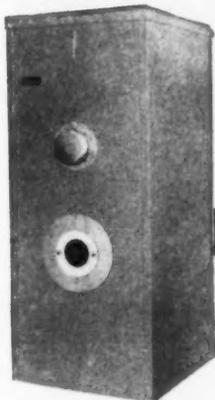
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● The Kaustine line offers forced air heating units delivering from 65,000 to 250,000 B.T.U.'s in models for every type of installation in any style or size of home.

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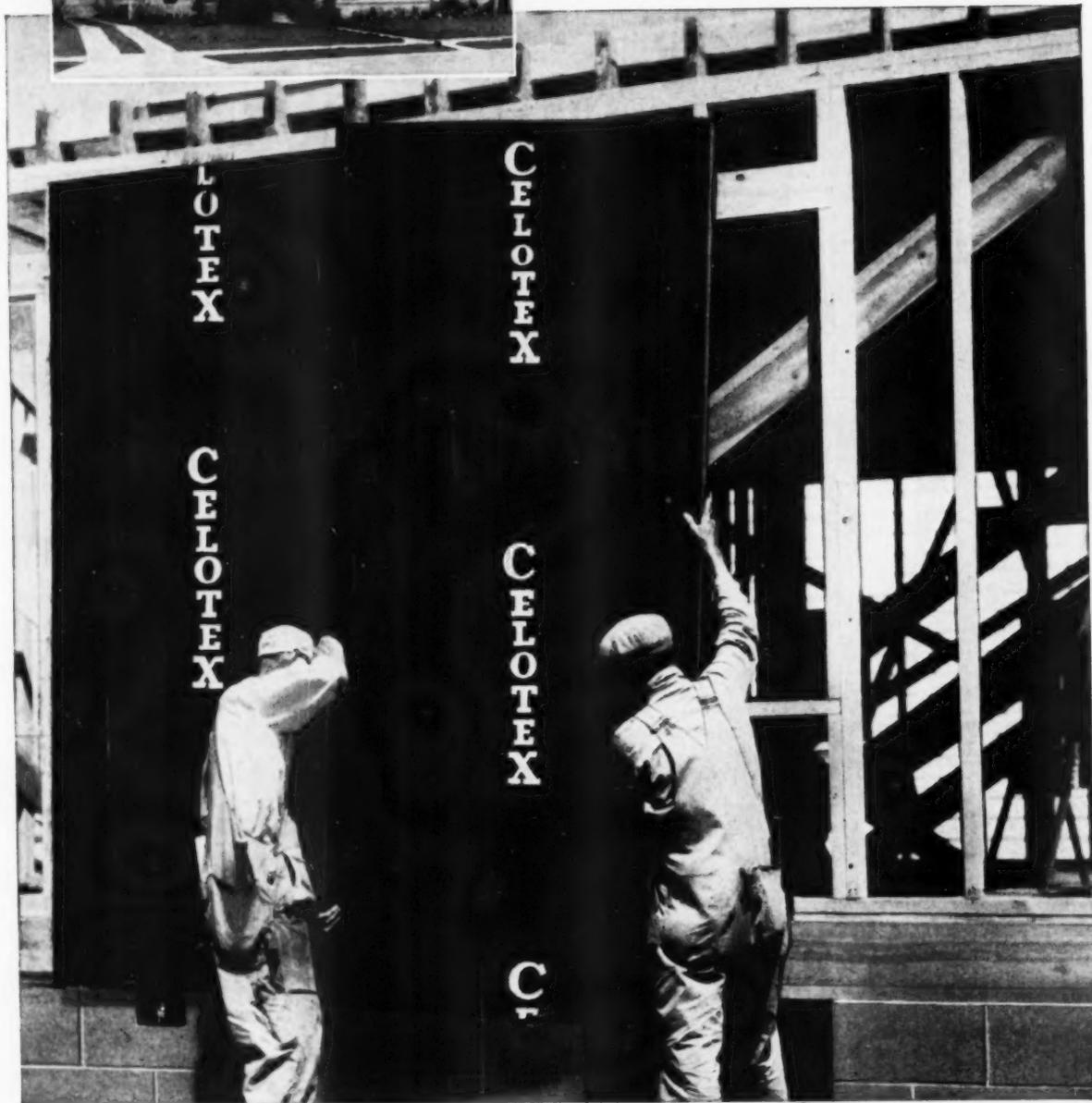
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*There is a Kaustine Furnace or
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Builder cuts



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"We have been using Celotex Double-Waterproofed Insulating Sheathing for 12 years. We have found it sheds water like a duck. Its asphalt coating and integral treatment provide such complete protection that we can resume work many hours sooner after rain. In addition, we have been storing it outdoors, exposed to the elements, with no ill effects."

James J. Culotta, General Contractor
New Orleans, Louisiana



Mr. Culotta's letter is typical of reports from builders in every section of the nation. Celotex Double-Waterproofed Insulating Sheathing provides many practical job advantages that save time, labor, materials... helps you build stronger, more comfortable, more salable homes at lower cost! Applied, Celotex Insulating Sheathing costs no more—usually LESS—than ordinary sheathing. Yet it gives you all these big *extra* benefits...

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- 2. Laminated for Extra Strength** and rigidity. All Celotex $\frac{25}{32}$ " Insulating Sheathing is made of 2 plies, permanently bonded.
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- 7. It is the Only Sheathing** made of tough, strong, long Louisiana cane fibres—and protected by the patented Ferox® process from dry rot and termites.

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SPLIT

LEVELS

ON PARADE



Split-level construction scene typical of today's market in the New York City suburbs. It is in Glen Crest Manor, Glen Rock, N. J.

stagger-plan houses capture the buyers' fancy throughout the New York metropolitan area

SPLIT-LEVEL design is definitely on the march.

In many areas along the east coast and in suburban sections of some of the larger midwestern cities, it has been appearing steadily in increasing numbers. In the New York City area, however, its rise in popularity has been so spectacular that since spring, few builders have dared to open a new development of any size without having a split-level model ready for public inspection. Even small plots scattered throughout heavily built-up sections in the close-in suburbs are being sold at high prices for improvement with attractive multi-level, four-level,

tri-level or duo-level dwelling units.

In one of its biggest real estate sections of the year, the New York Times recently published 48 display advertisements of new developments in Long Island and Westchester County, New York, and in New Jersey. Thirty-three, or 70 per cent, featured the split-level home. Six others indicated such units were available.

Klein and Teicholz, one of the largest operators on Long Island, disclosed recently that of the first 196 signed contracts in their current Lakeville Estates operation at East Meadow, New York, 89 families, or 45 per cent, bought split-

levels despite the fact that three ranch-type models and a two-story unit were also offered at lower prices. Even more significant, nearly all the buyers wanted to pay \$575 more for a finished recreation room, which brought the total unit price up to \$18,065.

Perhaps the most startling disclosure of split-level popularity came the last Sunday in July. Morris Sosnow and Leonard Schwartz, builders of the several Birchwood communities in Long Island, announced the opening of their 150-dwelling development in New Hyde Park, New York, a suburb just outside the city limits, where land remaining for

residential expansion is very scarce.

Four models were offered: a five-room Cape Cod with double-dormer expansion attic for \$17,790; a six-room ranch home with three bedrooms and a center hall plan for \$17,990; and two seven-room 2½-bath split-levels, each having a basic price of \$21,500. The latter included two-car garages and up to 1,692 square feet of living area.

One week later, Sosnow and Schwartz reported they had sold 73 homes on opening, representing a value of \$1,500,000. All but one buyer wanted one of the two split-levels displayed. Practically all the remaining homes were reported sold the next week end. Farther out on Long Island, these builders last May had opened a larger Birchwood Park project at Syosset. Models of the same type as at New Hyde Park were displayed, but they were scaled down slightly in size and in price. A breakdown of the first 200 sales contracts indicated a three-to-one preference for split-levels.

Developers featuring the split-level often refer to it as a stagger plan combining two-story privacy with the convenience of a ranch house. They point out that it has the same over-all dimensions as a three-bedroom ranch house but, in raising a portion of the dwelling one-half story, considerable extra space is gained from former basement area at less than a proportionate increase in cost.

Many builders do not like the split-level, but are building it anyway, because of popular demand. They say it affords twice as much opportunity to fall down and break a leg, yet admit that shorter stair lengths minimize the chances of serious injury. They argue that it presents an awkward appearance, particularly when built in a row of similar homes on level ground. Such ground has to be reformed in two levels for the front of each plot: one to meet the front steps, the other to align with the garage floor.

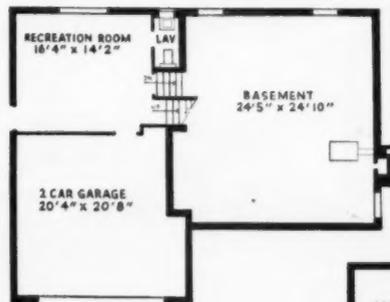
Like split-level design or not, the fact remains that today it is king in the New York area. Its potential reception in other markets should provoke some interesting studies.

Some conventional split-level designs, as well as some variations, are presented here.



finished playroom behind double garage

A LARGE finished recreation room behind a double garage is offered with this seven-room model at Birchwood, a 150-unit development just over the New York City line in New Hyde Park, Long Island. Selling at a price of \$21,500 and encompassing 1,692 square feet of living area, this plaster wall design and another similar four-level type virtually sold out the entire project in two weeks.



BUILDERS:

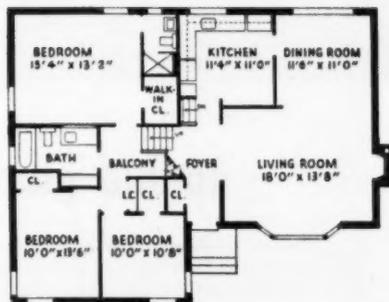
*Morris Sosnow and
Leonard Schwartz*

ARCHITECT:

Stanley H. Klein

LOCATION:

New Hyde Park, N.Y.



**SPLIT
LEVELS**

larger rooms spur sales



double garage, large sundeck in luxury model

BUILDER:

Fred Brunetti

ARCHITECT:

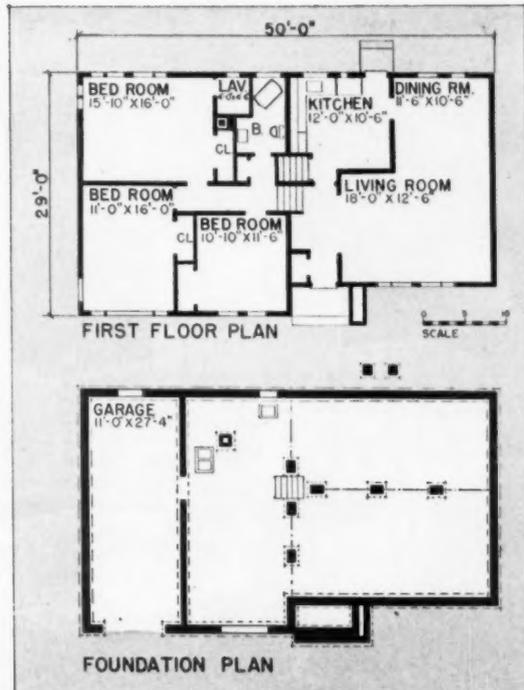
Lenord G. Feinen

OPENING week end brought out 2,000 persons to see this hipped-roof, seven-room model in Glen Crest Manor, Glen Rock, New Jersey, and 16 decided to buy.

Builder Fred Brunetti attributes the interest in his latest 60-home development to larger room sizes, particularly those of bedrooms, at a basic \$17,990 price in the busy Bergen County area of northern New Jersey. For \$600 additional, he will finish the large space adjoining the garage as a recreation room with knotty pine walls and asphalt tile floor.

Each bedroom has a wardrobe closet approximately six feet wide and the master bedroom has a separate lavatory. The oversize bathroom has a square neo-angle tub, 5-foot vanity, 4x4 mirror, built-in hamper and utility cabinets.

A large brick flower box provides a decorative touch at the side of the entrance porch. Heat is gas-fired forced warm air.



BUILDER:

Benjamin M. Robinson, President
Newfield Homes Associates,

ARCHITECTS:

Harding, Driscoll and Bright

LOCATION:

Stamford, Connecticut

THE PEPPERIDGE, whose builders prefer to call it a "multi-level" house, is the luxury model of the 130-unit Newfield Corners project in northern Stamford, Connecticut, selling for \$23,990.

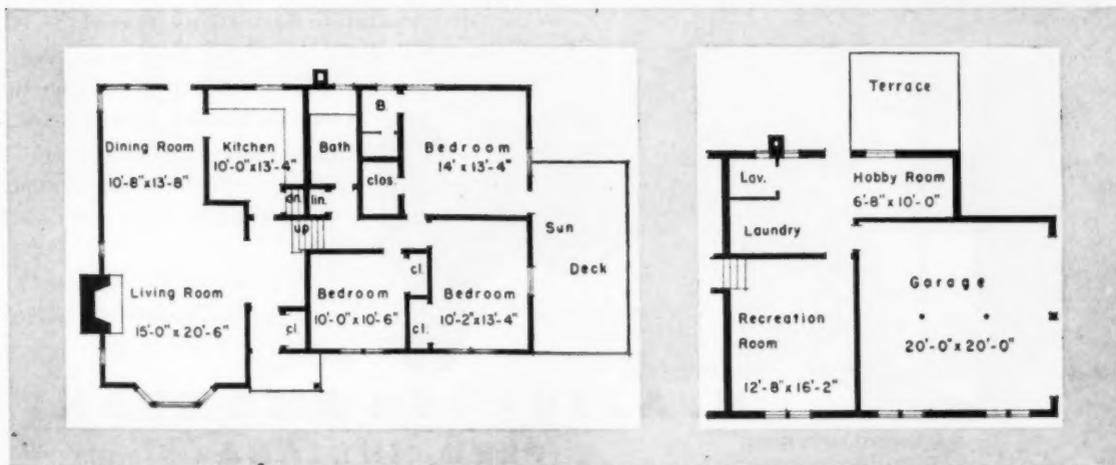
Offered with a minimum half-acre plot, this house has a two-car garage cut only part way into a side elevation, thus providing a large sundeck overhead with direct access from the master bedroom. Wider than average, the living room fea-

tures a fireplace and a bay window.

The grade level contains a recreation room 12 feet 3 inches by 16 feet 2 inches, a hobby room or workshop 6 feet 8 inches by 10 feet, a laundry area and a lavatory. The forced warm-air heating plant is designed for future addition of air conditioning.

For \$22,750 a one-car garage type, named the Peppermill, provides the same size land, the same room arrangement but eliminates sundeck.

Split levels continue on page 74





*More
livable space
with...*

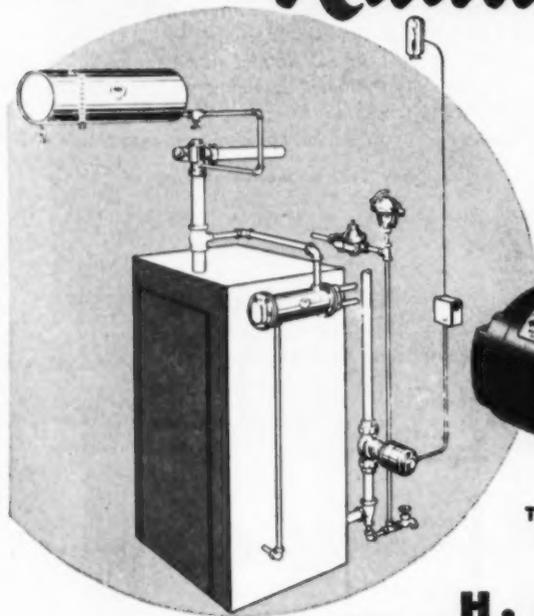


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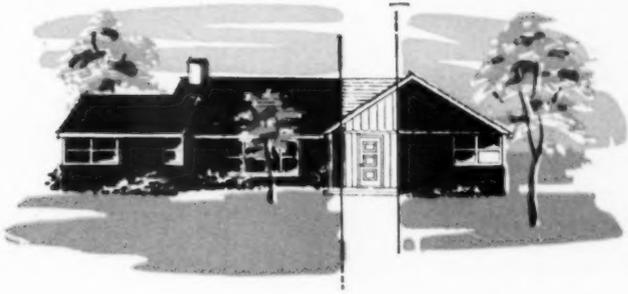
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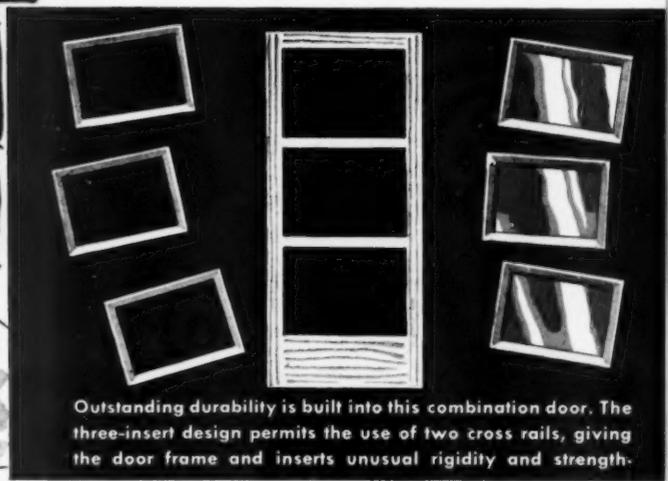
The CONTINENTAL STYLIST

*the Original All-Weather
Decorator Door*



Wabash introduces an exciting new combination weather door—The Continental Stylist—a true decorator door of three equal panel design. Styled to blend with any type of architecture—traditional, contemporary or modern—it is a combination door that gives both new utility and new personality to the home.

To add to the beauty already present in its well-balanced proportions and soft shadow lines, the Stylist lends itself to a wide variety of challenging color combinations. Here is an all-weather door that all home-owners will welcome—a door that will give that “New Look” to any home, old or new.



Outstanding durability is built into this combination door. The three-insert design permits the use of two cross rails, giving the door frame and inserts unusual rigidity and strength.

(Patent Pending)

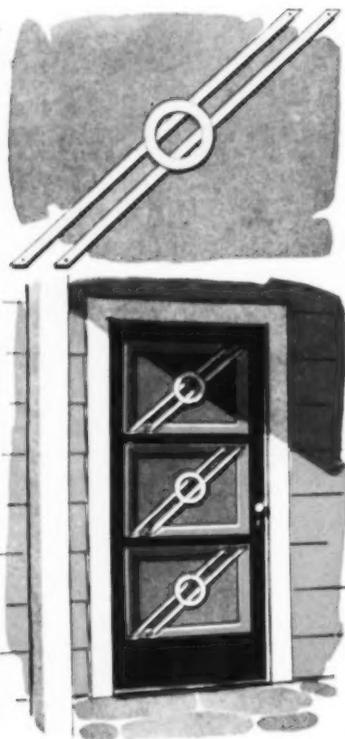
manufactured by

THE WABASH SCREEN DOOR COMPANY
Minneapolis.....CHICAGO.....Memphis

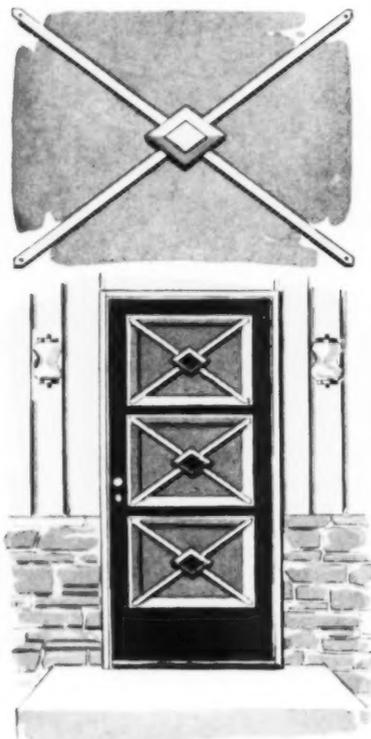
...added possibilities with the **STYLIST**

Further decorative possibilities with the Stylist are achieved by applying attractive wood grids to the screen and sash inserts. Grids are durably built and drilled for easy installation.

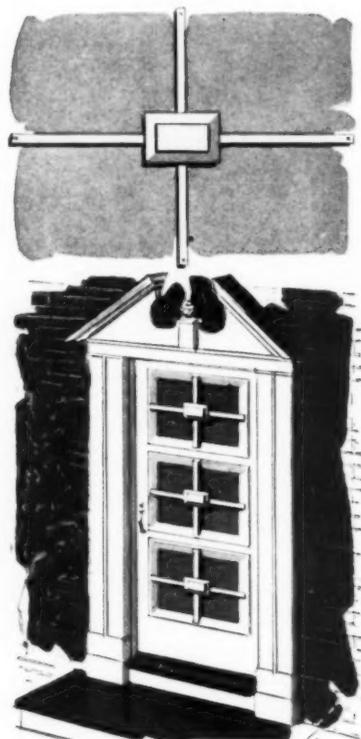
*the STYLIST
with circle grids*



*the STYLIST
with diamond grids*



*the STYLIST
with square grids*



Storm and screen panels are easily interchanged. For partial ventilation in mild winter weather a screen panel can be combined with two glass panels. Out-of-season panels require small storage space.

Wabash Quality as Always...

Made of Ponderosa Pine—The wood of warmth, beauty and durability.

Quality Workmanship—Mortise and tenon construction — Cross rails add strength and rigidity to door frame. Door frame 1 1/8" in thickness, screen and storm panels 1 3/4".

All Wood Parts treated with Woodlife—toxic water repellent preservative. Resists weather, decay and dimensional changes.

Glass in Sash Panels bedded in putty and held in place with wood molding.

Screen panels wired with non-corroding, non-rusting aluminum cloth.

Available Now!

The Continental Stylist is available in the following stock sizes:

2 - 8 x 6 - 9
3 - 0 x 6 - 9
3 - 0 x 7 - 1

Grids are available as an extra. They come cartoned, a set of three to the carton. Be sure to specify both type and size when ordering.

Stylist all-weather combination doors are distributed through retail lumber dealers.

Address Inquiries to: 310 S. Michigan Avenue • Chicago 4, Illinois

a Continental
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Minneapolis.....CHICAGO.....Memphis

OWNERS



ARE HAVING SECOND THOUGHTS

ABOUT

INSULATION'S

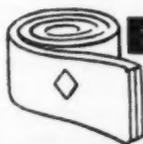


Maybe they don't always mention it—but many prospective home owners mentally ask the question "If I should ever want to sell this house, could I get my money out of it?"

You can go a long way toward establishing that second—or resale value—when the house has Balsam-Wool sealed insulation. Balsam-Wool has the *primary* value of keeping a house comfortable and reducing fuel bills throughout the owner's occupancy.

But its *second* value is that it lasts a lifetime—keeps its efficiency as long as the house stands. It doesn't deteriorate. Doesn't settle or pack down. Its efficient vapor barrier prevents damage resulting from moisture condensing within walls.

A Balsam-Wool insulated house is a better buy today—and *tomorrow*. WOOD CONVERSION COMPANY, 119-103 First National Bank Bldg., St. Paul 1, Minnesota.



Balsam-Wool*

*REG. U. S. PAT. OFF.

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bath and half-bath are joined

THIS FOUR-LEVEL design will comprise about half of the 400 units at Lakeville Estates in East Meadow, Long Island. The one and one-half baths are together on the bedroom level and have a connecting door. Lower level includes separate workroom, playroom and laundry

areas. The price of \$17,490 includes an automatic washer, refrigerator, electric range and venetian blinds. Nearly all buyers are ordering a finished playroom for \$575 more. Sliding window units over large fixed glass panels are a living room feature.

BUILDERS:

*Kalman Klein
and David Teicholz*

DESIGNER:

Kalman Klein

LOCATION:

East Meadow, New York



playroom converts to bedroom

BUILDERS:

*Joseph Carillo, Joseph Wanes
and Samuel Levin*

ARCHITECT:

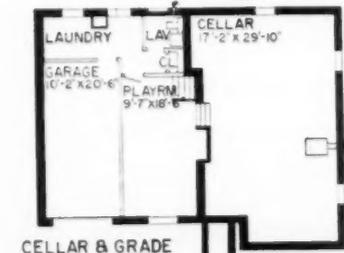
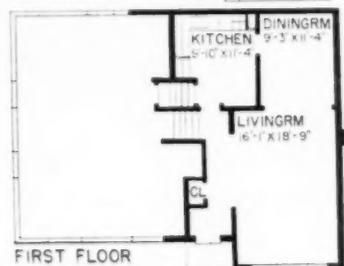
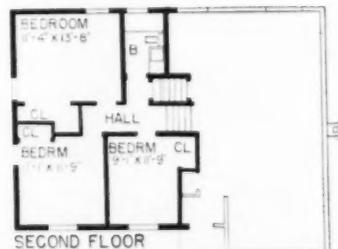
William Paul La Vallee

LOCATION:

Hicksville, New York

THE JEFFERSON, in the 567-home Hillside Terrace at Hicksville, Long Island, is a four-level dwelling priced at \$14,990. A large, finished

playroom on the grade level is so designed that it can be converted quickly to a fourth bedroom. It has a jog in the wall beside the "down" steps to provide space for a small bar. The lavatory is placed downstairs next to the rear service entrance, a feature intended to appeal to families with young children who frequently run in from play and track dirt through the house. A covered porch shelters front entry.



expandible on a fifth level

BUILDERS:

Sokolov Brothers and Sons

ARCHITECTS:

Matern and York

LOCATION:

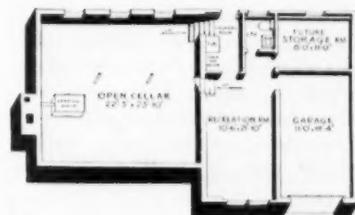
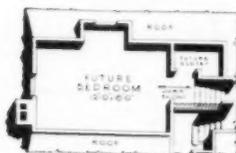
Cold Spring Hills, New York

SIXTY-THREE houses with eight rooms, two and one-half baths and an expansion attic for a future ninth room are being built from this plan in the Holiday Hill development at Cold Spring Hills, Suffolk County, Long Island. These homes have about 1,300 square feet of

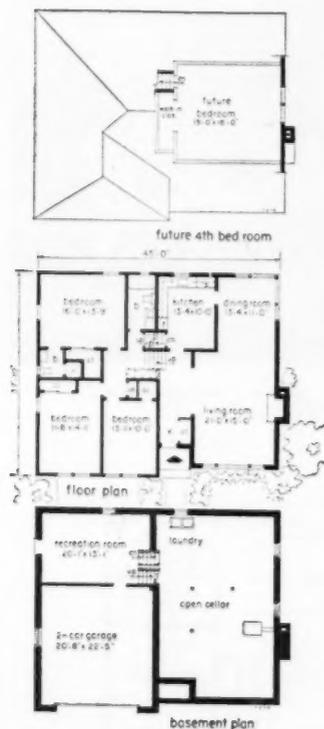


living space and measure 60 feet across including a 12 by 15 screened, covered porch. They are sold with

a minimum third-acre plot at a base price of \$21,500. The storage room can be used as a maid's room.



another five-level expandible plan



BUILDERS:
*Paul Axelrod
and Jack Lazar*

ARCHITECTS:
Matern and York

LOCATION:
Westbury, New York

SPACIOUS living quarters, as much as 2,240 square feet with installation of an 18 by 19 future bedroom in the expansion attic, feature this five-level plan at Sherwood Gardens, Westbury, Long Island. Extra depth in the two-car garage is provided, as well as a 20-foot finished recreation room. Wide corner windows flood dining area with light.



full basement adds to living area

THE HOLIDAY, a two-car garage model in the 101-family Broadlawn Estates community at East Meadow, Long Island, could technically be called a five-level plan, since its large living room is depressed two steps below the entry, dining room and kitchen.

All rooms on the bedroom level are aligned in a row in place of the usual "L" shape. The master bedroom has a private bath and a 5½-foot-square, cedar-lined, walk-in closet with a built-in chest of drawers.

Open plan of the house is accented by using a wrought-iron railing in-

stead of a solid partition between the upper hall and living room. This creates a mezzanine overlooking the lower hall, living and dining areas.

A full-width dining bay extending past the rear elevation line helps to create an unusually large kitchen, measuring 12 feet by 17 feet 9 inches.

Heated by an oil-fired hot water system, the house is priced at \$19,990. For \$1,000 more a playroom area, virtually the size of the garage, is finished as a recreation room with knotty pine bookshelves and a continuous seat and storage cabinet around three sides.

BUILDERS AND DESIGNERS:
Sy H. Corak and Michael V. Chaiko

LOCATION:
East Meadow, New York



variation of living room plan

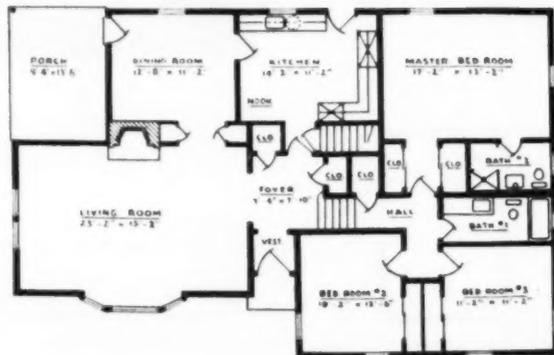
BUILDER:
Ben Okun Associates

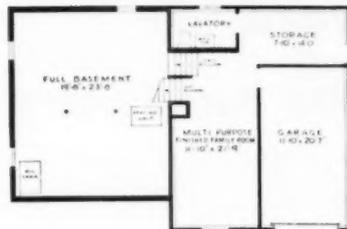
ARCHITECT:
Leo Perry

LOCATION:
New Rochelle, New York



LIVING room placement across plan, instead of the more familiar front-to-back arrangement, provides space for a covered rear terrace in this model for a new 40-unit section of Stratton Heights at New Rochelle, Westchester County, New York. These four-level homes, priced at \$28,500, have slate fireplaces and are equipped with three-ton Carrier air conditioners. Closets as well as rooms are oversized.





BUILDERS:

*Walter G. Stackler and
Leonard L. Frank*

ARCHITECT:

Alwin Cassens Jr.

LOCATION:

Hicksville, New York



truss roof adapted to split-level

PIONEERING in split-level use of the truss roof, this house is featured with two other models to make up one of Long Island's largest developments, the 700-unit Mid-Island Park at Hicksville, New York. Construction permits extensive use of storage walls, one of which is a three-section sliding door closet, 10 feet wide, in the master bedroom.

The price of \$15,990 includes a finished multi-purpose or family

room, two complete baths, each with tub and overhead shower, a lower level lavatory and a storage room 7 feet 10 inches by 14 feet with outside door in the rear of the garage. An oil-fired forced warm-air system supplies heat.

Wide, sliding aluminum windows are used. Those in the smaller bedrooms on the front elevation are embellished by decorative shutters and flower boxes.



air conditioned model under \$15,000

WEST HILLS GREENS, a 224-home project at Huntington, Long Island, supplies a variation in four-level planning by locating bedrooms on two levels and offering such a house for \$13,990, or \$14,890 with air conditioning.

Actually a modified Cape Cod style, it includes garage, workshop, hobby, laundry and heating facilities on the grade level; the cus-

tomary main floor of living room, dining room and kitchen; two bedrooms and bath on a third level and a studio bedroom and bath above.

When announced in June, this home and a smaller, ranch-type attracted over 3,000 visitors the first week end. The installation of a two-ton unit of the United States Air Conditioning Corporation for \$900 more was an added incentive.

BUILDERS:

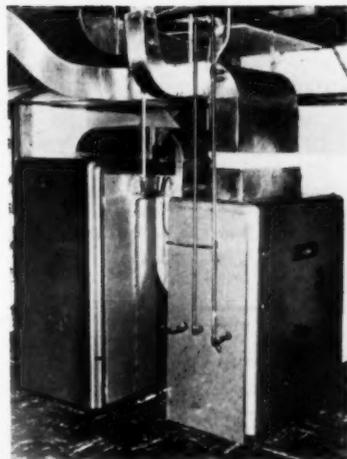
*Louis Funk and
Barnett Shelkowitz*

ARCHITECTS:

Schulman and Soloway

LOCATION:

Huntington, New York



Air conditioner and oil-fired forced warm-air furnace used in Huntington houses

Quiet



**is the word for
R-W Silver Streak vanishing door hardware**



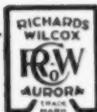
Notice how sliding doors permit full utilization of every inch of space in this limited hall area. There's no conflict between doors.



Quiet it is. Noiseless, smooth and so easy to operate with a minimum of effort. That's R-W Silver Streak Vanishing Door Hangers and Track. It's the sliding door hardware built for extra comfort, extra convenience and space economy demanded by modern living.

Silver Streak is designed for installation in standard 2x4 studded walls for more living space, more efficiency to every home. Its easy, noiseless operation due to precision ball bearings, molded bakelite wheels and extruded aluminum track makes it first choice with builders and home owners everywhere. For complete information on all the exclusive features of **SILVER STREAK** Hangers and Hardware, write for illustrated leaflet complete with architectural sketches of installation methods.

1880



1953

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Richards-Wilcox Mfg. Co.

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220 THIRD STREET, AURORA, ILLINOIS

AMERICAN BUILDER

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Waterproofed Brixment mortar checks the passage of water and keeps it from percolating down through the wall, dissolving salts which may be in the masonry materials, and carrying them to the surface.

In addition to reducing the possibility of efflorescence, Brixment mortar gives you two other practical benefits:

1 HELPS PREVENT LEAKY WALLS

Even under pressure, water cannot readily pass through Brixment mortar. Therefore, if the face brick are back-plastered with Brixment mortar, an effective barrier is set up against the passage of water to the inside of the wall.

2 GREATLY INCREASES DURABILITY

Water cannot readily penetrate Brixment mortar. This prevents the mortar from becoming saturated—therefore helps protect it from destructive action of freezing and thawing to which it is subjected many times each winter.

Both these advantages of waterproofed Brixment mortar are fully described in other recent advertisements. Write for reprints.

Louisville Cement Co., Louisville 2, Ky.

OCTOBER 1951

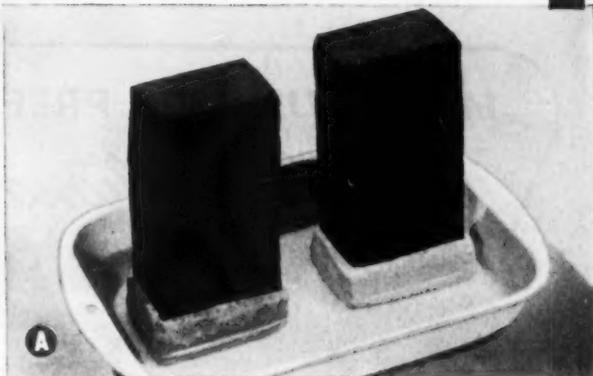


FIGURE 1

A To test Brixment and any other mortar for resistance to efflorescence, "cap" two brick heavily with the mortars, and let harden.

B Keep both brick for a few weeks in a shallow pan of water, as shown. See the difference with waterproofed Brixment mortar!

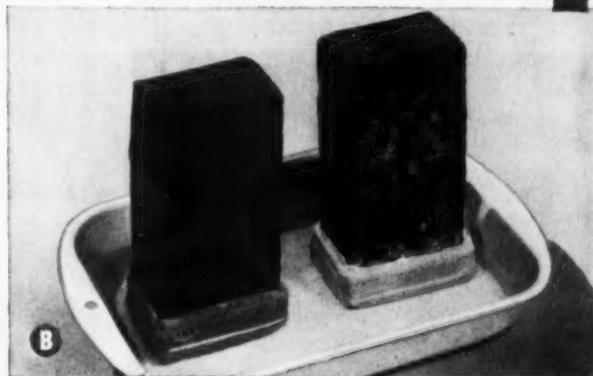
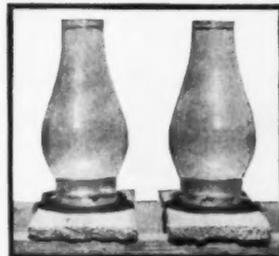
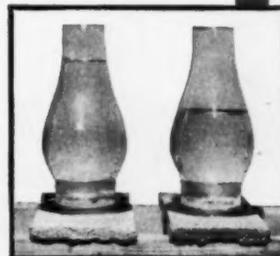


FIGURE 2



Prepare two slabs of mortar, one with Brixment and one with ordinary cement-and-lime mortar. After mortars have hardened, seal a lamp chimney to each of the mortar slabs, using wax or candle grease, and fill with water.



After 24 hours, note how much water has gone into and through the non-waterproofed mortar, and how little water has gone into or through the Brixment mortar.

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4. Partitions, completely assembled.
5. Interior: Doors completely finished and assembled into finished jambs. All trim finished in syntha blonde enamel; Youngstown Kitchens by Mullins; assembled, disappearing stairway; pre-cut utility room closet and shelving.

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Philip Carey Roofing • Owens-Corning Insulation

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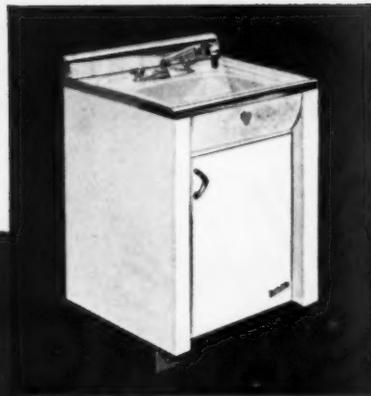
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announces

★
New *Diana*
Ensemble Sinks



NEW Diana ensemble sink, 24-inch model. Allows the addition of more features for any given space. Excellent for every size kitchen, large or small. Graceful lines flow unbroken through adjoining base cabinets in stainless steel back-splash and trim.

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kitchens so beautiful, so practical, so work-saving and timesaving. And never before have so many desirable features been offered—so many, many lovely all-new units been provided for added appeal.

These new *Diana*-style Youngstown Kitchens offer true custom planning at mass-production prices.

Get the entire story. Contact your distributor today. Or write *Builder Sales Department*, Mullins Manufacturing Corporation, Warren, Ohio.

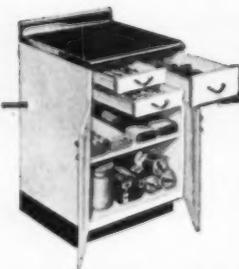


Youngstown Kitchens

MULLINS MANUFACTURING CORPORATION • WARREN, OHIO

Youngstown Kitchens are sold throughout the World

Gorgeous new Diana-style units packed with customer appeal!



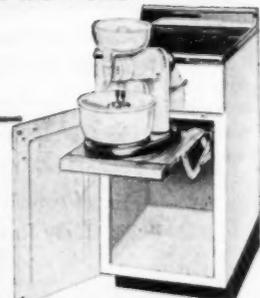
Diana-style cutlery base cabinet offers three drawers (one extra deep) for cutlery and cooking utensils, plus big shelved storage compartment. Width: 24 inches.



Quarter-Round Wall Cabinet combines beauty and utility in a handsomely contoured cabinet that's a real beauty at the end of a row of wall cabinets. Width and depth both 13 inches.



Tray Cabinets in two models; one with two sections, the other divided by a shelf into four sections. Width: 9 inches. Install alongside any base cabinet under top of proper total width.



Mixer-Grinder Cabinet. Tough maple shelf lifts easily and locks in front of cabinet at right height for electric mixer. Food grinder easily attached. Width: 18", door hinges right or left.



NEW Diana ensemble sink, 36-inch twin-bowl model. The first twin-bowl 36" cabinet sink. Double-terraced rims keep water from splashing over. One-piece, acid-resisting porcelain-enameled steel top, as on all Diana ensemble sinks and Diana-style cabinet sinks.



NEW Diana ensemble sink, 42-inch twin-bowl model. Handsome years-ahead styling of Diana ensemble sinks gives new "built-in" beauty to Diana-style Youngstown Kitchens. Large undersink storage space. Stainless steel back-splash matches base cabinet.



NEW Diana ensemble sink, 42-inch single bowl. Combines every desirable feature of a flat-rim sink with the advantages of porcelain-enameled drain-board. Curved, recessed knee space is beautifully trimmed with stainless steel. *Easy-V* handles, chrome-finished.

new concept in kitchen sinks ★

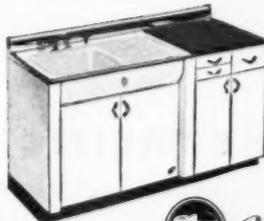
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You no longer CHOOSE a sink . . . you PLAN it!

Your choice in sink features is no longer limited by models—because Youngstown Kitchens Diana ensemble sinks permit you to select from 16 major storage, convenience and beauty features to build into your sink ensemble. Now you plan a sink from a countless variety of possibilities in-

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ment, garage and perimeter gas heat. It's all set for the cold Lake Michigan winds coming over the dunes. It has *Thermopane* insulating glass in every window.



"This sign packs a wallop for builders"

—says HENRY J. BULZA
of GARY, INDIANA

"This is *Thermopane** insulating glass." Those words in the window of a new house—or spoken to a home-buying prospect—are powerful selling. *Thermopane* is known—and wanted.

Henry J. Bulza of the Ambridge Lumber and Supply Company, Inc., Gary, Indiana, can tell you from experience that it works! Builders have bought from him over 1,000 lights of *Thermopane* in two panel window sizes. They're offering *Thermopane* in every window of houses ranging from \$18,000 to \$25,000. They give home buyers insulated windows right at the start, included in the mortgage package. There's no extra selling job for storm sash.



The use of *Thermopane* in panel windows gives builders an economical way to add the extra value and the sales appeal of *Thermopane*. Mr. Bulza says: "The panel window eliminates storm sash and cuts the builder's cost. Also, it gives the home owner more glass for less money. We can give him 82 sq. ft. of glass for about \$200. The same wall area with conventional windows would cost a lot more."

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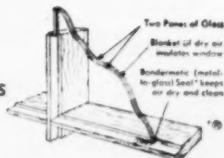


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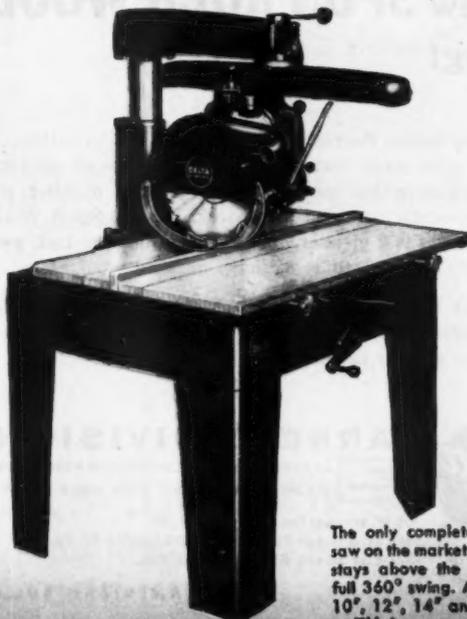
Actually Caruana's radial saw pays for itself over and over again every time two more houses go up.

"Stop in any time we're building and you'll find the saw running," says Caruana. "It never gets a vacation—never needs one. Maintenance—none."

This is the new secret weapon with which alert builders are conquering costs: Delta tool installations *at the job*. Why not find out about it—to your own handsome profit? Ask your Delta dealer, listed in the Classified Phone Book under "Tools" or "Machinery," and send the coupon for the new Delta Catalog.



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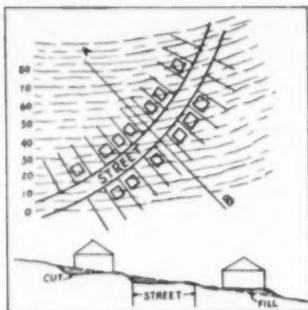
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what every builder should know about

a check list of major points



Where grades are steep, streets should generally be built diagonally across contours, and not parallel or at right angles to contours. This will eliminate excessive grading and costly retaining walls. (Figure from FHA's "Neighborhood Standards")

1 Keep the earth as much as possible as nature made it. This means laying out the streets to follow the natural drainage lines, and taking advantage of every contour for house siting. It also means lower development costs.

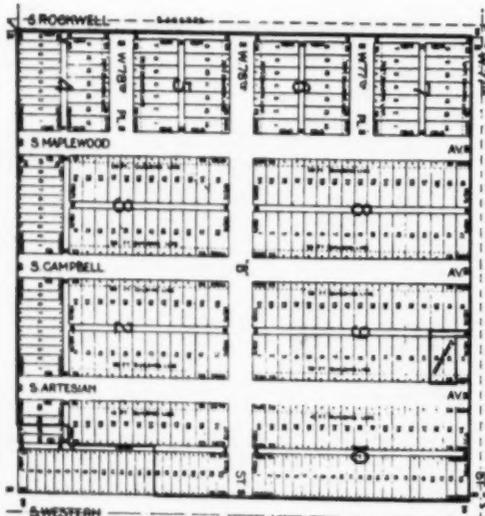
2 Building and lot should always be considered as *one problem*, not as separate problems. Subdividing is the science of cutting up land into *building sites*. Each lot should provide a good house site with a minimum of grading and the retention of as many trees and other natural advantages as possible.

3 The gridiron pattern is outmoded. Its supposed economies are largely illusory and it does not preserve values. The 40-acre tract shown here under "right" and "wrong" site plans was originally subdivided into 264 lots on the gridiron pattern and the plot recorded in 1925 (in Chicago). Only 9 per cent of the lots were over 30 feet in width, and by 1952 the tract was still mostly vacant. Today it is being revived under proper site planning which will preserve values for at least 40 years, to say nothing of making more economical use of the land.

4 Design the house or house-type first, then lay out the lots to get the most economical size of lot to suit the house. This keeps paving costs and length of sewer line connections at a minimum.



The ideal site takes advantage of natural drainage lines to keep sewer line connections at a minimum length



WRONG—Street pattern permits through traffic to use residential streets; residential lots face boundary streets, which are much-traveled thoroughfares; gridiron pattern wastes land in alleys, does not permit integration of the tract or beauty through groupings of buildings on curving streets. Nothing contributes to the preservation of residential values over a long period



RIGHT—More economical use of land; all lots are wide enough (minimum is 50 by 112 feet) to allow driveways so no alleys are needed; lots adjacent to boundary streets are deeper than others to provide buffer between the homes and the thoroughfares; no houses face the thoroughfares or the industrial area on the fourth side; street plan discourages through traffic

LAND PLANNING

5 Place the buildings on the lots (a) for the best possible orientation to sun, prevailing wind, view and privacy; (b) to form interesting street vistas.

6 Where grades are steep, it is generally desirable to cut streets diagonally across the contour lines. This results in avoiding excessive grading and retaining walls, and gives each property a reasonable relationship to the street. (See figure.)

7 Minor streets should enter major streets at right angles. Keep the number of streets converging on a single point at a minimum.

8 Avoid placing streets on tract boundaries. Such planning exposes the lots in the tract to possible dangers from uncontrolled development on opposite side of the street, and increases the length and cost of street improvements in the tract.

9 Traffic should flow toward thoroughfares. When this is not provided for, there will be unnecessary use of local streets in order to reach the main traffic-ways.

10 Discourage heavy through traffic, and protect residential lots against major street traffic by planting strips or service roadways at boundaries of tract.

11 Culs-de-sac have numerous advantages but also some practical disadvantages when it comes to providing such services as fire protection, garbage collection, mail and other daily deliveries. When used, a cul-de-sac should drain toward its entrance to avoid expensive sanitary and storm water mains constructed across adjoining lots or at excessive depths. Culs-de-sac should be kept less than 500 feet in length. The outer curb at the turn should have a minimum radius of 40 or 45 feet. Never bring a cul-de-sac to the property boundary line but place it so that the lots can back on the property line.

12 Short blocks are not economical. The large number of cross streets will increase initial construction costs and also increase traffic hazards. FHA has concluded that plotting suburban residential blocks up to 1,300 feet in length by two lot-depths wide, bounded by streets that are adjusted to topographic and traffic requirements, is most economical.

13 Corner lots should be from 10 to 15 feet wider than interior lots in order to provide an adequate yard space on the side street.

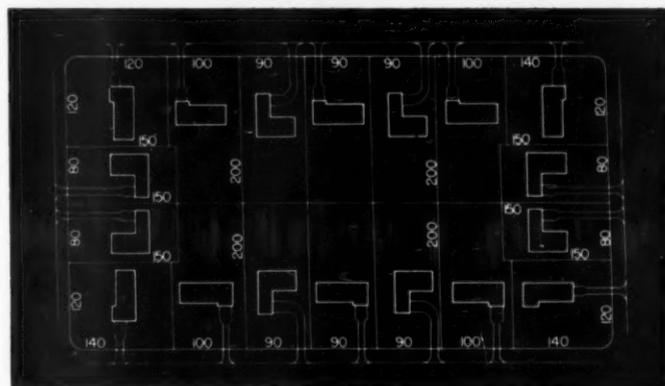
14 In grading, the relationship between street grades and lots is all-important. Aim for a finished house grade which is not less than one foot above the elevation of the curb with a 25-foot building line. In any case, best usage as recommended by the "Home Builders Manual for Land Development," 1953 edition, is to slope your grades away from the building for a distance of at least three feet.



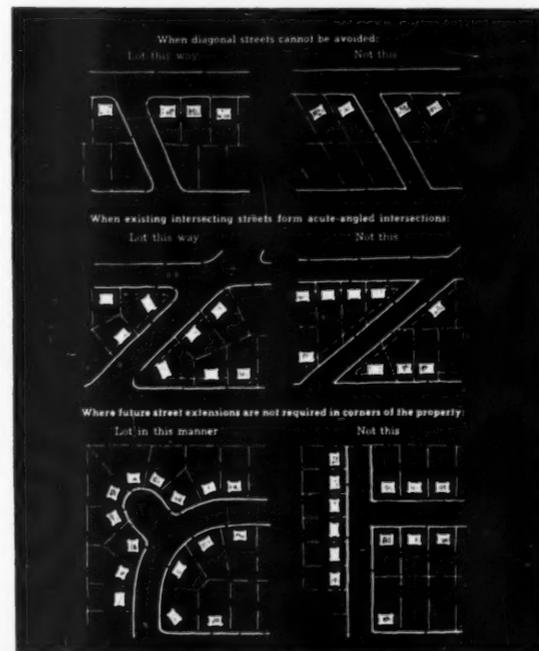
Houses placed below the level of the street will have a better appearance if the difference in elevation is taken up near the street and the grade rises definitely at the house



Site plan using both cul-de-sac and loop street



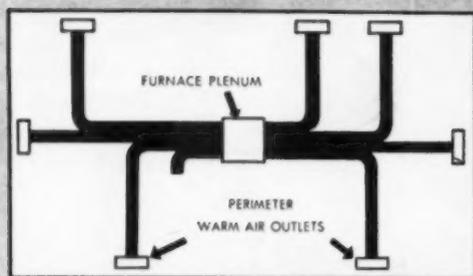
Good siting for a block of ranch-type houses in a high-price subdivision. The houses are well placed to provide variation and harmonious contrast from street view



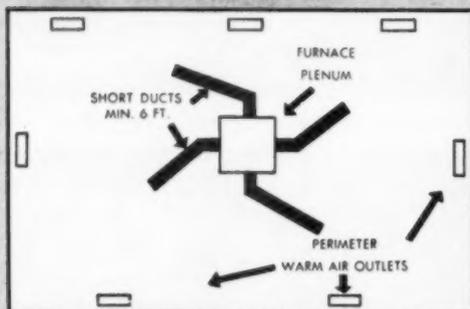
Common mistakes made in lotting (from "Home Builders Manual for Land Development," published by NAHB)

heating the CRAWL SPACE with warm air

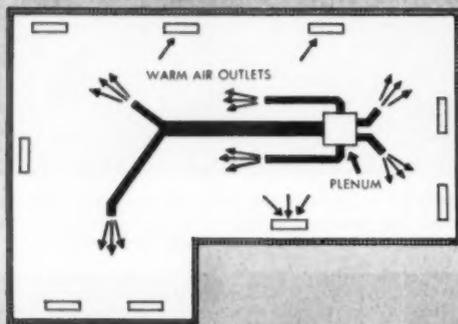
by S. Konzo
Professor of Mechanical Engineering
University of Illinois



PERIMETER CRAWL SPACE DUCT SYSTEM



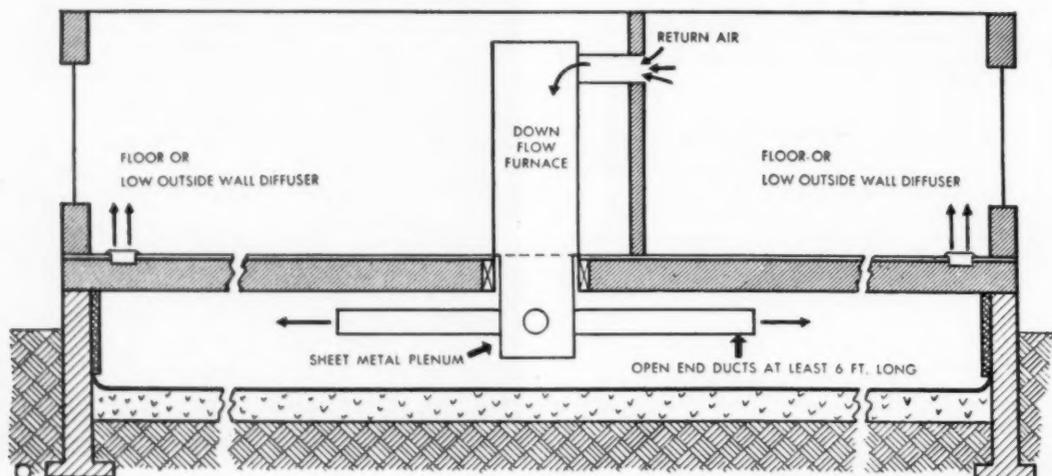
CRAWL SPACE PLENUM SYSTEM



Three methods of crawl space heating: one using ducts to registers, the other two adapting the plenum system with stub ducts pointing to registers

HHEATING a home built over a crawl space has never presented the problem that was encountered with the basementless home built over a concrete floor slab. In the first place, the number of slab floor homes far outnumbered those built over a crawl space. Furthermore, the floor construction in a home built over a crawl space did not result in high-conductivity heat losses to the air and to the ground. Nevertheless, the heating industry has recognized that the home built over a crawl space has not been as easy to handle as one built with a full basement. Some of the problems which have been encountered can be summarized as follows:

1. Floor surfaces over unheated crawl spaces have not been as warm as desirable.
2. Air temperatures in the living zone of rooms built over a crawl space have shown larger temperature differentials between the breathing level and floor level than was considered desirable.
3. Unless adequate ventilation of the crawl space was used and good drainage provided around the house, the moisture conditions in the crawl space were not satisfactory. The writer recalls two installations in which the moisture was so great that parquet flooring in the rooms above had buckled and formed a ridge two inches high.
4. With excessive ventilation of the crawl space in cold weather, freezing of water pipes has occurred.
5. Excessive moisture conditions in the living areas have been reported in some installations.



Sectional view indicating delivery of warm air into crawl space and from there into floor registers

Fortunately all of these complaints do not occur simultaneously in any given house. Again, as in the case of the slab floor home, the problems presented are primarily of cold weather origin and hence occur more frequently in the colder climates of the country. It may be apparent from the discussion that in this article we are dealing with the enclosed type of crawl space construction, and not the well ventilated crawl space which is formed when the house is built upon piers and the wind can whistle below the subflooring. The latter type of construction is found more often in the warmer climates where no unusual heating difficulties occur.

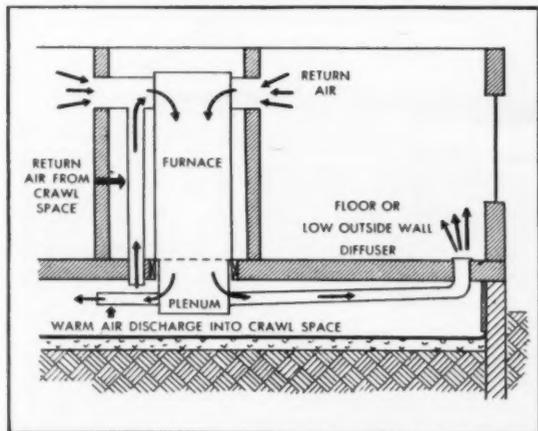
Moisture from Ground

When a house is built over unprepared soil, especially where the water drainage is not rapid, moisture will evaporate from the ground into the air above. This vapor becomes of great concern to the builder since the relative humidity of the crawl space is raised, and the moisture content of the wood used in the subfloor, joists and plates is dependent upon the relative humidity of the air surrounding the wood. When the moisture content of the wood is greater than 20 per cent of oven-dry weight, rot fungi become active and wood deteriorates.

Obviously, the wood deterioration is not as severe in a dry climate or in regions where sandy soil permits good water drainage, as in a damp region or in places where the soil retains the moisture. Four basic approaches have been made towards the prevention of damage resulting from excessive relative humidity in crawl spaces, as follows:

- (a) Airvents in crawl spaces have been specified to permit the moisture-laden air to leak out and be replaced by dryer outdoor air. Unfortunately, the number and size of vents may not be adequate to do a good job of flushing out the humid air. Furthermore, if the air vents are closed for winter, they may be left closed during spring and summer when much of the damage may occur.
- (b) In some cases, chemical treatment of all wood used in the crawl space has been specified. In all too many cases the builder is not impressed with the importance of the dry rot treatment so that any wood treatment is spotty and inadequate.
- (c) For the purpose of minimizing vapor travel into the living spaces, a vapor barrier paper has been attached to the floor joists. This barrier may reduce the moisture travel to the rooms above, but it does

(Continued on page 96)



Section showing a modified crawl space plenum and duct system. Ducts provide warm air direct to registers and a duct provides warm air to plenum space

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Neoprene-Shank Aluminum Nails are the ultimate in nail construction. They are made from the strongest aluminum alloy available and are coated with a special protective finish to prevent rust and staining.

COMPENIENT PACKAGING Nichols Neoprene-Shank Aluminum Nails are conveniently packaged for any application. Each carton is clearly marked with type, size and coverage. Also available in 50-pound cartons.

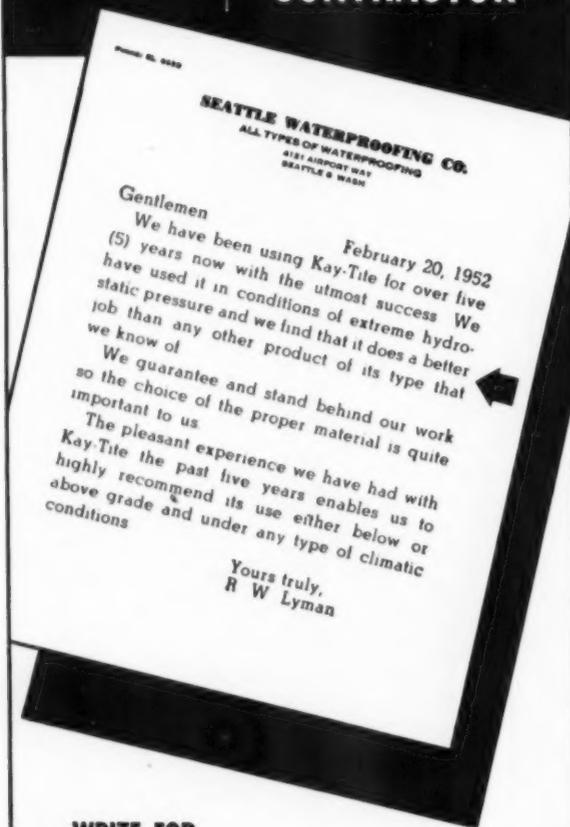
Includes regular Neoprene-Shank Aluminum Nails, Insulated Siding Nails, Gypsum Lath Nails, Standard Shingle Nails, Standard Roofing Nails, Roofing Nail (Plain Shank) With Neoprene Washer Attached, Roofing Nail (Screw Shank) With Neoprene Washer Attached.



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DAVENPORT, IOWA
World's Largest Manufacturer of Aluminum Nails

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KAY-TITE
For MASONRY ONLY

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PROTECTS MASONRY
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BRICK
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CINDER BLOCK
ROUGH MASONRY
UNGLAZED TILE

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ELEVEN FAR WESTERN STATES CONTACT KAY-TITE COMPANY
1717 WESTLAKE AVENUE, NORTH, SEATTLE 9, WASHINGTON
More than 20 years of satisfactory performance

HEATING

(Continued from page 95)

not protect the exposed wood at the plate and header at the top of the foundation wall. Furthermore, moisture can travel upwards through the studding spaces and condense in the attic space.

- (d) Insulation of the floor joists has been used, either in the form of mineral wool batts between the floor joists or rigid insulating boards tacked on the lower side of the joists. This insulation will serve to reduce the heat loss from the living quarters to the crawl space, but will not effectively control the moisture damage at sill, header and plate of the foundation wall.

Use of 55-lb. Roll Roofing as Ground Cover

The most effective method for control of excessive humidity in the crawl space is to attack the problem at the source, namely, the ground from which the moisture arises. That the moisture released from the ground can be of extremely large magnitude has been shown from a report by the Housing and Home Finance Agency, Technical Bulletin No. 8, January, 1949. The following data are condensed from the report:

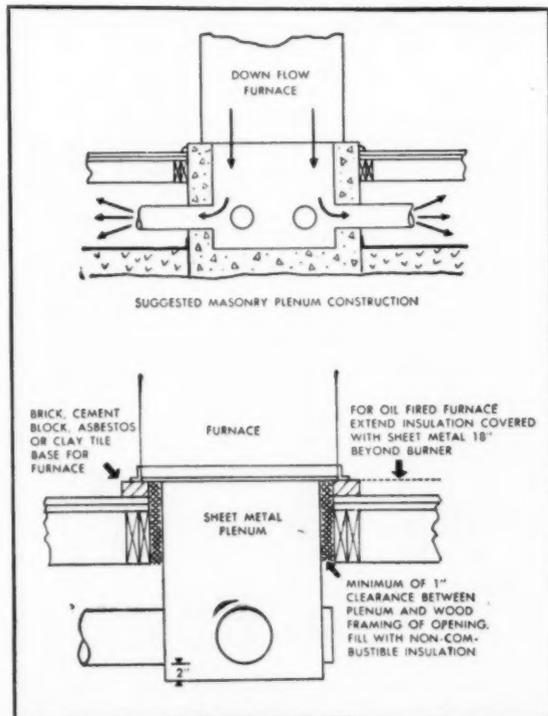
The soil evaporation experiments were made with

Average air temperature	58 F.
Average relative humidity	69.7 per cent
Average soil temperature	51.1 F.

EVAPORATION: gals. per
24 hrs. per 1,000
sq. ft. (Average Values)

TREATMENT OF SOIL

(a) Smooth untreated soil	12.1
(b) Smooth soil treated with Calcium Chloride-Sodium Silicate	8.2
(c) Soil treated with Vinsol N.V.X.	9.7
(d) Soil covered with 3"-thick layer of pea gravel	1.4
(e) Soil covered with 55-lb. heavy mineral surfaced roofing	0.3



Two methods of plenum construction to assure safe operation

AMERICAN BUILDER

No data are available on the treatment of soil with a thin cover-coat of concrete. Tests reported by the Housing Research, October, 1952. Housing and Home Finance Agency show that 55-lb. roll roofing is definitely preferred over 15-lb. asphalt-saturated felt. The following quotation from this report is of interest:

Dr. J. D. Diller of the Bureau of Plant Industry at Beltsville, Maryland, has carried on observations of 15-lb. asphalt-saturated felt and 55-lb. roll roofing and other materials under actual exposure conditions as ground cover under crawl space houses for nearly ten years. Tests show that 55-lb. roll roofing specimens are still effective vapor barriers after eight years of service, whereas 15-lb. asphalt-saturated felt ground cover has disintegrated sufficiently to be relatively ineffective as a vapor barrier in three years or less. A membrane for use as ground cover in a crawl space house need not be an unusually good vapor barrier to reduce the moisture content of the wood floor system above it sufficiently to prevent deterioration caused by fungi, often commonly referred to as "dry rot." For that reason few authorities recommend cementing of the laps.

Accordingly, 55-lb. roll roofing . . . is recommended for ground cover in a crawl space. It also has sufficient puncture resistance to permit periodic access to the crawl space for inspection.

Heating Methods in Use for Crawl Space Houses

From the foregoing discussion it can be seen that the ground moisture problem has to be solved first before further consideration is given to heating performance. Assuming that the ground will be protected with 55-lb. roll roofing, let us consider some of the approaches that have been made towards obtaining warmer floors and comfortable living temperatures.

- (1) The obvious step towards obtaining a warmer floor is to insulate the subfloor. Such insulation can consist of insulating sheathing below the floor or floor joist, mineral wool batts applied between floor joists or reflective insulation used between the floor joists.
- (2) Some merit exists in the notion that if the floors are to be kept warm and the heat loss from the building is to be reduced, the best place for the insulation is in the walls of the foundation. If the ventilators are kept closed, as they can be if the ground is covered with a vapor barrier, then the crawl space temperature will increase.
- (3) In warm-air heating practice, some installations have been made with the return air ducts carried in the crawl space. Obviously, if the crawl space

is at a very low temperature, considerable heat loss will occur from the return air duct. In such cases the recommendation has often been made that the return air duct be covered with at least one inch of mineral wool batts. Usually, however, the ducts are uninsulated and the heat loss from the ducts is allowed to heat the crawl space to some extent.

- (4) In a few isolated cases, installations have been made with the entire crawl space serving as a return air plenum. The return air intakes in the floor, or in the baseboard, permit the air to drop into the crawl space without benefit of any ducts, and then to travel towards the blower inlet of the furnace. Obviously, the crawl space will be under reduced pressure, and any leaks around the foundation or vent openings will permit large quantities of outdoor air to leak into the circulating system. Such air leaks will tend to reduce odors and relative humidity in the house, but at the same time will tend to increase the fuel consumption. Obviously, in an installation of this type the floors should not be insulated, but the insulation should be applied to the foundation wall.

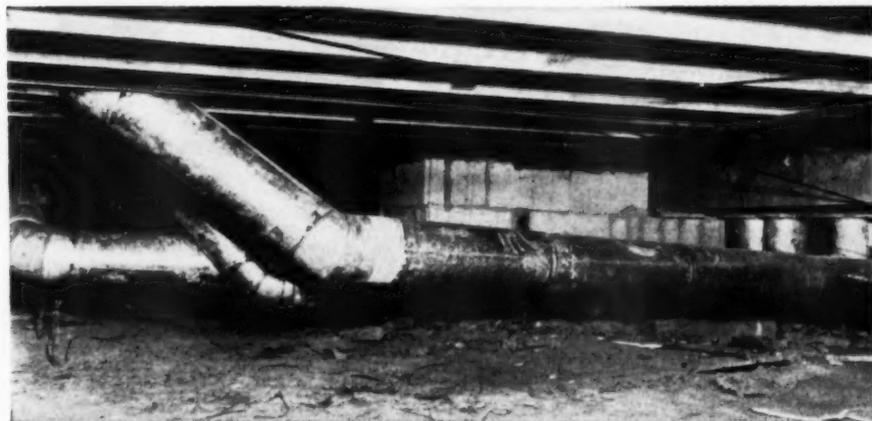
Trend Towards Heating of Crawl Space

In 1948 some experiments were carried on in the Warm-Air Heating Research Residence No. 2 at the University of Illinois which gave some unexpected trends. The following quotation is from Engineering Experiment Station Bulletin No. 401, page 53:

. . . It is apparent that the most significant effect of the change in basement-air temperature was to change the temperature differential from floor to breathing level as well as from floor to ceiling. Since the minimum differential was obtained when the basement was heated, the maintenance of a layer of warm air below the floor joists seems desirable.

In other words, it was found that when a layer of heated air existed below the floor joist, not only was the floor surface temperature increased, but also the living zone temperatures were made more uniform from floor to breathing level. In many respects, this was one of the most significant contributions made from the warm-air heating research program at the University. This phenomenon begins to explain why higher efficiency furnaces located in basements have not always given an improvement in comfort as compared with older hand-fired coal furnaces with relatively obsolete control equip-

(Continued on page 100)



Ducts radiate from concrete block plenum placed under down flow furnace in crawl space



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STANLEY **HANDYMAN** **BUILDERS KIT**

Now in one compact carrying case are all the power tools you need for hanging doors quickly and expertly right on the job.

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With the motor unit in the plane attachment, you can fit doors and sash in a jiffy — also fit storm sash, screens, shutters, inside trim, drawers.

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Put the Stanley Builders Kit to work for you. It will pay off in extra speed and economy on every building job. Ask your Stanley dealer for a demonstration. Or write for descriptive literature to: Stanley Electric Tools, 400 Myrtle Street, New Britain, Connecticut.

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Lock Mortiser, LM1.
Does a complete mortising job in about 30 seconds. Easily adjustable.



Safety Saw, W65. Light-weight 6' saw, full 2" cut. High speed, sturdy construction. Easy to handle in any position.



Stanley Builders Kit includes: 3/4 h.p. motor, straight and circular gauge, router base, plane attachment, arbor, plane cutter, mortising bits, templet guide, door and jamb buff templet, carrying case.



Plane cutter used in plane attachment. Will handle doors up to 1 1/2" in width. Leaves smooth, waveless surface that requires no sanding. Blows chips entirely free.



Router base and motor used with templet for cutting mortises. Provides perfect fit for round or square corner hinges. Accurate, micrometer depth adjustment.

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HARDWARE • TOOLS • ELECTRIC TOOLS • STEEL STRAPPING • STEEL

STOPS WARPING!



Paint can't protect improperly sealed wood from warping, swelling and blotching

Photo shows what happens when paint is applied to improperly sealed wood surface. Moisture penetrates the pores, causes the wood to warp, twist and swell. Note, too, how paint has soaked deeper into soft areas than into hard areas, causing uncontrolled grain raise which streaks and blotches wood, ruining its appearance.



Rez SEALS and PRIMES wood, reduces warping, stops swelling and blotching

Rez Sealer and Primer protects identical piece of wood — actually penetrates surface pores to seal out moisture—equalizes surface porosity, controlling grain raise. Rez preserves the beauty of wood grains in natural or rich color tones, beautifies wood trim, makes houses more salable.

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10 Places to Add Beauty— Protection—Sales Appeal with

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Rez
Sealer and Primer
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Smart color tones and clear
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Windows that SELL

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HETTINGER'S
Triple Seal

SASH BALANCES and WEATHERSTRIPS



"We are delighted with our easy-operating, weathertight windows, thanks to our builder who equipped them with Hettinger's TRIPLE SEAL. He tells us that they meet or exceed the requirements of the American Wood Window Institute. And they're featherlight, too—so velvet smooth that even a child can open them."

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For quicker on-the-job or mill-assembly of window units. Everything needed for one window is packaged in a single unit —your choice of either the famous STANDARD unit or the new ONE PIECE full jamb cover unit. Also available in bulk. Write today for full information and the name of your distributor.



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HEATING

(Continued from page 97)

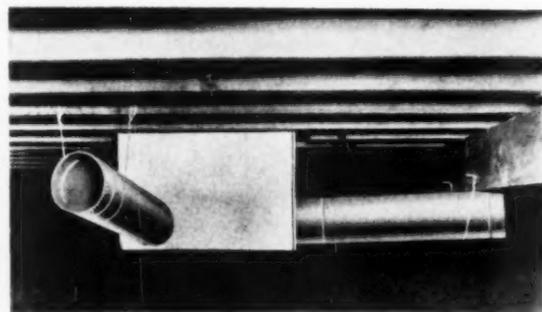
ment. Apparently, a panel-heating effect from the floor will serve to produce more uniform air temperatures in the living zone.

The industry was in a stage of development where this method of having the subfloor space could be easily done. The down-flow furnace had been developed for the perimeter loop system used in slab floor constructions and was readily adaptable for crawl space heating. The warm air was discharged into a subfloor plenum, to which branch pipes were connected. In one of the most common arrangements in use, these branch pipes led to floor registers or baseboard registers located along the exposed wall. The branch pipes were not insulated so that the heat loss from the pipes tended to warm the crawl space to some extent.

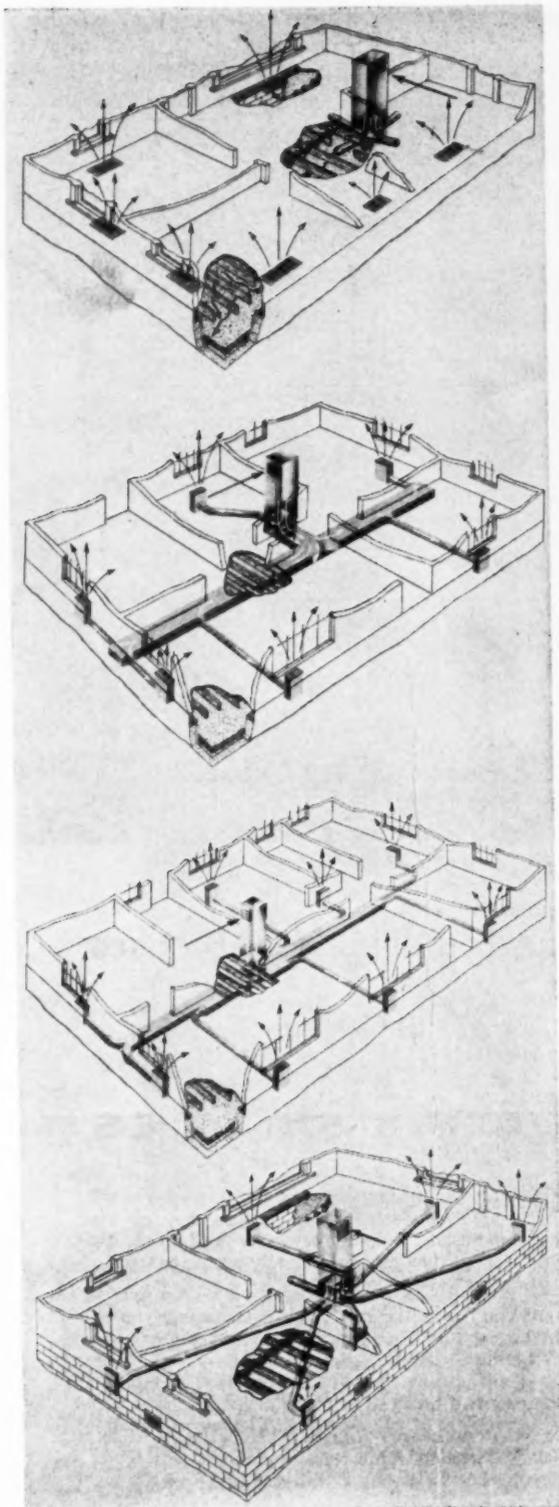
Another method which has been under trial is one in which the branch pipes from the subfloor plenum are only about six feet long and merely point towards the exposed cold corners of the crawl space. The warm air discharged from the branch pipes heats the crawl space to temperatures higher than 70 degrees F, and the air is permitted to escape into the room above through either floor or baseboard registers along the exposed wall. In this system the rooms are heated partially by floor-panel heating and partially by convection air from the registers. The results reported from the field have been most promising. Since the system is still new, some problems exist that will have to be settled by research and by interpretations of building codes:

- (1) Proper vaporproofing of the ground surface is mandatory. The presence of heated air in the crawl space will tend to evaporate water from unprotected ground and this moisture may give excessive relative humidity in the living spaces.
- (2) Adequate insulation of the foundation wall is also mandatory. Asphalt-treated rigid board insulation can be applied to the wall down to the ground level. Care must be taken to seal any cracks along the sill plate to reduce air leaks.
- (3) Precautions must be taken to eliminate any fire hazards. The sheet metal plenum which extends below the floor must not be in contact with the wood. No combustible material should be stored in the crawl space. A final ruling on the permissive use of this form of heating has yet to be made.

If and when the regulations are formulated for permissive use of the crawl space plenum system of heating, the heating contractor will have available a method which has proved to be the most effective yet devised for crawl space structures.



Metal plenum with connecting ducts is placed under down flow furnace in crawl space



Perspective view of four crawl space methods of heating: Top drawing shows crawl space distributing heat without benefit of ducts; second drawing shows a complete duct system. Two bottom drawings show a complete arrangement of ducts except that one method has duct to heat the plenum

REZNOR PAC answers **YES** to more outstanding features than any other horizontal furnace on the market

ASK YOURSELF THESE QUESTIONS

- ✓ ● **DESIGN** Are controls, gas and electric connections enclosed within one main cabinet?
- ✓ ● **FILTERING** Do you have to build a special holder or is it provided*?
- ✓ ● **DRAFT DIVERTER** Is it built in* or must you add it?
- ✓ ● **FLUE CONNECTION** Can you install in more than one location?
(Reznor is interchangeable* at top or back)
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- ✓ ● **BLOWER** Is it adequate?
(Reznor uses 10" blowers*)
- ✓ ● **LUBRICATING** Is oiling a problem?
(PAC uses oilless* bearings)
- ✓ ● **MOTOR** Is it resilient mounted*, automatic resetting*, overload protected*?
- ✓ ● **HEAT EXCHANGER** Is it made with safety-sealed*, welded* construction?
- ✓ ● **EXCHANGER TUBES** Are they venturi action* and made of aluminized steel*?
- ✓ ● **BURNERS** Do you have to change for different gas?
(Reznor uses Universal* type)

*Standard Equipment on PAC



● Just a casual glance at the new Reznor PAC tells you that here is a horizontal furnace that has what it takes to satisfy your most meticulous customer. Features galore, yet small as a TV set and almost as easy to install.

Reznor PAC makes itself at home in an attic, utility room, basement or crawl space. It's a real area saver for users who need every precious inch of space.

Better yet, you are not limited to residential installations. PAC as a unit heater may be sold to all types of commercial and industrial firms.

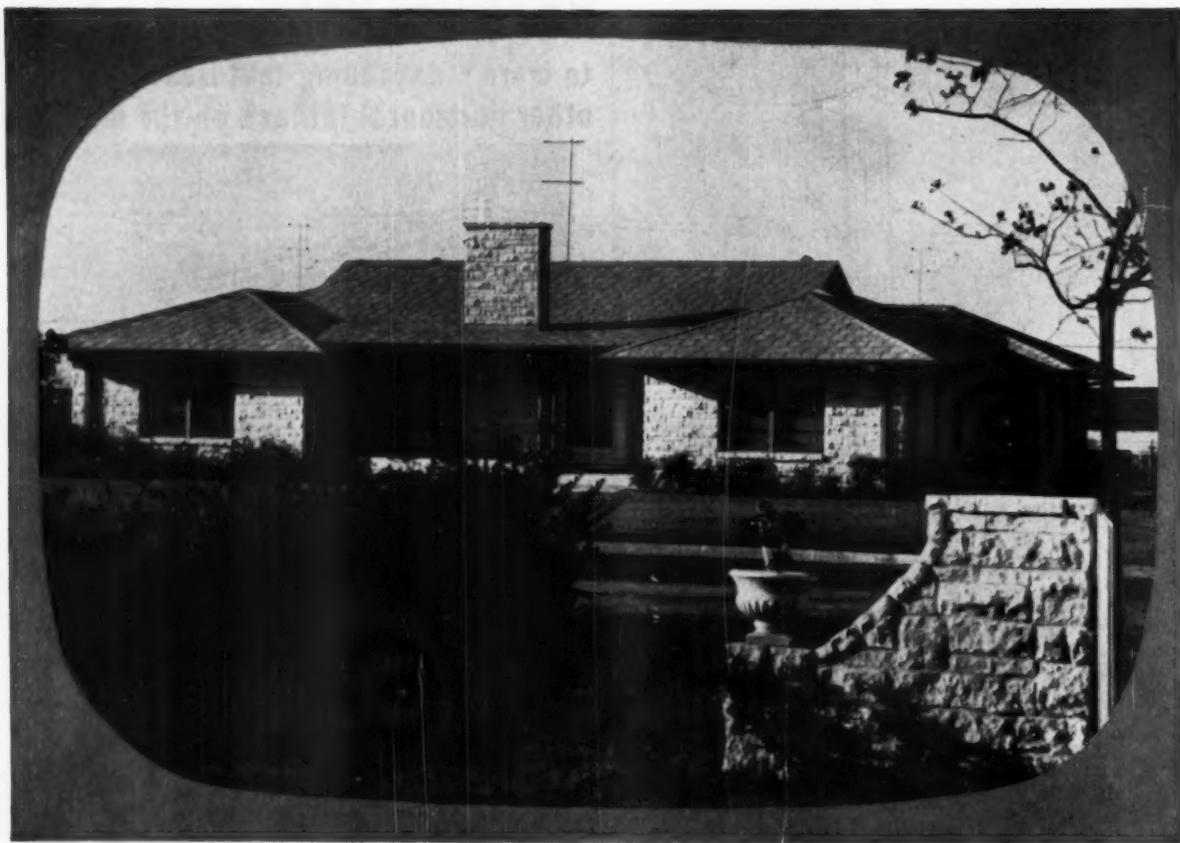
Why settle for less? Reznor PAC in its handsome Perlite cabinet, with more outstanding features than any other horizontal furnace, is easy to sell. People take to it on sight. Write today for more information on the unit that makes your work easier and more profitable.

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- Grey-green Perlite cabinet. ● 75,000, 100,000 and 125,000 BTU
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THIS BETTER ROOFING WILL HELP YOU SELL MORE HOUSES

"Century"

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"Century" roofing gives your houses outstanding selling features that impress any prospective buyer. For these remarkable shingles offer *durable beauty at low cost*. Here's what we mean:

As far as durability goes, "Century" asbestos-cement shingles are almost stone-like in their permanence. They resist sun, rain, vermin, and insects. Temperature changes won't harm them. They won't burn, rot, or corrode.

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And now for the important question of cost. "Century" shingles are truly economical because they go up quickly and easily, because they *never* need protective paint, because they require virtually no maintenance, because they last indefinitely.

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(For your reference, "Century" shingles are illustrated in Sweet's Architectural and Light Construction Files.)

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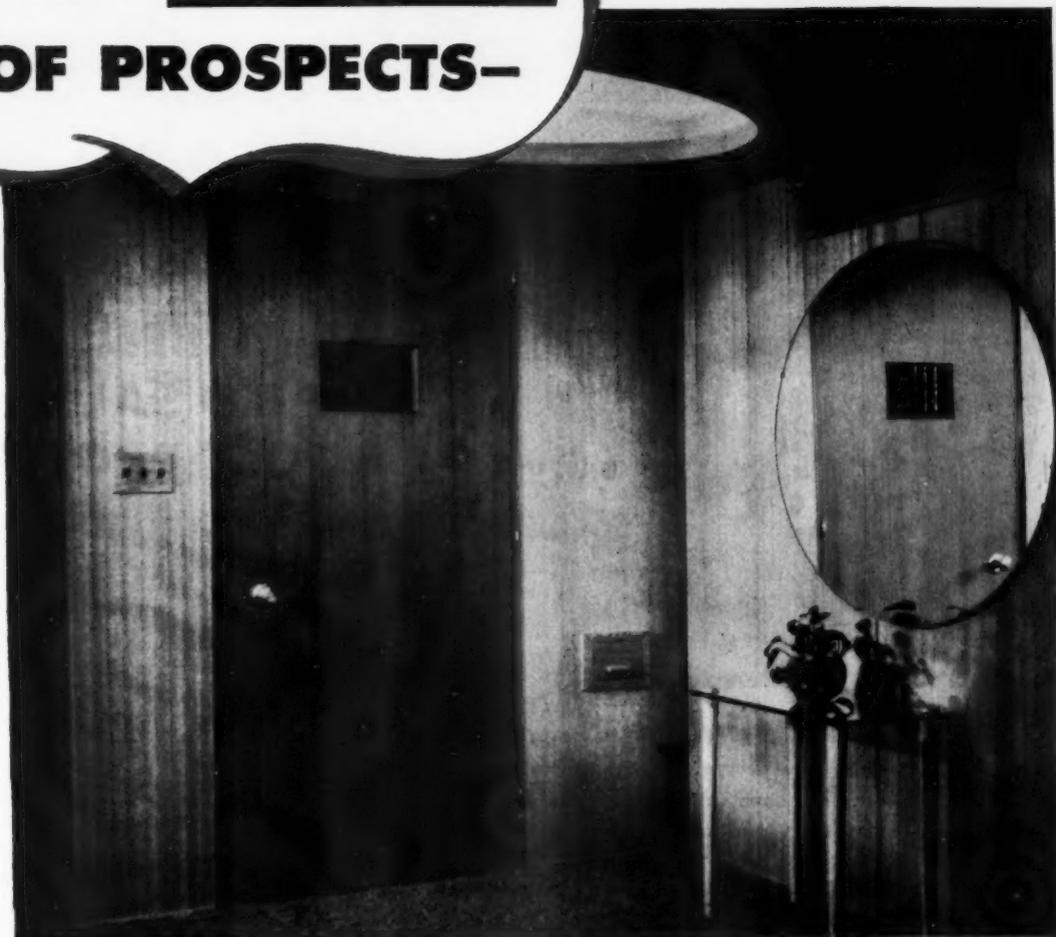


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Color-Grained Siding was selected for this 1421 unit housing project at the Cherry Point, N. C. Marine Corps base. Builders were Phillips, Bonin & Covington.



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SPEED SALES...
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Every builder can cash in with Ruberoid's Color-Grained Siding. Whether you're building 1 house or 1421, you get the same three big advantages:

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*Patent Nos. 2307733, 2307734, others pending

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new **duette!** Miami-Carey's Sliding Door Bathroom Cabinet
with Twin Compartments . . . twice as much storage space!

The **duette** DeLuxe Sliding Door Cabinet by Miami-Carey.
(Model SD1818FL)

Finished in baked-on gleaming white enamel. Twin storage compartments and sliding mirror doors. For recess or wall-hung installation.



Here is a bathroom cabinet that's roomier, more beautiful than any you've seen before. It's the **duette** Sliding Door Cabinet by Miami-Carey, in four smart models—all so roomy, so brilliantly styled, so low in cost you can fit them perfectly into your plans, even for inexpensive homes!

Dollar for dollar, no other cabinet can match the **duette** for functional styling and utility. Mirror doors slide open at a finger's touch. Inside in twin compartments—more than *double* the storage space of most ordinary cabinets. *Room galore* for medicines, cosmetics, shaving needs, all the items that have a way of "cluttering" bathrooms short on storage space.

These new **duette** cabinets are ideal for new construction and remodeling. So ask your Miami-Carey dealer for all the facts—or mail coupon on other side of this page.

please turn the page →



Specify freedom from topsy-turvy bathrooms . . . New **duette** by Miami-Carey

Available with or without tubular fluorescent light and shade, plus switch and electrical outlet.

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MIAMI-CABINET DIVISION—THE PHILIP CAREY MFG. CO.

they're all-new

and crammed with sales-making features

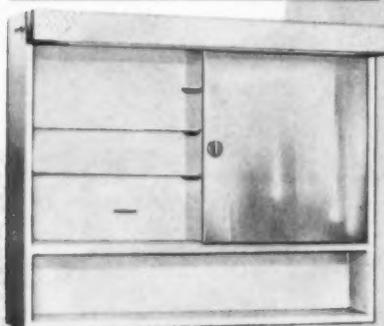
new duette

SLIDING DOOR CABINETS

another leader from MIAMI-CAREY

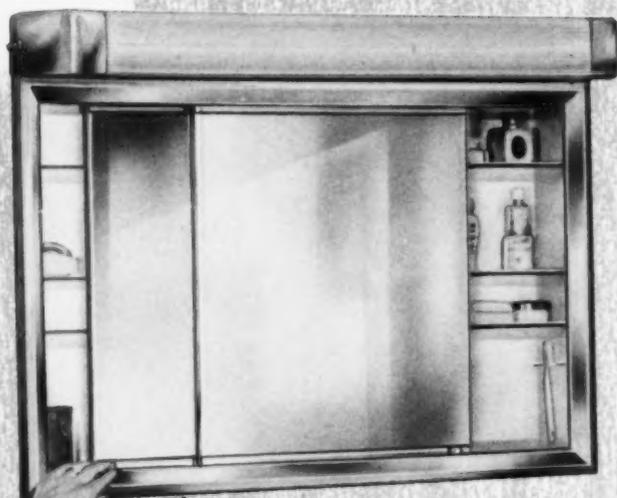
- Twin Sliding Mirror Doors (mirrors first quality plate glass, copper protected)
- Fluorescent tubular light with shade, plus switch and electrical convenience outlet (optional)
- Twin Storage Compartments
- Stainless Steel Toothbrush Rack in each compartment (Custom models)
- Razor Blade Chute in each compartment (Custom and DeLuxe models)
- Crystal Glass Shelves (8 in Custom, 4 in DeLuxe)
- Easy to Install

Overall Size:	Width	Height	Depth
Custom (without light)	38 $\frac{3}{4}$ "	x 23 $\frac{3}{4}$ "	x 5 $\frac{3}{4}$ "
DeLuxe (without light)	36 $\frac{1}{2}$ "	x 25 $\frac{1}{2}$ "	x 6 $\frac{1}{4}$ "
Custom Light Fixture	38 $\frac{3}{4}$ "	x 2 $\frac{1}{4}$ "	x 4 $\frac{3}{8}$ "
DeLuxe (with light)	36 $\frac{1}{2}$ "	x 28 $\frac{1}{4}$ "	x 8 $\frac{1}{4}$ " (without shade)



duette DeLuxe (Model SD1818FL) features fluorescent tubular light with matching metal shade, electrical outlet and switch—a lavish cabinet at a budget price. Beautifully finished inside and out in baked-on gleaming white enamel. For recessed or wall-hung installation. Also available—Model SD1818 without light unit.

Note: *duette* DeLuxe furnished in special colors if desired, when ordered in lots of 50 or more, at no extra charge.



duette Custom (Model SD1820FL) features fluorescent tubular light unit with curved translucent shade, plus switch and electrical convenience outlet; welded one-piece steel construction; snow-white baked enamel interior finish; Stainless Steel "picture frame" trim. Over 3450 cubic inches of storage space. For recessed mounting. Also available—*duette* Custom Model SD1820 without light unit.



Separate mirror and separate storage compartment for Him and for Her—no more "waiting turn"; no more bathroom clutter.



Mirror doors are framed in Stainless Steel, slide smoothly in specially designed metal channels. Each mirror door has aluminum back and Stainless Steel door pull. (*duette* Custom)

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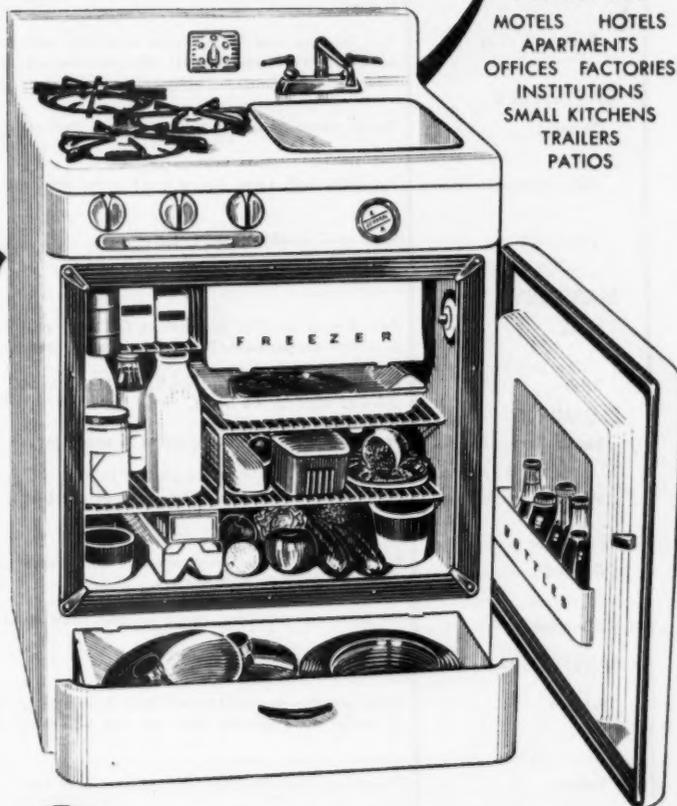
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ONLY 27½ INCHES WIDE!

Perfect For
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General Chef complete kitchen units fit in 5.4 square feet. The ideal solution wherever space and dollars are important.

SINK One-piece porcelain top of heavy gauge steel. Faucets and all hardware triple-chrome plated. Units also available without sink.

BURNERS Units come with 3 gas burners (easily adjusted for bottled, natural or manufactured [L. P.] gas), or 3 electric burners (220 V.) or 2 (110 V.).

REFRIGERATOR Four cubic feet of space. Electric (sealed, self-oiling Tecumseh unit). Owens-Corning Fiberglas insulation. Convenient bottle shelf in door.

FREEZER Holds 9 ice cube trays, or 12 standard frozen food packages.

STORAGE DRAWER Ample storage space for pots and pans.



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if you are building, remodeling, designing — you will be interested in the space and money you can save with General Chef units. Several models are available. Fully guaranteed. WRITE TODAY for complete information and specifications on all General Chef units. We will also send you name and address of distributor nearest you.



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Please send me complete information and specifications on General Chef units, and name of nearest distributor.

NAME _____ STREET & NUMBER _____
CITY _____ ZONE _____ STATE _____

HERE IS YOUR WINTER CHECK LIST

Plan your operation and procure any specialized winter equipment now!

CONCRETE WORK

Footings

DO
After digging, cover with hay to keep from freezing. Pour concrete between 70 and 80 degrees. Protect during curing period.

DON'T
Do not pour over snow, ice or on frozen ground.

Foundation

When pouring at 40 degrees or less, maintain 70 degrees curing for 3 days or 50 degrees for 5 days.

Do not pour over snow, ice or on frozen ground.

Slab

Protect with shelter and provide temporary heat until curing period is over.

Do not pour over snow, ice or on frozen fill.

Basement floor

Pour footings and furnace slab with side wall footings. Delay floor until building is under cover and temporary heat is turned on.

Do not pour over snow, ice or on frozen fill.

CARPENTRY

Framing

Pre-cut members and deliver to job for fast erection.

Do not use green or wet lumber. Freezing will affect strength.

Siding—exterior trim

Pre-paint both sides. Delay finish paint until spring.

Trim—out

Wait until heating plant is on.

Installation in very cold house will lead to expansion in warm weather; doors will stick, etc.

MASONRY

Block

Follow cold weather precautions for block and mortar. 40 degrees is critical temperature. Below 18 degrees, heat block to 40 degrees.

Do not lay block on snow or ice-covered surfaces.

Brick

Follow cold weather precautions. Maintain 40 degrees on both sides of wall for 48 hours.

Do not lay brick on snow or ice-covered surfaces.

PLUMBING

Sewer lines

Prefabricate sections under cover to speed job.

Do not lay lines on ice, snow or frozen fill. In winter use sand fill.

Water lines

Test with nitrogen gas. Nitrogen does not burn.

Do not use water to test. It might freeze during test period.

HEATING

Radiant

For first time, raise temperature of coil water very slowly in imbedded coils. Take 4 to 6 days.

Do not try to speed operation. You might crack slab or ceiling.

All other

No apparent problems. Work usually done in temporarily heated building.

PAINTING

Interior

Delay interior decoration until heat is turned on. Use furnace since oil or kerosene heating units can soot and streak paint.

Do not try to speed interior finishing. Finishing in winter takes longer.

Exterior

Pre-prime before erection. Delay finish coat until spring.

Do not use untreated exterior materials.

PLASTERING

Wallboard

Delay seaming until heat can be turned on.

Do not neglect to provide ventilation. Moisture must be eliminated.

Do not butt wallboard sheets if house and material are cold. Expansion could cause seams to crack. Do not neglect ventilation.

GLAZING

If possible, take windows out and glaze under cover. Use pre-glazed sash wherever possible.

Do not neglect to allow for expansion of glass at summer temperatures.

ROOFING

Keep material stowed out of weather. Asphalt shingles are brittle in cold weather, need special handling.

Do not neglect to allow for expansion of roofing material at summer temperatures.

TEMPORARY HEAT

Use temporary heating units during construction, then turn on furnace.

Do not skimp. This is winter building's largest expense. Man units 24 hours if not thermostatically controlled.

POWER TOOLS

Use them to speed erection. Get under cover faster.

Do not neglect frequent winter servicing. Use lightweight oil.



how to build in WINTER — an on the job study

WINTER WEATHER—shackle of the building business—can be overcome with thorough pre-planning. Today, with proper technical information and cold weather tools, builders can continue operations. It's true that winter construction costs more, but, properly planned, a winter job can show a profit.

To bring our readers a job experience story covering all phases of winter building, the *American Builder* sent its field reporter to Michigan's northern peninsula in the depth of winter, where men were building a town in spite of snow and sub-zero weather.

The town site of 400 houses, of which 130 were under construction, is part of a new copper mining venture—White Pine Mine, near Ontonagon, Michigan. Principal contractor for the mining construction job is the Turner Construction Company, Pace and Associates, architectural engineers of Chicago, laid out the town and designed many of the non-process buildings. Herman Gundlach, Inc., of Houghton, Michigan, was awarded the contract for the first 130 houses to be built.

Since the winter season in northern Michigan extends from October through May, winter weather was the controlling consideration in planning the construction program. Accumulated snow in the area—the heaviest in the United States—averaged about three feet. Temperatures of from 30 to 40 degrees below zero had to be taken into consideration. To facilitate a steady flow of material to the job, Gundlach instituted an enclosed precutting operation. He primed exterior siding, trim, windows and doors before they were delivered to the job site. To protect the pouring and curing of concrete, he designed and built shelters. These are but a few of the many pre-planned operations which made this winter building venture run smoothly.

Some of the 130 houses that were constructed on Michigan's northern peninsula in the depth of winter 1952-1953



WINTER BUILDING



Excavations went on during the winter. Frost penetration was as deep as seven feet on unprotected land. Excavations went below frost line

shelters

Concrete cannot be poured on frozen ground and left to set; the recommended procedure is to deliver heated concrete to the site and pour it over a thawed fill. Shelters, therefore, were needed to protect the concrete and make working conditions more favorable. The Portland Cement Association suggests shelters be used whenever concrete is to be poured in temperatures of 40 degrees or less.

On this job, Gundlach used two types of shelter, depending on the size of the work. To enclose a slab area, he built a truss-constructed frame, nailed Homasote panels to the trusses and covered the panels



Shelter's canvas covering was stretched over 1x4's supported on 4x6 purlins. Canvas was held in place by 1x4's

with waterproof building paper. He supported larger shelters with steel pipes set into the ground. These had welded brackets which held 4x6 purlins which supported a 1x4 frame over which canvas was laid. After the concrete was cured, the posts were cut off and grouted. He installed heating equipment to maintain temperatures above freezing.

concreting

Batching in the winter requires the operation of a boiler to generate steam for heating both aggregates and water. Since the concrete must be between 70 and 80 degrees when delivered, the operator must know the exact pouring time. This requires close coordination between the builder and concrete supplier.

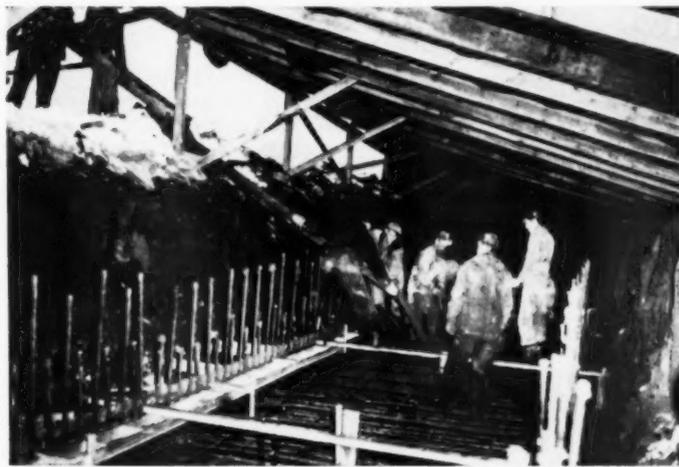
The Portland Cement Association suggests that mix be not lower than 70 degrees nor higher than 80 degrees when placed in a form. Freshly



Shelters were built to protect concrete work. Tarps covered frame

placed concrete should be maintained at a temperature of 70 degrees for three days or 50 degrees for five days for normal concrete. For high early strength concrete, the

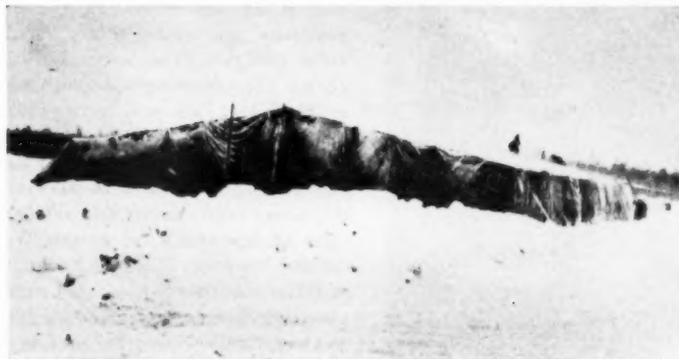
curing temperature should be 70 degrees for two days or 50 degrees for three days. Chlorides, up to 2 per cent by volume, can be used to speed curing.



Concrete was poured into foundation forms; crew then shoveled mix into place



The concrete was screeded. Tarps were lowered and heat placed inside shelter during curing stage



Shelters were needed if outside temperature was below 40 degrees. Temporary heating units insured proper curing of concrete

precutting and assembling

Material for each house is cut in a centrally located shed. Correct size stock patterns speed the engineered method of cutting. Lumber is stored outside and sent through the mill only as it is required.

The pieces, cut to size and in the correct quantity, are stocked outside in individual house packages for delivery to the job site. Window and door frames are pre-assembled at



Dimensional lumber entered cutting shed from storage yard

one side of the cutting shed. The sliding window unit is installed but not glazed until the frame is nailed into the wall.

carpentry

Carpentry costs are very little more in winter than in summer. The contractor's big problem here was to keep areas open for the delivery of materials to the men on the jobs. Consequently, an extra \$25 was added to the cost of each house for the removal of snow.

Precut framing members were delivered to the site, where framing crews assembled the walls on the slab and tilted them into position.



This bob-sled with tractor hitch was used to deliver lumber materials when roads were impassable to wheel machines

WINTER BUILDING



To protect structure from accumulated snow, architects specified this water-proof membrane be installed around perimeter of building

Ceiling joists and roof decking were then installed and wood or insulated sheathing applied. Wood sheathing was used where the plan called for vertical siding, and insulated sheathing where horizontal siding was indicated.

Cold weather has so little effect on wood that not much technical information is available. However, the California Redwood Association does warn that green lumber can crack or check in below-zero weather. Residual moisture in the wood cells freezes and breaks down the wood structure, lowering the strength. This is possible with all types of lumber.



Nitrogen used to test service lines in place of water during winter. Tank had enough gas for four or five houses



Steamfitters were not handicapped by winter cold. Salamander furnished heat

plumbing

While cost of the unskilled plumbing labor was 50 per cent above normal on this winter building job, the plumbers' and steam fitters' labor costs did not show a similar increase, the plumbing subcontractor at this White Pine project reported. He pointed out that the need for dry sand, which had to be brought in, and the work involved in keeping the sewer and water line ditches clear of ice and snow further increased his costs.

When weather prevented the plumbers from working on outside services, they would either prefabricate sewer line sections under cover or work on other jobs.

Service lines in the house were tested with nitrogen gas instead of water. A testing manifold was rigged to test at 150 pounds of pressure for two or three hours. The nitrogen tank has a pressure of 15 atmospheres, or 1,500 pounds per square inch, enough for four or five houses. Nitrogen was substituted for water to lessen the danger of cracked lines for water might freeze during the test period. The nitrogen added to winter cost.

masonry

Measures to protect masonry were rigidly observed at the project. Every effort was made to keep the units dry while they were stored. They were placed on planks and raised above the ground and then covered with tarpaulins to prevent moisture absorption. Some masonry material was stored inside partially completed buildings.

It is important that the mortar mix used in cold weather masonry work is properly prepared. On this job, batch mixers were used and all the aggregates and water heated to 150 degrees. To eliminate the possibility of scorching, the sand was piled around a 36-inch metal stack and heated with a Silent Glow oil-burning unit. The finished mortar had a temperature of 80 to 90 degrees, well within the specifications set up by the Structural Clay Products Institute.

Masonry units were heated as the need arose. Hollow units were heated when the temperature dropped below 18 degrees, and solid units in below-zero weather.

Further precautions called for not placing the masonry units on ice or snow-covered surfaces. All walls were kept covered to keep them dry.

Recommended specifications of the Structural Clay Products Institute are as follows:

1. Protective period and curing temperature

Construction with 1:¼:3 (cement-lime-sand by volume) mortar should be heated to over 40 degrees when the outside temperature is below 40 degrees. The air temperature on both sides of the masonry wall should be over 40 degrees for at least 48 hours. With high early strength cement, the protective period can be reduced to 24 hours.

For 1:1:6 mortar the same pro-



Portable conveyor carried hollow masonry units to second floor of office building. Note canvas cover for units stored in open



Clipper masonry saw was brought inside to perform its operation



Silent Glow helped keep building warm for glazed masonry work. Building was heated to above 40 degrees

WINTER BUILDING



Large Silent Glow poured heat through 36-inch stack, warming sand piled around it



Mortar mixer was under cover in area warmed to 40 degrees to help batching



Silent Glow oil burner provided temporary heat in painting shed

cedure as above applies except that the protective period is 72 hours. With high early strength cement, it can be reduced to 48 hours.

II. Protective methods

(A) When temperatures fall below 40 degrees, all masonry units should be free from ice and snow and the mixing water or sand should be heated not more than 160 degrees or less than 70 degrees.

(B) Below 32 degrees, in addition to A above, both sand and water should be heated to within the temperature listings in A.

(C) Below 25 degrees, in addition to A and B above, four pounds of calcium chloride per sack of cement should be added to the mixing water. Do not add to the cement, unless specified by the cement manufacturer.

(D) Below 18 degrees, in addition to the above, heat hollow masonry units to at least 40 degrees.

(E) Below-zero masonry construction is not recommended except in emergencies. Then all units should be heated to 40 degrees and temporary enclosures should be used.

III. Construction practice

Temp. range	Type of heating	Masonry protection
Below 40	None	None
Above 32		
Below 32	Salamanders	Provide wind breakers
Above 25		
Below 25	Salamanders	Sisalcraft or
Above 18		Canvas cover
Below 18	Salamanders or steam	Canvas cover
Above 0		
Below 0	Steam	Complete enclosures

painting

Because the painter pre-primed all exterior materials before sending them out to the job site, painting costs were slightly higher than normal on this job, due to this extra handling.

Material to be painted received both a front and back prime brush



Painter primed trim before delivery to job site. Both sides of material were primed



Roofer had to clean snow off roof before he could install standing seam terne plate. Extra man for snow removal, discarding of paper added to roofing cost



Standing seam was crimped to make it watertight and to hold it in position. Material had a base coat of paint

coating, while all redwood siding was dipped. The finish coat was to be applied to the exteriors in the spring. Interior decoration was held up until the heat was turned on in the houses.

roofing

Roofing costs are likely to increase with winter building. In this case, snow had to be removed from the house tops and the paper that had been covered with ice and snow



One roofer nailed flange to roof, another painted seam. Next panel was ready to position

replaced with new paper before the terne plate standing-seam roof was installed. The entire job increased costs \$21.60 per house—\$9.60 for six hours of one laborer's time for snow removal; \$11.00 for new paper and \$1.00 for increased handling charges. A small builder could save most of these additional costs by laying the roof immediately after putting on the paper. Project builders resort to the use of temporary paper protection to expedite other operations.

EXTRA COSTS PER HOUSE IN WINTER BUILDING

Snow removal	\$ 25.00
Hay for foundations	1.00
Sisalkraft	5.50
Portable shelter erection and removal	200.00
Heating and attending	50.00
Concrete	20.00
Roofing	21.60
Heating and plumbing	25.00
Painting	15.00
Overhead increase	5.00
Total	\$368.10



Lead vent flashing was prepared for soldering to terne metal



Ridge was soldered to make it watertight

WINTER BUILDING



Maintenance of power equipment was a big winter job. Snow was removed from machines' treads every night

power equipment

Power machinery played an important part in this project. Gundlach's Traxcavator spent most of the time clearing snow from roads, driveways and sites. The machine not only pushed the snow out of the way but also carried it to isolated places.

In winter both heavy machinery and light, hand-powered equipment are lubricated with lightweight oil. The builder made a nightly ritual of cleaning the snow and ice from the treads of the crawling units. Had these been allowed to build up and freeze, the expansion might have broken the treads. Also, the builder found it was easier to get the operation under way in the morning if the equipment was thoroughly cleaned at night.



Portable generator furnished current for electrician's power tools. Electricians found winter no handicap



Major job of Caterpillar tractor was snow removal. Unit could carry snow to out-of-the-way places, keeping road shoulders open for future plowing

POWER EQUIPMENT USED ON JOB

- 1 Model B Silent Glow heater
- 1 Model J Silent Glow heater
- 1 Master Vibrator heater
- 2 Jackson power plants 2,500 W
- 1 Jackson Vibrator tamper
- 1 22B Bucyrus-Erie crane
- 1 D4 Caterpillar tractor
- 1 DeWalt saw
- 1 Walker-Turner saw
- 3 Ford trucks
- 1 GMC pickup
- 24 Oil-fired salamanders
- 7 F8 Ford semi-trailer dump trucks
- 1 F6 Ford dump truck
- 1 F7 Ford dump truck
- 1 Chevrolet dump truck
- 5 L190 International mix trucks with 5 1/2 cy Rex Mixer
- 1 Butler Bin Redi-mix 7 cy loading cap
- 1 24x36 Cedar Rapids portable crusher
- 1 Manitowoc #1500 crane

equipment useful in winter building operations

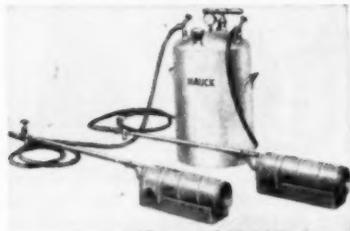
Below is a selection of various types of equipment including space heaters, salamanders, thawing devices and other apparatus essential to an efficient building operation during the cold weather months

AB105301—Oil-Burning Salamander eliminates usual fire hazards of all-night heating by the turn of a shut-off valve. Fuel oil is sealed in a steel, welded pressure tank. Danger to workmen from poisonous fumes is also eliminated. Units shown will heat approximately 850 square feet of floor space, with average ceiling height and at average winter temperatures. Legs raise firebox from floor, allowing better draft. Salamander is portable,



light in weight and has fuel consumption of $\frac{3}{4}$ of a gallon per hour. Aeroil Products Co., Dept. AB, 69 Wesley St., South Hackensack, N.J.

AB105302—Thawing Outfit with double burner permits dual heat application on a single job or single heat application on two different jobs within the base length radius of the fuel tank. Unit is completely self-contained; hand pump is built into the tank. After the initial pumping, a few strokes at half-hour intervals keep the unit in continuous operation. Outfit includes a 15-gallon fuel tank, two 12-foot lengths of oil hose and two burners. The outfit is recommended where there is demand for fast heating, indoors



or out. It is useful for thawing frozen concrete or sand, frozen ground in excavations, concrete forms, etc. Hauck Manufacturing Co., Dept. AB, 124-136 Tenth St., Brooklyn 15, N.Y.

AB105303—Space Heater furnishes 12 hours of continuous operation without refueling. Thermostats are provided on all models as well as safety devices including



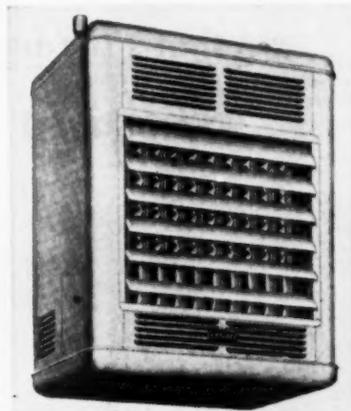
a solenoid on the pump for instantaneous cut-off and flow of fuel. Compact, portable unit is available in three models, furnishing from 160,000 to 400,000 Btu's per hour. Fuel tanks have 14-, 21- and 34.5-gallon capacities. Totally enclosed stainless steel combustion chamber permits almost complete elimination of either carbon dioxide or carbon monoxide gases. Master Vibrator Co., Dept. AB, 108 Davis Ave., Dayton 1, Ohio.

AB105304—Unit Heater has proved useful in supplying temporary heat in buildings under construction. This gas-



fired unit is light enough to be transported in the trunk of an automobile and can be installed without difficulty. It can be hooked up with temporary electrical wiring and a few feet of rubber hose to supply gas to the unit. Suspended from hooks screwed into a floor joist, it can be moved to other locations being worked on wherever heat is required. Modine Manufacturing Co., Dept. AB, Racine, Wis.

AB105305—Unit Heater, gas-fired, operates automatically by fan forced air. The warm air moves directly into the



working zone and continuous circulation eliminates cold areas and stagnant air levels. Directional grilles permit the air flow to be controlled as desired. Threaded pipe hangers permit suspension of the heater in temporary locations, allow easy removal to other spots where needed, yet keep the unit up out of the working area. Four models are available, rated from 52,000 to 18,000 Btu's per hour. Utility Appliance Corp., Dept. AB, 4851 S. Alameda St., Los Angeles 58, Calif.

AB105306—Portable Heater has been especially designed for various requirements of portable space heating on construction jobs. It offers complete separation of the products of combustion from the ventilating air stream, plus forced hot air delivery to areas where it is most needed. Fuel consumption is 1.4 gallons per hour, heat output is from 125,000 to 190,000 Btu's per hour. Application shown is use of unit to heat brick piles at homes



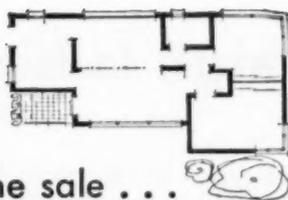
under construction by a Racine, Wisconsin, builder. Heater's use tripled the num-

(Continued on page 118)

◆ FOR MORE INFORMATION USE COUPON ON PAGE 228

When open plans open up
new sales problems,

there's one way to close the sale . . .



::: that's the beauty of

Higgins Block^{*}
INC.



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*** SPECIFICATIONS:**

9" x 9" net face hardwood blocks — easy to install

3-ply cross-grain construction — when properly installed will not warp, buckle, cup or crack

Selected oak face — ready finished

Pressure bonded with marine-type glue — water-proof, climate-proof

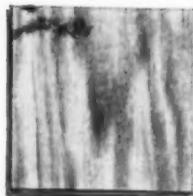
Toxic impregnated — rot-proof and termite-proof

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Can be laid without special preparation on concrete slab — ideal for radiant heat

Blocks fit flush — without large, visible V-grooves

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winter building products

(Continued from page 117)

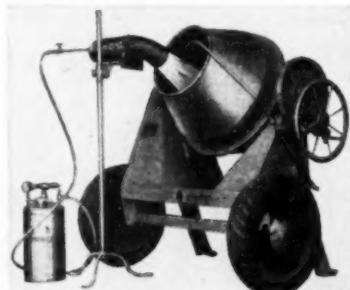
ber of bricks that could be conditioned at one time, preparatory to bricklaying. Herman Nelson Division, American Air Filter Co., Inc., Dept. AB, Moline, Ill.

AB105307—Unit Heater, gas-fired, is installed by suspension from ceiling. It is suggested with a variety of diffuser accessories to provide proper distribution of warm air in special directional flow problems. This unit warms and mechanically circulates large volumes of air within the required space to be heated.



No piping systems or change-overs are required for temporary installations. Unit operates on natural, manufactured or LP gas. Heating capacities in nine models range from 50,000 to 225,000 Btu's per hour. Units are applicable to winter building, due to portability, capacities and minimum space requirements. Surface Combustion Corp., Dept. AB, 2375 Dorr St., Toledo 1, Ohio.

AB105308—Concrete Mixer Heater is made in three sizes to fit different makes and styles of mixers. The heating unit consists of a torch-type burner, special discharge elbow or reflector pipe, fuel tank equipped with brass hand pressure pump, etc. A universal, clamp-type attachment precludes cutting or threading of pipe, drilling holes or making special



brackets. The "Fireblo" burner uses kerosene, distillate, diesel or light fuel oil and produces a quick, intense flame of over 2,000 degrees F. It is useful in thawing out concrete mixers, melting ice around foundations, pre-heating machinery. American Steel Works, Dept. AB, 27th & Southwest Blvd., Kansas City 8, Mo.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

AMERICAN BUILDER



STRIPPING TOP SOIL

is another job this versatile unit does well. The simple rugged design of the Ware loader correctly distributes weight on tractor frame, regardless of the operation being performed. Down-pressure can be applied when it is necessary in tough digging. Hydraulic rams absorb shock loads... mean longer life and lower maintenance for both tractor and loader.

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HYDRAULICALLY CONTROLLED BUCKET assures greater "breaking-out" action—full bucket loads every time. 28° roll back helps prevent wasteful spillage.



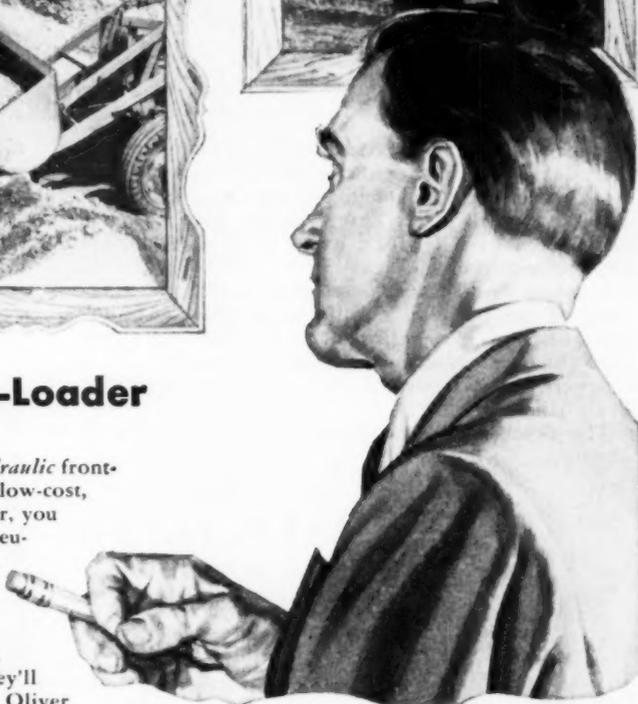
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Profits...*

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An Oliver Industrial Wheel Tractor with this *all-hydraulic front-end loader* is a combination that's hard to beat for low-cost, profitable operation. With any Oliver Wheel Tractor, you get famous Oliver *dependable* plus power, easy maneuverability, rugged construction. With the loader, manufactured exclusively for Oliver Wheel Tractors by Ware Machine Works, you get completely hydraulic operation which means easier, surer control for more efficient digging and loading.

Take a look at the "profit pictures" shown here. They'll convince you that it's well worthwhile to ask your Oliver Industrial Distributor to arrange a demonstration of an Oliver tractor-loader combination for you.



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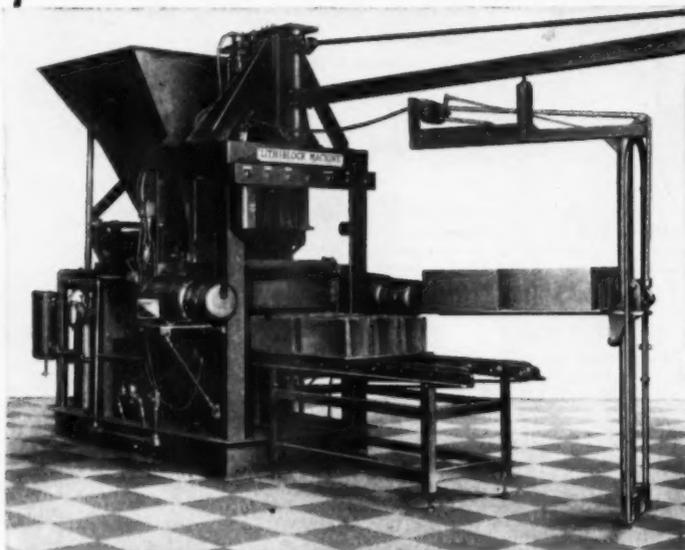


A complete line of industrial wheel and crawler tractors



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MEASURE OF PROFIT
WHEN YOU SPECIFY
BONUS QUALITY LITH-I-BLOCK**

**BOTH INTERNAL
STRENGTH and
SURFACE UNIFORMITY
ARE ALWAYS BETTER**



With more and more concrete masonry being used on every job, a constantly growing share of your profit is directly tied to the economies you can effect in the purchase and use of block. That's why the unique savings available to Lith-I-Block users is of the utmost importance to you.

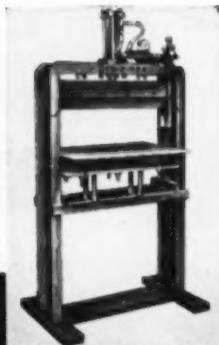
Consider Lith-I-Blocks internal strength! Here, because of the precision manufacturing process, Lith-I-Block offers an even distribution of cement and aggregate that insures equal strength throughout . . . a compact, rock-like strength that gives superior service in all buildings.

The dimensional accuracy of Lith-I-Block makes it

easier to lay, ends the time-consuming labor required to true-up inferior block. Masons really appreciate this ease and speed and that shows itself in lower costs to you.

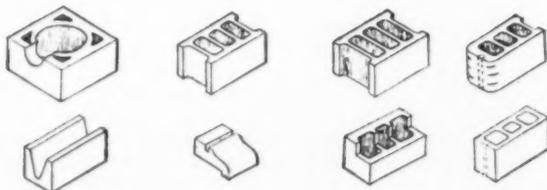
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**Contractors use ten Stud Drivers
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Please send me *free* copies of the new booklets showing how I can cut my fastening costs—and the name of the distributor nearest me.

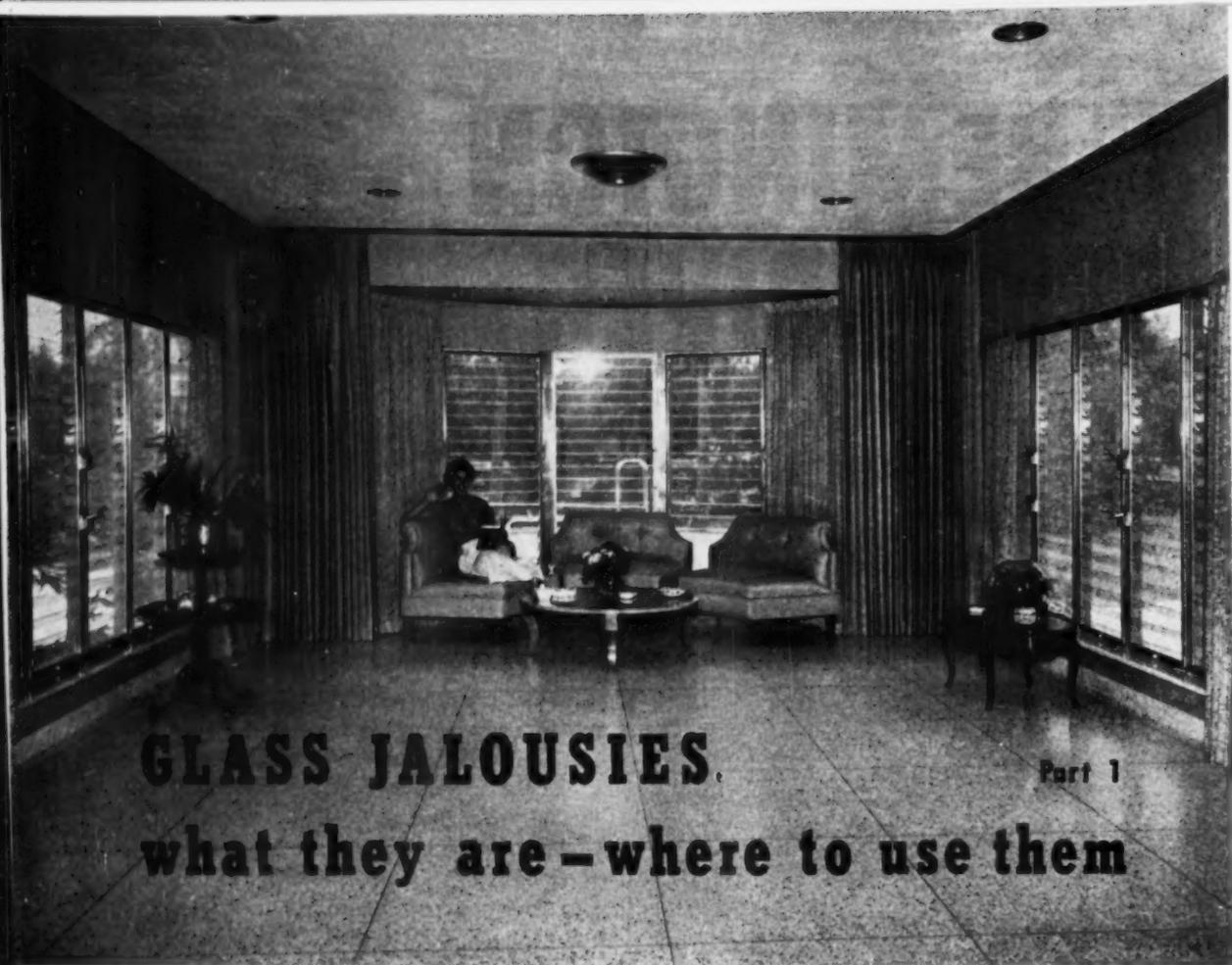
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GLASS JALOUSIES.

what they are — where to use them

Part 1

ABC-Adams Engineering Co.

DEVELOPED right after the second world war, the jalousie of today was adapted from the adjustable wooden- (or metal-) louvered jalousie used on porches to obtain ventilation without sacrificing privacy. Glass was substituted in the venetian-blind-like slats and aluminum replaced wood in the frame. A screen was attached to the inside of the frame.

Improved ventilation was apparent. Louvers set at 90 degrees permitted a maximum passage of air. Partly closed, they still admitted air, excluded the average rainfall. The claim has been advanced that louvers in full open position influence a compression of air between them which actually pulls more of it into a room than would enter through a rough opening of the same size.

Where Used

At first, problems of water and air leakage during severe storms limited the use of glass jalousies to porch enclosures and breezeways, mostly in remodeling work. But in 1948, jalousies began to be specified for every opening in new homes, from bathrooms to front door. Their use spread to interior walls, full and partial office partitions, stores, schools, hospitals, factories, motels;

A factual, on-the-spot American Builder report on the new window which has taken the South by storm and is now attracting a rapidly expanding nationwide market

PART I

even boats, truck cabs and trailers.

Popularity of jalousies throughout the south induced so many winter visitors to investigate that manufacturers redesigned their windows about two years ago to take interchangeable screens and storm sash for adaptability to northern climates.

Claimed Features

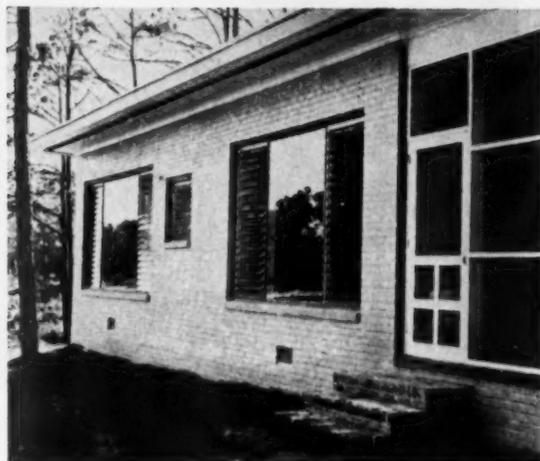
According to the manufacturers, the following are the outstanding features of a jalousie:

1. Controls ventilation from maximum flow to none.
2. Allows airing of a room during most rainstorms.
3. Creates extra space for year-round use.
4. Prevents children from falling out of windows.
5. Guards against burglars, even when windows are wide open.
6. Permits entire window to be cleaned from inside.
7. Has interchangeable screens and storm sash.
8. Opens to considerable degree without loss of privacy in installations using obscure glass.
9. Improves conditions in hard-to-ventilate rooms, if installed in inside partition.
10. Reduces chance of breakage since at weakest point, where two vanes join, it is one-half inch thick.
11. Limits replacement of glass, in event of a break, to one or two louvers as a rule.



Arnold Products, Inc.

Jalousies were first considered for remodeling work, such as the enclosure of the porch in this modern central Kansas home



Uni-Jal—Universal Metal Products Corp.

Reversing procedure, this Virginia Beach, Va., home retains a screened-in-porch but has jalousies in prime window openings

- 12. Provides frame with life-long lasting qualities.
- 13. Adjusts windows silently.
- 14. Offers builders a design innovation for new houses.

Hurricane Test

Until a year ago, there was much skepticism that jalousie windows would perform efficiently during hurricanes and other storms. This led five leading manufacturers to engage the University of Miami to test windows under these conditions.

Windows were installed in a test house, the glass being about 20 feet from the variable pitch propeller of a large Pratt & Whitney airplane engine. Lasting 12 minutes, the test simulated gusts of wind with a maximum velocity of not less than 100 miles per hour for ten minutes and gust conditions of 80 to 120 miles per hour for two minutes. During this time, water was introduced into the airstream at a rate of 20 gallons a minute, equivalent to a 4-inch rainfall during the 12 minutes.

Under these conditions, windows were considered satisfactory if air infiltration was not over 75 cubic feet per minute and water not over one-fifth gallon per minute. While this seems like a lot of air and water, the university report stresses that few hurricanes are ever as severe as this test.

Of 16 jalousies listed in the study, all but two passed the water test; four failed the air test. Two admitting too much air were among the most watertight windows, due to baffles which catch water between louver clips and jambs but do not stop all air. The test revealed a pinhole through a window frame will let through more water than a loosely-constructed baffle.

The Florida Window Manufacturers Association was formed, with membership contingent upon a satisfactory test. In return, the university permits members to use a seal bearing this statement: "Hurricane approved. Florida Window Manufacturers Association specifications for air and water infiltration under dynamic condition of wind and water—confirmed by the University of Miami Housing Research Laboratory."



ABC—Adams Engineering Co.

Jalousie-enclosed, screened porch below adds an extra room to the house. Each window in this recent installation has two operators for better ventilation control. Note obscure glass used in lower half. Jalousies on inside wall (above) pull the outdoors into living room





Test house at University of Miami, where windows were subjected to hurricane conditions by blasts from powerful airplane engine

Construction

Basic parts of nearly all jalousies are the same: aluminum frame, glass louvers, an operating mechanism in each jamb to control the position of the clips and one or two operators mounted on jamb or sill. However, there is quite a difference in design toward the common goal: a sturdy, easily-operated window that will be airtight and watertight at all points.

A detailed description of jalousie construction, including weathertight features, will appear next month.

Costs

The cheaper varieties are said to compete in cost with other windows using heavy sheet or plate glass; higher quality jalousies figure 10-20 per cent more; heavier, wider-louvered units up to 50 per cent more.

Shipping costs are considered a minor factor for bulk shipments, due to light weight of aluminum and the fact that most glass is bought locally.

Jalousie Doors

General practice of the industry is to install jalousie windows in 1 $\frac{3}{4}$ -inch door frames, either half-panel or full-panel. Since the frame is wider than the door, wood or aluminum molding strips are used. Some doors are equipped with an aluminum strip flush with the bottom so that it overlaps an aluminum threshold. Water enter-

ing between door and threshold enters weepholes and is returned outside.

Within the past few weeks, a new jalousie frame designed especially for doors was made available. When closed, it is no wider than the 1 $\frac{3}{4}$ -inch door it was designed to fit. When open, the over-all width of the door and extended louvers is about 3 $\frac{1}{2}$ inches, nearly two inches less than the width of the regular jalousie set in a door frame.

Vertical Louvers

A variation in jalousie operation is the vertical-louvered window. Because the glass slats stand on end



Alenco-Albritton Engineering Corp.



Uni-Jal—Universal Metal Products Corp.

Low ranch home in Louisville has jalousie-equipped breezeway



Uni-Jal—Universal Metal Products Corp.

Small jalousies below fixed windows assure ventilation without draft, rain or shine. Obscure glass is used for privacy

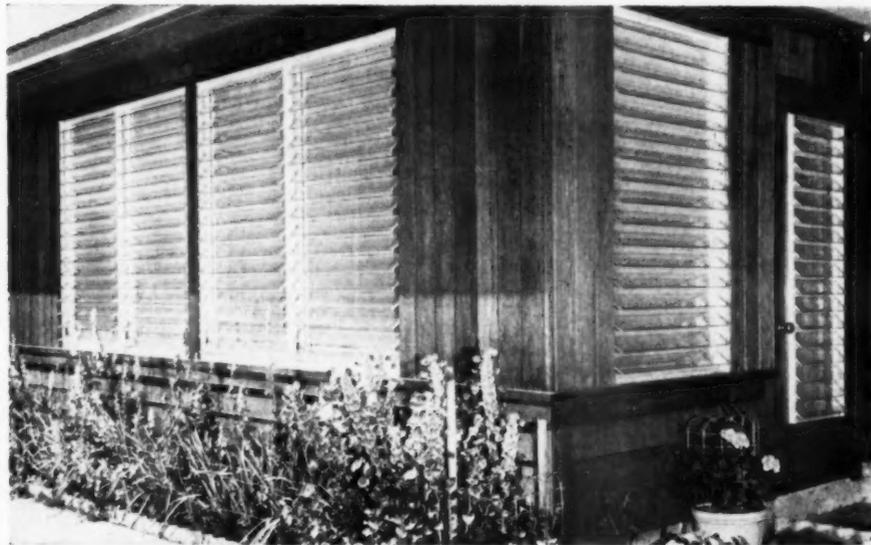
they can be longer than usual without danger of bowing at the middle. One of these jalousies can cover a large window opening, instead of two or more with horizontal louvers.

This installation is recommended only for protected inside partitions between two rooms, or between a hallway and a room. Such use normally calls for obscure glass slats.

Outside use is not generally considered practical, because of a tendency for the glass to "bend" during high winds, but the vertical jalousie has been successfully installed in a wide window of shallow depth, protected by a wide overhang.

WHAT THE JALOUSIE IS DESIGNED TO DO

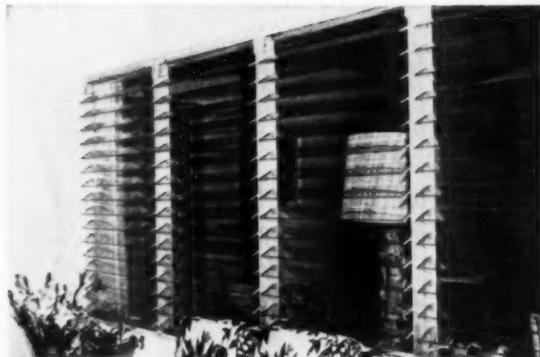
- WIDE OPEN:** maximum admission of air
- THREE-QUARTERS OPEN:** deflects average rainfall; still admits nearly 100 per cent air
- HALF OPEN:** admits large quantity of air but deflects it to prevent drafts
- NEARLY CLOSED:** kills off all possibilities of draft but admits enough air to allow room to "breathe"
- CLOSED:** is virtually airtight and watertight, even under hurricane conditions



Vanes opened at this angle will keep out the average rain shower but permit near-maximum ventilation. Interior of this porch is shown at left on opposite page

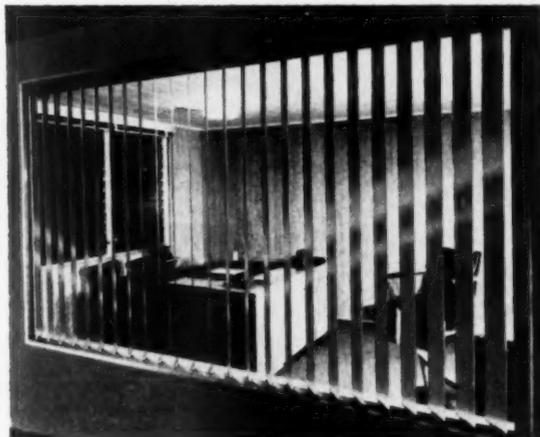
Vertical-louvered jalousie in partition between private offices. Such position eliminates need for several windows mullioned together; also improves air distribution through inner office. Obscure glass panels are used for privacy

Uni-Jal—Universal Metal Products Corp.



Denison Corp.

Practical as well as decorative, this interior partition allows through-the-building ventilation when desirable



50

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here's how one custom builder operates

an American Builder interview



MOST economical operation for the small volume builder is to buy his material from his local retail lumber dealer and stick with the same family of subcontractors. That's the business approach of E. Harold Johnson, Minneapolis builder. This year Johnson is president of the Minneapolis Home Builders Association, one of the few small builders to hold that office in a large metropolitan organization. One of his houses is featured as this month's blueprint house, see page 34.

Questions and answers:

1. *What design are you now building?*

"We are building the ranch type house. People do not want extreme contemporary design. I guess there aren't enough who like it."

2. *Where do you get your plans?*

"Most plans that we use are originated by us. I mean we have a designer who works with buyers and prospects. I don't have the time to draw plans. The designer can also figure load limits and other technical data."

3. *What is the biggest headache of a custom builder?*

"Financing is our biggest problem as it always has been and probably always will be. Most of our clients, however, have large enough equities in their old property to buy or they might have enough cash."

4. *Where do you obtain your financing?*

"Before we start construction we make application to a home loan concern for commitments."

5. *Do you ever explore other sources of financing?*

"No, so far the savings and loan money has been available. Government programs require too much red tape and we have had trouble finding VA and FHA money."

6. *Do you have any problems with financing?*

"We could stimulate more business if mortgage bankers would have a longer viewpoint. I would like to see longer amortization periods, lower down payments and start of the trade-in."

7. *What down payment do you require?*

"We must have 40 to 45 per cent. I would like to see the requirements drop to one-third down."

8. *Do you ever do any speculative building?*

"At the present time we are doing 50 per cent speculative building. We get mortgage commitments on these after construction."

9. *Why do you do that much speculative construction?*

"That is the starting point we need to build the custom work. We can show the speculative job even though we are going after custom work. It also keeps our crews busy."

10. *How do you obtain land?*

"We purchase our land and have a land planner design the plot for its greatest use. We do this before we submit project to the city."

11. *How do you finance the land?*

"Many times the owner wants his money over a period of time due to the tax situation. We take title to the individual lots when we start construction. Of course we option the whole plot. We then use either a 'contract for deed' or 'purchase money mortgage' system to obtain the land. A 'contract for deed' is where the land owner keeps title after we pay down payment. We get deed when lot is paid in full. On a 'purchase money contract' we take title to the land after paying down payment, owner holds mortgage."

12. *How do you sell houses?*

"Rarely have we had to advertise a house. Most of our construction is in the open and can be seen by traffic. People see the house and inquire for us. Now, people are beginning to seek us out and our custom work is growing."

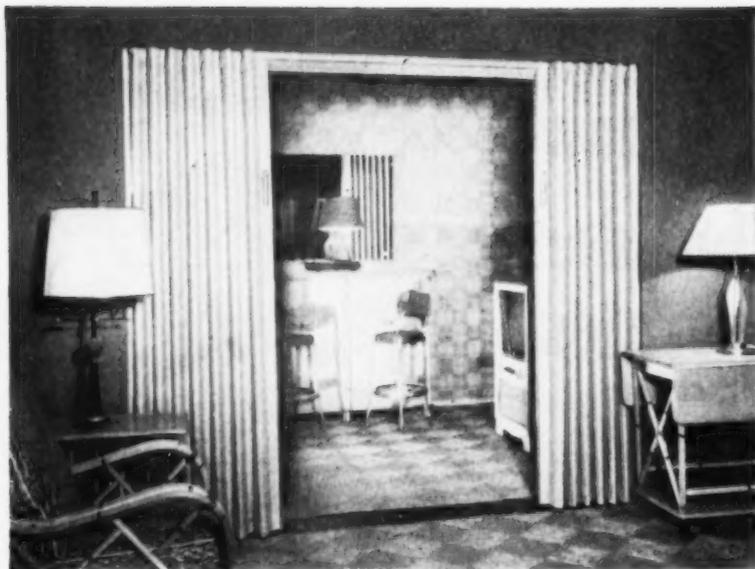
13. *What are your selling techniques?*

"After someone has shown a definite interest in a house I ask them how they are going to pay for it. If it is a cash deal, we might come down a couple of hundred dollars because we can save two or three months in getting our money. Cash deals are faster. If they need to finance the house, we try to work out the deal. If they haven't enough money for our houses, we refer them to other builders who are building in their price range."

14. *Do you use a realtor?*

"We use a realtor in our trade-

(Continued on page 128)



"modernfold" was the outstanding sales feature of our houses"

... ALBERT BENESON AND ABNER ROSENBERG, YEDLIN CONSTRUCTION COMPANY

The Yedlin Construction Company, of New Haven, Conn., uses "Modernfold" doors to add luxury, comfort and convenience to its 250-house "High Ridge" project. Note how the use of "Modernfold" doors combines the graciousness of a large living room with the premium feature of a private den in a house designed to sell for only \$13,000. "Modernfold" doors not only make this practical and inexpensive but add a decorative touch as well. Builders Abner Rosenberg and Albert Beneson say, "Public reaction was spontaneously enthusiastic, and we found our use of 'Modernfold' was the outstanding sales feature of our houses."

"Modernfold" doors spark sales—and speed construction as well. They come complete, ready to be installed in 30 minutes or less! No exact fitting, no extra hardware is necessary. No cornice or extra trim is required. You save time, labor, materials—and gain a strong sales clincher, with "Modernfold" doors.

For full details see our installing distributor—listed under "doors" in your city classified directory. Or clip coupon.

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New Castle, Indiana

In Canada:

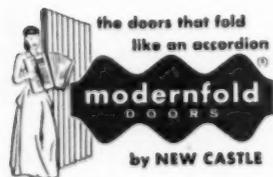
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Look for the door with the double-strength frame

For continued customer satisfaction, you need "Modernfold's" double box-like hinges both top and bottom, which prevent warping and twisting, insure dependable, even opening and closing.



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New Castle Products
P.O. Box 504
New Castle, Indiana

Please send me full details on "Modernfold" doors.

Name.....

Address.....

City.....County.....State.....

custom builder

(Continued from page 127)

in selling as we are not familiar with older houses. We sell our new houses. I've had instances where our carpenters have helped sell houses."

15. *How do you work with your subcontractors?*

"We do not look for the lowest bid; we want quality. We need it for custom houses. We use the same subs most of the time. We like to stick with them and if things turn up, the sub will take care of it. We are very selective in choosing subs and then stay with them if their prices don't get out of line.

16. *Where do you buy lumber?*

"We get our lumber from a retail yard. They handle very good grades and do not charge us a premium for it. I like their service."

17. *Do you specify products?*

Yes, I am very careful to specify products. I want the best. We get our product information from ads, local suppliers and other builders. We read the trade paper ads. When buyers want a product other than the one we use we sell them on the one we are using. Seldom do we change our brand names to satisfy buyers' whims."

18. *Who does your bookkeeping?*

"I have a part-time accountant who keeps our books. I pay all bills and save the check stubs and cancelled checks. The accountant uses this information to put everything in the ledger. It costs me \$35 to \$40 a month. The accountant also handles tax returns, social security, workman's compensation, etc."

19. *Do you use any business forms?*

"Yes, we have a simple time card. It is the only form we use."

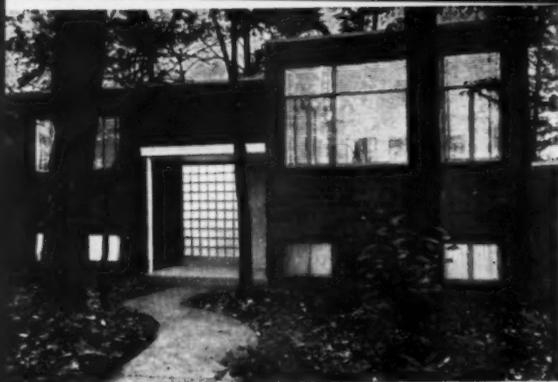
20. *How do you estimate a job?*

"We call in all our subs and get firm bids on their end of the work. We then figure our costs from recent past performances."

21. *How about architects?*

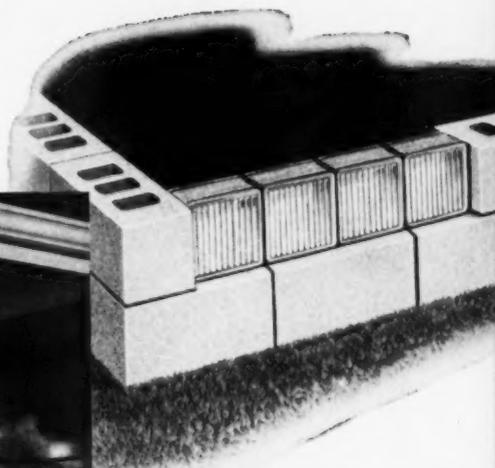
Architects usually over-design for the price and try to beat the builder over the head to deliver more house for less profit. I am not going to build for free. We want 13 per cent broken down as 10 per cent profit plus 3 per cent overhead.

(Continued on page 131)



-with brick...

Insulux Glass Blocks go in right along with the rest of the masonry. Here a panel brings needed light for living room and entrance without sacrificing privacy.



with cement block

Glass blocks are handled in the same way as cement blocks—same mortar, same laying technique . . . go in at the same time. Two 8" glass blocks can be substituted for one standard cement block.



with wood...

Here's traditional charm that says "come in, you're welcome." This panel of random clear glass block retains all of the charm of this colonial doorway . . . adds to its antique feeling.



with pleasure...

Here's a kitchen with brightness and cheerfulness built right in. Panels flood working surfaces with soft diffused daylight, yet keep the room shielded from outside view. Soil marks, even splattered grease, rub right off.

Glass block "belongs" with wood or brick . . .

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What other material offers you the opportunities to create such interesting, new

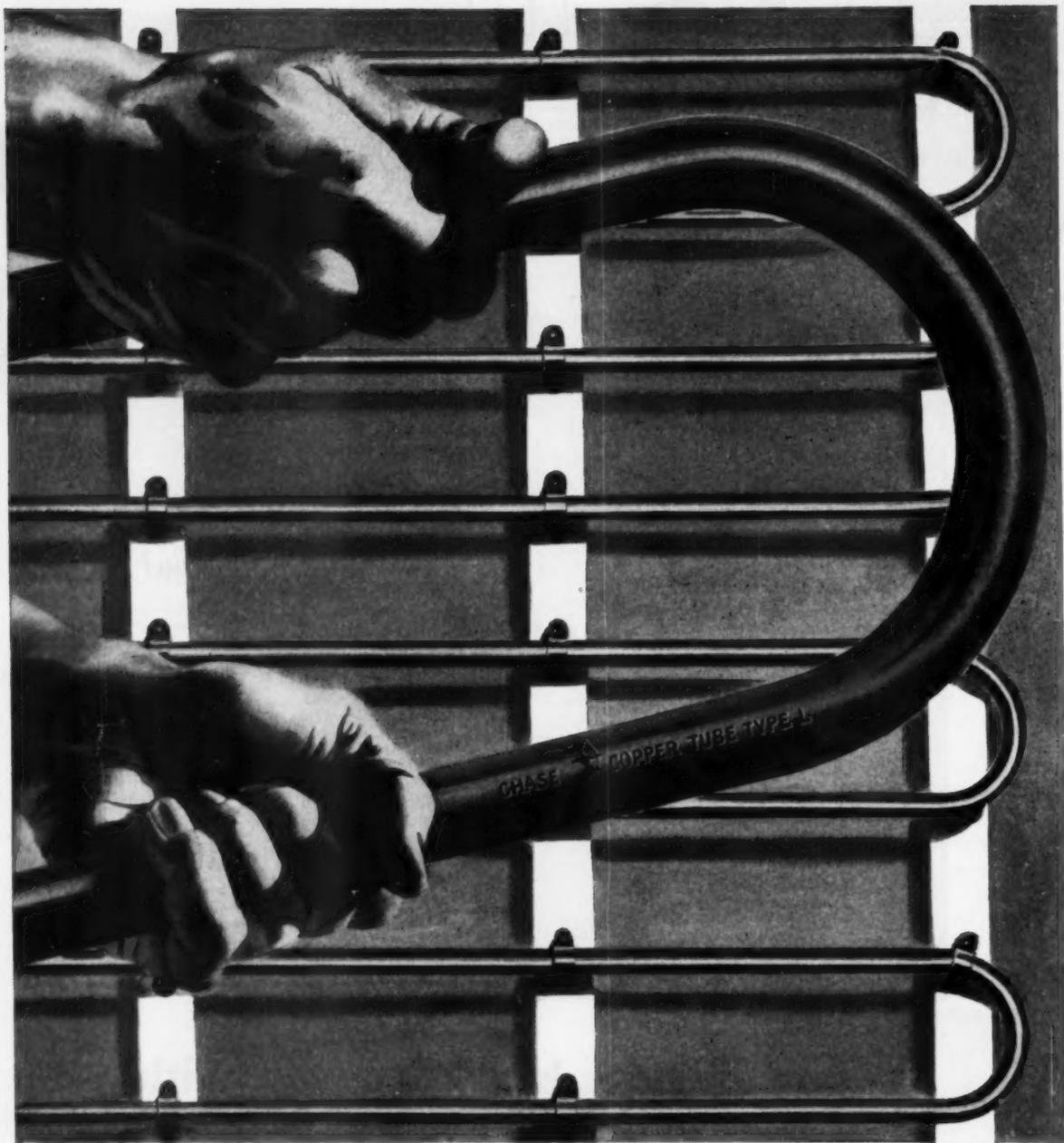
architectural effects that are so decorative . . . so useful . . . yet so practical?

Start to plan now to use this versatile, practical building material in your homes. Write to Insulux Glass Block Division, Kimble Glass Company, Dept. AB-10, Box 1035, Toledo 1, Ohio, and get complete information about the many advantages Insulux can bring to the homes you build.



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Chicago	Houston	Newark	Rochester †	(† sales office only)
Cincinnati	Indianapolis	New Orleans	St. Louis	

custom builder

(Continued from page 128)

22. How do you select color?

"I have a woman who is an interior decorator. She helps a client choose colors and wallpaper. She sells the wallpaper. Her service doesn't cost us anything."

23. Are there any disadvantages to being a custom builder?

"Yes, we must do all the work ourselves. I give each job my personal attention. People feel that you are building just the one house. That service to each buyer is important in building up the business."

24. Where is your office?

"I have an office in the basement of my home. All work is carried on from there."

25. How many people do you employ?

"I employ five people, an office girl, three carpenters and one apprentice. I join the crew if necessary to get a certain job or operation completed."

something new in panel door design

A national competition for interior panel door design, sponsored by Ponderosa Pine Woodwork, produced a winning design by Laurence S. Higgins, an architectural design student at the University of Illinois.

Higgins' design is based on the ingenious use of perforated board for the main panels of the door. A back door, for example, may have a solid outside panel with the inside panel of perforated board to which may be applied hooks for hanging various items.

An office passage door may have both main panels of perforated board in an unmatched placement of holes which will obstruct the light while permitting restrained ventilation. The tenant's name and the room number may be applied to the outside panel on detachable plaques arranged to suit individual fancy.

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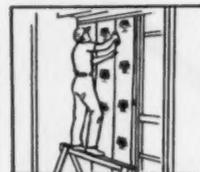
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4 APPLICATION SAVINGS 13%!

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Good color of Atlas Mortar makes it a favorite of both architects and contractors alike. Here, it adds to the good appearance of Westmoreland Hospital, Greensburg, Pa.

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subside the price! There are no extra-in the home above shown.

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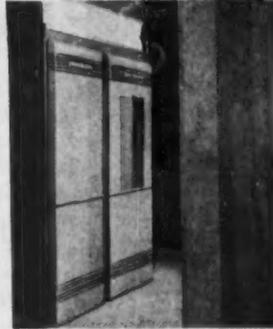
So, if you don't want to be disappointed, come see us now or see you—today if possible. There are 3 additional models in sales form. The model home is open every day a week from 10 A. M. to 9 P. M.

DIRECTIONS: From Williams or Union Center take Route 100 to Route 25; to see block beyond the Crane Brook Country Club. Model Home is shown on corner of Lane Road Parkway and Henry and Elm Terraces. Model Home Furnished by Backlund Furniture Co., Route 25, Montrossville.

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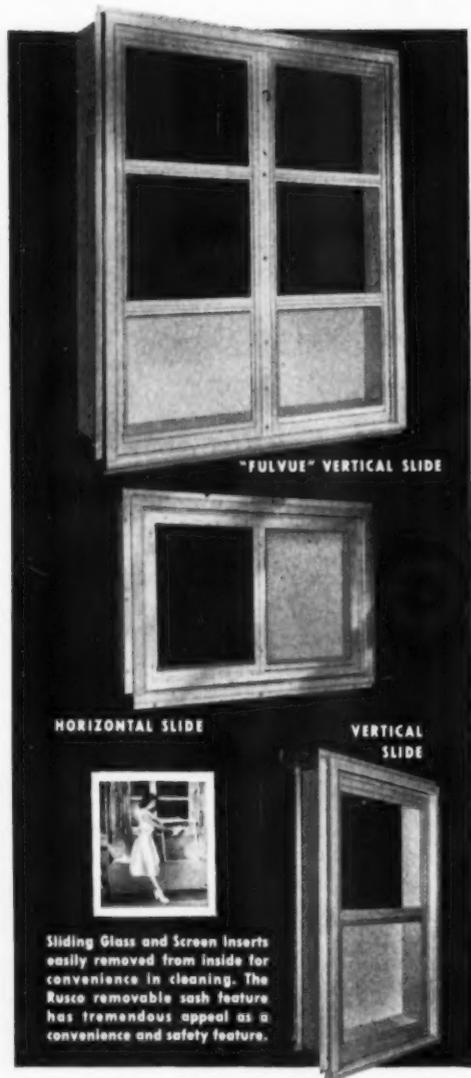
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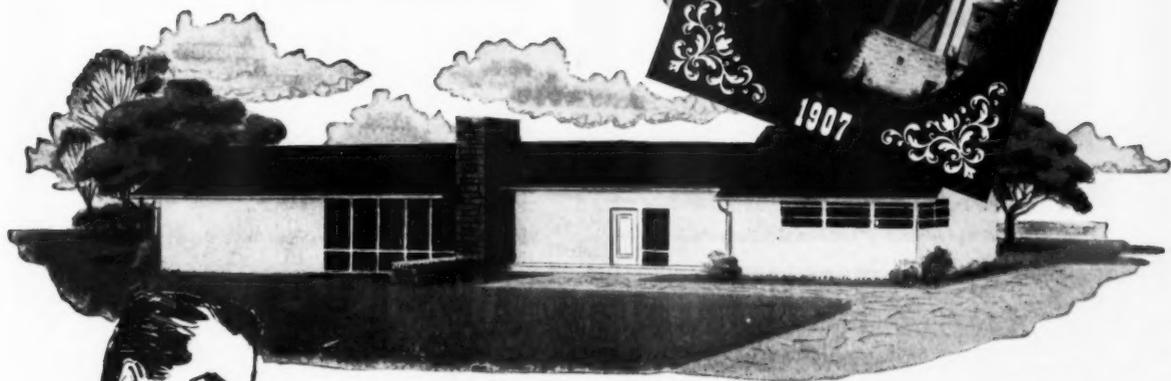


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desire. Furthermore, Medusa White's exceptional plasticity enables you to attain a stucco finish that harmonizes with other building materials.

Stucco made with Medusa Waterproofed White Portland Cement has amazing, non-staining properties. Water-carrying dirt is repelled at the surface instead of being absorbed into the stucco leaving a stain when it evaporates. For Finer Stucco you can depend upon Medusa White!



THE ORIGINAL WHITE PORTLAND CEMENT

You can build **BETTER**
with **MEDUSA PRODUCTS**



MEDUSA PORTLAND CEMENT COMPANY

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Chicago 1, Ill.
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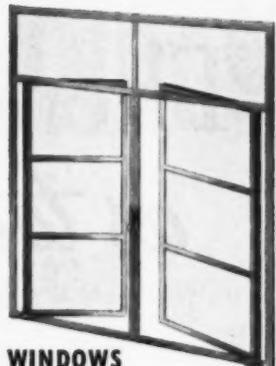
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TRUSCON STEEL CASEMENTS

Design for lifelong service with this versatile steel residential window. Made from 1" sections of heavier than average weight—less likely to twist out of line. Extra depth glazing ledge for additional ventilator rigidity. Bonderized to increase resistance to rust and provide superior base for baked-on prime paint. Quality roto operators hold ventilators in any open position. Window frame is tapped to receive screen and storm sash. Available from warehouse stocks.

Specify Truscon "Highest Quality" Residential Building Products



TRUSCON ALUMINUM CASEMENTS AND AWNING WINDOWS

Design to modular dimensions with Truscon's new Aluminum windows. New range of modular sizes to match standard concrete block dimensions and cut costs on labor and materials. Modern horizontal lines . . . increased light and ventilation area . . . stronger, more rigid construction of heavy extruded aluminum sections. Hardware, fittings and operators are either aluminum or stainless steel. Screens and storm sash available for installation from inside. Popular sizes in warehouse stocks.

Specify Truscon "Highest Quality" Residential Building Products

QUALITY PRODUCTS FOR EVERY STYLE

TRUSCON UTILITY STEEL WINDOWS

Design for utility value with Truscon Utility Windows of sturdy, durable steel construction. Especially suited for use in basements where extra light is desired, for garages, areaways, etc.

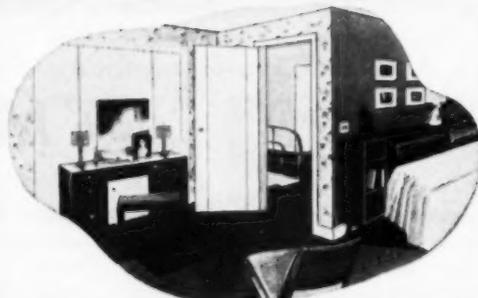
Removable ventilator opens in at top. Screens for attaching to exterior. Made in just one size to fit a masonry opening 2' 8 1/2" x 3' 6 3/8". In warehouse stocks.



TRUSCON BASEMENT STEEL WINDOWS

Design for lasting service with Truscon Steel Basement Windows. Rigidly built of heavy hot-rolled sections. Double weathering contacts around entire perimeter. Ventilator opens in at top—can be easily removed. Screens for exterior. Available in three sizes from warehouse stocks.

Specify Truscon "Highest Quality" Residential Building Products

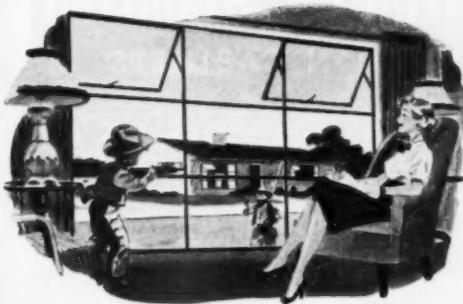


TRUSCON RESIDENTIAL INTERIOR STEEL DOORS

Design for permanent trouble-free operation with Truscon Residential Interior Steel Doors and Frames. Precision-engineered and manufactured of high quality steel, swing doors and frames fit perfectly—permanently. Doors can be installed in considerably less time than normally required to fit and hang a conventional door. Combination of sound-deadening material and closely spaced bracing members inside panels reduces closing sound to a minimum. Four types of locksets for your selection. Swing doors also made with louvers, glass or vision panels. Double-swing doors supplied in a single frame. Popular sizes of all types of Truscon Residential Doors available from warehouse stocks.

Specify Truscon "Highest Quality" Residential Building Products

TRUSCON STEEL DIVISION REPUBLIC STEEL CORPORATION



TRUSCON STEEL RANCH WINDOWS

Achieve modern openness with Truscon's new Ranch Window—handsomely styled in long-lasting steel, especially designed for one-story ranch homes. In larger sizes, it provides an attractive living room picture window, minimizing the "wide open" effect of large undivided glass areas. Medium sizes just right for dining rooms, dens, libraries. Smaller units ideal for sleeping rooms. Ventilators swing outward at bottom. Can be fitted with double insulating glass. Sliding wicker screens available. Popular sizes from warehouse stocks.

Specify Truscon "Highest Quality" Residential Building Products

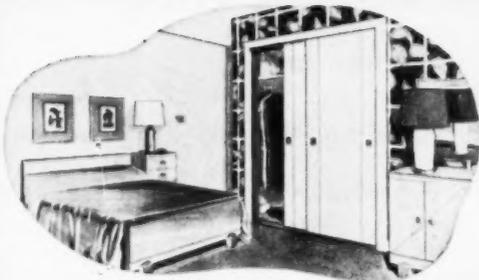


TRUSCON DOUBLE-HUNG STEEL WINDOWS

Design for lifetime satisfaction with the Truscon Double-Hung Steel Window, the one that's "right at home" in any type of home architecture. For greater rigidity and durability, 18 gauge electrogalvanized steel is used, sash members are of welded tubular construction. Weathertight design throughout features full-length stainless steel weatherstripping attached to frame. Sash and frame members are electrogalvanized. Bonderized and primed with a phenol-resin base paint, oven-baked. Two motor-action spring type balances on each sliding sash assure easy operation. Solid bronze hardware. Full and half screens and storm sash can be supplied. Popular types and sizes in warehouse stocks.

Specify Truscon "Highest Quality" Residential Building Products

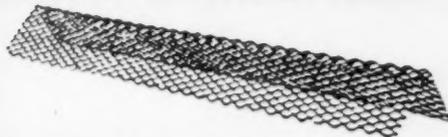
YOU CAN DEPEND ON OF HOME BUILDING



TRUSCON RESIDENTIAL STEEL CLOSET DOORS

Design for total accessibility with Truscon Residential Steel Closet Doors. They make every nook and corner of a closet readily accessible. They provide more usable floor space. And use of these modern sliding doors saves so much in material and labor! Precision-made of prime quality cold-rolled sheets heavily reinforced for rigidity. Truscon Sliding Doors fit perfectly—indefinitely. Each door equipped with two noiseless nylon rollers, dense felt top guides and rubber bumpers at jambs. Package Units contain two doors, hardware, and accurately punched header, jamb and track sections. Framed Units come with knocked-down frame. 6'8" high doors available in four standard widths from warehouse stocks.

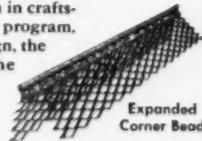
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TRUSCON METAL LATH AND ACCESSORIES

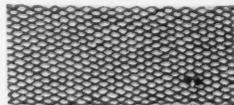
Selvedge Edge Cornerite

Design with Truscon Metal Lath and Accessories for the maximum in craftsmanship in any plastering program. Truscon offers the exact design, the quality construction and the complete range of metal lath and accessories plastering contractors need to assure a good job and a safe job every time. Made of the finest materials, fabricated by the most advanced methods in the industry . . . accepted by all building codes in the United States. Available from warehouse stocks.



Expanded Corner Bead

Selvedge Edge Strip-It



Specify Truscon "Highest Quality" Residential Building Products

1050 ALBERT STREET
YOUNGSTOWN 1, OHIO



TRUSCON
... a name you can build on

IT'S EASIER TO PLAN

with *Convertible*

AMERICAN-Standard
KITCHEN CABINETS



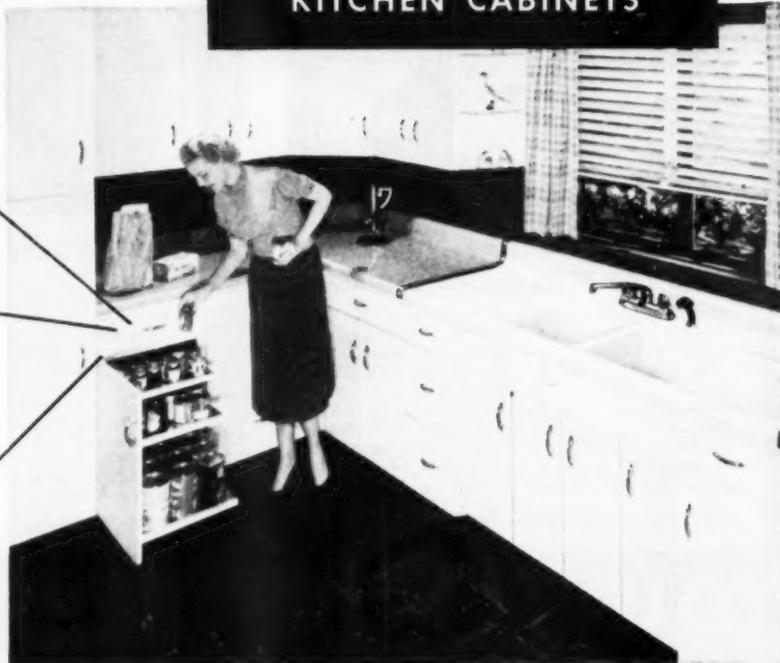
Space like this ...



can be converted ...



to meet storage needs!



ADAPTABLE TO FUTURE NEEDS OF YOUR CLIENT

... sizes and styles to fit any kitchen layout

Give your clients a feature that *only* American-Standard cabinets can offer—*convertibility*. The position of adjustable sliding shelves or drawers may be changed in any undersink or base cabinet, except the 27" base cabinet. Each sliding shelf, shallow or deep concealed drawer can be located at any of four levels. Deluxe exposed drawers can replace doors. Wall cabinet shelves are adjustable on one inch centers. These changes can be made easily—in just a few moments.

American-Standard kitchen cabinets offer you wider flexibility of kitchen planning . . . give your clients streamlined, work-saving kitchens that can "grow" with their particular needs. There is a wide variety of sinks, and base, wall, utility and undersink cabinets that can be

combined to fit any kitchen shape and dimension requirements.

Rugged construction is another client-pleasing feature of American-Standard kitchens. Made of heavy gauge steel, bonderized for long life, the cabinets are smoothly finished in a glossy white enamel that will stay new-looking indefinitely. They are perfect companions for American-Standard sinks—the finest made—which are constructed of rigid cast iron to which is fused a thick coating of acid-resisting enamel, available in five colors as well as white.

For further information about adaptable, convertible American-Standard kitchens, write for the Kitchen Products catalogue—Form No. KP-52.

For further information on American-Standard products see Sweet's Light Construction File.

American Radiator & Standard Sanitary Corporation
Dept. AB-103, Pittsburgh 30, Pa.



AMERICAN-Standard
KITCHENS

Serving home and industry: AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS & WALL TILE • DETROIT CONTROLS • KEWANEE BOILERS • ROSS EXCHANGERS

Take your choice...or take all three!

Bruce Hardwood Floors

They're naturally beautiful!

When you choose one, or all three, of these Bruce Floors, you give a home all the natural beauty and lasting charm of solid oak . . . plus smart new styling.

The glamorous Ranch Plank Floor (with alternate widths and walnut pegs) is perfect for rambling, informal homes in all price ranges. Distinctive Bruce Blocks are ideal for modern as well as formal styles,

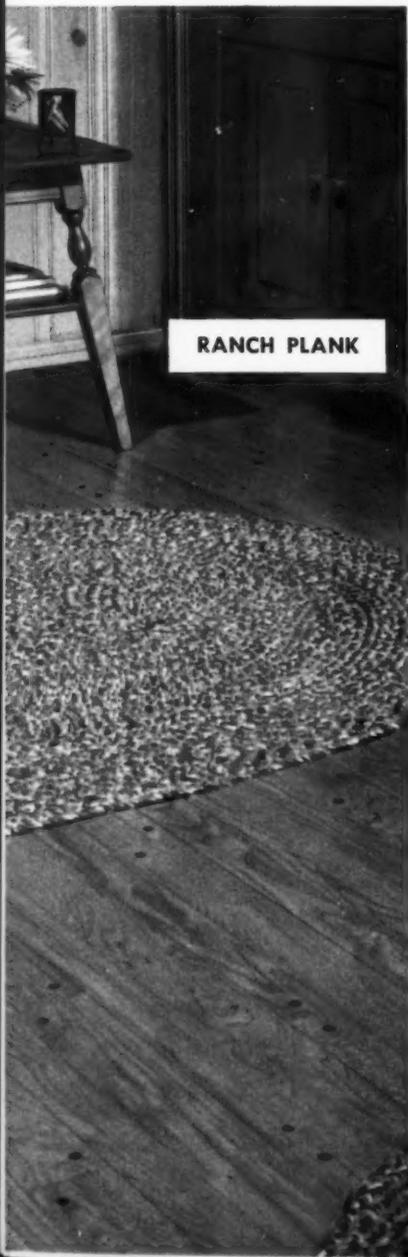
and can be installed over concrete or wood subfloors. A Bruce Strip Floor, of course, has timeless appeal and is in good taste in any setting. It's well to remember, too, that very interesting effects may be achieved by using two or three types of Bruce Floors in the same house.

Specify "*prefinished*" to save time and money on the job. See our catalog in Sweet's and write us for booklets with color photos of Bruce Hardwood Floors.



E. L. BRUCE CO., MEMPHIS 1, TENN.

Hedrich-Blessing Photos



RANCH PLANK



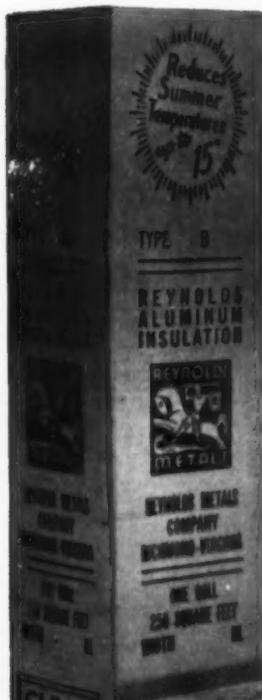
BLOCK



STRIP



Going up **FAST** all over the country!



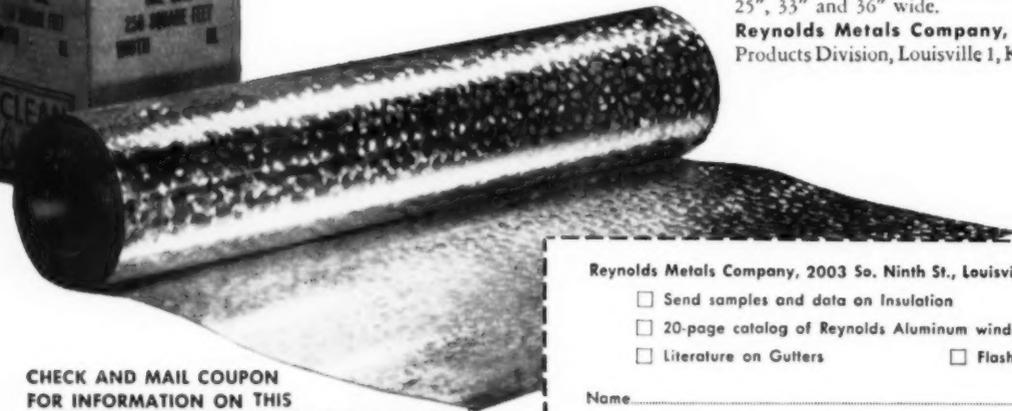
REYNOLDS ALUMINUM REFLECTIVE INSULATION

Low Cost, High Efficiency . . . the Fastest, Cleanest to Apply!

Quick application is just one reason this insulation is "going up *fast*" in popularity. It takes the least manpower . . . lightest, easiest to handle. It takes the least space . . . you can carry enough for a house in your car. It takes the least capital . . . for material, labor, storage. Yet it does a big job winter and summer. And it's the perfect vapor barrier, too!

Remember, Reynolds Reflective Insulation is pure aluminum foil laminated to tough kraft paper by special pressure-embossing for a firmer bond and better appearance. Reflects up to 95% of radiant heat. Clean, odorless, pliable yet rigid enough to hold position permanently. Ideal for unheated crawl spaces . . . for radiant-heated and air-cooled installations. Comes in 250 sq. ft. rolls . . . double-faced (Type B), single-faced (Type C), 25", 33" and 36" wide.

Reynolds Metals Company, Building Products Division, Louisville 1, Kentucky.



CHECK AND MAIL COUPON FOR INFORMATION ON THIS AND OTHER REYNOLDS BUILDING PRODUCTS

Reynolds Metals Company, 2003 So. Ninth St., Louisville 1, Ky.

- Send samples and data on Insulation
 20-page catalog of Reynolds Aluminum windows
 Literature on Gutters Flashing

Name _____

Address _____

REYNOLDS ALUMINUM

SEE "MISTER PEEPERS," starring Wally Cox, Sundays, NBC-TV Network.



B&D Utility 8" Saw
 cuts to 2 13/16"
 deep, bevel
 cuts to 45°
\$92.50
 Choose from complete
 line—sizes 6" to 9"

Black & Decker Utility Saws

Save 3 working hours a day

for Hayward & Feller Construction Co., Denver, Colorado

ON the El Paso Motel job in Denver, the Hayward & Feller Construction Co. used two B&D Saws—and really cut building time! The company found that by switching to B&D power sawing they saved three working hours a day. In 10 working days, the 30 hours saved was money in the bank for them. The contractors also report that B&D tools have proved reliable, durable, and tops for all-round performance.

With reports like these as typical, it's small wonder builders all over

the country specify Black & Decker! Builders like the powerful, B&D-built universal motor in the Utility Saws. They like the light weight and perfect balance for cutting operator fatigue; the telescoping blade guard and instant-release switch for maximum safety; the ball-bearings, heat treated alloy steel gears, and strong, aluminum housings for long life.

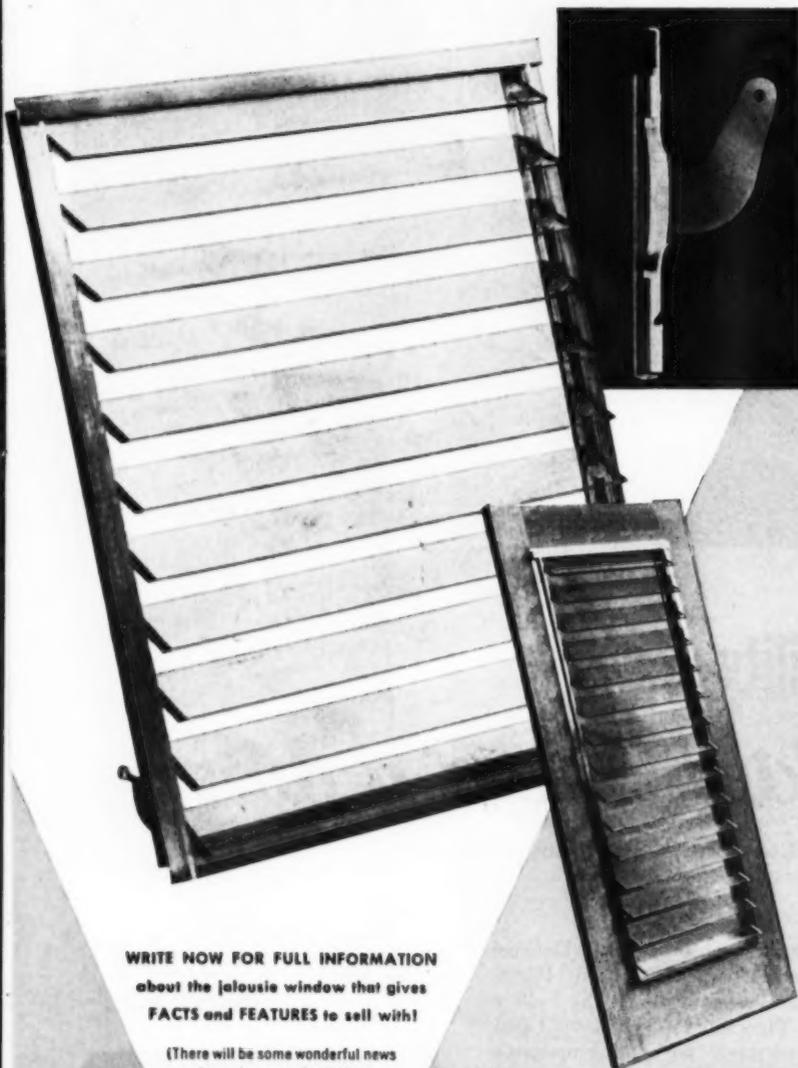
For free demonstration, see your B&D Utility dealer. Write for free catalog to: THE BLACK & DECKER MFG. CO., Dept. H663, Towson 4, Md.

Look under
 "TOOLS, ELECTRIC"



Black & Decker
 UTILITY
 PORTABLE ELECTRIC TOOLS

Your Selling Points are
Exclusive **FEATURES*** and **REAL FACTS**
 with **ABC JALOUSIE WINDOWS!**



WRITE NOW FOR FULL INFORMATION
 about the jalousie window that gives
FACTS and **FEATURES** to sell with!

(There will be some wonderful news
 and surprises soon for dealers on
 our mailing lists — be sure
 we have your name and
 address.)

AB-10

ADAMS ENGINEERING CO., Inc.
 P. O. Box 936, Little River Branch, Miami 38, Florida

Name _____
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EXCLUSIVE
PATENTED SPRING-CLIP

Makes installation easy, foolproof, chip-
 proof...glass is held firmly in "knee-action"
 assembly that cannot rattle!

ALL BALANCED CONTROL

Perfectly suspended jalousies are smooth-
 operating...never a strain on moving parts
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FULL NATIONAL
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ABC Jalousies have *acceptance*...national
 advertising makes sales for you...and full
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 your job easy!

...and remember, Adams Engineering
 Company manufactures just one grade
 of jalousies!



Adams Engineering Co., Inc.

MIAMI, Florida HACKENSACK, New Jersey

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You complete homes faster — sell them easier with

Roddiscraft

PANAWALL

MAHOGANY • WALNUT • OAK
CHERRY • BLONDE LIMBA



Interiors like this *thrill* customers . . . provide *lasting beauty* . . . yet take *less time* to install!

Builders and buyers both win with Roddiscraft Panawall interiors. The *builders* win — creating interiors that are showplaces, at reasonable cost, and doing the job in less time. There's no matching necessary with Panawall. The *buyers* win — getting far more beautiful interiors, saving on installation costs, and having walls that *keep* their beauty through the years. There is no more "decorating" after Panawall is installed. Costly repainting is ended, messy papering eliminated! It's the ideal material for use in new homes, and for home modernization.

Panawall is the best of today's plywood paneling!

Roddiscraft Panawall is genuine *hardwood* plywood, made of random-width veneers V-grooved at the joints. Looks like costly solid wood — costs only a fraction as much. 4' x 8' x 1/4" panels simplify new construction, or can be installed over existing walls.

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Learn how Roddiscraft Panawall can help you build faster, sell easier. Clip and mail the coupon for complete information.

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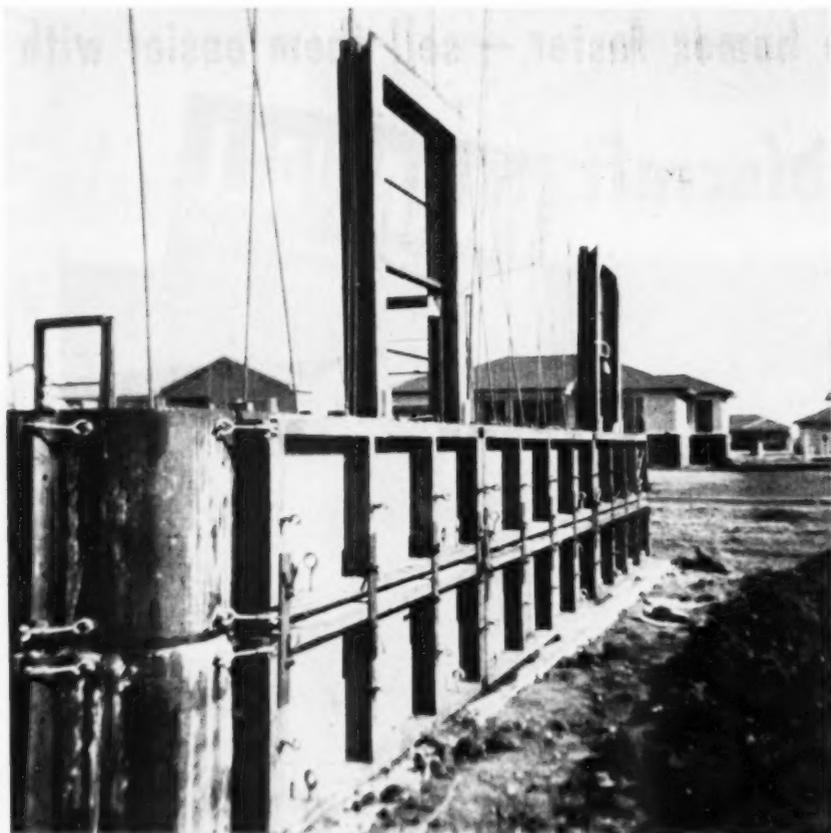
RODDISCRAFT — RODDIS PLYWOOD CORP.
Marshfield, Wisconsin

Yes, I want the facts on Panawall and other types of Roddiscraft decorative paneling.

Name

Address

City State



Precision forms lower costs and speed production for monolithic poured structure

precision forms speed construction of concrete buildings



Reinforced monolithic concrete house has 1,140 square feet of livable area. House sells for \$12,500 in Lawton, Oklahoma

REINFORCED monolithic construction, dream of many building professionals, has taken another step forward. For now Tom Jelks, Lawton, Oklahoma, builder-manufacturer, has invented special forms which speed erection and impart architectural beauty to the face of the concrete wall. Jelks also claims solutions to other age-old problems: high cost of forming and dampness in the wall.

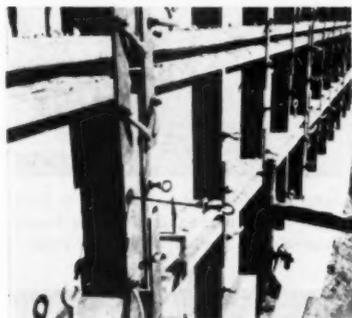
Jelk's system utilizes special forms made by him in 4-6- and 8-foot sections, two feet high. These forms are set on the foundation wall and leveled. Each form is equipped with a leveling bolt at each side and after the first set is in position, the concrete is poured. The next operation is to place another set of forms

on top of the first and then pour these. Three or more sets of forms are used for best results. From this point the wall is progressively raised by first stripping the lower form and then setting it on top.

Jelks warns that care must be exercised after the forms have been stripped from the lower extremities of the wall. The exposed concrete surface must be kept moist until it is cured.

Provision for window and door openings is made at the time of pouring. A special frame encases a metal window unit, allowing it to be placed in the form so that the concrete can be poured around it. Corner sections are rolled steel forms which are tied to the regular form.

The exterior walls of an average-sized house can be erected in 3 to



Forms are leveled by large I-bolt in foreground. On first form it screws down against footing to level. Only first set of forms needs leveling. Rod seen in middle of photo insures uniform thickness of form; is pulled while concrete is green

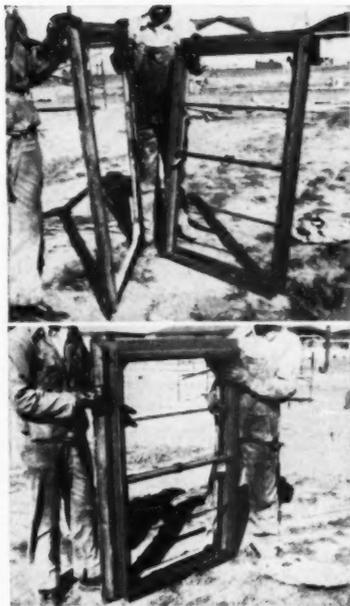
16 hours with a crew from 6 to 10 men. The crew moves the forms, prepares the mix and fills the forms.

Scoring the face of the wall is the architectural keynote of this poured-in-place method. Jelks has patterns resembling brick and many other types of parallel, horizontally scored bands. Aluminum half rods, attached to the face of the forms, leave the scored depression.

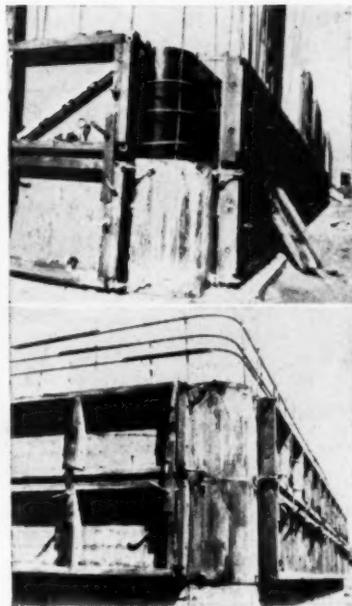
Dampness in the wall has been overcome, according to Jelks. He uses Styrofoam, a rigid insulation material, which he mortars to the inside of the wall. The material serves two purposes: as an insulation and as a plaster base.

House Construction

The lot is leveled, footings are laid out and then excavated. Grade



Windows are placed in wall and mix is poured around them. Photos show frame placed around window to get proper wall thickness



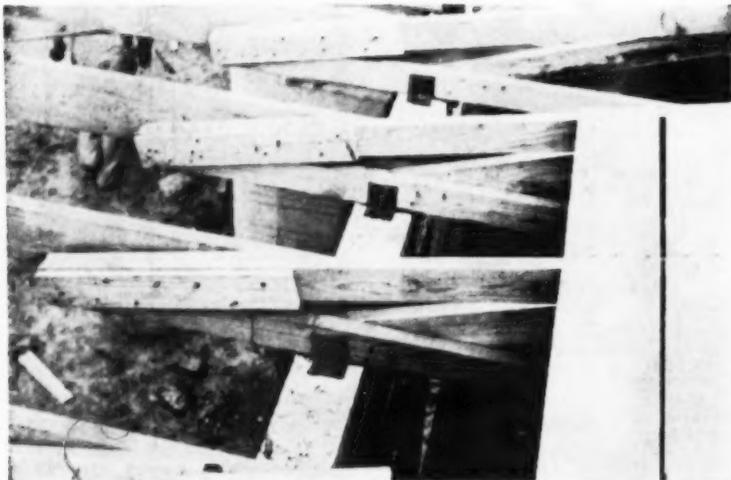
Corner has rolled steel form attached to the regular form. Three horizontal bars are placed below and four above the window

stakes are set and then the footing is poured. The footing is then blued-lined to make the exterior dimension of the structure. The forms are set on this line. The wall is progressively raised by adding two-foot

forms. Prior to the start of the walls, the plumbing is roughed in and the gravel under-slab fill is placed inside the footings. When the lower form is pulled, the gravel is leveled, a waterproof membrane installed,



Scoring in the face of the exterior wall is made by aluminum half rods attached to the face of the form



Roof trusses are bolted to the poured-in-place wall. Bolts are placed in position when concrete is poured

and the slab poured. After the exterior wall is erected, roof trusses are raised and roof sheathing nailed in place.

Interior walls are conventional stud and plasterboard or plaster. These are designed for a 4-inch module and are shop-fabricated and trucked to the site.

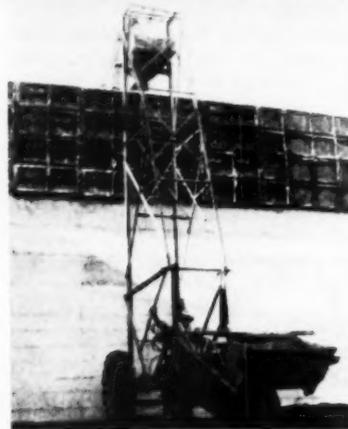
Jelks recently completed ten houses in Lawton and sold them the first week even though, as he puts it, "There were hundreds of vacant houses at the time."

Using the progressive forming method, Jelks has built houses, schools, gymnasiums and commercial buildings. He now plans to manufacture the forms and set up franchises throughout the country.

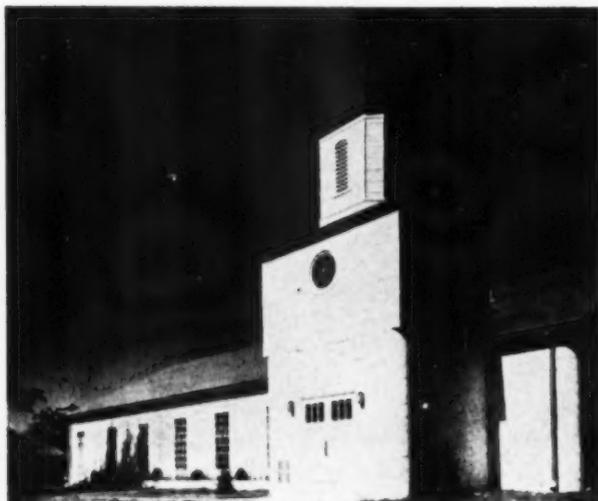
Shown below and to right examples of construction using this method of forming. All examples are reinforced monolithic poured construction



Rigid Styrofoam insulation is mortared to interior wall. Plastering is done over the Styrofoam

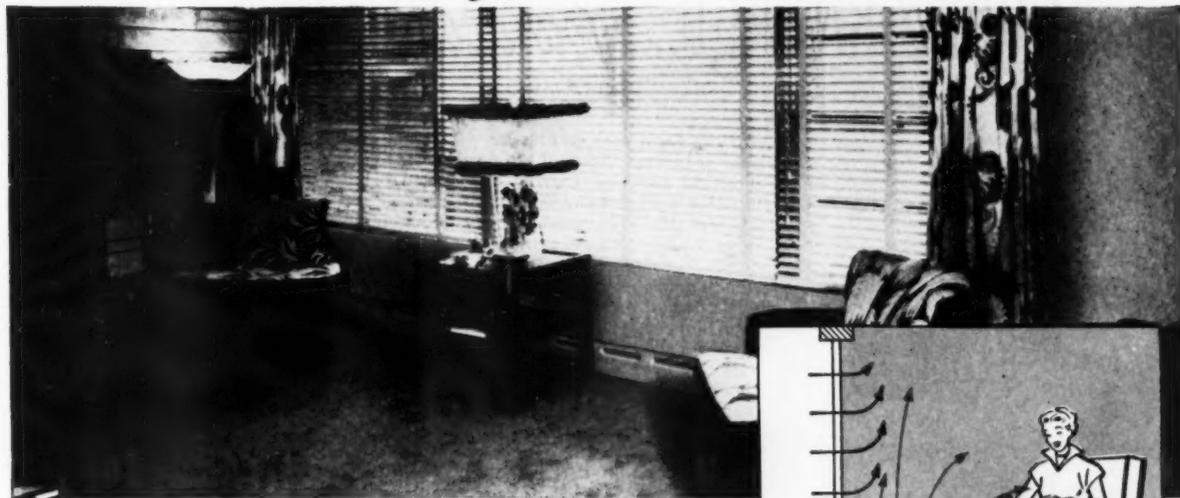


Special lifting device is attached to Ford tractor, lower section is used for house construction. Bucket holds 1/3 yard



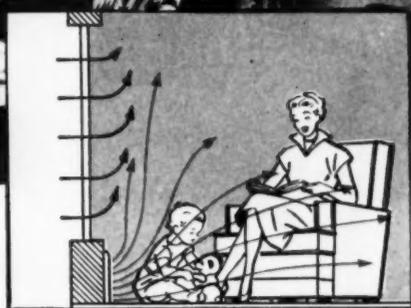
Today's home builders demand both

Comfort and Beauty



B & G Hydro-Flo Heating

with baseboards or radiant panels provides overall sunny warmth . . . permits full decorative freedom



All space livable—no cold drafts

Homes with large glass areas present a special heating problem—easily solved with *radiant* B & G Hydro-Flo Heating. This forced hot water system permits proper placement of the heating units to protect against icy downdrafts from the windows and to keep floors warm.

B & G Hydro-Flo Heating provides not only a better *quality* of heat but better *controlled* heat as well. Every change in the weather is automatically met with a corresponding change in the heat supply. No fuel-wasting overheating—but always plenty of heat when the thermometer hits bottom.



All year 'round domestic hot water

An abundant supply of domestic hot water is a genuine necessity in the modern home. The Water Heater of a Hydro-Flo System provides an ever-ready supply, 24 hours a day, winter and summer... at amazingly low cost. Plenty for automatic washers, bath, showers and every household use.



Snow melting an optional feature

Pipe coils can be installed under the sidewalks and circulated with hot water from a heat exchanger connected to the boiler. Snow is melted as fast as it falls . . . ending a back-breaking job. A snow melting installation can be made when the original heating system is installed or at any time thereafter.



BELL & GOSSETT

COMPANY

Dept. DD-11, Morton Grove, Illinois

Canadian Licensees: S. A. Armstrong Ltd., 1400 O'Connor Drive, Toronto

National Homes Sales Up 27% Over Year Ago...*How about Yours?*

For the fiscal year ending June 30, National Homes' volume of business showed an increase of 27% over the previous 12 months. During that same period the home building field remained virtually static.

And this sensational gain was registered on top of National's already dominant position in the field. It might be easy for a small company to do 27% more volume, but when the leader does it—that's amazing!

If you haven't stepped up *your* business in the same ratio, investigate the profit opportunities in a National Homes dealership. Your area may be available. Write or wire today.

Charles M. Goodman, AIA, is now exclusive Architectural Counsel for National Homes. This internationally famous architect will help YOU sell more houses as a National Homes dealer-builder, by giving you a still greater variety of pace-setting plans and designs. This exclusive National Homes feature further adds tremendous sales appeal!



Now — Air-Conditioned!

Any new National home may now be ordered completely air-conditioned at unbelievably low cost—only \$500 additional for the small and medium-sized homes, \$600 for the larger models, with just a very slight increase in the down payment. And this health-giving feature annually averages only a few cents per day to operate.



GABRIEL HEATTER, called America's No. 1 Salesman, is now on the air for National Homes, coast to coast. Listen to his new program, "Good News Today" every Monday, Wednesday and Friday morning over the entire Mutual Network. Just think how Heatter's dynamic personal selling could build business for you as a National Homes dealer!



National Homes prefabricated panels and structural parts as they leave the assembly plant carry the Good Housekeeping guarantee seal and Parents' Magazine seal of commendation.

SOUTHWESTERN BUILDERS!

You are invited to see new "RANGER" series of National Homes, introduced at Texas State Fair, Dallas, Oct. 10-25. A complete house of the "Ranger" series will be on display just inside main entrance, General Exhibits Bldg.

You can add
this note of quality
to your homes
without paying
a price premium!



MORE AND MORE BUILDERS ARE
PUTTING *Silent Automatic* IN THEIR PLANS!

*Here is a name customers
know . . . priced for builders
with an eye to value!*

Let your customers know that you build *quality* homes! Install Silent Automatic—the heating equipment they know and can rely on for dependability!

A handsome Silent Automatic unit in the home you've built is one of your salesman's best talking points. But you don't have to pay extra to add this note of quality! Silent Automatic is priced to compete with other makes that can't offer as much in prestige and resale value.

Look over the complete Silent Automatic line of furnaces, boilers and conversion burners. There are models and sizes to suit your every building need.

*Write for the name of your
nearest wholesaler!*

Put *quality* heating into all your homes. Write today to National Sales Manager R. E. Loebell in Jackson—he'll rush you the name of your nearest Silent Automatic Heating Equipment Wholesaler.



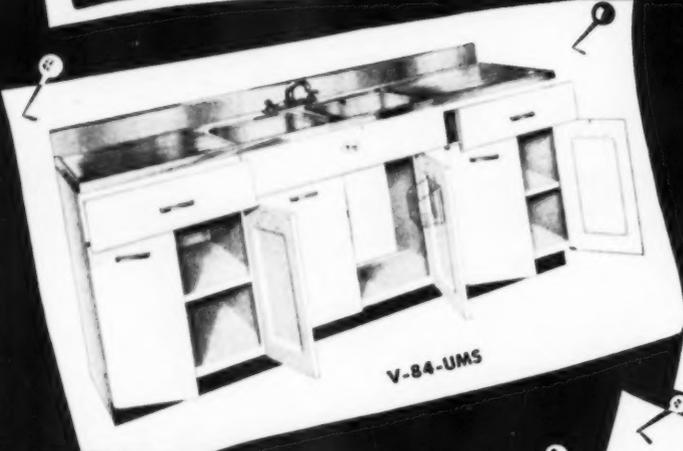
Silent Automatic
HEATING EQUIPMENT

TIMKEN SILENT AUTOMATIC DIVISION
THE TIMKEN-DETROIT AXLE COMPANY
General Offices, Jackson, Michigan

Tracy
KITCHENS

BUILDER'S
TACK BOARD

2 New Models *Tracy Value-Line*



**STAINLESS
STEEL
SINKS**
priced like
ordinary
porcelain

BOTH
Double Bowl
Beauties
—each practically a complete kitchen in one unit!



ALWAYS
HIGH
SKY QUALITY



**DOWN TO
EARTH
PRICES**

It's a cinch
to lick the
competition
with these



ask for data now!

Builders! It's a proven fact!

"Plug-In" Strip sells homes*



In Reading, Pa.'s "all-electric" house National Electric "Plug-In" Strip drew more approving comments than any of the other convenience features of the home.

KITCHEN—Type CF-2 (constant service) "Plug-In" Strip provides a spread of outlets every 6" along the kitchen work centers. Every appliance has its own outlet!

You *know* that such conveniences as modern kitchen facilities add real value to a home . . . increase its saleability. But did you know that there's another way to make your homes even *more* desirable and at no extra cost? It's National Electric "Plug-In" Strip, the permanent multi-outlet wiring system.

Economical, easy-to-install, "Plug-In" Strip puts your homes years ahead electrically . . . provides your prospects with all the electrical outlets they'll ever need.

Here's what NE "Plug-In" Strip offers . . .

- A spread of outlets every 18" all around the room . . . for lamps, appliances, radio, TV.
- Outlets every 6" for kitchen work centers.
- A choice of electric service—Type CF-2 for constant service; CF2-G for grounding equipment; CF-3 for both constant service and automatic switch control.

Give your homes the added lift that can mean the difference between a sale or no sale. Write for the details on National Electric "Plug-In" Strip today. It's listed by Underwriters' Laboratories, Inc.

EVERYTHING IN WIRING POINTS TO

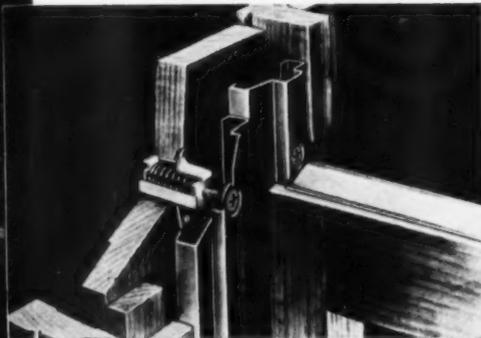
National Electric Products

PITTSBURGH, PA.

3 Plants • 7 Warehouses • 34 Sales Offices



FEATURES
that add
up to
SALES



THE HEART OF THE "400"
The metal sash guides and the spring tension units make the "400" an outstanding, fast selling prime window. The sash guides give all weather protection.

REMOVABLE
Easily removed for washing or repairing.



EASILY INSTALLED
Takes no more time nor effort than ordinary prime windows.

QUICKLY ADJUSTED
Two minutes with a screw driver and the window slides as desired.



**CONTACT YOUR
LUMBER DEALER
OR**

ALASKA
Glass Sash & Door Supply
Anchorage, Alaska
Don Able Millwork and
Building Supply Co.
Juneau, Alaska

COLORADO
Prefabricators, Inc.
3800 Race Street
Denver, Colorado

NORTH CAROLINA
Malta Mfg. Co.
Malta, Ohio

SOUTH CAROLINA
Dealers Supply Company
420 West McBea Street
Greenville, South Carolina

CONNECTICUT
Malta Mfg. Co.
Malta, Ohio

GEORGIA
Randall Brothers
Atlanta, Georgia

IOWA
Presto-Matic, Inc.
24th and Spring Streets
Omaha, Nebraska

ILLINOIS
Lumbermen's Supply Co.
2020 Burlington Avenue
Kansas City, Missouri

IDAH0
Utah Sash & Door Factory
2341 South State Street
Salt Lake City, Utah
Lumbermen's Supply Corp.
3002 Mission Avenue East
Spokane, Washington

INDIANA
Allied Wholesale Company
1212 S. Walnut Street
South Bend, Indiana

KENTUCKY
Malta Mfg. Co.
Malta, Ohio

KANSAS
Lumbermen's Supply Corp.
2020 Burlington Avenue
Kansas City, Missouri

MARYLAND
Dixie Millwork Co., Inc.
Hagerstown, Maryland
Monumental Millwork, Inc.
1101 S. Brunswick Street
Baltimore, Maryland

MISSOURI
Lumbermen's Supply Co.
22nd and Olive Streets
St. Joseph, Missouri
Defiance Window Mfg. Co.
1605 S. Kingshighway
St. Louis, Missouri

MAINE
Malta Mfg. Co.
Malta, Ohio

MASSACHUSETTS
Springfield Millwork Co.
Springfield, Massachusetts

MINNESOTA
Vetter Mfg. Co.
Stevens Point, Wisconsin
Presto-Matic, Inc.
24th and Spring Streets
Omaha, Nebraska
Marvin Lumber & Cedar Co.
Warroad, Minnesota

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Royal Oak Wholesale Co.
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Saginaw, Michigan
Ros Curtis Company
831 Osbow Lake Road
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West Michigan Sash &
Door Co.
Grand Haven, Michigan

MONTANA
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NEBRASKA
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Omaha, Nebraska

NEW HAMPSHIRE
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Utica, New York
Cameron Lumber Company
Newburgh, New York
The Gibson Door Company
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Utica, New York
Rock Island Wholesale Co.
52 Leslie Avenue
Buffalo, New York
Wood Glass Company
Newport Ave. Eastwood
Station
Syracuse, New York
Mercury Millwork Corp.
Garden City, Long Island,
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Malta, Ohio

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Akron, Ohio
Cincinnati Sash & Door Co.
Front and Freeman Streets
Cincinnati, Ohio
Great Lakes Sash &
Door Co.
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Cleveland, Ohio
Interstate Sash & Door Co.
836 Savannah Avenue
Canton, Ohio
Teachout Sash & Door Co.
100 Spring Avenue
Columbus, Ohio
Malta Mfg. Co.
Malta, Ohio

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WEST VIRGINIA
W. A. Wilson & Sons, Inc.
1409 Main Street
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Malta, Ohio

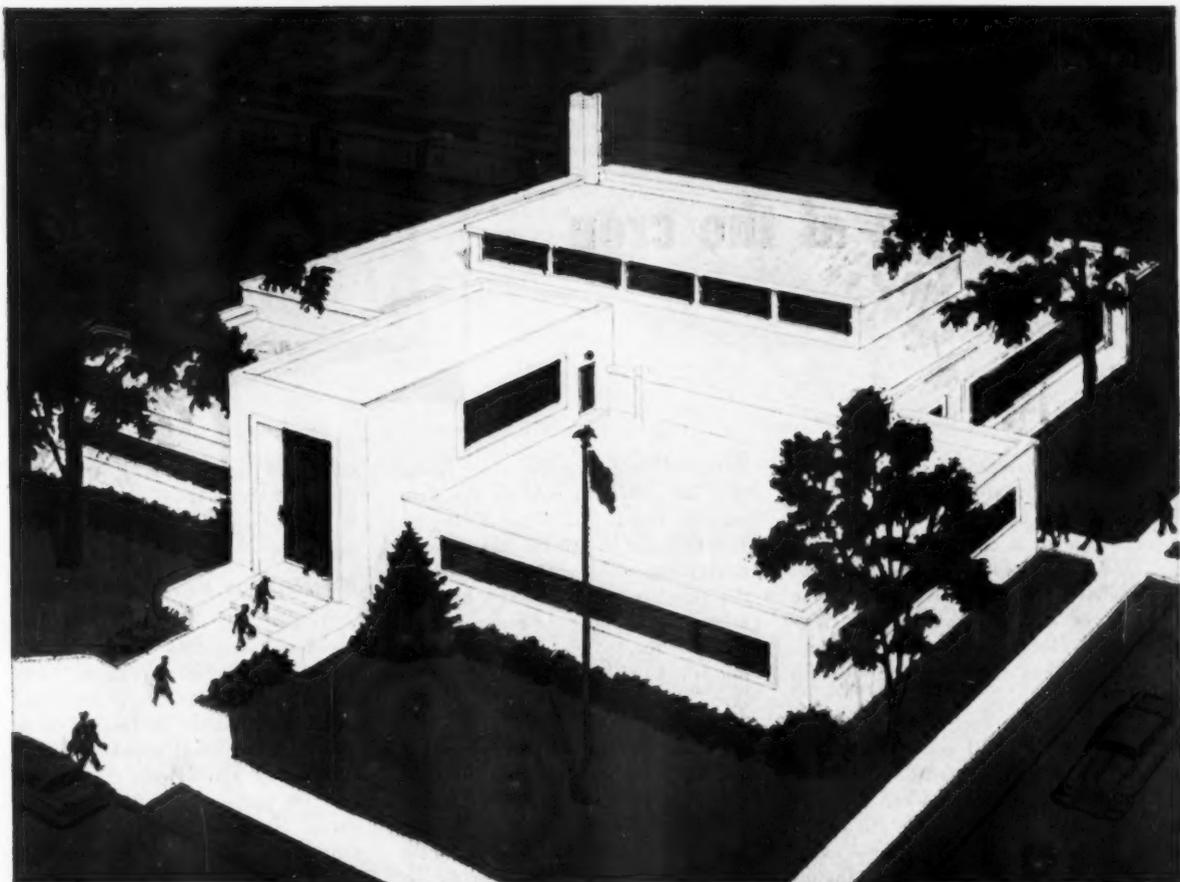
WASHINGTON
Lumbermen's Supply Corp.
3002 Mission Avenue East
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Dealers Millwork Supply,
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**METALS BY
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306 E. State Fair Ave., Detroit 3, Mich.

AMERICAN BUILDER



HARDY PERENNIAL PLANT

Take a tip from the gardener, there's no plant like a hardy perennial. And you can build *your* plant that way with reinforced concrete. Experienced plant owners find there's nothing like reinforced concrete construction for real strength and long life. They get, in addition, the beauty and safety that only concrete can provide.

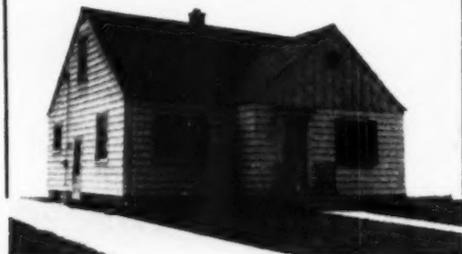
To give concrete proper reinforcement, experienced builders choose welded wire fabric. For only fabric furnishes uniformly spaced steel members for correct load distribution and added strength. Specify Clinton Welded Wire Fabric and meet all A.S.T.M. requirements. Available in sizes and weights for all reinforcing needs.

PACIFIC COAST DIVISION, Oakland, California
THE COLORADO FUEL AND IRON CORPORATION, Denver, Colorado
WICKWIRE SPENCER STEEL DIVISION, New York, New York



TRADE INS— cream of the crop

Hansen has this rental house for buyers who need to leave their old houses before the new house is completed. Thus buyers of the older houses aren't turned away for need of immediate housing



A TRADE-IN sale nets the builder approximately one-and-one-half times what he could make on the sale of a new house without a trade-in, that's the statement of Richard Hansen of Kenosha, home builder and president of the Wisconsin Home Builders Association. Hansen has been trading for 25 years.

"What difference does it make," asked Hansen, "if you speculate on the new or the old house?" The new house is no problem when trading. The large equities in the old house make financing the new house easy. A builder who can arrange financing on the old house can add dollars to his business. "It's the cream of the crop," according to Hansen.

Hansen uses the "Trade-In Guarantee" method. (The Trade-In Guarantee method was fully explained in the original trade-in article appearing in the July, 1953 *American Builder*. The Trade-In Guarantee allows a buyer a certain pre-de-

termined value for his older house if it has not been sold by the time the new one is completed. Every effort is made to sell the older house during the construction period.) In the past six years, Hansen has not taken in one house. In every case he has sold the old one before the new one was completed.

This Is How He Does It

As soon as the sales agreement is signed, whereby Hansen will build a new house in his subdivision, he will begin listing the older house. Hansen will not trade on existing new houses, only on ones to be built. If the older house is sold before the new house is completed and if the buyer of the older house wants immediate possession, Hansen will move the buyer of the new house into a rental. He charges a nominal \$60 per month until the new house is completed. Hansen doesn't believe in turning buyers of older houses away because they

can't get occupancy. Providing a place for the buyer of the new house is one of the keys to the trading operation.

Watch Your Real Estate Values

Biggest pitfall in the trading business, according to Hansen, is guessing at real estate values. "Competent appraisals mean success," stated the builder. In fact, Hansen, who is a qualified appraiser, is so certain of his figures he guarantees 90 per cent of the appraised value. Hansen warned, however, that most builders had better offer 35 per cent if they are not experts. The 35 per cent figure was recommended by the *American Builder* in its July kick-off article on trading.

How To Appraise

Appraising, as outlined by Hansen, includes three steps. These, he states, are used by most appraisers. The average, or mean, of the three is the correct value.



Hansen guaranteed \$12,500, but house was sold at owner's price of \$13,500 before the new house was completed. New



house was priced at \$19,000. Deal was cash. Buyer of the old house paid \$4,500 down; has a \$9,000 mortgage



Hansen built the older house in 1946 for \$7,700. In the meantime, owner added the garage and finished the second floor. Improvements and inflated prices increased the value to \$14,000 in 1952.

Both houses pictured were built by Hansen. The owner of the house on the right wanted to trade for a three-bedroom model. He paid \$10,000 for the older house with garage in 1948. In 1952 the house sold for \$12,500. The new three-bedroom house for which he traded cost \$13,500. Owner had a \$5,500 equity in the older house which was applied to the new house. He took a \$8,000 Building and Loan mortgage. Upon hearing his neighbor talk about this deal, the owner of the house on the left also wanted to trade. In 1948 he paid \$9,200 for the expansible. He completed the second floor and raised the value to \$12,000. His new home was priced at \$13,500 and his equity and mortgage plan were the same as the example above



1. Cubic Foot Appraisal:

First determine the cubic-foot content of the house and multiply it by the area value for certain type structures. The unit factor could not be given by Hansen because it differs in all parts of the country. After the total is reached, subtract one per cent per year for age of the house. Square-root figures can be used as well as the cubic-foot figures. The cube figure in Kenosha is 62½ cents.

2. Comparable Prices:

Builders can take into account recent sales of like property in the same vicinity. These are a good indication of values.

3. Tax Assessor Figures:

The city or township tax assessor is doing a better job today, according to the Wisconsin builder. The assessor's figures, multiplied by a constant, will

produce a realistic value for older property. However, areas differ as to what the constant might be. In Kenosha the constant is nearly 220 per cent.

Unforeseen Conditions Affect Appraisals

Other unseen problems can crop up to affect appraisals. Hansen tells the story of the house that could be sold only in the winter. It seems the house was a couple of blocks from a lighted baseball field. Almost every night in the late spring, summer and early fall, autos belonging to the baseball crowd would park in front of the house. Noise and lights made the area unfavorable. Amusement centers, air fields, and certain types of manufacturing plants can adversely affect property values.

Overcoming Owner's Unrealistic Values

Hansen, like most builders who are trading, frequently comes face

to face with owners who place the value of their property way out of line. His method of bringing them down to earth is unique. When he sets up a trading deal he does not ask the \$64 question. He doesn't want to know. Hansen makes a complete appraisal. Then he goes back to see the buyers for their estimate.

A typical example is one where he made an appraisal of \$13,500 yet the owner wanted \$15,000. Hansen asks, and usually receives, an exclusive 60-day listing at their figure. He tells them, "If you are right and I am wrong, we will sell the house for \$15,000. But if it's not sold in 60 days, then I must be right and we will use the \$13,500 figure. If you want my trade-in deal, that's how we will do it." It works.

Hansen is a small builder. He builds 15 to 20 houses a year and makes five to ten trades. He sums up the operation this way. "Builders should have this type of service and they don't need to go to poorhouse."



Hansen guaranteed this buyer \$13,000 and sold the house for \$14,000. New house was priced at \$17,000. Buyer had an \$8,200 equity in the old house which he applied on the new one



Older house was built by Hansen 28 years ago. It sold quickly at \$12,500. Hansen moved the buyers of the new

house to his rental while they waited for their new \$14,200 house to be completed. The deal was cash in both cases

Now you see it..now you don't

NEW AMWELD Slide-away

POCKET DOOR AND FRAME UNIT



A SPACE SAVING SOLUTION for "door swing" problem areas

The new Amweld Slide-Away is an attractive steel flush door when closed — yet it completely disappears by gliding into a hidden wall pocket — out of sight — out of the way. Operation is smooth and silent with no obstruction to room or hall space. It is the most practical answer for floor plans where "swing" may not be conveniently available.

EASY-TO-INSTALL

Designed for use with standard Amweld Steel Flush Doors — it can be installed without mortising or drilling. The Slide-Away Frame Unit is also available separately for use with wood doors. Complete step-by-step instructions furnished in every carton. Factory primed with grey baked-on enamel, Amweld Flush Doors are ready for your choice of colors.

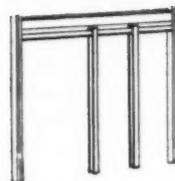
See Your Authorized Amweld Dealer

He will be glad to discuss your door problems with you and show how the Amweld Slide-Away as well as Amweld Steel Doors, Frames and Sliding Closet Door Units can save you money. Contact him today.



Amweld Building Products Division

THE AMERICAN WELDING & MANUFACTURING COMPANY
310 DIETZ ROAD • • • WARREN, OHIO



Fits Standard door opening

The Slide-Away Unit is furnished for 2'6" and 2'8" (1½" thick, 6'8" high) Amweld Flush Doors. Pocket frame fits into conventional 2" x 4" wall construction and wood core frame permits nailing of lath.



Finger Pulls or Latch Sets

Handsome brass recessed finger pulls are furnished where Slide-Away is used for ordinary doorways. Latch sets available for privacy in bathrooms or bedrooms.

CHEM-O-GLAS

NEW SHATTERPROOF TRANSLUCENT REINFORCED GLASS-FIBER BUILDING PANELS FOR STRUCTURAL AND DECORATIVE USES WITH EXCLUSIVE, DISTINCTIVE **RIBBED** DESIGN SO EASY TO INSTALL.

See the new shades — "FROSTED GREEN" and "COPPERGLO" — especially created for patio use where glare and heat are undesirable. Give restful, glare-free light. Heat rays screened out by exclusive new Chem-O-Filter Compound "XO." Also in natural blonde and marbled yellow. Colorful. Colorfast. Virtually indestructible.



CHEM-O-GLAS (pronounced Kem-O-Glass) is precision molded in 8' lengths, 32 7/8" wide, (32" wide from c/c of outside ribs when overlapped.) Some jobber-dealer territories still open. Write today.

Hundreds of Uses

No need to paint-or-repaint-ever!
"Your first cost is your last cost"

CHEMOLD
CHEMOLD Company
 2310 BROADWAY
 SANTA MONICA, CALIF.
 "LARGEST MATCHED METAL MOLD PRESSES IN THE WEST"



CHEM-O-GLAS UPS SALES — Outdoor showroom of J. A. Eisele Sales, Inc., one of west coast's largest Lincoln-Mercury dealers, showing utilization of CHEM-O-GLAS ribbed structural panels as roofing for structural steel carports.

Everlasting . . . Everlovely . . .

CHEM-O-GLAS is available in flat sheets or the distinctive new RIBBED design. Many architects and builders have found ribbed CHEM-O-GLAS the answer to inside and outside structural and decorative problems where canvas, porcelain, tile, wood, plastic, glass, aluminum or plywood have proved impractical. Inquiries invited.

CUSTOM MOLDING: Manufacturers are invited to submit production problems to us for estimate.

Write for information today

CHEMOLD COMPANY, DEPT. AB-10
 2310 Broadway, Santa Monica, Calif.

Send details on CHEM-O-GLAS

NAME _____

FIRM _____

ADDRESS _____

CITY _____

As presented in
BUSINESS WEEK



Mixing chopped Fiberglas yarns with gypsum plaster helps makers of gypsum wallboard to almost double the board's impact resistance!

Fiberglas reinforcements are used in gypsum wallboard to replace such conventional fillers as cellulose fibers, cork, wood pulp, etc. They permit significant product improvement at no increase in price.

Previous to their adaption into the general line of gypsum board, they had been used to increase the fire resistance ratings of special gypsum boards by as much as 300%. They proved ideally suited for this application because they do not burn, because they retain their great tensile strength even at high temperatures and help reduce shrinkage of the gypsum core.



Improved flexibility. Fiberglas reinforcements help hold the board's gypsum core together, increase its flexural strength and resiliency. Means easier handling, greater resistance to cracking, chipping of edges and other damage.

For tougher gypsum wallboard: "Season well with Fiberglas* yarns"

You'll be hearing a lot before long about this new, improved gypsum wallboard. For this is gypsum board that's been "seasoned well with Fiberglas yarns"—a board that builders say is tougher, better to nail, longer-lasting than gypsum board has ever been before!

It's the chopped Fiberglas yarns that make the big difference. They're light, incombustible, rotproof. Above all, they have exceptional tensile strength.

When chopped and mixed with gypsum plaster, these Fiberglas yarns form a reinforcing network which holds the gypsum core together—gives the board added resistance against impact . . . improved nailability . . . greater resili-

ence. Ne-

tion the

Mo-

textile

pro-

not only

as best

other

the

inter-

of use

Why

is

Fiberglas

MORE AND MORE
PEOPLE ARE TALKING
ABOUT THE NEW
FIBERGLAS-REINFORCED
GYPSUM WALLBOARD
*Do you have all
the facts?*

Owens-Corning Fiberglas

Textile Products Division, 16 East 56th Street, New York 22, N.Y.

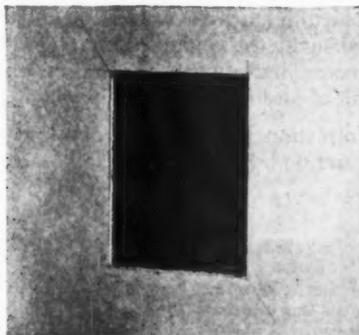


leading a great new industry forward

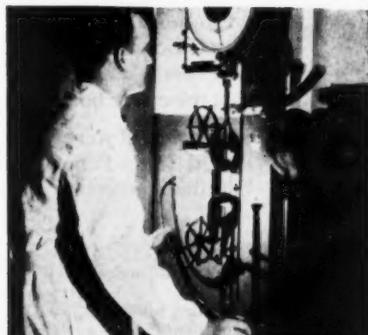
*Fiberglas is the trade mark (Reg. U. S. Pat. Off.) of Owens-Corning Fiberglas Corporation for a variety of products made of or with fibers of glass.



Better nailability. Fiberglas-reinforced gypsum board is less brittle, doesn't flake as readily during nailing. Nails hold better, too; reduces likelihood of unsightly pop-ups by nailheads. Installations look better . . . longer.



Cut-outs break clean. Trimming out for electrical outlets, etc., is easier, neater, because the Fiberglas reinforcements help keep the gypsum core from chipping off. Reinforced board is easy to score-and-snap or to saw.

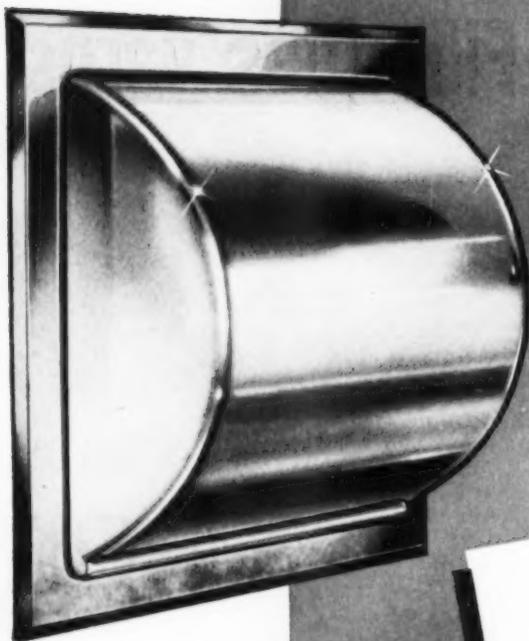


Resistance to shock. The high tensile strength (well over 200,000 psi) of the filaments of glass from which Fiberglas reinforcements are made helps give Fiberglas-reinforced gypsum board up to 80% greater resistance to shock.

modern

Design

patent no.
2561584



This newest mark of refinement for today's bathrooms... Hall-Mack's new concealed Toilet Paper Holder... brings smart styling and tactful covering to a bathroom facility that hasn't changed much down through the years.

When not in use only the pleasing curvature of the chrome cover gives a hint of the contents... yet it opens instantly at the touch of a finger. It blends perfectly with all modern bathroom designs and colors... and easily accommodates a standard roll of toilet paper.

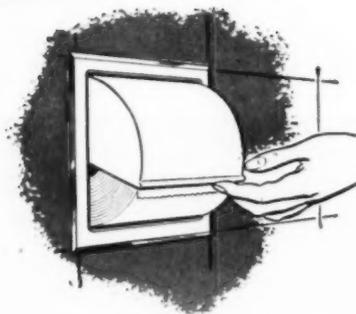
This new Concealed Toilet Paper holder is but another example of Hall-Mack quality expressed through originality of design.

bathroom magic...

An original Hall-Mack idea, this new Concealed Toilet Paper Holder is the extra touch of convenience and charm that makes a home more desirable... more saleable! Only the finest materials and craftsmanship go into bathroom accessories bearing the Hall-Mack name.

In Hall-Mack's complete line of bathroom accessories you'll find a number of original developments with the kind of special appeal that sparks up an entire bathroom... and conveys the impression that the entire home is the result of careful thought and planning.

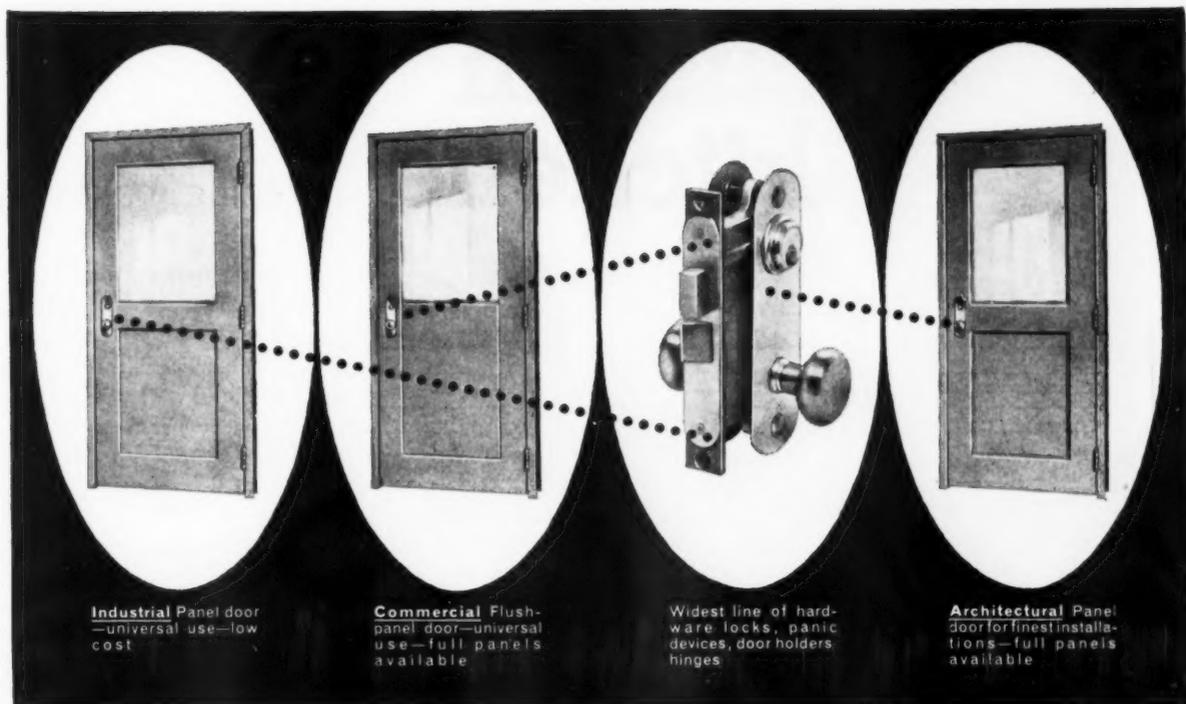
May we send you complete information on Hall-Mack's new Concealed Toilet Paper Holder... and on other exclusive Hall-Mack bathroom accessories?



*Sold by leading plumbing,
tile and hardware
dealers everywhere.*

HALL-MACK COMPANY

1344 West Washington Boulevard, Los Angeles 7, California
7455 Exchange Avenue, Chicago 49, Illinois
1000 Main Avenue, Clifton, New Jersey



Industrial Panel door—universal use—low cost

Commercial Flush-panel door—universal use—full panels available

Widest line of hardware locks, panic devices, door holders, hinges

Architectural Panel door for finest installations—full panels available

THE BROADEST LINE EVER OFFERED...

CECO standardized hollow-metal doors

WITH FINEST QUALITY HARDWARE

All over America contractors and builders have been asking for standardized hollow-metal doors combined with hardware to assure trouble-free service.

Ceco accepted the challenge and now presents a new hollow-metal door line with standardized name-brand hardware.

Here are three standardized doors that you can use in architectural and commercial buildings, as well as industrial plants. Here are doors engineered and prepared for proper attachment of hardware—saving you installation time. And Ceco offers the widest hardware line... suitable for all three doors.

Interchangeable muntins, panels and hardware plus reversible doors mean quick delivery from stock,

The end result is lowest cost—with doors and hardware made for each other, furnished by one responsible source.

This is another example of Ceco broadening its building products to better serve builders and contractors. Send for full information. **CECO**

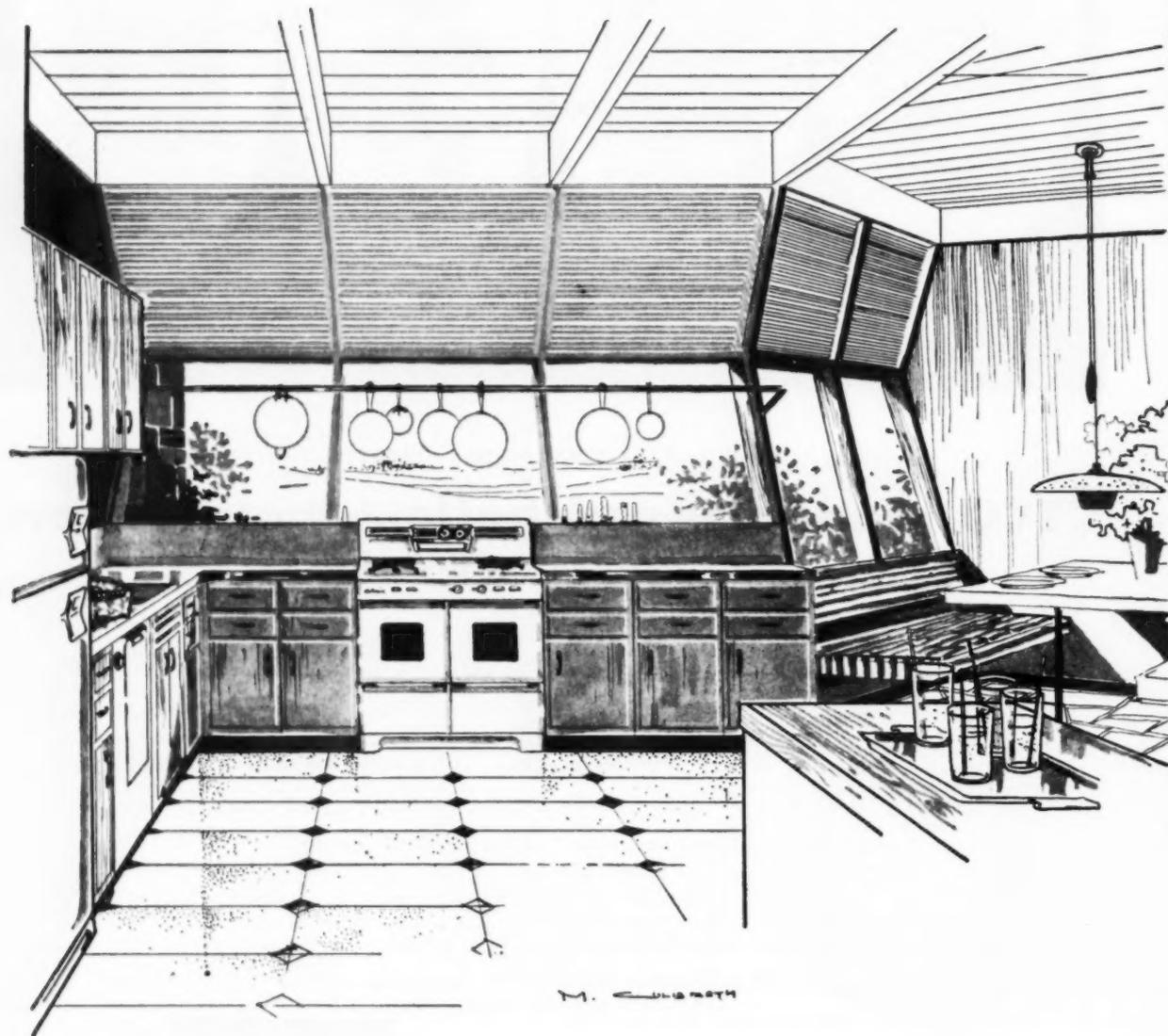


*In construction products
CECO ENGINEERING
makes the big difference.*

CECO STEEL PRODUCTS CORPORATION

Offices, warehouses and fabricating plants in principal cities
General Offices: 5601 W. 26th St., Chicago 50, Illinois

When it comes to **custom
kitchens** ... nothing makes as



This New Freedom Gas Kitchen* features an automatic Gas range, made to "CP" standards by the **Caloric Stove Corporation**.

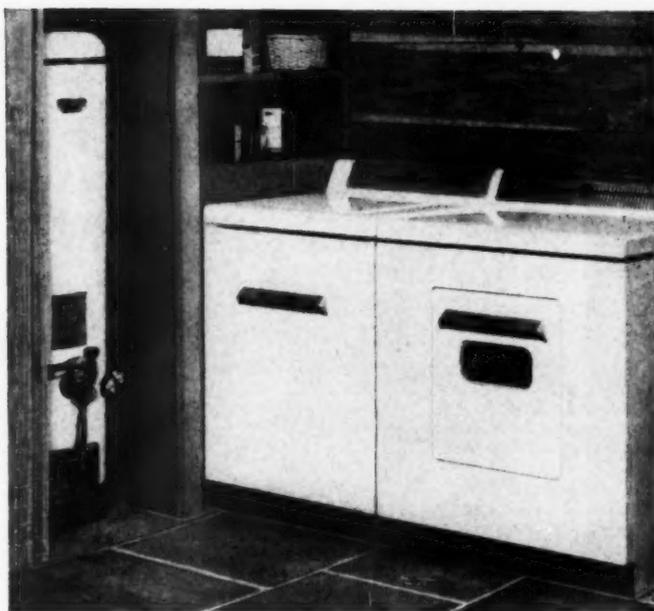
Cabinets by **Mutschler Bros.**

Even a man can be "sold" by a kitchen when it holds the new **Servel** Gas refrigerator with the automatic ice-maker. (Shown above.) It starts itself, stops itself, supplies its own water, makes ice cubes without trays, and puts them in a basket automatically. This dependable refrigerator carries a 10-year warranty.

*Reg. A. G. A.

much sense as gas

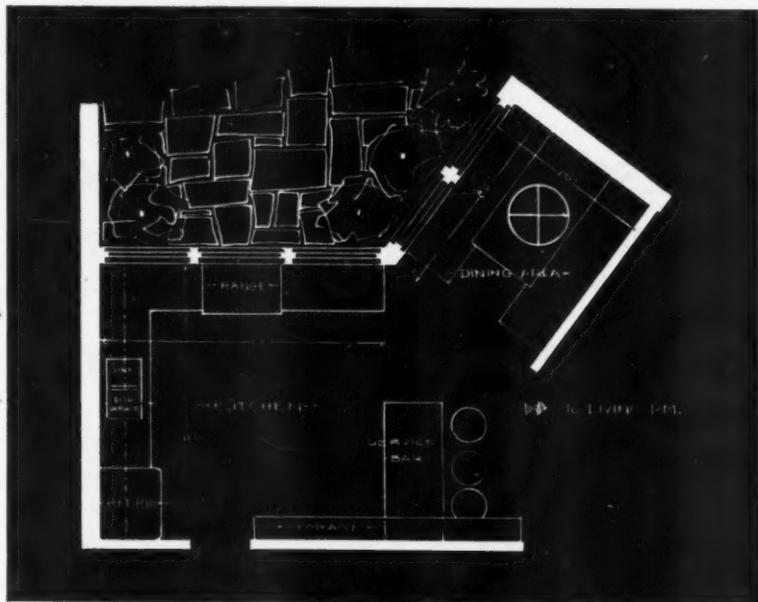
So very often, a distinctive kitchen means a pace-setting house. *You* decide on the picture windows, the service bar, the modern decor and the open rafters. Let *Gas* supply the range and the refrigerator that can set them all off. Instead of a few range models, you have hundreds — all fully automatic. Ranges that glitter with chrome. Ranges that glow with color. Mammoth ranges that can handle a banquet. Thirty-inch ranges that nestle in a corner. Separate range units that are built into cabinets. Name it — and you'll find it in *Gas*; the fuel that every woman knows cooks best by every test, the fuel that costs less to install and use. Whether you're building or remodeling, *Gas* definitely makes the most sense.



New twin **Hamilton** washer and automatic *Gas* dryer;
Roud automatic *Gas* water-heater.

A custom home is almost sure to have an automatic washing machine, an automatic dishwasher and extra bathrooms—3 good reasons for an automatic *Gas* water-heater. The recovery rate of *Gas* is so much faster that a 30-gallon tank actually gives more service than an 80-gallon tank run by any other all-automatic fuel. An automatic clothes dryer is also rapidly becoming a standard feature in better houses. Here, too, *Gas* is considerably faster (there's no warm-up period), more efficient. No two ways about it, in every area of every home, *Gas* is faster, thriftier, more satisfactory.

AMERICAN GAS ASSOCIATION



Your local *Gas* company will be happy to work with you on any problem.

Only Gas



gives you such a big choice of modern models

GAS—the modern fuel for automatic cooking . . . refrigeration . . . water-heating
. . . house-heating . . . air-conditioning . . . clothes-drying . . . incineration.



Courtesy: Allis-Chalmers

Convertible power equipment like this is relatively inexpensive for small builders to own. With many attachments, it will do many jobs and will quickly pay for itself; save time and money

multiple uses of new convertible **POWER EQUIPMENT** make it feasible to own



Courtesy: Ford Tractor Division

Lightweight tractor, shown doing backfill with front-end loader, weighs 2,500 lbs., costs \$1,700 without attachments. Loader carries heavy weights, excavates, grades and loads trucks



Courtesy: Ford Tractor Division and Sherman Products, Inc.

Lightweight rubber-tired tractor with power digger attachment is used to excavate, to dig ditches and to load trucks. This power digger adds about 1,750 pounds to basic unit



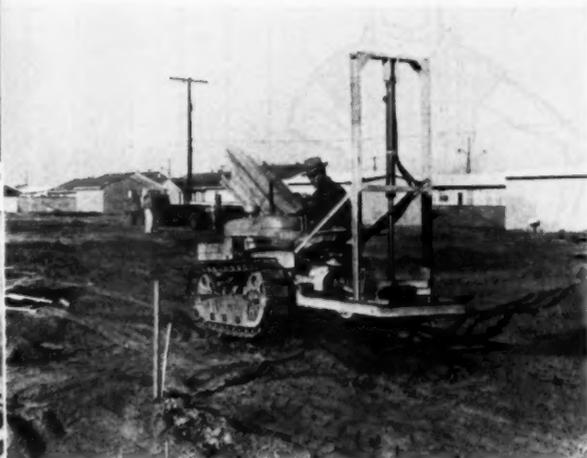
Courtesy: Oliver Corporation

A lightweight crawler-type tractor like this weighs about 5,400 pounds with front-end loader; here shown with loader and dozer blade. Basic tractor unit costs about \$2,300. It backfills, bulldozes and loads

Post-hole digger attachment used on this lightweight crawler-type tractor makes short work of an otherwise time-consuming job



Courtesy: Oliver Corporation



Courtesy: Oliver Corporation

Lightweight crawler-type tractor equipped with front-end loader and backhoe used for excavating and trenching work

BUY YOUR OWN convertible power equipment and save time and money! This is the conclusion of many small-volume builders today. The small-volume builder who constructs from 25 to 75 houses a year has found that it is now feasible to invest capital in new machinery which will do many jobs for him that he formerly had subcontracted for.

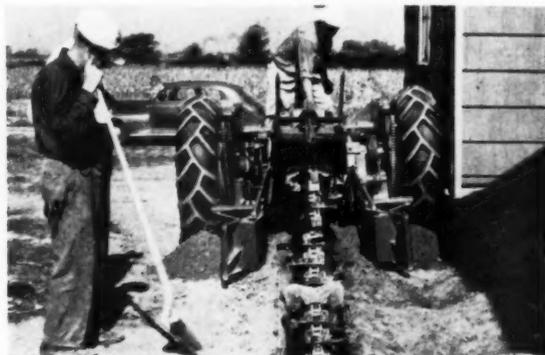
Convertible power machinery consists of a basic tractor unit to which various attachments can be easily fastened. With some of this equipment, the small-volume builder is able, at a relatively low cost, to purchase the basic tractor unit and the many attachments that will

enable him to dig basements, grade new streets, do rough and finished grading, dig trenches, lift material, and transport and move earth.

American Builder research, in talking to both manufacturers of convertible equipment and to small-volume builders, has found that many of these builders have purchased convertible power equipment and are using this machinery with great benefit to their businesses.

Take the case of Victor Baron of the Cosmic Construction Company, Orland Park, Illinois, for example. He and his partner, Hans Schaller, make up a building

(Continued on page 166)



Courtesy, Ford Tractor Division and Arps Corporation

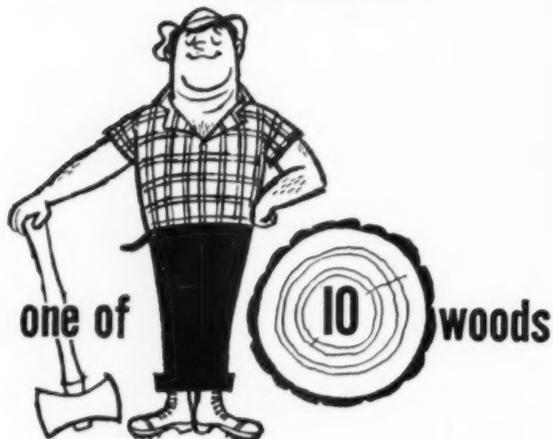
Standard lightweight tractor unit, with trenching attachment, eats its way through tough soil. Speed is its great advantage. Trenching attachment adds 2,700 pounds to weight of basic unit



Courtesy: Ford Tractor Division

Grader or blade attachment on this lightweight tractor weighs about 340 pounds. Other attachments that can be fastened on are post-hole digger, at rear, a front-end dozer blade or a lift

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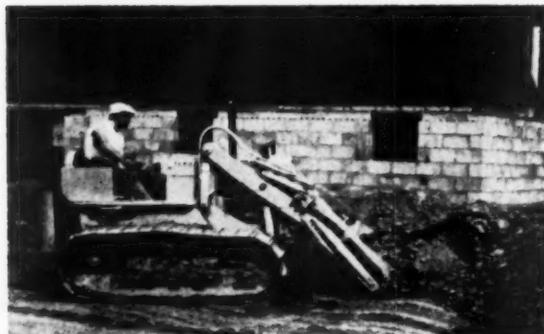
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POWER EQUIPMENT

(Continued from page 165)



Courtesy: American Tractor Corporation

Another crawler-type tractor that lends itself to convertible equipment. This one weighs about 6,000 pounds without front-end loader; sells for about \$5,000. With it and attachments, operator can dig, load, carry, grade, spread and trench

team who are convinced that by doing their own work with convertible power equipment they have saved themselves time and money.

The Cosmic Construction Company has completed its Orland Hills development and is now at work on a new development called Palos Highlands in which there will be an eventual 120 homes selling for \$11,900 to \$12,400 each. Most of the homes it builds have no basements. Baron and Schaller built approximately 58 houses in 1952, and they have built 36 houses so far this year. Builder Baron estimates that his company builds about 70 houses a year.

The Cosmic Construction Company owns two pieces of convertible power machinery. It owns a relatively light, rubber-tired tractor with a 1/4-yard bucket in front and a grader at the rear. It also has a fork lift. The company also owns a heavier crawler-type tractor with a one-cubic-yard front-end shovel attachment.

The light tractor is used for various light odd jobs. The crawler-type tractor is used to rough grade, finish grade for lawns, dig occasional basements and move earth. Baron states that this piece of equipment is used to build all of his roads. "In a new development like

(Continued on page 168)



Courtesy: Mixermobile Manufacturers

This piece of equipment is rubber-tired; shown here with lift fork attachment. Scoop bucket attachment will load, backfill, scoop, doze, level. Basic unit with bucket weighs 8,900 pounds

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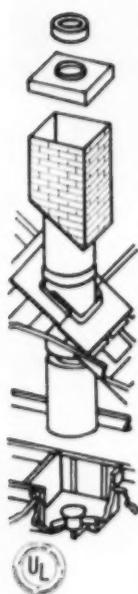
The Stanley Works, New Britain, Conn.

(Continued from page 166)



Packaged Chimney Housing Looks Like Massive Brick

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Courtesy: Allis-Chalmers

Essentially a grader, this piece of equipment can be supplied with a back-end loader and a scarifier. Basic unit without back-end loader sells for about \$4,500 and weighs about 8,800 pounds. Rubber-tired, it will do shallow excavating for slab foundations, will grade, level and load

ours, if you used the crawler-type tractor for roads alone, the machine would pay for itself."

Baron says that they purchased the crawler-type tractor not quite a year ago and that it has paid for itself by now. "I couldn't get by without it," Baron says. "It saves me time since the equipment is right on the job. It is here when I want it. Sometimes you have to wait a week for a subcontractor."

The most valuable piece of equipment owned by C. S. Foster, a prominent El Paso, Texas, builder, is a 5-cubic-yard crawler-type tractor with a ripper and a backfill. He also owns a heavy-duty crawler-type tractor. Building about 50 homes a year, Foster is representative of the average small-volume builder.

Foster, who is the president of the Home Builders Association of El Paso, conducted a panel discussion at the recent Conference of Southwest Home Builders at Amarillo. There he expressed his opinion that it is best to "own your own levelling equipment. It more than pays for itself in a short time."

One of the points he makes is that very few of the smaller cities in the country have the means to contract sewer and water extensions. Since nearly every city in

(Continued on page 170)



Courtesy: Allis-Chalmers

A heavier crawler-type tractor that is an excellent piece of convertible power machinery costs about \$10,000 with a one-cubic-yard shovel. It weighs about 16,200 pounds, including the shovel. With its many attachments, it will dig basements, bulldoze, backfill, lift palletized material and do some grading

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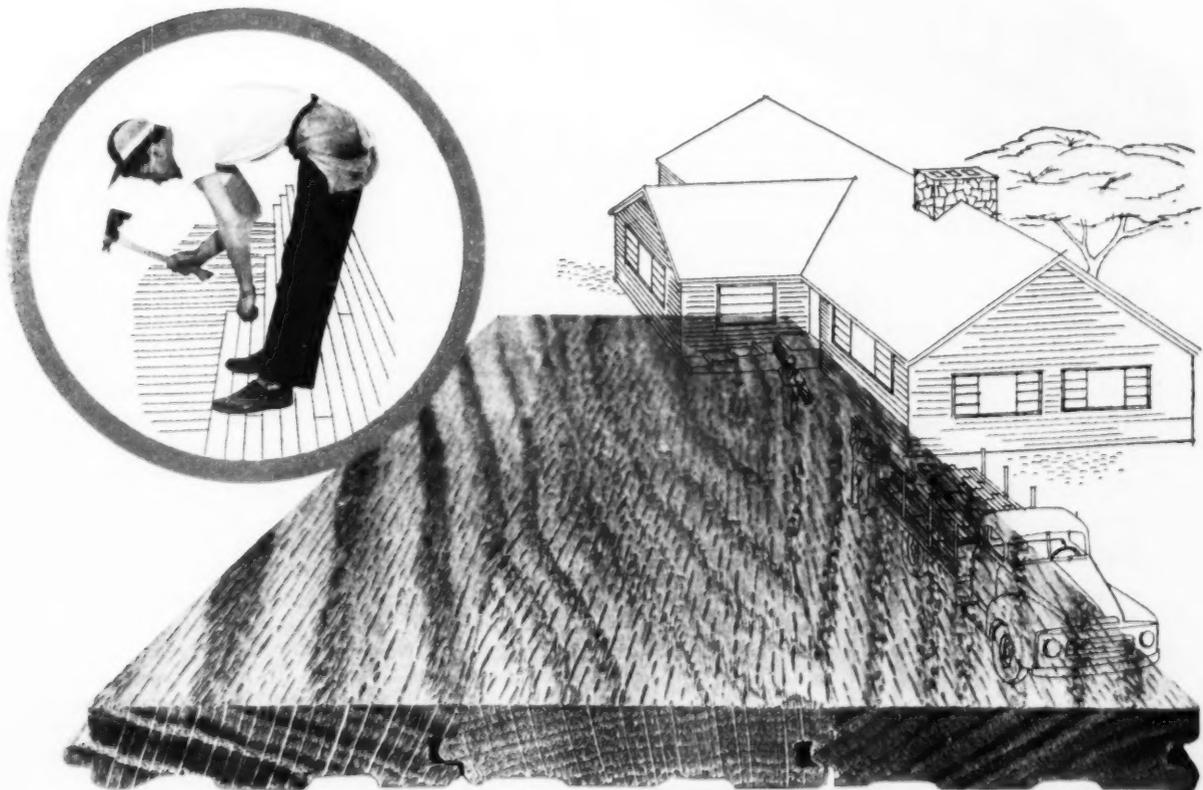
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POWER EQUIPMENT

(Continued from page 168)



Courtesy: Bucyrus-Erie

Relatively heavy and rubber-tired truck plus crane weighs about 15,000 pounds. Approximate price of the unit shown is \$10,700. Crane easily puts foundation forms into place. Other attachments dig basements, trenches, backfill

the country is expanding beyond its sewer and water facilities, somebody has to extend these lines and do it in a way that the city can afford.

Foster finds that, with a full line of equipment, he can do this work for the city on a contract basis at much less money than the city can have it done in any other way. The result is that he can do his own grading and trenching, along with what is necessary for the city, and charge off the overhead against himself, giving the city the benefit of a good deal.

Unlike many of the builders described above, there is a large group of small-volume builders who put up as few as 6 to 10 houses a year. These builders subcontract most of their excavating work, but find that it is very profitable to own a small rubber-tired tractor with attachments.

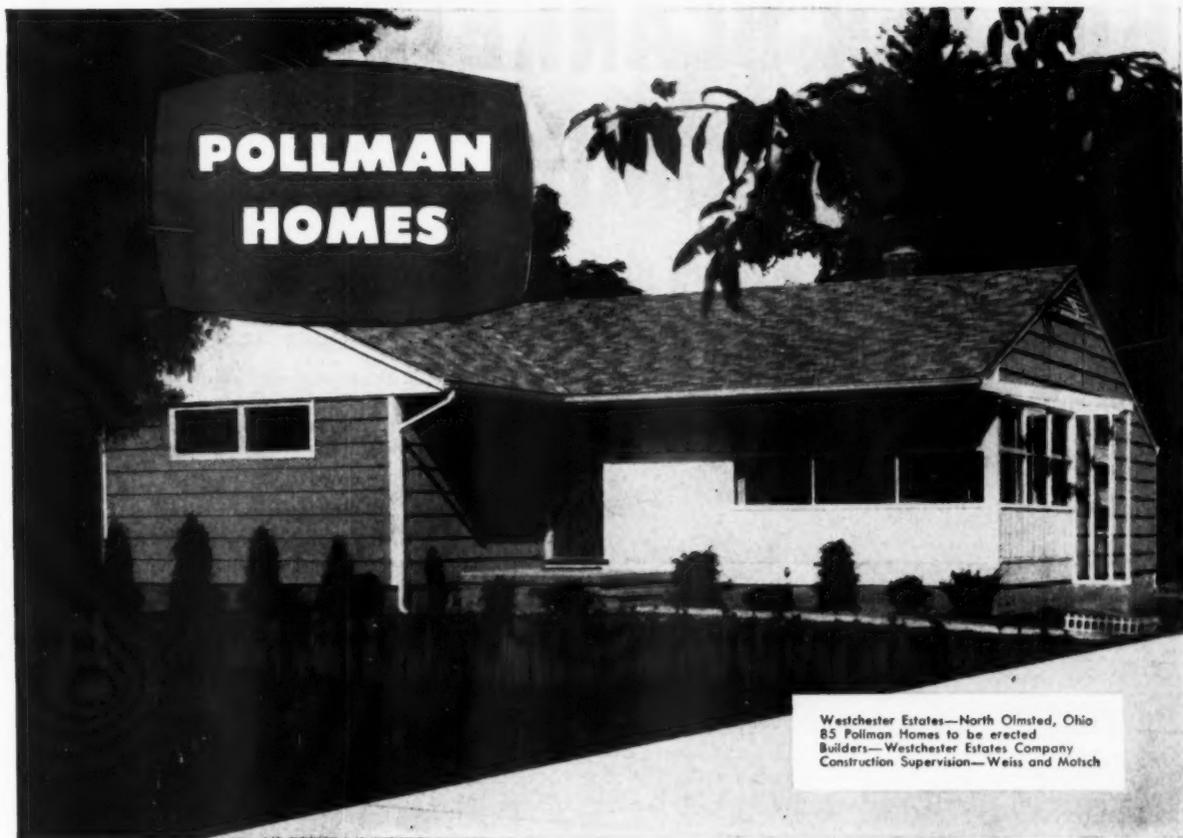
With a tractor of this sort, they can do all of their own grading for roads or driveways. They also find it useful for moving sand and gravel. A post-hole digger attachment saves them much time and money when placing fencing or for the occasional planting of trees and shrubbery.

This is the experience of one typical small builder of the type described above who said that owning a lightweight convertible tractor "saves money just in getting off a job and on another when you want to. So often there is the problem of getting subcontractors when you want them. Owning your own convertible power equipment saves time."

Asked if he would like to own heavier convertible power equipment like the crawler-type tractor, he thought that if he were to build 50 houses a year, it would be worth his while to buy more equipment. "But," he added, "what I would buy would depend upon the type of construction contemplated, and other factors like soil conditions."

Hardly a small-volume builder, Andy Place of South Bend, Indiana, builds about 250 basementless houses a year. He owns a great deal of equipment including some convertible power machinery. But Andy Place is an enthusiastic booster for convertible power equipment and recommends the purchase of such equipment to builders far smaller in operation than himself.

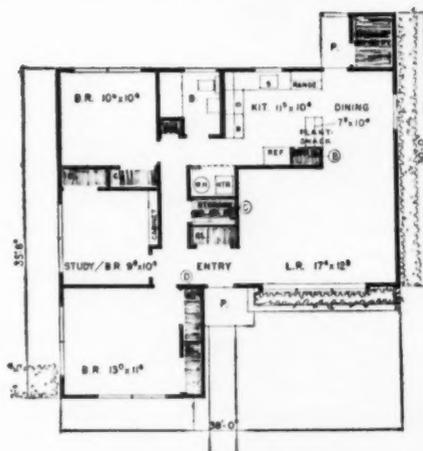
Place feels that "if a builder only puts up 20 houses a year, it would pay him to own convertible power equipment with attachments." However, the experience of the small-volume builder (6 to 10 houses a year) and the popularity of lightweight convertible tractors seem to prove another point. They seem to prove that a much smaller building schedule than 20 houses a year can make some convertible power machinery pay.



Model Home—sold before it was open

That's the story at Westchester Estates—a new 85 home development on Cleveland's suburban West Side. This new 3 bedroom, L-type Pollman Home was built for a model home showing—a buyer signed the purchase contract two weeks before the doors were open. On opening day, contracts for nine other Pollman Homes were sold.

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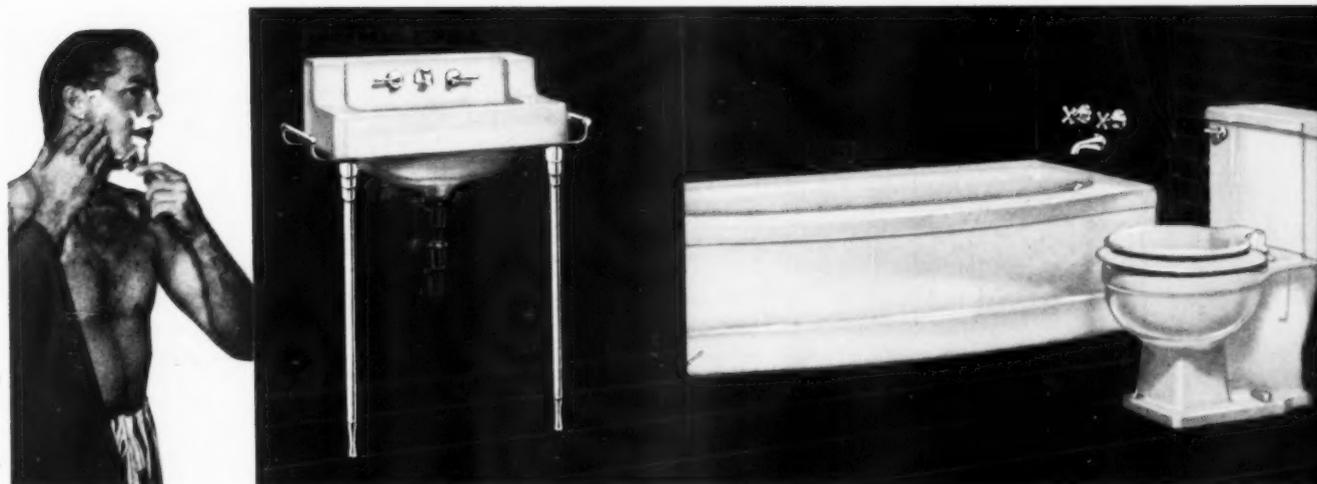


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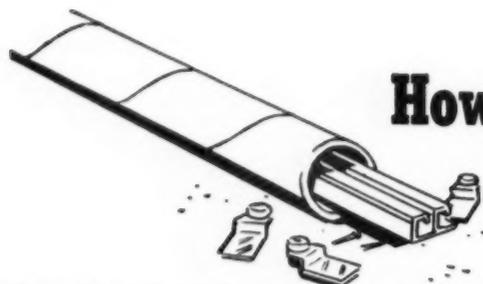
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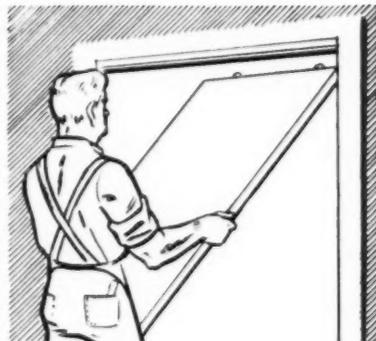
How to install sliding doors in as little as 6 minutes



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2 Use template to position carriers, attach with single screw. Mount guide-strip on bottom rear. (2 minutes)



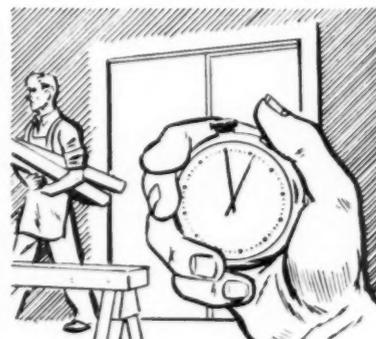
3 Hold rear door at angle and engage rollers on bottom of track. Let hang. Do same with front door. (30 seconds)



4 Bottom clearance should be $\frac{1}{8}$ ". Loosen screw, raise or lower door, tighten. Insert other screw. (100 secs)



5 Open doors. Place floor guide halfway under doors, screw to floor. Move doors and secure other side. (55 secs)



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is the distribution system for building products outmoded?

“NO!” says *American Builder*

PRICE CONTROLS and shortages of building materials during the war gave rise to black markets and gray markets, both of which, by reason of the shadowland in which they operated, tended to circumvent the traditional channels of distribution. Some retail dealers, hard pressed to fill the needs of their builder customers, bought lumber wherever and from whomever they could. Some builders, impatient with their retail suppliers or dissatisfied with prices, resorted to the same practices. The net result was a serious disruption of price structures and supply.

With the demise of price controls and the subsequent resumption of adequate production, reasonable balance was restored. But the seeds of circumvention were sown during the war, and we are still reaping the produce in some quarters. Added aggravation is being visited on the distribution system by slovenly merchandising habits into which some producers, wholesalers and retailers fell during the wartime imbalance of supply and demand, by failure in some places to respect the functions of wholesalers and retailers, and by the inability of some builders to determine their own inventory and handling costs when buying direct.

This is not to be construed to mean that no builder should enter the retail supply business as an economy or that every retailer should see to it that he sells every builder in his community. Some builders should not be sold by service-minded dealers. These are builders who shop for a price re-

gardless of service or the quality of materials. Some builders should enter the retail supply business because they cannot get the service to which they are entitled for the price the retailer asks.

But, in cases where these statements are true the fault does not lie with the distribution system itself, but rather with the people operating it at the local level.

It is obvious that whenever a builder buys directly from a wholesaler or a manufacturer there is a wholesaler or manufacturer who is willing to short-circuit the normal distribution channels. And it is equally obvious that whenever a retailer buys directly from a manufacturer who has wholesale distribution connections, there is a manufacturer who has no rigid regard for a wholesaler. This naturally leads to the question, "Is the traditional distribution system for building products outmoded?"

American Builder, viewing the question in the light of historic fact, seeing the economic need for ever more speed in construction, and appreciating the need for continuing specialization as a tributary to top performance, believes the answer is no.

How did this distribution system of producer to wholesaler to retailer to builder come about? About the time of the Revolutionary War job-site fabrication of practically all building materials began to move slowly away from the field and into the factory. Even with primitive equipment it was becoming evident that structural lumber

and boards could be manufactured at a central sawmill and shipped in job lots to the job site for less money than it cost for carpenters to select and cut their own trees and fabricate their own lumber. Slowly this also happened with other materials—glass, screen cloth and nails, to mention a few.

Soon, the lumber mills and others found themselves in competition for business, and faced with the need for selling their output. Direct selling to master builders was economically out of the question. The areas to be covered were too great to permit manning them with mill salesmen, and communication was limited to uncertain mails. It was found necessary to make stocks of materials available locally in warehouses or yards operated by people who could contact the master builders and sell them. With the rapid growth of the country these local stocks were not sufficient, and it was found that shipping great quantities to an area distribution point was economical. Thus, the advent of the wholesaler and the retailer was no accident. Nor was it a device for creating an idle class of middlemen to grow fat on unwarranted markups. It was a marketing necessity from the standpoint of the producer, and a service necessity from the standpoint of the consumer—both the master builder and his customer. As long as the wholesaler carried stocks adequate to the needs of the retailer, and the retailer in turn carried ample inventory for his master builder customers, no one quarreled with

(Continued on page 176)

is distribution system outmoded?—continued from page 175

the two markups between producer and master builder—the markups, of course, always held within reason by the forces of open competition.

It is axiomatic that it costs money for a wholesaler to select materials, provide and maintain warehouse facilities, carry inventory, secure orders, process those orders and make deliveries on time at the area level. It costs money for the retailer to perform the same functions at the local level. And if, as is demonstrably true, these services represent final savings in time and money to the buyer of a new home, wholesalers and retailers are entitled to respect and protection.

That is the traditional picture, greatly over-simplified, and not taking into consideration other important factors such as installation and performance of mechanical trades products, of which, more later. But the essentials are there, and that is the important thing at this stage of the discussion.

IT IS NOT to be implied from the foregoing that the established channels of distribution for building products always ran smoothly until World War II. They never did, and probably never will. But, the fact that the fabric of the system developed and has survived in open competition which quickly eliminates everything outmoded and non-essential, proves that until now, at least, the system has been the most economical. If any better distribution system could have been devised competitive forces would have forged it.

It should be recognized here that there are all sorts of justifiable variations from the complete traditional pattern. These variations are dictated by the nature of the product, location of the manufacturing plant, the market area, and the individual abilities and merchandising theories of the management. To some extent the same is true of wholesalers. As for retailers, many utopian standard plans of operation have been advanced. None has ever been universally adopted, or likely ever will be. Aside from the primary function of all retail lumber yards, that of serving the structural

building needs of builders and contractors, each community has its own set of special local conditions which determine largely how far beyond the primary function the dealer wishes to or can go. Of more importance, each retail lumber dealer is an individual in his own right, with his own ideas of what lines he should carry and how he should merchandise them.

Until human nature is changed and until the business fabric of every community is a prototype of every other there will be no uniformity of operation in the conduct of retail lumber yards.

TO REITERATE, the primary business of a retail lumber yard, a plumbing supply business, a heating supply house or an electrical supply concern is to serve builders and contractors by selecting guaranteed branded merchandise, stocking it, selling it and delivering it, and in the case of the latter three, installing and maintaining it.

None of this is news to these types of suppliers or to the producers or wholesalers from whom they purchase. Nor is it news to them that some of them are being circumvented. It is news to no one that these circumventions are a source of annoyance to the entire industry, and of vigorous protest in many cases, especially where they are practiced in violation of announced distribution policies.

SO WE COME to the question of why these irregularities in buying and selling, and what can be done about them. But, before answering either, we should go back to the original question, "*Is the traditional distribution system for building products outmoded?*"

The answer, in the light of evidence supplied in cases where established dealers and large operative builders do business with each other to the mutual satisfaction of both, is that the system is as economical as it ever was. A number of these cases will be reviewed in a future article. The several cases studied have two common denominators. These are, first, the dealer

knows his function and the cost of his service, and, second, the builder anticipates delivery requirements, and understands the costs involved in buying, warehousing and delivering.

Even without such evidence there is no reason to conclude that because transportation and communication facilities, and population density are not what they were in colonial days when the system was set up, present conditions are such that something else should be devised. The development of telephone, telegraph and radio communication, and the growth of fast rail, air and truck transportation have been accompanied by an acceleration in construction speed that is at least comparable. So, the need for ready stocks of building products at both wholesale and retail levels is as great, if not greater than it ever was. It is well known that costs can mount to non-competitive figures on jobs that are delayed because of material shortages at the job site.

THE BASIC function of both wholesale and retail operators is to eliminate any possibility of costly delays. If both are functioning properly the cost of the services they render is less than the cost of delay on account of shortages. And it should follow as an axiom that a retail supplier can purchase, warehouse and deliver for a number of builders for less cost to each builder than if the individual builder performed these services for himself. Where that is not true the dealer may be at fault in one or both of two ways. Or the builder may be at fault.

If the trouble lies with the dealer, he may not know how to perform effective service for a builder. He may not have sufficient capital to enable him to carry inventories adequate for the needs of a fairly large operative builder. If that is true he should either increase his capitalization, discontinue trying to service such a large account, or enter into a joint service agreement with one or two other dealers. On the other hand, the dealer may have sufficient capital, but not know

how to service a large account economically but profitably. Finally, he may have capital and know-how, but not enough sales ability to make a builder see that direct buying is an expense in spite of low prices.

On the builder's side, if the system falls down in a community where there are one or more competent dealers, the chances are that the builder has never sat down and figured ALL the costs of direct purchasing—the time of a man to choose and purchase materials, the cost of warehouse facilities, the cost of carrying inventory, the cost of personnel for these two operations, and the cost of purchasing, maintaining, garaging and operating delivery trucks.

MOST of the discontent caused by short-circuiting one or more of the traditional channels of distribution begins with the relationship between dealer and operative builder. The builder is engaged in a never-ending fight to keep his costs down. Somewhere in his scrutiny of cost factors he compares his supplier's prices with the direct-from-factory or direct-from-wholesaler prices. Then he looks at the service he gets, and if he decides that the latter is negligible, he decides either to find ways to eliminate the retail supplier or enter the retail supply business himself. Regardless of which he does, and in a vast majority of cases neither is the right answer, some of the dealers involved are inclined to apply the same kind of reasoning to their wholesale suppliers, or the wholesaler, seeing an opportunity to move in on a direct account, does so. In the end, largely through incompetent operation or bad selling on the part of the retailer, or ignorance of costs on the part of the builder, a chain reaction of disturbance is set off, finally involving producers as well as their distribution factors.

To say that the whole situation can be resolved easily by the retailers' simply standing pat is to overlook the basic cause of the trouble. If the distribution system is as sound and economical as this magazine believes it to be the answer to saving it and making it work to the best interest of the home buyer and home owner is for all of the factors involved to make

it their business to understand the problems of all the others. It is only through such an understanding that inefficiency and dereliction can be cured. If the system is right and some of the people operating are wrong, and the evidence indicates that this is true, it is time for those who are wrong but would like to be right to begin studying their own operations and the operations of the people to whom they should be selling. Once the problems on both sides are in focus, adjustments can be made in the interest of mutual economy, and within the fabric of the system as it exists.

EARLIER in this article brief reference was made to the problem of installing and maintaining appliances and heating, plumbing, lighting and air conditioning. It isn't only structural materials that are being distributed outside the traditional channels. The distribution of heating and plumbing fixtures, appliances and connections are getting a share of the criticism. Everything that has been said about structural materials applies to these items.

But, in addition, there is the matter of performance of mechanical parts, safety, sanitation, and service after installation. In addition to the distribution economies already explored with respect to structural materials, producers of mechanical items have the problem of performance, and in most places, the obligation to meet rigid safety and sanitation codes. As a matter of self protection, as well as in the interest of the home buyer, these producers have had to develop an elaborate dual system of distribution and installation. When the distribution system for these items breaks down and the builder buys direct, then finds his own installation crews, he is taking a long chance, and so is the manufacturer who sells him direct. If anything goes wrong, and it is more likely to with an unlicensed installation crew, the manufacturer can rest assured that the home owner is going to blame the equipment. A few such installations can cause more lack of prestige than can be regained in years. On the other hand, when it comes time for a financial settlement the builder can rest assured that if the fault lies with his unlicensed crew or crew not approved by the manu-

facturer, it is the builder who will make things right with the owner.

A lot of criticism has been shouted at the plumbing and heating industries for alleged arbitrariness in distribution and distribution markup, and while the system may appear cumbersome, inhibiting, and at times costly, it does, on the whole, work for the best interest of the entire building industry, and its client, the home buyer. The system's most ardent defenders among heating and plumbing producers likely will not claim perfection for their distribution and licensing plan, but until some better way of protecting themselves, the builders and the ultimate customer comes along, the basic system should be preserved.

As in the case of structural materials, where the plumbing and heating distribution system breaks down the fault lies with the people running the system, and not with the system itself. Here, the proof is not only in the evidence afforded by numerous harmonious and economical relationships that do exist, but in the added fact that disaster and disease from faulty plumbing and heating installations are at a minimum consistent with human frailty where the producer controls handling and installation through the channels he has set up.

COMPETITION for business is expected to sharpen in the next few years. Sharper and tighter competition always means that there is a greater premium on economy. Everybody knows this. But it is questionable if everybody knows that many of the essential economies that will have to be effected are ready and waiting to be realized within the distribution fabric as now constituted. There is no final economy for anyone in a breakdown of the system. On the contrary it needs strengthening through study on the part of all the factors involved. It is not to be denied that the conditions of building today are not those of ten years ago, but nothing that has changed indicates the traditional system of distribution is any less useful now than it has ever been. Indeed, it may be said safely that under tightening competitive conditions those who survive will be those who make the most effective use of the system.

ask the experts about

-
-
- Planning
- Concrete Work
- Framing
- Roofing
- Heating and Plumbing
- Air Conditioning
- Wiring
- Insulation
- Interior Finish
- Power Equipment

nail streaks on siding

Will you please let me know what to use over nailheads in red cedar siding to keep them from showing black spots and streaks down the boards. I have more trouble with coated nails. I have been thinking of using shellac.

W. E. R., Longview, Ill.

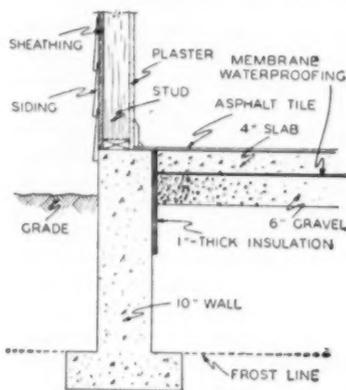
Regarding streaking caused by nails on red cedar siding, we have found that the only way this can be eliminated is by the use of aluminum nails. I believe that where appearance has to be considered, their use is necessary.

is a "below grade sill" practical?

Would you recommend the type of construction shown in sketch at right? Would final drying (shrinkage) of floor members tend to cause corner cracks where an inside wall connects with an outside wall?

I would like to use this type of sill in order to set the house lower into the ground and do away with all steps on outside entrances.

E. S. C., Johnston, N.Y.



Attempts have been made in the past to use this type of box sill with a brick veneer house. Below are noted some basic criticisms:

1. If the wall and floor are separated as completely as they are,

- it is entirely possible for shrinkage cracks to appear at the base.
2. Our interpretation of FHA rulings in this case is not entirely clear. If you take them very literally they call for the plate to be 6 inches above finished grade.
3. Most serious of all is the possibility of the sill and header deteriorating due to moisture and decay. I would question the use of 30-pound felt in this location and feel that a termite shield, possibly metal, would be much more desirable.

Small Homes Council,
University of Illinois

how to prevent wall from sweating

I would like to get your idea of how to prevent a solid 8-inch brick wall from sweating on the inside.

The wall is of solid brick construction, 8 inches thick and plastered on the brick. The rooms, two, are heated with a floor furnace.

My idea is to fur out the wall and provide an air space. Any better way would be much appreciated.

F. Q. S., Atlanta, Ga.

To prevent sweating on the inside of an 8-inch brick wall, we recommend that you fur out at least one inch with 1x2 furring strips on the inside of the wall. These furring strips may be placed 16 inches o.c. with a one-inch blanket insulation with a vapor seal applied between strips. The vapor seal is on the warm side. Lap all joints over the face of the furring strips. Any type of interior finish may be applied to furring strips.

C. E. Lund,
University of Minnesota

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?

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Another exciting room idea from Crane's national architectural competition

CRANE'S "Triple-Duty" Utility Room

... another modern planning idea that helps sell homes



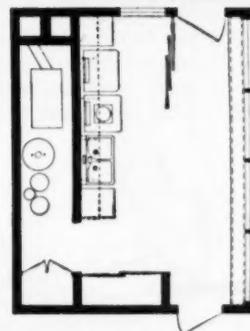
We call this the "Triple-Duty" Utility Room because it serves a three-fold purpose.

Behind the wall at the left, it functions as a regular utility room — with Crane boiler, Crane-Line water heater and Crane-Line water softener performing their duties unseen and out of the way.

Out in the open, it's a complete and roomy Crane-equipped laundry — with Crane Duraclay Laundrette tub, Crane wall and base storage cabinets, washing machine, drier and ironing board conveniently arranged along one wall.

And when not in use as a laundry—zip! A flexible door completely shuts off the laundry area and provides a beautiful garden passageway from kitchen to carport.

Whether shown as a finished room in a house up for sale or just as an idea in preliminary plans, a room idea like this can be a strong factor in closing a deal. And 46 equally modern room ideas—for kitchens and bathrooms as well as utility rooms—are now available in the big, helpful Crane Sketchbook of Ideas. Get your free copy from your nearest Crane Branch or Crane Wholesaler, today.



Big usefulness in small space.

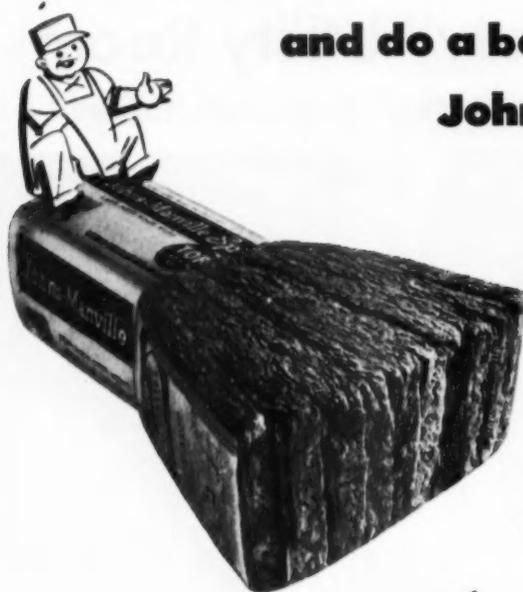
Notice how spacious and uncrowded this Crane utility room looks. Yet here are all the usual utilities plus beauty and usefulness that most utility rooms lack—and in space that measures only 14' 4" x 11' 10". Design by Arthur A. Gorrell, Carlsbad, New Mexico, as an entry in Crane's National Architectural Competition.

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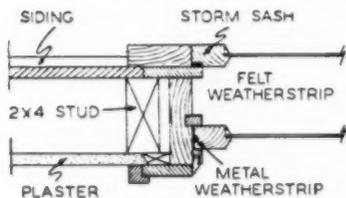
weatherstripping storm sash

Being a reduce-the-heat-loss enthusiast in house construction, I fit some of my storm windows in the manner shown in the accompanying sketch. The object, to reduce the cold air infiltration in the space between the two glass units. My questions are:

1. Does the reduction of the ventilation between sash present a condensation danger of rotting sash, sills and frames? There has never been visible evidence of high humidity. These windows do not frost over as much as unstripped ones, in spite of the fact that I have treated the north windows this way.

2. Are there any figures on the effectiveness of weatherstripping outside storm sash in reducing heat loss?

L. C. C., Sioux Falls, S. Dak.



We do not believe that the use of weatherstripping on your storm sash will present any condensation dangers. Condensation occurs only when too much water vapor or high humidity is allowed to develop within the house. Even if moisture should show on the storm sash after weatherstripping has been installed, it is an easy matter to drill two one-half-inch holes below and above the glass to permit a slight circulation of air which will carry the humidity outdoors.

In answer to your second question, any figures on the effectiveness of weatherstripping outside storm sash would be available through the weatherstripping industry. We believe that weatherstripping would cut down the infiltration

loss slightly in addition to the weatherstripping of inside windows. Nat'l. Mineral Wool Assn.

too much heat for floors

A client of mine has asked for my advice on a problem concerning the bumpy condition of the asphalt tile laid over a heated, concrete slab.

What is the cheapest and best way to correct this?

G. J. A., Noroton Heights, Conn.

The bumpy condition of the asphalt tile placed over a radiant-heated, concrete slab may be the result of running too much heat through the pipes. Regardless of the heating system used, the surface temperature of the floor covering must not go above 85 degrees F. Also, on all legs of furniture equipment used throughout the home, Armstrong's furniture rests should be placed to eliminate excessive indentation to the asphalt tile.

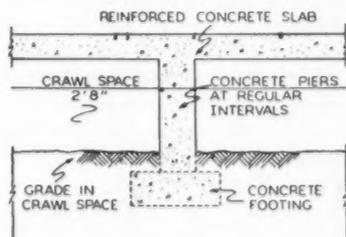
The only solution to your client's problem now is to replace the bumpy tiles with new material.

Armstrong Cork Company

method of construction for crawl space

I want a concrete floor but over a crawl space. How can this be done? I believe I have seen where a type of block is laid somehow and then the finish floor poured over it.

M. S. B., Rochester, Mich.



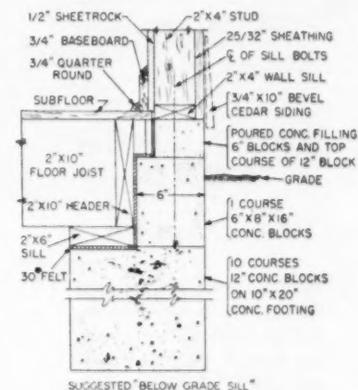
By providing a crawl space under the slab, the concrete slab would have to be reinforced and supported from underneath by concrete piers

and beams. Another alternative would be to use Flexicore precast concrete slabs spanning from wall to wall or to intermediate posts. The normal manner of construction where a crawl space is provided is to use wood joists and wood floors with the proper amount of insulation under the joist to prevent dampness from the ground coming through into the first floor area.

footings below or above frost line

Please outline the disadvantages of pouring a concrete footing for a one-family home above the frost line. For example, if the frost line is 4½ feet below the existing ground surface, and the footing is poured so that the bottom is only two feet below this ground surface, what is going to happen?

S. O., Bronx, N.Y.



We prefer discussing the advantages of placing the footings at least six inches below the frost line, rather than the disadvantages.

Every well-designed house is planned from the ground up. It should be supported on concrete footings having the proper width, spread and depth.

The footing should be carried down at least six inches below frost penetration. Freezing of the subsoil might well cause the walls to heave and produce cracking in some part of the house. Any unequal movements caused by heaving will have the probable result of distortion, causing doors and windows to bind, plaster to crack, and cracks to form throughout the masonry.

Experienced builders know the proper depth to go in their localities to make footings safe against frost upheaval.

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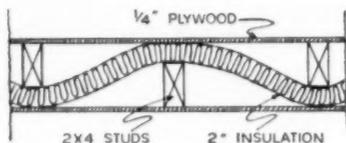
ask the *experts*

soundproofing partition

The walls of a private office in one corner of a building are 2x4 studded and covered on both sides with 1/4-inch plywood.

Our trouble is sound transmission. Voices in a normal pitch can be heard quite plainly from either side of the wall. Would a blanket insulation in this partition remedy this condition?

H. M., Hardy, Nebr.



The most practical way to soundproof an interior partition is to stagger the studs and then weave a blanket type of insulation between them. This will prevent sounds from penetrating through the wall by eliminating direct contact of facing material with studs.

If the partition is already in place, then we suggest the plywood be removed from one side of the studs and 2-inch batt insulation be installed between the studs, after which replace the plywood. This type of insulation is comparable with a normal plastered wall.

laying subfloors

I have been building in a community where builders are in the habit of laying subfloors, boxing and sheathing in a diagonal manner, claiming that it gives the building more strength. It seems to be a great waste of both time and material and I would like to have your opinion on it. I have been laying my subfloors in this manner but am of the opinion that laying a subfloor straight across the joists gives it more strength. The argument for the diagonal flooring is that the hardwood can be laid either way when the subfloor is diagonal.

C. M. N., La Plata, Mo.

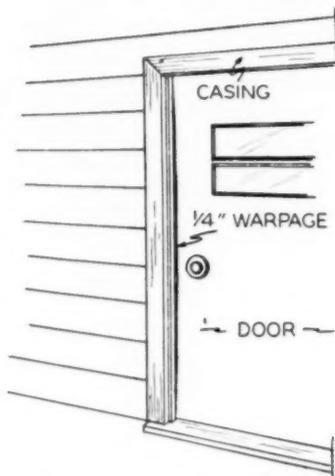
In this section of the country it would appear that laying the floors in a diagonal manner is the preferred way. I do not believe that it strengthens the structure any more

and it is a trifle more expensive. I should judge that there would be a waste of about 5 per cent in the lumber, but it does provide that the finished flooring can be laid in any direction. Not only this, but in a great many cases, the electric conduit is laid on top of the subfloor. It becomes a bit easier to strip the floor if subfloor is laid diagonally.

warping of outside doors

How can I prevent the lock stile of outside doors from warping in away from the jamb? These are all in-swinging doors of white pine, protected by white pine storm doors. Some of these doors warp in as much as a quarter of an inch at the top of the stile. These doors were all fitted perfectly when hung, but within a year all seem to warp in.

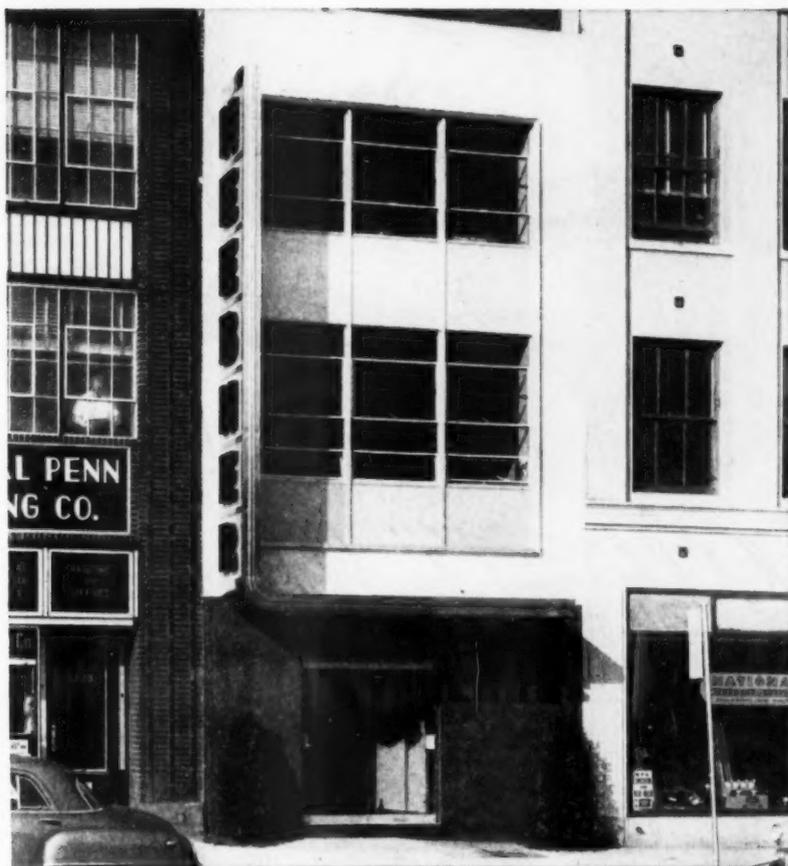
E. J. C., Cincinnati, Ohio



Warping is due primarily to differentials of moisture on the two sides of the door or differentials in temperature or both. Where these conditions are severe and the differentials are large, the likelihood of warping is always greater.

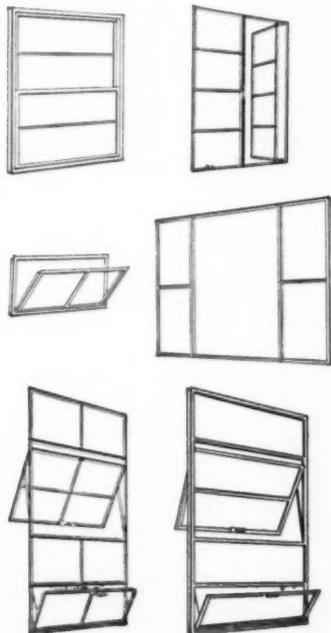
Warping of 1/4 inch on the full length of a door is not considered too serious. This does not mean that all wood doors are expected to warp as much as 1/4 inch. But if conditions are sufficiently severe even a well manufactured door might do so. This is the reason that the guarantee allows for 1/4-inch warpage.

One safeguard which we recommend in any and all cases, is that the door be given a standard water repellent preservative treatment at the factory. It does retard and reduce the effect of moisture on door. Nat'l. Woodwork Mfrs. Assn., Inc.



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technical guide

for builders and craftsmen



Setting stake for form in preparation for laying sidewalk. Grade of other form is established by means of a level



Excavating and placing of screeds for sidewalk



Cinders are often used for fill where soils are heavy and not well drained



Concrete mix is placed between screeds. Strikeboard used for leveling the concrete

how to build concrete sidewalks and driveways

The main requirements for a good sidewalk are: (1) It should be durable. (2) It should be smooth without being slippery. (3) It should be easy to clean and pleasing to the eye.

The width of the sidewalk will vary depending on its use. The walk from the street to the main entrance should be at least four to five feet wide. Service walks alongside or at the rear of the house are usually two to three feet wide.

The first step in laying a sidewalk is to prepare the base. If the soil is well drained, the concrete can be placed directly on the surface after the soil has been thoroughly compacted. If the base is of hard clay or similarly compact earth, a 4-inch-thick subbase of well-compacted, clean, coarse gravel or cinders should be laid between the wood forms.

The thickness of a concrete walk should be four to six inches. If the walk is to be used only by pedestrians, a 4-inch thickness is sufficient, but if automobiles or other heavy vehicles are likely to be moved over the surface, then the thickness should be increased to six inches.

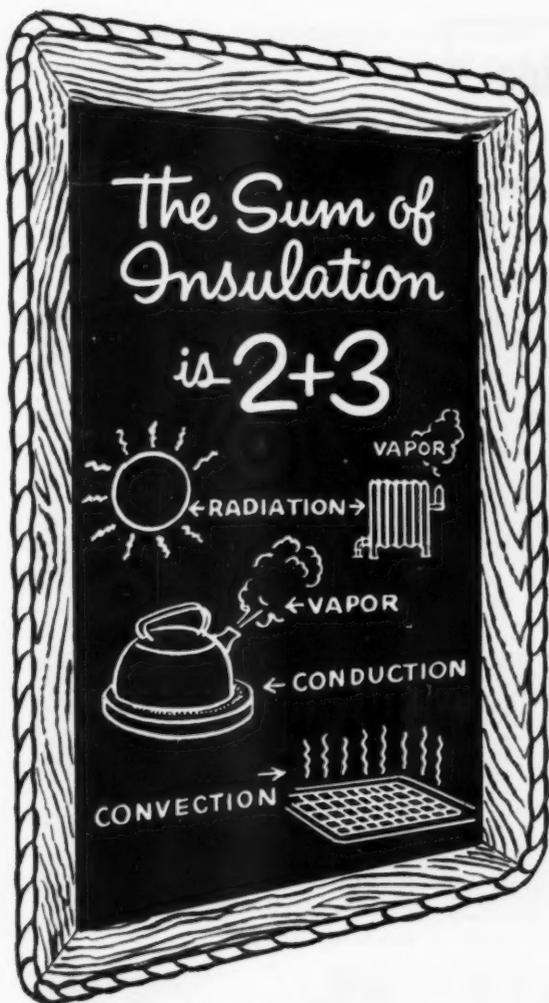
Side forms are made of 2x4 screeds held in place by wood stakes. The top edges of the screeds serve as guides in leveling the top of the slab. The first step is to set one form to line and grade. The other form is located by establishing the width from the first form and then fixing the grade by means of a level. It is good practice to let the top surface of the slab be one inch above the fixed grade. The surface of the walk should be sloped about $\frac{1}{8}$ -inch per foot toward one side for drainage, preferably away from the building.

Sidewalks should be laid in one pour. This means that the full thickness of the walk is laid at one time, using the same mixture throughout. The topping is poured integral with the base concrete and is floated to a smooth finish.

Making quality concrete is a simple procedure if a few basic fundamentals are observed. In laying a sidewalk, care should be taken to see that the concrete is: (1) carefully proportioned; (2) properly mixed and placed, and (3) adequately cured.

(1) Careful proportioning means that the concrete mixture should not contain more than five gallons of water per bag of Portland cement when the sand is in an average moist condition. If the sand is very wet, the amount of water can be reduced to $4\frac{1}{4}$ gallons.

(Continued on page 188)



7 FIVE-WAY protection is required of an insulation against (1) CONDENSATION, (2) VAPOR FLOW, as well as against Heat Flow by (3) RADIATION, (4) CONDUCTION, (5) CONVECTION.

Multiple accordion aluminum provides this 5-fold protection. It is pre-fabricated to automatically create a "blanket" of multiple alternating layers of air, aluminum and fiber as it is installed.

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Type 6-Si under 9½¢ sq. ft.

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Against (1) RADIATION there is high (97%) reflectivity, low (3%) absorptivity and low (3%) emissivity of heat rays. (2) CONDUCTION is low because of preponderant compartmented air spaces of slight density. (3) CONVECTION, outer and inner, is retarded by multiple layers of aluminum and fiber.

The aluminum sheets are completely impervious to water vapor. Infiltration under flat, stapled flanges is slight. The scientific construction of multiple layers of accordion aluminum, fiber and air spaces minimizes condensation on or within this insulation. Its slight mass produces little heat storage.

An improved* multiple accordion aluminum, now on the market in the form of Infra Insulation Types 6-Si and 4-Si, gives every fraction of the area between studs and joists maximum protection against heat loss and condensation formation.

The U. S. NATIONAL BUREAU OF STANDARDS has published an informative and authoritative report on "Moisture Condensation in Building Walls." This booklet explains the conditions under which condensation will take place in insulated as well as uninsulated walls; what part is played by effective vapor barriers such as metal foils; how to use and interpret thermal-resistance and vapor-resistance fractions. You can obtain it at our expense by sending us the coupon below.

*Patent applied for

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Please send sample of new insulation ; Bureau of Standards Report "Moisture Condensation in Building Walls"—BMS63 ; Description of new insulation .

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technical guide

for builders and craftsmen

(Continued from page 186)

The trial batch for sidewalks should consist of one part Portland cement by volume to $2\frac{1}{4}$ parts sand and 3 parts gravel or crushed stone having a maximum size of one inch. If this mix is too stiff, the amount of sand and gravel should be reduced in the next batch. If the mix is too wet, small amounts of sand and gravel should be added in the proportion of $2\frac{1}{4}$ parts sand to 3 parts gravel. If the mix is coarse and difficult to work, the amount of sand should be increased. NEVER CHANGE THE CEMENT AND WATER CONTENT.

(2) Concrete should be thoroughly mixed and then poured directly into previously laid screeds. During the pouring process, the concrete should be well spaded along the screeds. After it is poured, a strikeboard resting on the edges of the side screeds is passed across the surface in a saw-like motion, leveling the concrete. In the event that freezing weather is encountered, the mixing water should be heated so the concrete is between 60 and 80 degrees F. when poured. Materials containing ice or frost should never be used. Concrete should not be poured on frozen ground or in forms containing frost or ice.

To provide for expansion and contraction of the concrete during the summer and winter months, joints $\frac{1}{2}$ -inch thick should be placed where the new walk meets such fixed objects as foundations, street lights, fire hydrants, driveways, etc. Expansion joints should also be provided where sidewalks intersect and at curbs.

Contraction points should be provided at about 5-foot intervals for the entire length of the walk. These are made with a trowel by cutting grooves about one-third the depth of the slab. These grooves are then finished with a grooving tool.

(3) Several hours after the concrete is poured, or when the sheen or shiny film of water has disappeared, the walk should be finished with a wood float to produce an even, gritty surface. New concrete must be protected from freezing, and should be kept above 50 degrees F. for at least three days after pouring.

To assist in curing, a covering of moist sand, earth, straw, burlap or similar material should be placed on the concrete as soon as it has become sufficiently hard to resist marring. This covering is kept continually moist for at least three days, and may then be removed and the sidewalk put to use.

Driveways

Preparation of the soil base is one of the first steps in the construction of a concrete driveway. This consists of leveling the base and staking the wood forms in which

(Continued on page 266)



Trowel cut, about one third the depth of slab, is made at five-foot intervals. Cut is then edged with a grooving tool



Top edge of walk is rounded with an edging tool



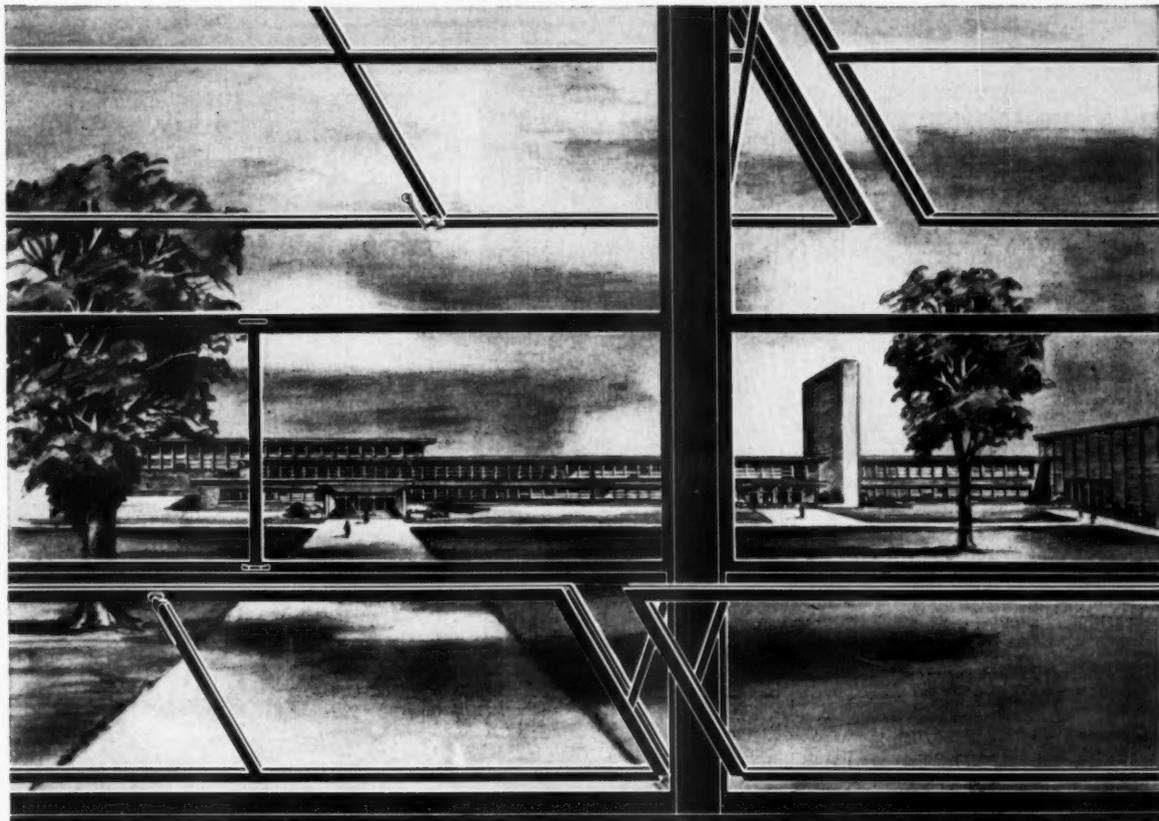
Tamping subgrade and constructing forms enough to hold concrete in place are preliminary steps in laying a driveway



Concrete mix is poured and spaded against forms. Surface should be at least one inch above grade and pitched for drainage

CECO HAS ACHIEVED AN EXACTNESS IN INTERMEDIATE WINDOW DESIGN THAT MEETS THE NEED OF THE PRESENT... SETS THE PATTERN FOR THE FUTURE

It's easy to make a cheap product and it's easy to over-manufacture. But it requires ingenuity and infinite skill to create the ideal of quality and selection without compromising value or indulging extravagance.



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1 1/4" and 1 1/2" intermediate windows**

For years Ceco engineers have been experimenting so as to give you the "just right" window.

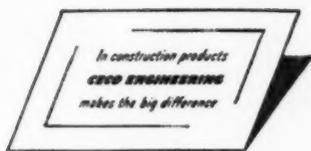
Today we can announce mission accomplished in the two new Ceco creations . . .

1 1/4" Intermediate Windows and 1 1/2" Intermediate Windows.

For here are two windows that can be adapted to any building problem where intermediate design is indicated. The 1 1/4" window gives you weight and strength plus beauty at a *sensible* price. Hardware is handsome bronze lacquer finish.

The 1 1/2" window assures greater strength and rigidity, *adequate* for any need, longest trouble-free service, will outlast any structure. New beauty is reflected in rich solid bronze hardware.

In these new windows Ceco has reached deeply into the future to bring you truly balanced design plus an innovation in simplicity . . . an exactness you can find nowhere else.



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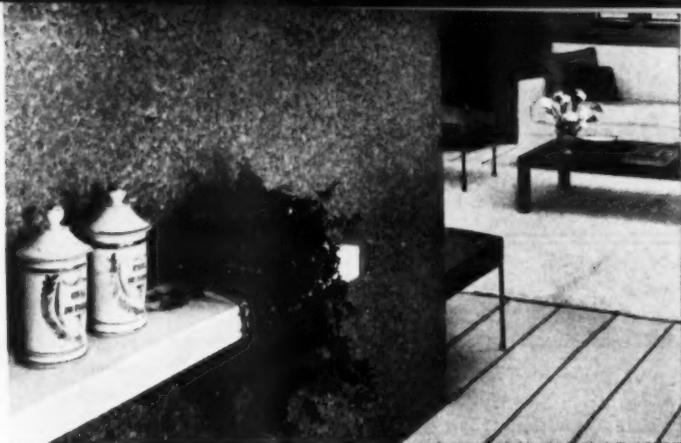
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SURFWOOD. When you want the rustic touch in a den, boy's room or TV room, try new Surfwood. It's the Weldwood with 3 dimensions which adds depth and warmth to any room.



NOVOPLY. Newest Weldwood product for wall paneling is Novoply. Its rich mosaic textured look has become a decorator's favorite. This paneling, in rich pine or glowing California redwood, is also ideal for sliding doors and built-ins because it is known as "the flattest panel ever made." $\frac{3}{8}$ " and $\frac{3}{4}$ " thick; good *both* sides.



PLANKWELD. It's beautifully factory pre-finished, comes in Honduras or Philippine mahogany, birch, walnut, oak or Hazelwood. Put it up and your job is done. No on-the-job finishing. Special edge grooves conceal nails and unique metal clips make your installation job easier.

Whether you're remodeling old homes or building new ones...

Low cost Weldwood adds the beauty that sells

**Beautiful wood paneling goes up easily..
adds charm and distinction...and is
guaranteed for the life of the building**

If you are one of the many thousands of builders who are cashing in on the growing remodeling and modernization market, Weldwood is an ideal product for you. Whether you're remodeling old houses or making additions to newer ones, these beautiful wall panelings—which are guaranteed for the life of any building—make your job easier and keep your customers satisfied.

Take pre-finished Plankweld, for instance. Whether you install it in rich Honduras mahogany or any other of the five beautiful woods, it goes up directly over plaster or dry wall without furring.

Your job is also easy with Weldwood Novoply, Weldtex, Surfwood, or any beautiful Weldwood hardwood because sheets come in large sizes right for almost any job.

But best of all, when you panel with Weldwood, you give your customers real wood—beautiful, lasting wood which fits with any decorating scheme, needs little or no costly, frequent redecoration and which gives you a job you'll be proud of.

See your nearest United States Plywood or U.S.-Mengel showroom . . . or visit your Weldwood lumber dealer.



WELDTEX. Builder favorite—and increasing in popularity—is patented Weldtex—the wood with the grooves. Goes up fast, easy to paint or lacquer; low in cost.



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"BIG PROFIT," says N. J. Dealer

"I used to be afraid to handle ornamental iron, so I sent my business to local iron shops. A year ago, I investigated Coffman 'Standardized' ornamental iron. When I discovered how easy it is to stock, the profit I had been missing, I started to include it on the material estimate sheets for our builders and contractors. We all learned that Coffman standardized ornamental iron is easier to install than a door or a window. Now all of us are making profit we previously overlooked! Now all of us are Coffman boosters!"

—R.H.J., Newark, N. J.

If you are not stocking Coffman porch posts or rails, you are missing easy profit! Investigate today! Remember there is a stock size Coffman post or rail to fit any porch or entrance.

FREE: Write for descriptive catalogue on all Coffman products and complete information on our amazing free air mail blueprint service.

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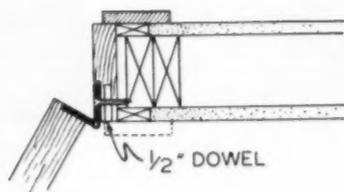
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Dept. AB-10 ORLANDO, FLORIDA

how would you do it?

ideas for the man on the job

use dowels to tighten loose hinges

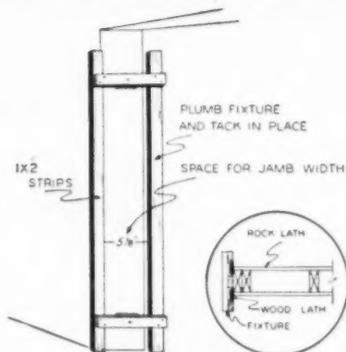


Remove casing near loose hinges. Bore 1/2-inch hole exactly opposite each screw hole. Insert 1/2-inch dowels and then replace screws. Screws will then be able to anchor themselves more tightly.—V. Shearer, York, Pa.

use this jig to place plaster grounds

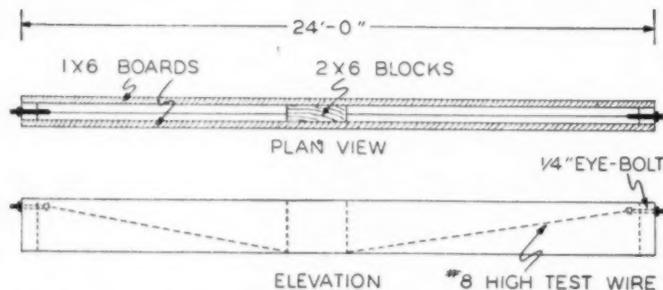
Here is a method of applying plaster grounds for interior doorways of frame construction. After the inside door opening is framed and gypsum lath is applied, use this jig as a guide to apply wood lath around the door opening. The lath will serve as plaster grounds to insure the correct wall thickness, and will help to make sure that the wall surfaces are plumb.

Apply the gypsum lath first. Then tack the jig to the inside bottom of the door opening. Use a level to plumb the sides of the jig. Then tack the top of the jig to the frame. Tack the two pieces of lath to the frame. When one side of the door is finished, repeat the process on the



opposite side. Then remove the jig and apply header strips flush with both vertical strips of wood.—A. Kucharski, Akron, Ohio.

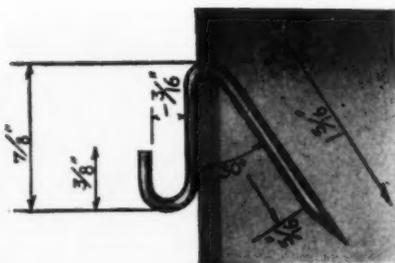
how to make a straightedge for concrete work



A 24-foot straightedge used to screed concrete must be without bow when suspended at each end, and should be light in weight. A straightedge that fits these requirements can be made in the following way: Two 1x6's that are 24 feet long are spaced apart with three 2x6 blocks (one placed at the center and one at each end). High test wire is used

as a diagonal brace. The wire is secured at each end with eye bolts. Eye bolts enable correct tension to be placed on the wire. By increasing the tension on the wire it is possible to put a negative bow into the straightedge, enabling it to be used to crown a slab.—M. Sorensen, Dallas, Texas.

(Continued on page 195)



Actual size of Hook-Nail.

Now Flintkote announces a new Hook-Nail for applying asbestos-cement sidings over insulation sheathing

At last... a nail that saves installation time and money... gives added security... improves siding appearance!

It's the new Flintkote Hook-Nail... developed by Flintkote's famous research laboratory, for applying Asbestos-Cement Siding Shingles over insulation board sheathing in new construction.

Look What This New Hook-Nail Gives:

- 1... Ease of driving.
- 2... Automatic alignment of siding.
- 3... Quick placement of backer strips.
- 4... Rapid application, equal to, or quicker than face nailing.
- 5... Both top and bottom of siding firmly held without working back of wall.
- 6... Weight of siding contributes to lasting tightness.
- 7... One size fastener for both 25/32" and 1 2" boards.
- 8... Can be driven over studs.
- 9... Increases butt shadow.
- 10... Good appearance, non-corrosive, non-staining, inconspicuous.

Send today for complete information, prices and illustrated instructions for applying Flintkote Asbestos-Cement Siding over Flintkote Insulation Board with the new Hook-Nail.

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

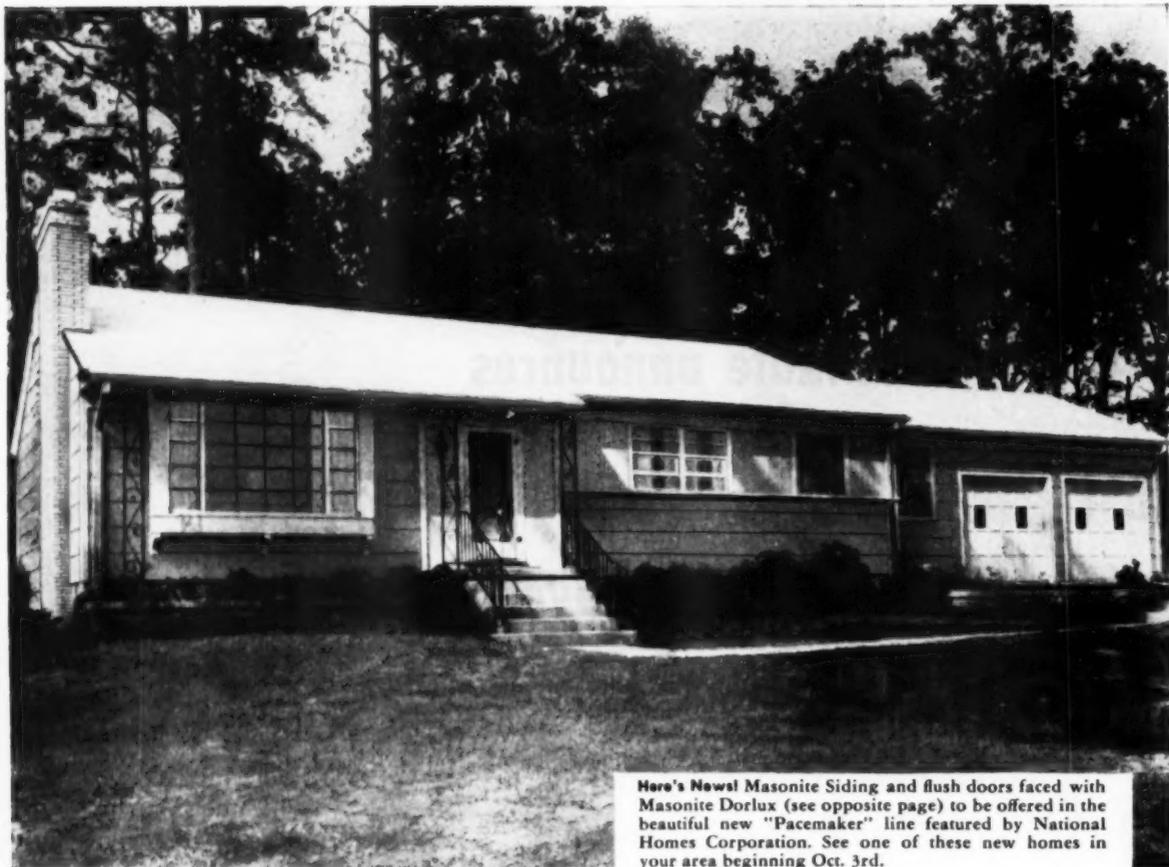


It's easy to get the knack of driving the Flintkote Hook-Nail. Application time is fast, good alignment is assured. And the siding really stays put. The siding will break before the Hook-Nail can be pulled out.

The use of the Flintkote Hook-Nail is qualified to be considered acceptable in the construction of properties otherwise eligible for mortgage insurance under the Minimum Property Requirements of the F.H.A.



FLINTKOTE... *Style and Color Leader since 1901*



Here's Newsl Masonite Siding and flush doors faced with Masonite Dorlux (see opposite page) to be offered in the beautiful new "Pacemaker" line featured by National Homes Corporation. See one of these new homes in your area beginning Oct. 3rd.

More and more builders now switching to **MASONITE SIDING**

Why are so many builders, architects and home-owners insisting on Masonite Siding, that new packaged Presdwood® Product?

There are several reasons.

Take the matter of cost. Masonite Siding is very much in line with conventional materials. And, because every square inch is usable (no knots or grain), because it goes on faster, and because it takes less painting time and material—you can count on some mighty important savings overall.

Appearance? Masonite Siding has all the good looks

you want—and then some. Comes in 3 widths: conventional 12", wider 16" and extra-wide 24". No premium on the wider widths. True-cut lengths between 8' and 12'. In 5/16" and 1/4" thicknesses. (Board and batten siding? Tempered Presdwood does the job!)

This all-wood hardboard is really rugged! Takes all kinds of rough weather without flinching. Resists small children and baseballs. Won't split, splinter or crack. Won't rot or corrode. Won't push nails out.

Ask your building materials dealer about this time-tested siding. Or send the coupon for the whole story!



MASONITE®
CORPORATION Dept. AB-10, Box 777,
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better hardboards for better building

- I want to know more about Masonite Siding. Please tell me all about it.
- Please send me information about Masonite Dorlux for paint-grade flush doors.

AB-10

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Address.....

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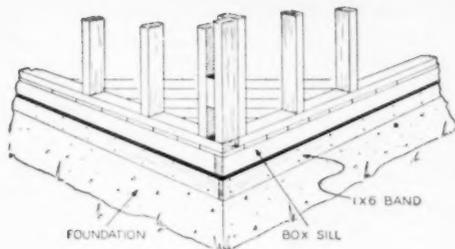
County.....State.....

how would you do it?

ideas for the man on the job

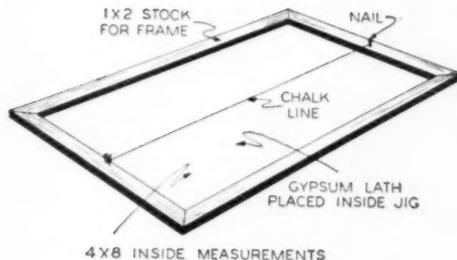
(Continued from page 192)

solid nailing base for first row of shingles



Quite often there is the problem of not having a sufficient base on which to nail the first row of shingles for the exterior wall of a house. Many of the nails driven often hit the area between the sill and the foundation and therefore do not offer a secure clinch. To remedy this, nail a 1x6 band around the sill near the foundation. Then apply sheathing over the box sill and up to the edge of the 1x6 band previously applied. When the first row of shingles is applied to the sheathing and over the 1x6 band, there will be a very solid member to which you can nail securely. Each nail will do an effective job. Each shingle will be fastened tightly.—T. M. Reeves, Albany, Ga.

this gypsum lath marking jig saves time, reduces errors



Before applying your gypsum lath sheets, marking them with this simple marking jig will save you time and work, and will assure a more accurate nailing job. The jig is simple to construct. It is simply a frame made of 1x2 stock. The inside measurements are slightly wider and longer than a 4x8 sheet. A heavy, chalked string is stretched tight across the center of the frame.

In use, the jig is simply placed over a piece of gypsum lath and the line is pulled up and then snapped. If the ceiling joists are spaced 16 inches apart, stretch two lines across the frame at the proper distances.—H. E. Fey, New Braunfels, Texas.

(Continued on page 196)



You always get more
when you hang a flush
door faced with

MASONITE DORLUX

Looking for an "extra" that'll give home buyers more value—at little or no extra cost?

Then specify Masonite Dorlux for the facings of paint-grade flush doors. Here's why:

This smooth, strong Presdwood® Product offers a perfect base for paint, enamel and varnish. Gives a maximum choice of finish and colors...that stay on.

A sturdy all-wood hardboard, Dorlux has no knots or grain to pull and strain. Holds its shape in all climates. Helps keep the door from binding or sagging. Never splits, splinters or cracks. Withstands knocks, bumps, other household hazards.

Many builders and remodelers, such as National Homes Corporation, already know and like Dorlux. You will, too. Send coupon on opposite page for more information.

better hardboards for better building



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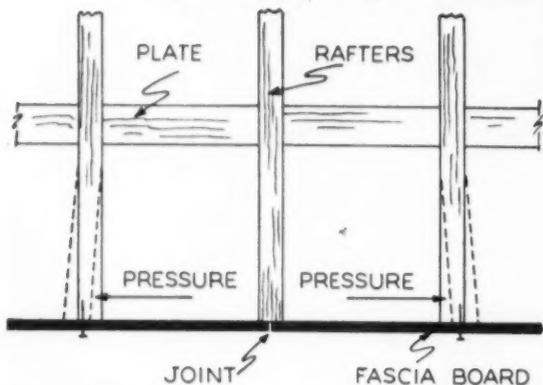
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how would you do it?

ideas for the man on the job

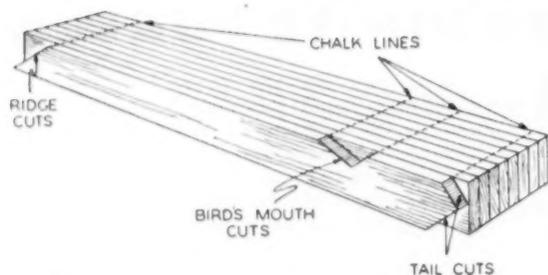
(Continued from page 195)

how to keep fascia joints tight



Sometimes fascia boards pull apart where they are joined, leaving an unsightly gap. To keep a fascia joint tight indefinitely, put pressure on the rafter tails away from the fascia joint as you nail each side of the two fascia boards. Then, when pressure is released, the relaxed rafter tails will force the fascia boards together into a tight-fitting joint.—C. E. Chubb, San Fernando, Calif.

how to cut rafters quickly



When cutting common rafters, make all ridge cuts first, using a power saw and an adjustable steel square or guide. Cut two rafters complete with bird's mouth cuts and tail cuts. Use these two completed rafters as patterns for cutting others.

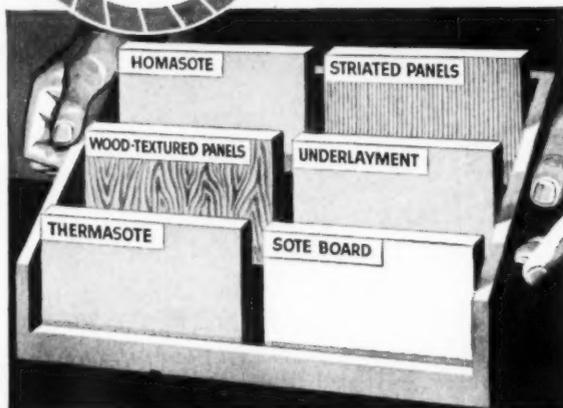
Take as many rafters as is possible (usually 30) and place a patterned rafter at each end to act as guide. Clamp the rafters together with 4-foot (or more) adjustable clamps to keep the rafters rigidly placed. Then snap chalk lines across the rafters to guide your sawing of tail cuts and bird's mouths.

If it be possible to turn the complete clamped-up unit of rafters over, the other tail cut can then be made.—J. H. McNeil, Rome, N.Y.

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

Homasote Insulating and Building Boards

Six insulating and building boards for many specific jobs. Everything from inside to outside finishing and from sheathing to decorative wood-textured and striated panels. All are long-wearing and completely weatherproof! Suitable for finishing, sheathing, roofing, fire walls, heater rooms—and a host of other jobs. Send coupon for descriptive literature on each.



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Date _____

This Certificate is issued to _____ in their guarantee that the Woodwork as listed below, furnished by CURTIS COMPANIES INCORPORATED, is Curtis Woodwork of authentic design, manufacture, and workmanship, bearing the Curtis trademark. The most approved methods, processes, and materials have been used in its production, and the performance of the several machines through which it has passed are under our positive control, and which are reported to furnish new material.

This certificate has been countersigned by the Curtis dealer from whom the material was purchased.

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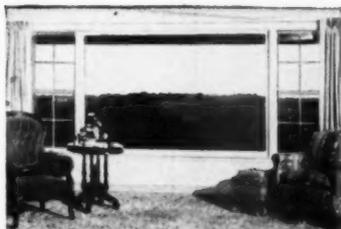
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DATE AT _____

**The little piece of paper
that's selling houses today!**

Even we didn't realize what a powerful selling tool this Curtis Woodwork guarantee could be! But today it's actually being used by builders to sell the *entire house*. It's not hard to find the reason why. Today's home buyers are choosy... value-wise and quality conscious. No wonder they respond to the kind of assurance they get from the Curtis name and the Curtis guarantee of quality.

The Curtis Certificate is a guarantee against manufacturing defects in materials and workmanship in any Curtis product over which Curtis has control. It is issued by the dealer who furnished the Curtis Woodwork. Architects who specify "Curtis Silentite" can be confident of satisfied clients... builders who feature the Curtis guarantee are getting substantial help in moving homes faster and at a better price.

Glazed, pre-fitted and ready to install, the Curtis Silentite window unit saves time on the job. Here, the Silentite double-hung windows flanking the picture window have the exclusive patented Silentite construction—including "floating" weatherstrips—which assures superior weather-tightness and fuel economy.



Silentite wood casements close tightly to shut out wind and dust—won't swing or rattle in the wind. They come in several sash styles and in all commonly used sizes. Special Curtis operating hardware gives easy, simple control.



The new Curtis panel windows offer a highly flexible means of providing for any desired number of window openings. Simple, yet rugged in construction, they are available for standard Thermopane or Twindow glazing. Ventilating units and louvres are furnished when desired.



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Curtis makes a complete line of architectural woodwork and birch kitchen cabinets for homes of all types. Make your next home "all Curtis."

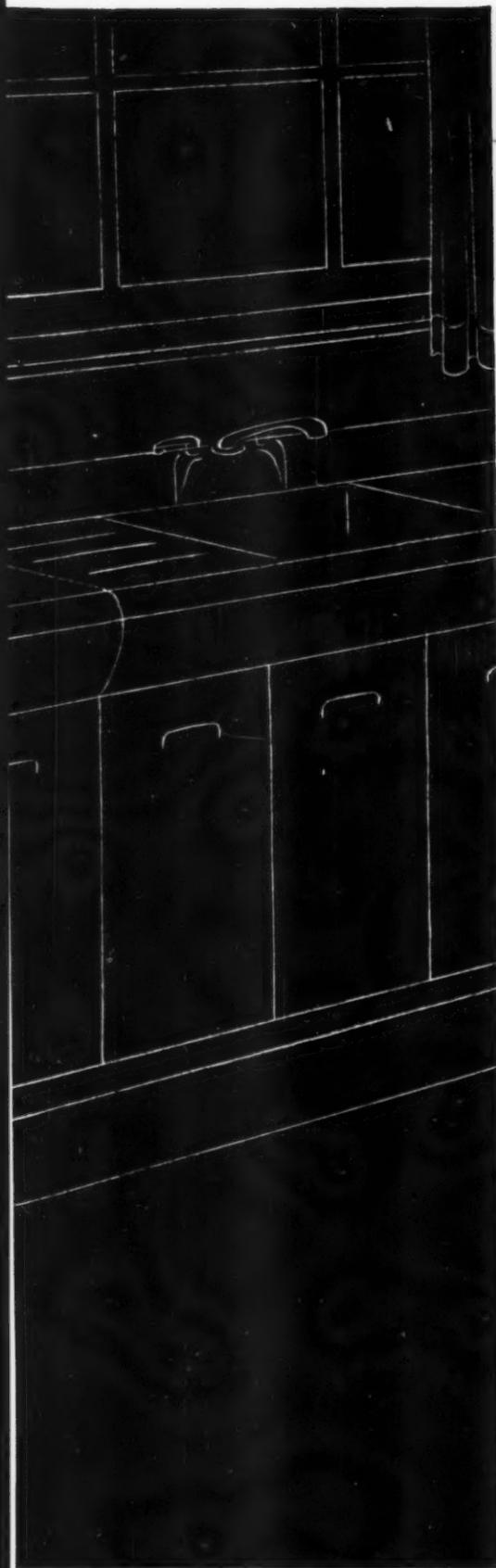
NEW



NEW SPENCER SUBURBAN

THE OIL-FIRED BOILER BURNER UNIT

with the beauty and convenience of a kitchen appliance!



NEW PRODUCT

COMPLETE NEW HEATING UNIT

combines "kitchen appliance" beauty with
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easier installation and servicing

Spencer now offers a new ready-to-install oil-fired heating unit called the Suburban. This unit combines time-tested Spencer efficiency and durability with a new kind of beauty and ease of installation. It's equipped to supply year-round hot water, conforms to ASME and SBI codes, offers several unique advantages.

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EASIER TO INSTALL—just hook up electrical connections, oil and water lines, and smoke pipe. That's all.

EASIER TO SERVICE AND CLEAN—readily removed plate on top makes all fire tubes easily accessible. No need to disturb jacket or smoke pipe when cleaning this unit. Controls and all working parts can be reached from front for easier servicing.

This is the newest member of Spencer's Complete Line.



510 SQ. FT. NET SBI WATER RATING
DIMENSIONS—ONLY 21½" x 32½" x 56"



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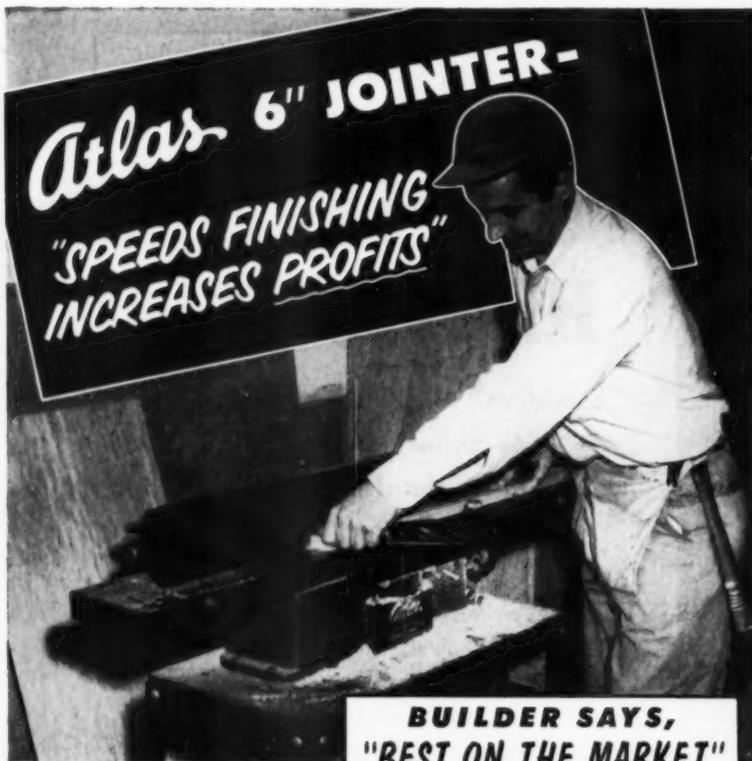
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"SPEEDS FINISHING"
INCREASES PROFITS"

**BUILDER SAYS,
 "BEST ON THE MARKET"**

F. L. Randall, builder, "wouldn't be without an Atlas 6" jointer." It saves him time and money in finishing out a house by enabling him to do most of the mill work. Randall considers the Atlas "the best jointer on the market" — likes "its accuracy, the big table and fence, and the easy way the fence can be positioned."



BIG CAPACITY Handling big boards is a sure, easy job on big Atlas working surfaces. THE TABLE IS 42" LONG! Fence, itself, is 32" long, 4½" high. Fence quickly removes for surfacing wide boards.



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 Atlas cutter head removes for sharpening blades without disturbing their setting. An exclusive feature.

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You'll like its size, speed, and smooth performance. Table is 42" long — precision-ground for smooth work feeding. New two-way tilting fence is 32" long, 4½" high — has positive adjustable stops for 45° settings. 2¾" diameter cutter head with 3 blades spins 4100 RPM on large, sealed ball bearings. Exclusive features include a timesaving width-of-rabbit scale, and simultaneous blade positioning.

The Atlas 6" jointer can make money for you. Look into it. Send for the latest catalog.

**No. D-105
 fireplace made
 integral with wall**

In this house of contemporary design, the fireplace and the adjoining brick wall which extends all the way over to the side wall of this room are the outstanding features. The light-colored buff pressed-brick, laid up in a stack pattern, provides a pleasing contrast to the brownish red of the Philippine mahogany which is used on the other three walls.

The stone hearth of the fireplace was raised 18 inches above the floor and extended 18 inches out from the face of the fireplace to provide space for the storage of fireplace logs. An opening under the hearth and extending beyond the end of the fireplace wall and over to the side wall of the room, is used for the under-floor warm-air duct and register face.

The upper portion of the fireplace above the opening is a splayed surface with a one-inch projection at the left end extending to 10 inches at the right end of the fireplace. A 2½-inch steel column provides support at this end for the splayed ¾-inch steel plate placed under the overhang.

An interesting surface pattern is provided in the upper portion of the splayed wall where the masonry comes in contact with the sloping ceiling of the living room and the overhang of the drop ceiling. The brick wall adjoining the fireplace extends up to the stone sill of the strip windows and the Philippine mahogany plywood walls that surround them.

ATLAS PRESS COMPANY

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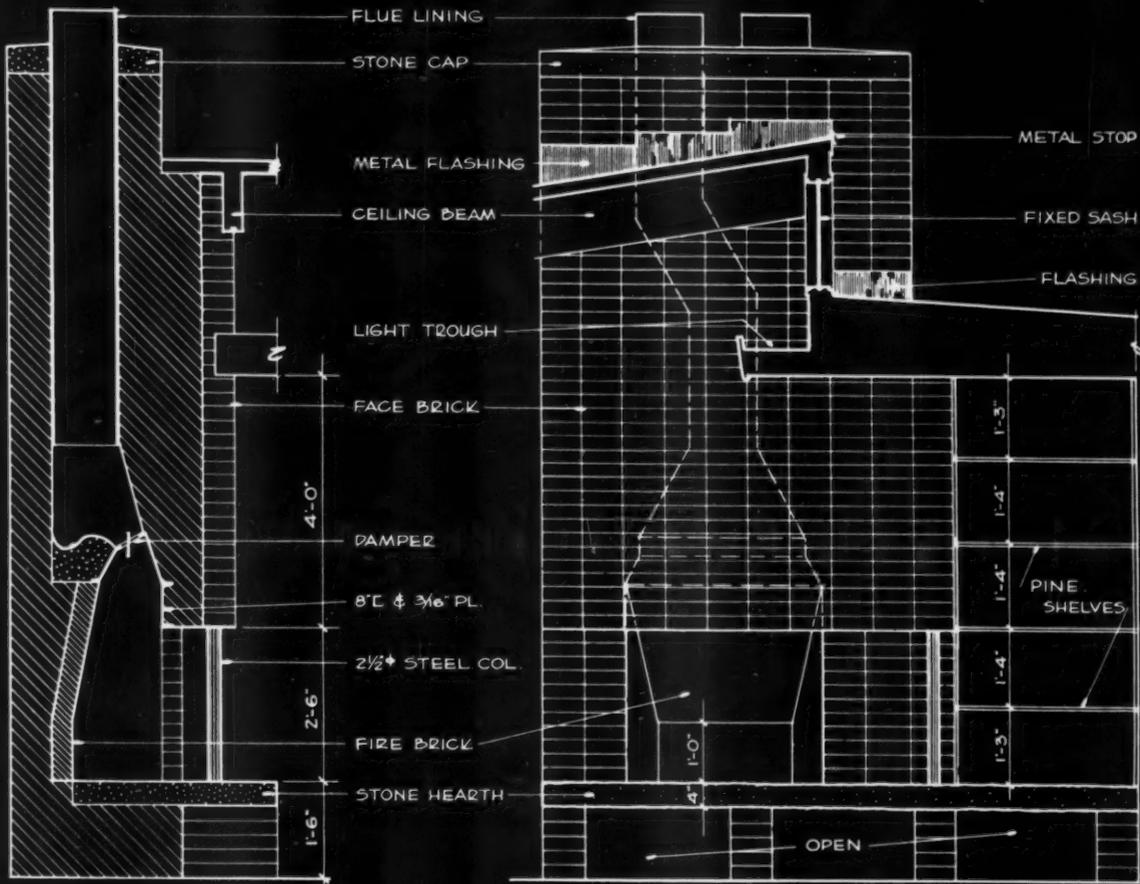
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Designed by Arthur V. Hansen

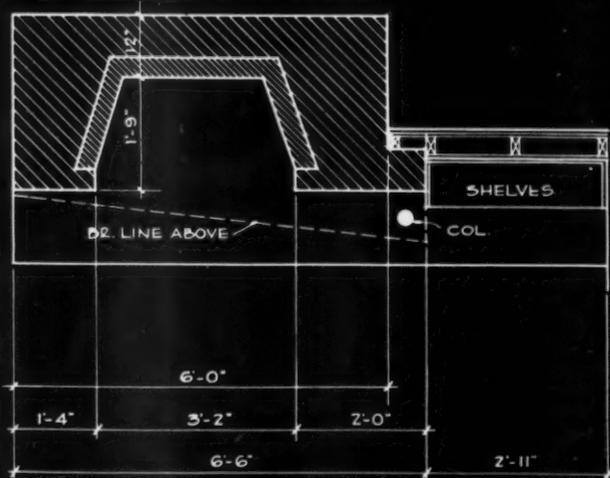
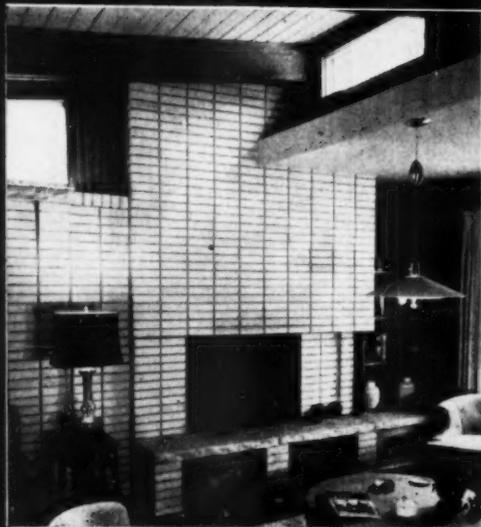
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NO. D-105 FIREPLACE . . .



Section . . .

Elevation . . .



Plan . . .



48" DOOR CANOPY

72" STOOP CANOPY

TROY **Door Canopies**
the sensational new
CANOPY made of sturdy
rustproofed STEEL!

- **STRONGEST BY FAR!**
- **HARMONIOUS IN DESIGN—**
THEY LOOK LIKE AN INTEGRAL
PART OF THE HOUSE
- **LOWEST IN PRICE — BECAUSE**
OF QUANTITY PRODUCTION

A REAL PROFIT ITEM!
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 A sample hung in your show room will start a chain reaction of sales.

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THE OLDEST AND LARGEST
 MANUFACTURERS OF SUN CONTROL PRODUCTS

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dental clinic is
a community asset.

Located close to a busy intersection, yet far enough away to permit off street or curb parking, this small dental clinic, designed in the contemporary style, blends well with the suburban character of the neighborhood.

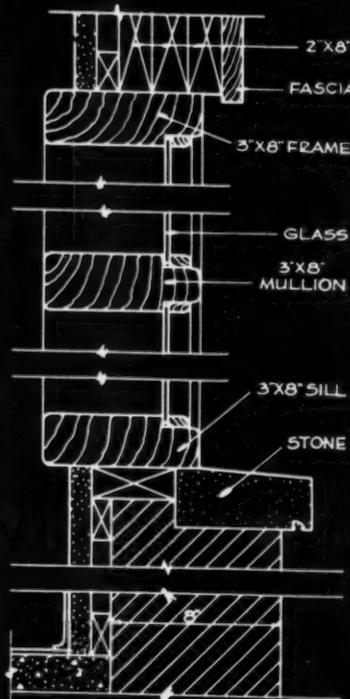
The front wall of the clinic, which is set back to conform to the building line of the adjoining homes, is designed in a series of sawtooth bays. This method provides a greater glass area for two of the treatment rooms, and introduces an informal design effect for the entire front and part of the side. This area is further enlivened by the use of continuous planters, which form a base for the stone facing and the vertical wood framing members supporting the roof overhang. Planters of pressed brick are divided at front to form a passage to the entrance door.

The angular, vertical wood members and beams forming the support for the roof overhang, including fascia boards and 1x6 V-grooved soffit boards, are all of redwood which is sealed to preserve the surface. The frame of the large windows in the reception room is built of 3x8-inch rabbeted members with half-inch plate glass set in stops. All units are fixed.

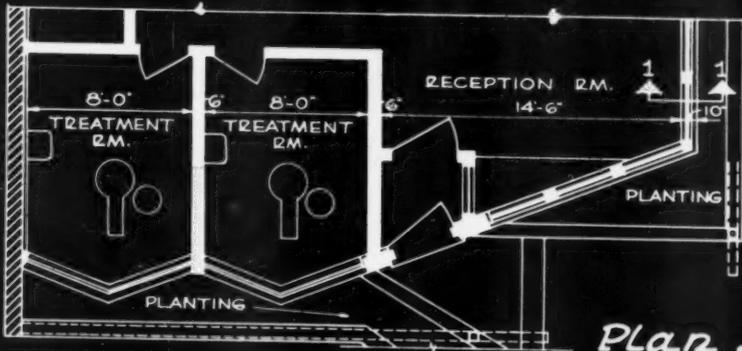
AMERICAN BUILDER'S STORE FRONT DETAILS

Detailed by K. Roderick O'Neal, A.I.A. for American Builder

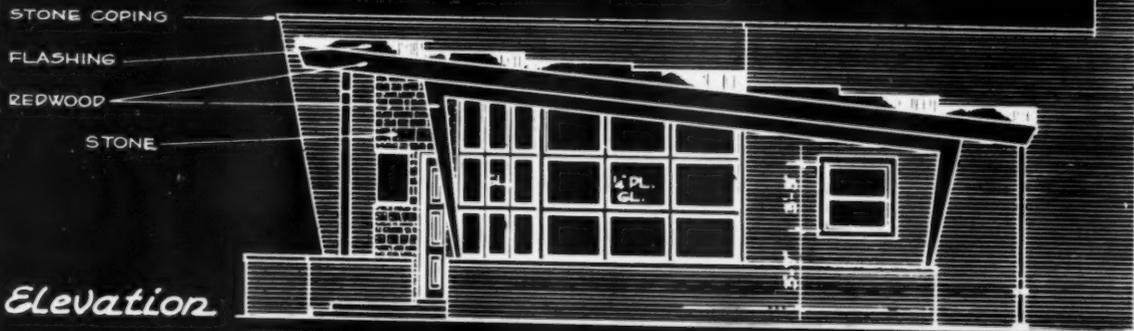
NO. G-48 DENTAL CLINIC . . .



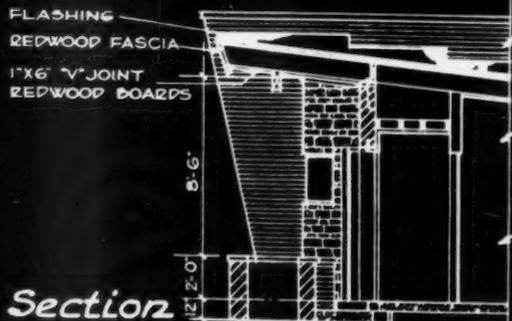
Section 1-1 . . .



Plan .



Elevation



Section



Sewer Gas
Can't
Harm



CLAY PIPE

There's no safe substitute for Vitrified Clay Pipe. It resists corrosion from the acid gases that rise out of sewage waste. Gases actually do more damage than waste liquid. But sewer gases do not affect Clay Pipe.

Clay Pipe is also *completely* safe from acid liquids, strong detergents, or the corrosive

substances produced by decaying waste from garbage disposal units. Clay Pipe is *guaranteed for 50 years.*

NATIONAL CLAY PIPE MANUFACTURERS, INC.

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311 High Long Bldg., 5 E. Long St., Columbus 15, Ohio

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THE SPOTLIGHT ON THIS MODEL HOME . . .



Model home currently featured in *Living for Young Homemakers*.

Spotlights **AIR-COOLED** Year 'Round Air Conditioning by **CHRYSLER AIRTEMP**

Uses no water! Uses no living space! Makes any home
MORE SALABLE!

You find Year 'Round Air Conditioning by Chrysler Airtemp in more and more new homes these days, including many of the famous model homes to appear in the *national* spotlight. Here is mute testimony of builders' recognition of the public's confidence in the Chrysler Airtemp name and the public's respect for Chrysler Airtemp engineering leadership.

Now Chrysler Airtemp makes it practical for builders to incorporate the tremendous buy appeal of year 'round climate control in more new homes than ever before! The new Chrysler Airtemp *Air-Cooled* Air Conditioner provides refrigerated cooling *without using water*. It costs less to install . . . costs less to operate in many locations. In any of four recommended installations, it takes up no living space!

Get complete details of this latest achievement of Chrysler Airtemp engineering and the complete Chrysler Airtemp line of Air Conditioning for homes. See your nearest Chrysler Airtemp Dealer or return coupon today!

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Utility Room and Attic Installation

Attic Installation

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Basement Installation Compressor Outside

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HEATING • AIR CONDITIONING
for HOMES, BUSINESS, INDUSTRY

Airtemp Division, Chrysler Corporation, Dayton 1, Ohio

Comfort Zone



AD-9-53

Airtemp Division, Chrysler Corporation
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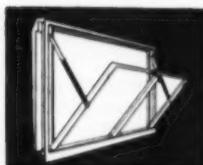
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WINDOWS
OF

Extra Value

All casements drilled and tapped to receive storm sash and screens, operator arm guide channels attached with screws for easy removal and replacement, if necessary; ventilator frames constructed from the same heavy sections as the outside frame. This provides greater rigidity and stronger ventilators.



VENTO
BONDERIZED
"CHAMPION"
BASEMENT
WINDOWS

14-gauge electrically welded frame, fins welded to jamb for quick installation and double contact with leak-proof watershed sill. A plus value incorporates a redesigned latch which assures positive operation under all conditions.

Also ask about the extra value in:
VENTO "THRIFTY" BASEMENT WINDOWS
VENTO FORMED STEEL LINTELS (FOR BLOCK AND BRICK CONSTRUCTION)

Vento "Champion" Bared Basement Windows
Vento "Champion" Utility and Barn Windows
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Write us for full information

Some desirable territories are open for representatives and distributors. Write for particulars.

VENTO STEEL PRODUCTS
CO., Inc.

247 Colorado Ave., Buffalo 15, N. Y.

unfair off-street parking law invalid, Court rules

By John F. McCarthy
Attorney at Law



LAST MONTH we discussed building and zoning ordinances. We noted that the courts sustained them if they were reasonable but struck them down where they were arbitrary or capricious. The application of such general principles often becomes difficult.

The City Council of Chicago has adopted the proposed off street parking ordinance explained in last month's article. This ordinance, it was noted, is broad in its application and refers to all types of new construction and conversions. It requires a private garage or an open parking area on the same lot as, or in close proximity to, the building to be served. It replaces an earlier ordinance held invalid by the Illinois Supreme Court as an unreasonable exercise of the city's zoning power. See *Ronda Realty Corp. v. Lawton*, 414 Ill. 313, 111 N.E. 2nd 310.

The earlier ordinance, which was held invalid, required a private garage or automobile compound for the storage of passenger automobiles on the same lot as apartment houses of more than two units. It set up the ratio of one parking space for every three apartments. The ordinance, however, made no requirement for off street parking facilities for lodging houses, hotels, hospitals, schools, colleges, clubs, libraries, museums and the like.

In that case the facts were that Ronda Realty Corporation had applied for a building permit to remodel an apartment building which it owned by increasing the number of units therein from twenty-one to fifty-three. It planned to provide off

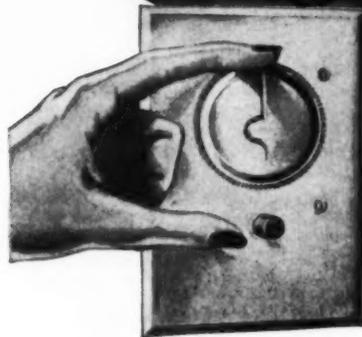
street parking facilities for eight cars rather than for eighteen as required by the earlier ordinance. The Court held that the building permit applied for should be issued despite the fact that off street parking facilities in compliance with the ordinance would not be provided. The reason for this, as we have said, was the Court's opinion that the ordinance was invalid as an unreasonable exercise of the city's zoning power.

The Court observed that relieving congestion in city streets was a proper object of a zoning ordinance. It pointed out, however, that the particular ordinance required only apartment buildings, as distinguished from many other types of structures, to provide off street parking facilities. It suggested that the occupants of rooming houses and hotels, for example, contributed to the city's traffic congestion at least equally with those of apartment buildings. The Court concluded that it was unreasonable to impose the burden of providing off street parking facilities on one kind of property, namely apartment buildings, but not on others, where each contributed substantially to the congestion sought to be remedied.

The Court thus decided that the earlier ordinance was invalid. The later ordinance is explained in some detail in last month's article. By subjecting all types of new construction and conversions to some requirement for off street parking facilities the present ordinance attempts to meet the objections which caused the earlier one to be stricken from the records.

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at your fingertips

with the **powerstat**

Wallbox Dimmer

Here is the ultimate in home lighting — a light control designed to replace the ordinary ON-OFF wallswitch . . . to permit the selection of any amount of light from darkness to full brightness. Simply by turning a knob, light can be set to any brightness to suit each seeing task, every activity, all occasions. Operation is smooth and silent. Installation is easy. The powerstat WALLBOX Dimmer is Underwriters' Laboratories Approved. A variety of knobs and faceplates are available to blend with any room decor.

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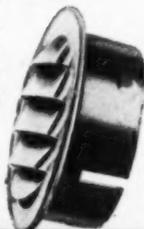


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THEM
AIR!**

**safeguard against paint blister and peeling with
"MIDGET" LOUVERS**

Install Midget Louvers on the overhang or soffits of Ranch type homes . . . on gable ends, dormers, eaves, etc. of houses of any style. Wherever there is danger of destructive condensation and dampness, these inexpensive all aluminum units are your fastest, cheapest and most positive method of permanent protection. Made in 6 sizes (1" to 4" diameter)—2 styles (regular, with rain deflectors—and "ID" without deflectors). Both have built-in screens to keep out insects.

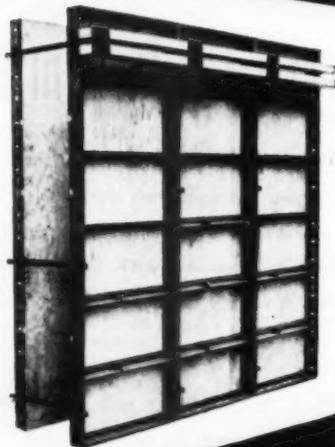
QUICK & EASY TO INSTALL. Just drill hole and tap in place. No nails or screws. "Midget" Louvers have special tension slots and swedge fasteners to assure tight fit and permanent anchorage.



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8 WALL STREET • NORWALK, CONN.

**ATLAS
COMPO FORMS**

**FOR FAST
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STRUCTURES**



B-10

All steel frame—
plastic coated plywood
face. Easy stripping
Accurate alignment • Low cost

Irvington Form & Tank Corp., 20 Vesey St., New York 7
Atlas Compo Form Division

Catalogs —

and Manufacturers Literature

418—MASONRY CEMENT

Useful information for architects, engineers and masonry contractors is presented in this 16-page catalog. Descriptive matter is divided into four sections, presenting cement's economic value, analysis of properties assuring quality masonry mortar, range of product performance and reference tables for estimating quantities of cement in relation to block, brick and mortar. Clear illustrations, concise text heighten catalog's usefulness. Lone Star Cement Co., Dept. AB, 100 Park Ave., New York 17, N. Y.



419—CELLULAR GLASS INSULATION

A new 24-page booklet, "Foamglas: Low Temperature Insulation for Walls, Ceilings, Floors," contains information on application methods for this material. Characteristics, finishes, suggested thicknesses, insulation values (in typical construction) and properties are listed. Insulation is impervious to moisture, as shown by vapor penetration tests; is also incombustible, lightweight, vermin-proof. Pittsburgh Corning Corp., Dept. AB, 1 Gateway Center, Pittsburgh 22, Pa.



420—DISPLAY HARDWARE

16-page folder presents manufacturer's complete line of metal fixtures, including counter brackets and posts, counter display channels, splicers, clips and holders, sign frames, price tag holders, display hooks, knife-type and keyhole brackets, molding for price markers, sliding door hardware, including track, carrier and pulls. Harry Sall & Co., Inc., Dept. AB, 802 W. Girard Ave., Philadelphia 23, Pa.



421—ELECTRIC TOOLS

A new 40-page catalog of portable electric power tools contains complete illustrations, descriptions, specifications and prices on all of the manufacturer's universal electric tools, including drills, grinders, hammers, saws, screwdrivers, nut setters, sanders, polishers, tappers, nibblers, balancers, impact wrenches, as well as automotive tools, air hammers and air impact wrenches. Accessories and available attachments are also shown. Thor Power Tool Co., Dept. AB, 175 N. State St., Aurora, Ill.



♦ FOR MORE INFORMATION USE COUPON, PAGE 228

AMERICAN BUILDER



BUILDING BUY-WORDS by Herb Willson

An Advertising Page.

LIKE IT OR NOT, building more "sell" into new homes is here to stay. But to stay ahead of choosy buyers doesn't *have* to mean bigger costs. I've seen *one* good answer in Fremont Rubber's Vinatile and Vinatop, with their SOFT-GLO finish. Believe me, that SOFT-GLO finish *is* expensive looking. No waxing, it wears like iron—but is priced so you can stay within your building budget. Try it in a kitchen, bath or any room. Nine brilliant, matching colors. Vinatile in 6"x6" or 9"x9" *Tru-Cut* squares. Vinatop in rolls 30", 36" and 42" wide. See your dealer or write Fremont Rubber Company, Fremont, Ohio.



COLOR— IT'S A SELLING TOOL

THE TREND TOWARD COLORFUL EXTERIORS has taken hold and enterprising builder-contractors are taking advantage of this and using it as a sales tool. Soft, pastel shades for frame houses, contrast trim for brick homes, many interesting effects possible with aggregate block construction and cement paints—result in houses that are half sold before the prospect enters the door. Once inside, color again plays a big part in selling the house. Without our being aware of it, color makes a tremendous impression upon us. Houses today must not only be functional but cheerful looking and attractive. Color *is* important. Use it—sell with it.

HERE'S YOUR CHANCE to see a new kitchen merchandising plan in action! It's shown in full color in this month's issue of Woman's Home Companion . . . a house trailer containing a natural maple kitchen and laundry, with all major and minor appliances operative. This is the kind of sales-backing promotion enjoyed by dealers of MUTSCHLER BROTHERS COMPANY, Nappanee, Indiana . . . manufacturers of custom hardwood kitchens. There's also a Mutschler sales training school for your employees. And each kitchen is built to your specifications, eliminating inventory problems. Write MUTSCHLER for franchise information.

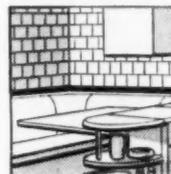


1954 N.A.H.B.

IT'S NOT TOO EARLY to make your plans *now* . . . attend the National Association of Home Builders Convention and Exposition this coming January 17th through January 21st, 1954 in Chicago. *Two* great hotels will house the enlarged planned activities and exhibits for this 1954 convention . . . the Conrad Hilton on Michigan Boulevard and the Sherman Hotel in the heart of Chicago's Loop. Special inter-hotel bus service will be provided . . . another record attendance in January is anticipated . . . the tempo of the convention is being stepped up to meet the challenge of constant improvement and necessary expansion. Don't miss this . . . make plans early.

OCTOBER 1953

I'VE JUST READ SOMETHING that's opened my eyes to the big difference in portable heaters. It's the new, fully illustrated 40 page booklet just issued by the people who make Herman Nelson Portable Air Heaters. Here, in unbiased form, are *all* the facts about *all* portable heaters. You can see for yourself why some are safe—and others not so safe. You'll see, too, why Herman Nelson is the only complete line of completely safe portable air heaters. Send for your free copy today. Herman Nelson Division, American Air Filter Company, Inc., Dept. 401, Moline, Illinois.



MORE AND MORE BUILDERS are installing Tilemaster, the "mechanic's" tile. "It goes up right—stays on tight"—they say. There's not only profit in it, but it's got some exclusive features. For instance, each tile has an arched construction called "Bev-All" which prevents "dishing-in" or "cupping." Don't overlook the Mastec-Seal Rib either, that seals mastic in—water out! It prevents water damage in shower stalls or *any areas exposed to water!* For the complete Tilemaster story, write A-1 Plastic Molders, Inc., 1415 Diversey Pkwy., Chicago 14, Ill.

THIS HOUSE SOLD BY—is the sign that builder-contractors hope to tack on their houses by the time of completion, if not before. To help do this, remember that buying a house is ordinarily a family affair. ATTRACT the "lady of the house" with plus features in kitchens, bathrooms, dens, playrooms, etc. and CONVINCe the "man of the house" with sturdy construction with top flight products that will stand the test of time and weather. Products that will *attract* and *sell* the whole family are featured each month in BUILDING BUY-WORDS *by* Herb Willson, 5510 Cornelia Ave., Chicago 41, Illinois.



SPECIAL CABINETS . . . to fit around chimneys, pipe chases, angled corners, etc., can be supplied by GENEVA. This ability to furnish *special custom cabinets* . . . plus offering the most extensive variety of stock size base and wall cabinets in the industry are two important reasons more and more builders are featuring GENEVA steel kitchens in their new construction and kitchen remodeling jobs. GENEVA makes it possible to beautifully tailor a kitchen to any room dimension without loss of time or materials . . . and at prices competitive with conventional kitchens. For complete specifications and details on GENEVA quality kitchens write . . . GENEVA MODERN KITCHENS, Dept. BG-3, Geneva, Illinois.

Lowest priced Delco forced air furnace ever made reduces new home costs!

NEW DELCO-HEAT
OIL-FIRED FORCED AIR FURNACE
FEATURES NEW, MODERN,
MASS PRODUCTION
WRAP-AROUND DESIGN FOR
LOWEST BIDDING PRICE
EVER OFFERED
BUILDERS!



Costly frills and extras

eliminated without sacrificing quality



To offset rising costs, General Motors Delco-Heat now offers you top-quality, top-performance heating units at new, low prices for truly profitable installation. The new economy OBC75-H oil-fired Conditionair is compact — only 25x25x66 $\frac{3}{4}$ for use in closets or other small out-of-the-way spots. 75,000 Btu/Hr. output. Has new wrap-around steel cabinet with Delco Green enamel finish. The 16 ga. steel heat transfer unit is seam welded to eliminate combustion leaks. The Circle-Air Radiator adds an extra heating surface — improves efficiency. Other great Delco features are the Quik-Action stainless steel combustion chamber; Delco-Heat Pressure Oil

Burner powered by the vibration-free Rigidframe Motor; centrifugal blower; replaceable air filter; wrap-around wipe sheets; knockouts in side panels that permit installation of filter at either position; and base pan with knockout for floor return.

Similar in every detail, the new Model GBC90-H answers all your needs for an economy Gas-Fired Conditionair. Both models shipped assembled.

For warm air, hot water or steam installations — gas- or oil-fired — for every kind of heating problem, contact your Delco-Heat Distributor. Or write Delco-Heat, Dept. ABH, Rochester 1, N. Y. In Canada, Toronto 13, Ontario.

For a good deal —
DEAL WITH DELCO



General Motors Engineering

Delco Production Skill

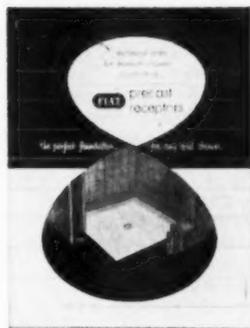
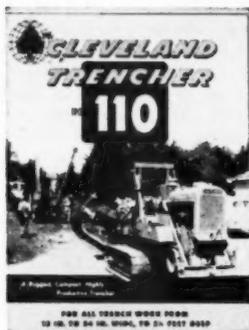


...your keys to Sales Success

... a complete line of automatic oil- and gas-fired conversion burners, Conditionair forced warm air furnaces, boilers, and electric water systems.

Catalogs

422—SHOWER RECEPTORS—This new manual contains technical data, construction details and installation instructions on the manufacturer's receptors used with modern stall showers. Manual describes advantages and uses of two shower floors—one for plaster or tile walls (ceramic, metal or plastic), the other a rabbeted terrazzo-type for slab wall construction (marble, slate or structural glass). Monolithic design is stated to assure permanent, leak-proof and joint-free shower floor. Fiat Metal Mfg. Co., Dept. AB, 21-33 Borden Ave., Long Island City 1, N. Y.



423—TRENCHER — New eight-page bulletin on Model 110 trencher contains information on this unit which is capable of digging all types of trench from 12 to 24 inches wide and up to 5½ feet deep. Bulletin features versatility of the machine. Job applications within the trench size range are illustrated. Design and construction features are described. Information on optional extra equipment for special trenching requirements is given. Cleveland Trencher Co., Dept. AB, 20100 St. Clair Ave., Cleveland 17, Ohio.

424 — RESIDENTIAL WINDOWS—“Glazing the Air-Conditioned Home” is the title of this pamphlet which points out the importance of window planning in relationship to the air conditioning system. Data on the transmission of solar energy through different types of window glazing is presented. Year-round effectiveness of insulating glass and the role of heat-absorbing glass in the air conditioned home are included. Libby-Owens-Ford Glass Co., Dept. AB, Nicholas Bldg., Toledo 3, Ohio.



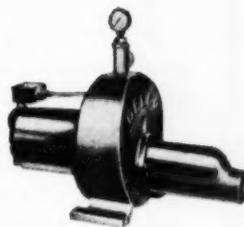
425—BASEBOARD PANELS—Four-page folder presents manufacturer's line of radiant baseboard panel heating. Cast iron baseboard panels designed for forced hot water or two-pipe steam systems are supplied in 18- and 24-inch lengths to provide flexibility in unit assemblies. Corner and extension pieces are designed to match baseboards, improve installation appearance. Folder contains ratings covering assembled length range of from 1½ to 25 lineal feet. Utica Radiator Corp., Dept. AB, 2222 Dwyer Ave., Utica 2, N. Y.

*“Be sure of
real running water
under pressure with a
Delco Water System”*



Build in guaranteed water capacity with a Delco Water System

Nothing can help sell a home faster, and keep it sold better, than a dependable water system that will meet all the demands for comfort, luxury and healthful living. So, when you build past the “city mains,” install the proved reliability of a General Motors Delco Water System. Every pump is test rated to deliver every gallon promised, and more... every system is quickly and easily installed and designed for lasting peak performance. Here's top quality guaranteed to keep home buyers happy; yet priced low to save you money.



This convertible jet pump is super-simple, super-powerful. Converts quickly to deep well operation if water table falls. For complete information about all pumps, contact your Delco Dealer. Or write: Delco Water Systems, Dept. ABW, Rochester 1, N.Y.



For a good deal
DEAL WITH DELCO

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NON



"You don't need a professional blueprint for a small house like ours."

This is common sense

NO NEED to be embarrassed by poor planning when the National Plan Service, in conjunction with America's alert retail lumber dealers, makes top-notch blueprints available at low cost. Good plans, like good cedar shingle roofs, are essential to good home-building.

Plan on Cedar Shingles

CERTIGRADE cedar shingles, because of their great strength and rigidity, can be applied on spaced rather than solid sheathing. You can count on saving about half the sheathing materials cost, and much of the cost of sheathing application, when you use cedar shingles. Let us send you a free estimating form so that you can accurately check the comparative cost of roof construction including sheathing. Your own

check, in your own area, will prove that cedar shingle roofs are your best buy. Write today, ask for "Roof Cost Estimating Form."



RED CEDAR SHINGLE BUREAU

5510 White Building, Seattle 1, Wash.
425 Howe Street, Vancouver, B. C.

Catalogs

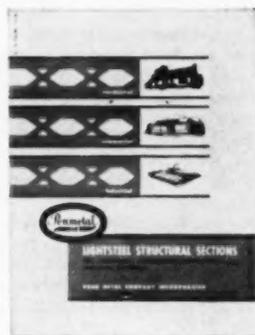
426—CONCRETE FORMS

—Expansible concrete forms constructed on a principle that permits ready adaptation of panel size to a variety of dimensions are presented in this eight-page folder. Advantages include savings in labor, quick placement of forms, reduced storage space, less weight and elimination of waste wood. Forms are adaptable to floor or roof construction, whether flat slab or slab and beam type; also useful for straight concrete walls. Kurt Orban Co., Dept. AB, 205 East 42nd St., New York 17, N. Y.



427—STEEL STRUCTURALS

—"Lightsteel" sections for low-cost steel framework of smaller buildings, homes, institutions, are described in 12-page catalog. Illustrations of building frameworks are shown. Single and double studs, joists, track and bridging, with complete framing details for assembly and welding are included. Framing details for doors, windows, roofs and clear spans also given, plus technical data and properties. Penn Metal Co., Inc., Dept. AB, 205 E. 42nd St., New York 17, N.Y.



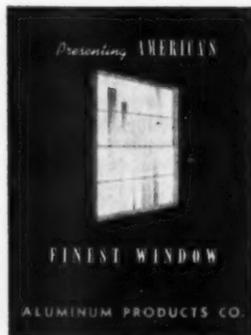
428 — BUILDING SPECIALTIES

—This new 52-page catalog contains listings of weatherstrips, caulking and glazing compounds, molding and trim, numbers and letters and screen door grilles. Catalog is indexed for easy reference and each product is illustrated with both product picture and schematic drawing of its functional application. Complete product information is given, including materials, sizes, packaging and shipping. Macklanburg-Duncan Co., Dept. AB, P. O. Box 1197, Oklahoma City 1, Okla.



429—ALUMINUM WINDOWS

—New eight-page catalog presents window unit made from extruded aluminum sections. Fixed upper sash permits weather-tight construction. Aluminum half-screen offers maximum visibility. No metal-to-metal contact gives silent, easy operation. Range includes 28 regular, four picture window sizes. Line drawings show methods of installation in masonry or wood. Aluminum Products Co., Dept. AB, 1901 Franklin St., Houston, Texas.

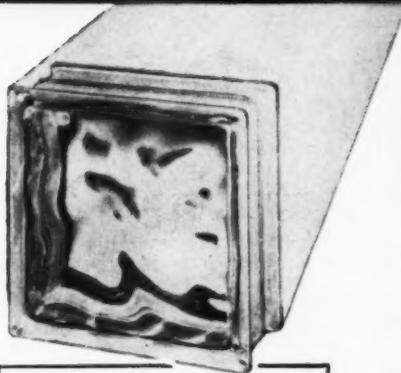
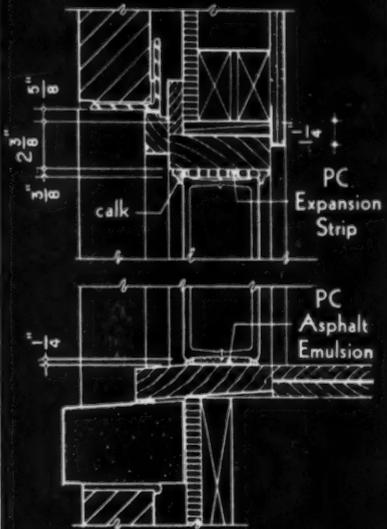


♦ FOR MORE INFORMATION USE COUPON, PAGE 228

AMERICAN BUILDER



EASY TO INSTALL



PC GLASS BLOCKS give

- light and charm to entrance halls
- extra salability to all types of houses

Only PC GLASS BLOCKS
give you all these advantages

KEY-LOCK MORTAR JOINT exclusive edge contour creates double wedge-shaped mortar joint—locks each block in place.

DISTINCTIVE MARKINGS on top edge of functional block make pattern identification easy, assure proper setting.

FINGER-FEEL RIDGES along top edge of functional blocks are an added guide to setting blocks correctly.

PLASTIC BOND COATING with heavy grit application provides tight bond between glass and mortar.

"CLEAN-EASY" FACE FINISH—special factory-applied coating protects block face from mortar and dirt. Gives neater installation. Available in certain styles.



A good way to brighten a drab entrance hall, lighten a dark stairway is to use large panels of PC Glass Blocks. Prospective home owners are quick to notice "extras" like this. They know the use of PC Glass Block panels means a smarter, more modern and safer home—one that will stand out from its neighbors.

And home owners really appreciate the advantages of glass block panels, too. They like their long life, easy cleanability, freedom from undue maintenance and repair and the way they insulate against heat in summer, cold in winter and reduce condensation.

Because of this buyer preference, you will do well to consider PC Glass Blocks for the houses you are building—for cellar windows, bathroom windows, over kitchen work counters, and interior partitions throughout the house. PC Glass Blocks are available in a variety of attractive patterns.

Pittsburgh Corning Corporation

PITTSBURGH, PA.

Pittsburgh Corning Corporation, Dept. AO-103
One Gateway Center, Pittsburgh 22, Pa.

Please send me more information on the use and installation of PC Glass Blocks.

Name

Firm

Address

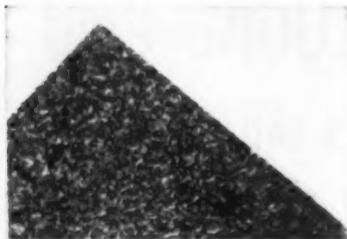
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new products



FIBER PANEL BOARD AB105317

A new hard type panel board, known as Type "A" Plaswood, is made of specially treated long wood fibers bonded with a resin binder. It is available in medium density board for use as sidewall sheathing and high density board for underlayment of asphalt and rubber tile, linoleum and wall-to-wall carpeting. Underlayment is available in 4x8-foot square edge panels, 3/8-inch thick. Sidewall

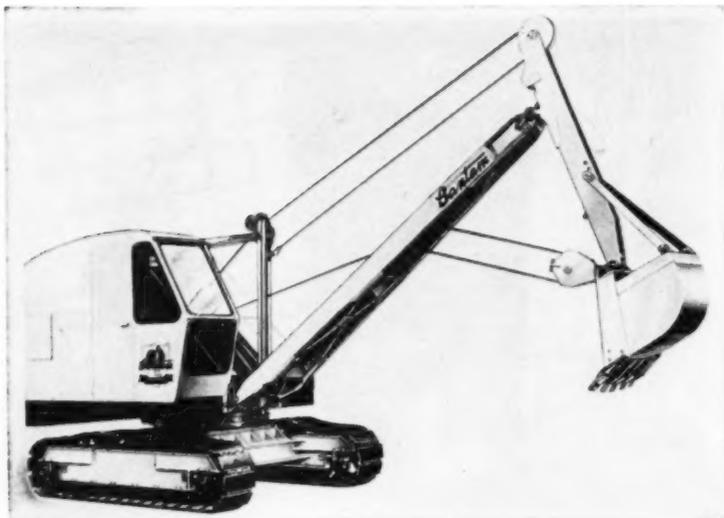


sheathing is made in 4x8-foot square edge panels, 1/2-inch and 3/4-inch thick, and in 2x8-foot shiplap panels, 3/4-inch thick. All panels, including shiplap, afford 100 per cent coverage.

The material's resistance to indentation makes it suitable for underlayment. Its nail-holding ability and bracing strength are an advantage when used as sheathing, its manufacturers claim. Southern Plaswood Corp., Dept. AB, P.O. Box 123, Hope, Ark.

CALCIUM CHLORIDE AB105323

A new 25-pound consumer package of flake Calcium Chloride is being introduced. The new package, which can be used on counters or in window displays, is designed to attract store customers' attention to the product and its principal uses. The front of the package carries, in addition to the product and brand name, large contrasting squares of gold and blue in which are shown the principal uses of the product. On the back of the package, full directions for the various uses of the material are given. Solvay Process Division, Allied Chemical & Dye Corp., Dept. AB, 61 Broadway, New York 6, N.Y.



TRUCK-MOUNTED SHOVEL-CRANE

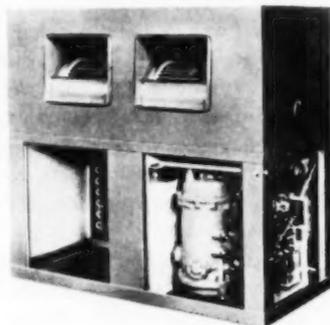
A 3/4-yard, five-ton rated crawler-mounted line of cranes, back hoes, draglines, shovels, clam-shells, etc., can be used with a buyer's truck, a factory rebuilt truck or with the manufacturer's own crane carrier. The unit is designed with two-speed, independent travel, enabling the operator to work a front-end attachment while simultaneously traveling and swinging the machine; undercarriage has a heavy-duty main frame and rigid side rails; six track rollers provide even distribution of load weight over entire track assembly; drive

power through chain and jaw clutches is used for each track.

Fast-acting mechanical controls and jaw clutches enable operator to enter turns with a split-second pause and return to straight-line travel after turn without stopping. The crawler-mounted unit has low ground-bearing pressures with either 16- or 24-inch pads available. Wide range of front-end attachments is available. Schield Bantam Co., Dept. AB, 221 Park Ave., Waverly, Iowa.

HOME AIR CONDITIONER AB105310

Central-type, air-cooled residential air conditioners require no water usage or water piping. Two types are available: the "packaged" unit (illustrated) for interior installations and the "custom"



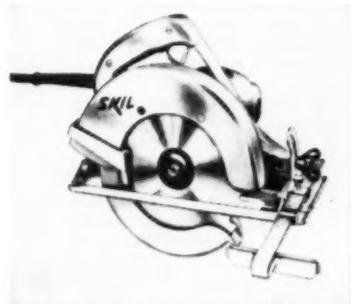
unit in which the refrigerating unit is located outside the home and the cooling coil is mounted in the main furnace air discharge duct. Both are produced in two- and three-horsepower sizes to cool average homes of up to eight rooms.

Outside air is drawn through the unit to cool the refrigerant, doing the job formerly performed by water. Home air is drawn through the cooling coil, dehumidified, cooled and distributed through the furnace air ducts. Airtemp Division, Chrysler Corp., Dept. AB, 1600 Webster Ave., Dayton 1, Ohio.

PORTABLE ELECTRIC SAW AB105311

A heavy-duty, 7 1/4-inch portable electric saw, Model 687, has been designed for carpenters, contractors and builders. It features a powerful universal motor, ball and needle roller bearing construction, overhead-type handle for one-hand control, a built-in rip fence and an automatic telescoping blade guard with retracting handle. Depth of cut is regulated at one point by use of a lever-type clamp, permitting quick adjustment.

Weighing only 13 1/4 pounds, the Model 687 is stated to be useful for all framing on home construction. It cuts two-inch dressed lumber at 45 degrees and cross-cuts two-inch rough lumber. Its speed of 5,000 r.p.m. recommends it for cutting



and scoring concrete, cement block, stone, metal and composition materials. Skil Corp., Dept. AB, 5033 Elston Ave., Chicago 30, Ill.

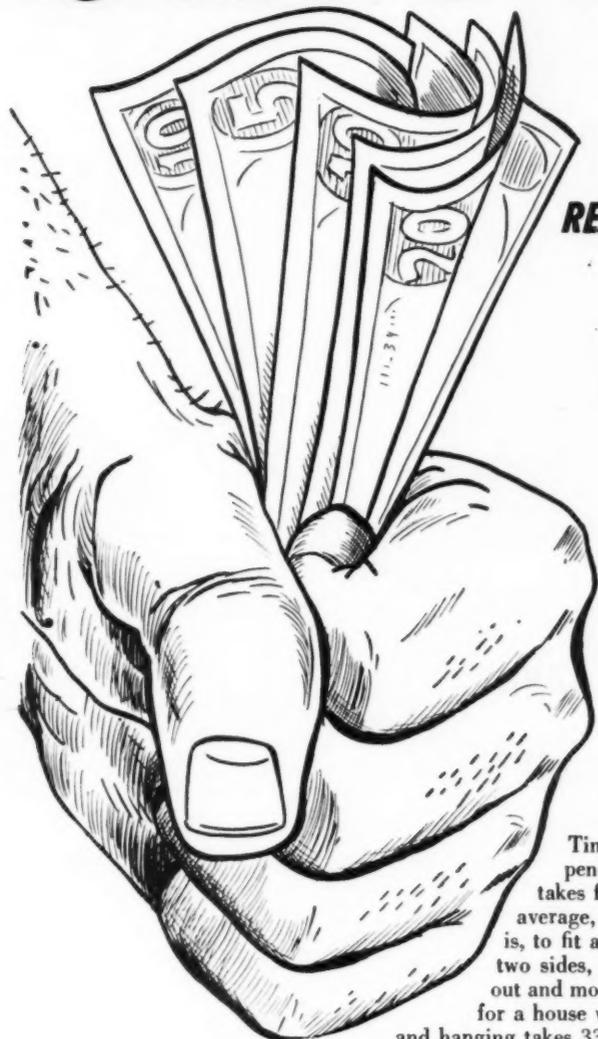
◆ FOR MORE INFORMATION USE COUPON ON PAGE 228

Save \$50

PER HOUSE

INSTALL 12 READY HUNG DOORS IN 1/2 DAY

SLIP THE HALVES TOGETHER IN THE OPENING AND NAIL IT TO THE WALL



Time studies made by the Independent Researchers show that it takes from 2 $\frac{3}{4}$ to 3 $\frac{3}{4}$ hours, on the average, to case and hang a door, that is, to fit and block a set of jambs, trim two sides, fit and hang the door, stop it out and mortise and install the lock — or, for a house with 12 doors, the door casing and hanging takes 33 to 45 hours.

Actual timing by thousands of builders prove that it takes less than 20 minutes to install a Ready Hung Door. You can install 3 Ready Hung Doors per hour, or 12 Ready Hung Doors in half a day. *Save 29 to 39 hours' labor per house with Ready Hung Doors!*

Ready Hung Door units cost a little more than conventional material, but the tremendous saving in labor always makes the *installed cost — labor plus material — up to \$50 per house LESS!*

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National Woodworks, Inc.
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BURBANK, CALIF.

Ready Hung Door Mfg. Co.
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DALLAS, TEXAS

Ready Hung Door Mfg. Corp.
1113 Dragon

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Prefabricators, Incorporated
P. O. Box 5222

GRAND RAPIDS, MICH.

Haskette Manufacturing Corp.
701 Ann St., NW

HOUSTON, TEXAS

Ready Hung Door Mfg. Co.
P. O. Box 124

NEW YORK, N. Y.

Bailey-Whalen Company
17 Park Ave., W. Orange, N. J.

SAN ANTONIO, TEXAS

Ready Hung Door Mfg. Corp.
200 Seguin Street

SEATTLE, WASH.

Acme Millwork, Inc.
P. O. Box 668, Kirkland, Wash.

SIOUX FALLS, S. DAK.

Jordan Millwork Co.

TORONTO, CANADA

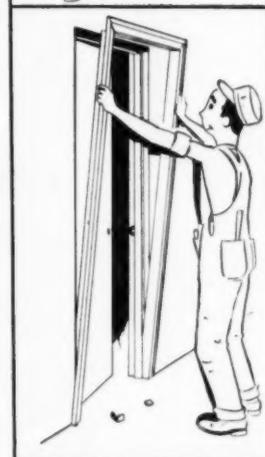
C. Lloyd & Son Limited
1214 Lawrence St., N. Park P. O., Ont.



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DOORS**

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new products

LIGHT SWITCH

AB105325

A device which is said to be the first quiet mechanical light switch is called the "Lifetime Quiette Switch." It can be installed in any position, not vertically alone. It is claimed to be the only quiet switch which is safe for use with either incandescent and fluorescent lights.

Other features of the switch include its compact size, fully enclosed mechanism, heavy Bakelite body and the silver alloy contact tips that provide greater electrical efficiency and resistance to wear. The



switch offers optional back- or side-wiring with a handy wire strip gauge marked on the back plate, assuring faster, safer wiring. Unit is supplied with Ivorylite or brown Bakelite operating handles, or lock type with key for commercial applications. The Arrow-Hart & Hege-man Electric Co., Dept. AB, 103 Hawthorn St., Hartford 6, Conn.

ALUMINUM SCROLLS

AB105334

Door scrolls, a new product to enhance the beauty of home entrance-ways, are finding ready acceptance by home owners. The scrolls consist of full depth aluminum castings made from hand carved models; they are finished in textured white or natural lustre pattern. Two patterns are available: "Enchantment," a swirling leaf design to be used in sets of four, one for each corner of the screen or storm door; and "Morning Glory," with entwined leaves and flowers, to be used in sets of



two in diagonally opposite corners. Mounting holes are provided and rust-proof screws are furnished. Leigh Products Division, Dept. AB, Coopersville, Mich.

♦ FOR MORE INFORMATION USE COUPON, PAGE 228

AMERICAN BUILDER

This feature helps **sell** lots of houses!



"We've built over 400 houses in our Azalea Park development, and there will be 241 homes in Lakewood," says Mr. Wellborn C. Phillips of Phillips Properties, Orlando, Florida. "The price range varies, but one item of equipment is standard in every house—the *Electric Water Heater*. It not only supplies adequate hot water automatically, but does so with economy, and that's what customers want."

Builders and customers both approve the *Electric Water Heater* because of these features: *Automatic* hot water. Cleanness of operation. Economy of operation, due to short hot water lines and fully insulated tank. Easy installation, because there's no flue or vent.

The *Electric Water Heater* is a modern water heater for the modern house!

Equip your homes with

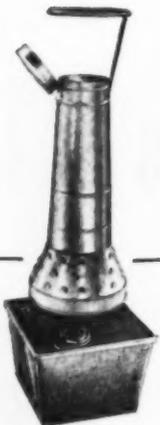
electric water heaters

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- 3 weights, treated
- Rustproof gram-mets on strong canvas reinforcing patches.
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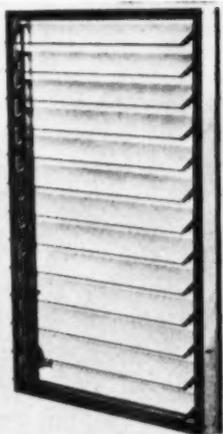
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new products

ALUMINUM-GLASS JALOUSIE AB105319

Engineering and design features incorporated in the "Alenco" jalousie include a heavy extruded aluminum frame with a friction-free lifetime operating mechanism which can be assembled with only eight screws. The unit is available in assembled

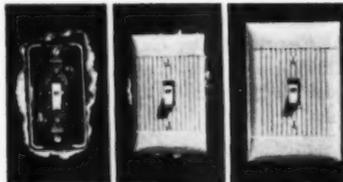


or knocked-down units. Weatherproofing at the vane ends is achieved by a double baffle system which has been tested and proved. The unit's aluminum screen is removable, and storm sash may be substituted for cold weather.

The jalousie is provided in 24 stock sizes. It is designed to enable the dealer to convert stock size units into specials simply with the use of a hack saw. Picture window frames are also available for use in connection with these jalousies. Albritton Engineering Corp., Dept. AB, 2501 Wroxtton Road, Houston 5, Texas.

OUTSIDE WALL PLATES AB105314

Electrical contractors are occasionally faced with the job of patching plaster or other wall surface adjacent to a switch or outlet box, when damage is too extensive to be covered with a standard size wall plate. A practical solution is embodied in "Jumbo-Plates,"



similar in appearance and construction to standard wall plates, but substantially larger (3½x5½ inches) to cover up many defects.

These outside wall plates are made of ivory or brown Plaskon in two types, a toggle switch plate or a duplex receptacle plate. Sierra Electric & Mfg. Co., Dept. AB, 544 E. 31st St., Los Angeles 11, Calif.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

and that includes
a *Scott Lawn*



This builder knows a Scott lawn adds value . . . helps clinch sales. He knows too, that folks realize a **Scotts Lawn is the best** . . . more beautiful, healthier, more enduring. Scotts Lawns are economical . . . Scotts seed goes farther . . . use less.

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LAWN CARE PRODUCTS



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HEAT**

to lick
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PORTABLE

HOT BLAST HEATERS

This handy heater will more than save its cost in speeding up construction for you! Licks humidity and condensation in Fall construction—for faster drying of plaster, paint, varnish . . . prevents freeze-ups and aids worker comfort, too, for Winter work. Saves both time and labor.

The Portable, HOT BLAST generates an intense blue flame, smokeless, sootless, on a mixture of kerosene and compressed air—like a blow torch. Completely safe. Automatic Shut-Off Control stops fuel supply if flame goes out. Lightweight, sturdy, easily portable. Also available with wheels.

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READ THESE FACTS ABOUT POPULAR DELFAIR OAKBLOK

DELFAIR Oakblok offers to builders a truly distinctive floor, one that is equally suitable for small or large homes, commercial structures, housing projects, schools and institutions. It is especially adaptable to economical installation over concrete.

DELFAIR Oakblok is available in all standard strip flooring grades and also in the following special grades: Prime, Standard and Better, Standard, Tavern and Better and Tavern.

DELFAIR Oakblok is made of either Red Oak or White Oak, and is available either unfinished or prefinished.

DELFAIR Oakblok comes in the following sizes: 25/32" x 6 $\frac{3}{4}$ " x 6 $\frac{3}{4}$ ", 25/32" x 7 $\frac{1}{2}$ " x 7 $\frac{1}{2}$ ", 25/32" x 9" x 9", 1/2" x 8" x 8" and 1/2" x 10" x 10". All blocks are steel spline joined.

DELFAIR Oakblok's milling characteristics: tongue and groove end-matched—slight vee-edge on prefinished blocks — cross-wise grooves spaced to insure better mastic adhesion.

DELFAIR Oakblok can be a money-maker for you. Write today for complete information.

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- ★ Oakblok
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**SHEATHING builds well
insulated quality
homes**



FIR-TEX Sheathing saves time...labor...cost

The prospective home buyer not only expects but demands a well insulated home. To the home builder Fir-TEX Sheathing has many on-the-job advantages. Paramount among these are:

1. Fir-TEX large sheet type Sheathing, $\frac{25}{32}$ " thick meets FHA requirements. No corner bracing required. Has greater bracing strength than ordinary Sheathing.
2. Goes up faster. Easy to cut and fit with a minimum of waste.
3. Can be used with Fir-TEX Backer Board for additional insulation and to provide deep shadow lines when shakes are applied.
4. Consumer acceptance due to year 'round national advertising.

INTERIOR FINISH

For adding that extra room within the home, for finishing the attic or basement, for all remodeling jobs—use Fir-TEX Color Panels and Tile. It insulates as it builds; is easy to use.

BACKER BOARD

Fir-TEX Backer Board eliminates the slow, time consuming job of undercourse shingling and building paper application. It adds insulation, cuts building costs, gives a smoother, neater appearance. It adds beauty with uniform, deep shadow lines; is asphalt impregnated. **Certified in compliance with requirements FHA UM14.**

FIR-TEX

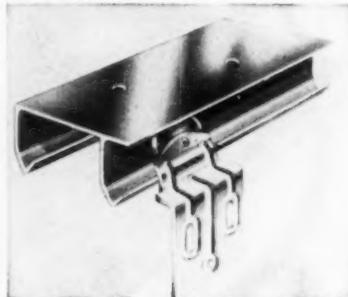
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new products

SLIDING DOOR HARDWARE AB105322

A new series of hangers and tracks for communicating and closet doors offers several features which will appeal to architects, builders and dealers. The new Challenger track is an aluminum extrusion, top-mounted for quick installation without mortising, and V-grooved to prevent roller vibration.

Durable nylon rollers glide on self-lubricating Oilite bearings that require



no maintenance and assure smooth rolling for the life of the fixture. Hangers are made of cadmium-plated ribbed steel; side-mounted models are adjustable. Three hanger and track models cover all requirements for doors weighing up to 70 pounds. Metal Products Corp., Dept. AB, 807 N.W. 20th St., Miami 37, Fla.

GREASEPROOF TILE AB105318

Vinylized Azphlex greaseproof tile is a floor covering which has been designed to offer exceptional resistance to all kinds of greases and oils, according to its manufacturers. The tile is flexible and possesses a smooth, tight surface that resists the wearing in of grime and dirt.

The tile is offered in twelve decorative colors to blend with either modern or traditional decor. The tile is available in standard 9x9-, 6x12- and 12x12-inch sizes, also 18x24-inch borders in plain black.



and special 6x6- and 12x12-inch duotone sizes, all in $\frac{1}{8}$ - and $\frac{3}{16}$ -inch thickness. Pattern is stated to remain throughout the life of the floor. Uvalde Rock Asphalt Co., Dept. AB, Frost Bank Bldg., San Antonio, Texas.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

new products

STEEL SLIDING DOORS AB105327

This sliding closet door unit with a birch finish is supplied complete, with all hardware, in one package. Panels are finished in baked enamel birch grain or with gray primer. The baked enamel is durable and easy to clean and keep clean.

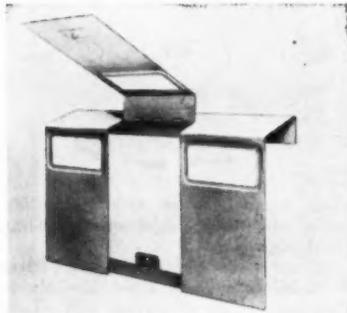


It requires no additional painting. Door units are available for four- and five-foot door openings, with two bypassing panels for each side.

Construction and installation permit use of the units both in new buildings and in remodeling. The complete package, including doors, track, guides and hardware, is shipped knocked-down. All hardware snaps into place with no screws, bolts or nuts required. Nylon rollers assure smooth, quiet operation. Detroit Steel Products Co., Dept. AB, 3101 Griffin St., Detroit 11, Mich.

BASEBOARD ACCESS PANELS AB105328

Access panels for Vulcan baseboard covers are now available. Panel is hinged to the cover and is easy to operate, with light pressure required to open and close. The unit is furnished in a short cover section, 13½ inches long. It may be



located at any point along a run of baseboard cover, a convenience for making control valves accessible, with the remainder of the run taking regular covers. Vulcan Radiator Co., Dept. AB, 26 Francis Ave., Hartford, Conn.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

Give
the
Buyers
what
they
WANT



in garbage and trash disposal equipment

Incinerators are a "must" in automatically heated homes, where the furnace no longer provides a refuse burner. Buyers are learning that incinerators give the *complete* answer to *both* disposal problems—including large bones and husks that other disposal methods can't touch, as well as all burnable household trash.

Majestic INDOOR INCINERATOR

Model 30—Deluxe 3-bushel unit
Burns Garbage and Trash without other fuel

Welcomed by home buyers the country over! Readily burnable portion of household trash plus Majestic's patented down-draft burns wet and dry garbage easily, efficiently. Just fill it as the refuse collects, then drop in a match. No auxiliary fuel needed. That's all there is to it!

Double-walled steel casing has cast-iron liner and grates for long service. Holds a full three bushels of refuse. Installs in basement, utility room or garage with only a simple connection to furnace flue.



Majestic Model 2

Here's the economy model in Majestic's full line of indoor and outdoor incinerators. Its cost is surprisingly low. Thousands of satisfied users proclaim it the best buy they've made!

As simple to operate and easy to install as Model 30. Steel-rod basket liner lifts out of double-walled steel casing for removal of non-burnables (cans, jars, metal objects) that may be dropped in. Has a two-bushel capacity.

See your distributor or write

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ELECTRIC HAMMERS AND HAMMER DRILLS

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ELECTRIC DRILLS

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Heavy duty tools for severe snagging, wire brush work, scaling and a host of other jobs.



ELECTRIC SANDERS AND POLISHERS

Five models from which to choose, ranging from light-weight to heavy industrial polishers and sanders—there is one to do your work.



ELECTRIC SCREWDRIVERS

Essentially production tools for fast driving and running—in a variety of styles and models—all with adjustable clutch.



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A versatile tool for all types of work—running and setting nuts—tapping and threading—or ordinary drilling, screwdriving, etc.



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DUAL V-BELT ELECTRIC SAW

Dual V-Belt drive eliminates gears—provides fast smooth cutting—uses 8 1/2" blade—cuts from 3/4" to 2 11/16"—adjustable depth and angle cutting of wood, masonry and light metals.



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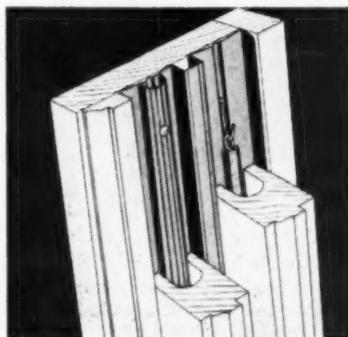
Penna.

new products

WINDOW WEATHER STRIP AB105329

A one-piece side weather strip covering the full jamb of double-hung windows has been added to the line of "Triple Seal" combination spring sash balances and metal weather stripping. Roll-formed from a spring-tempered aluminum alloy, the side strip provides smooth-running channels for both top and bottom sash, eliminates the need for a wood parting-stop between them.

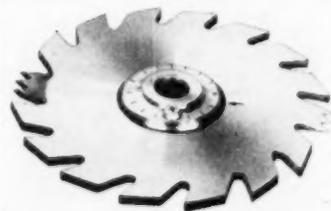
All points of friction between sash and frame are sheathed in light-gauge metal for smoother operation and a true



weatherproof seal. The aluminum side strips will retain their temper for years of service, the manufacturer states. Spring sash balances, metal weather stripping and fasteners needed for one window are unit-packaged. Weatherproof Products Corp., Dept. AB, P.O. Box 8498, Waldo Sta., Kansas City 14, Mo.

MULTI-CUT DADO SAW AB105321

Permitting instant adjustment to any desired cut between 3/8-inch and one full inch while still on the arbor, this new dado set features a one-piece unit of heavy nickel chrome steel, 3/8-inch in thickness. In operation, the saw cuts



clean square grooves with clean side-walls, eliminating objectionable splintered edges.

Offered in six-, eight- and ten-inch sizes, in styles to fit any arbor, the Multi-Cut Dado is an all-purpose unit which is stated to fill the demand for a precision built production tool, as well as for shops which require frequent changes. Western Saw Manufacturers, Inc., Dept. AB, 1842 W. Washington Blvd., Los Angeles 7, Calif.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

AMERICAN BUILDER



"EVERYTHING HINGES ON HAGER!"*

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Kencork helps sell homes faster

YET COSTS NO MORE*



Kencork is nature's most adaptable flooring for any size home

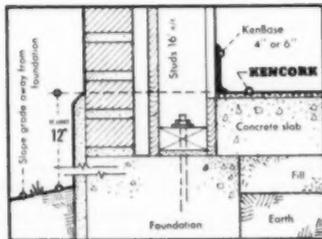
Home buyers know all about Kencork...want it because they've seen it and read about it month after month in their favorite magazines...in colorful advertisements as well as impartial news stories. That's why it's smart selling to remind every prospect about the exclusive advantages of Kencork Floors and Walls. Explain that the preferred random tones are perfect with any color scheme, period plan or decor. Yes, Kencork in one or more rooms takes your houses out of the ordinary class with conventional floors and makes them easier to sell.



***KENCORK COSTS NO MORE THAN HARDWOOD WHEN INSTALLED OVER CONCRETE!**

Install Kencork over any interior surface...even over concrete in contact with the earth where drainage is away from installation and sub-floor is 12" above grade.

Kencork installed prices are surprisingly low. Your Kentile Flooring Contractor will gladly furnish you with an estimate...he is listed under FLOORS in your Classified Phone Directory.



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annular-threaded linoleum underlay drive screws



To make your linoleum underlays hold tightly and lie flat permanently, secure them with Hassall annular-threaded linoleum underlay drive screws. They are cement-coated for maximum gripping power. Heads are flat countersunk type. Size: 1/4" x #3 gauge. State quantity when writing for prices to:

JOHN HASSALL, INC.
P.O. Box 2151
Westbury, N. Y.
Established 1850



OCTOBER 1953

new products

SLIDING PANEL DOOR AB105324

A sliding panel door which saves space while offering ease of installation and foolproof operation is being adopted by home builders. Called the "Trig Door,"

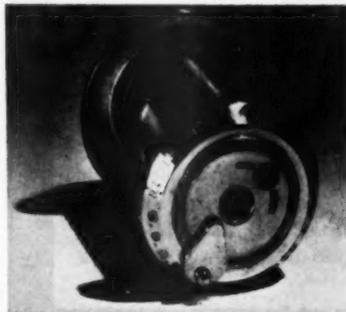


the unit is said to add beauty and convenience to home interiors, in addition to saving time, space and materials. Constructed from lightweight, non-warping Novoply, and without exposed hardware, the door slides on built-in nylon bearings over a heavy-gauge track which is completely concealed. Rollers are in proper positions and track is in place on the jamb head when the door comes from the manufacturers. In just a few minutes it can be slipped onto the track, aligned and securely fastened. The unit is useful for closet and wardrobe doors and for storage walls. Craftwood Products, Dept. AB, 94 Stephen St., Belleville, N. J.

DOOR LOOK-OUT AB105330

This device has optically ground lenses which give occupant of home, apartment or hotel room a head-to-toe view of callers, even at close range. Occupant cannot be seen by the caller. Lenses are sealed in heavy-duty lock metal which is corrosion and weatherproof.

The unit can be installed in any standard wood or metal door. Patented, locking flange adjustable for door thickness holds unit rigidly in place and is temper-



proof. The device is 2 1/2 inches long, two inches in diameter at the outer flange. It is available in chrome, brass or bronze finishes. Danca Products Corp., Dept. AB, 116 Broad St., New York 4, N.Y.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

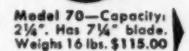
you get the EXACT SAW you want when you ask for



These are some of the saws in the MALL line. Take your pick—get the exact kind of saw you want! MALL also offers a COMPLETE selection of drills, sanders, and other portable power tools for builders. See your MALL dealer or mail this handy coupon today.



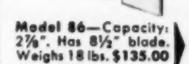
Model 60—Capacity: 2". Has 6" blade. Weighs 8 1/2 lbs. \$54.95



Model 70—Capacity: 2 1/4". Has 7 1/4" blade. Weighs 16 lbs. \$115.00



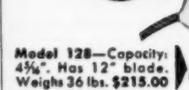
Model 72—Capacity: 2 1/2". Has 7" blade. Weighs 9 lbs. \$64.50



Model 86—Capacity: 2 3/4". Has 8 1/2" blade. Weighs 18 lbs. \$135.00



Model 96—Capacity: 3 1/2". Has 9 1/2" blade. Weighs 19 lbs. \$155.00



Model 128—Capacity: 4 3/4". Has 12" blade. Weighs 36 lbs. \$215.00

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EASY TO OPERATE — The cleverly engineered counterweights operate on LIFE-TIME ROLLER BEARINGS and silently raise or lower the stairway with practically no effort.

RUGGED & STRONG — Construction of No. 1 kiln dried lumber throughout. Brackets, rocker arms and hinges cast of special aluminum alloy. Trim furnished on door panel only. All parts are numbered and interchangeable. Frame is made to fit 26" x 54" opening in ceiling.

INSULATED PANEL — Panel is insulated with Cellufoam and protected with tough chip board.

SAFETY TREAD — Each step is covered with full-width composition safety treads. Adds to appearance as well as safety.

FITS ALL CEILINGS — The stairway fits any ceiling from 7 feet to 9 feet, 9 inches figured from finished floor to finished ceiling. Runners are graduated to facilitate cutting off at different heights. Two standard sizes: 8'9" fits from 7' to 8'9" ceiling, 9'9" fits from 8'9" to 9'9" ceiling.

EASY TO HANDLE — Shipped in 1 package assembled. Precision Stairways are packed completely in one heavy carton, assembled complete with jamb and ready for installation, which offers a considerable savings over other attic stairways. Shipping weight 130 pounds.

EASY TO INSTALL — No adjustments — No springs — Requires no attic space. Full height above attic floor is only 36". Folds completely into 26" x 54" opening in ceiling.

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Manufactured by

PRECISION PARTS CORPORATION

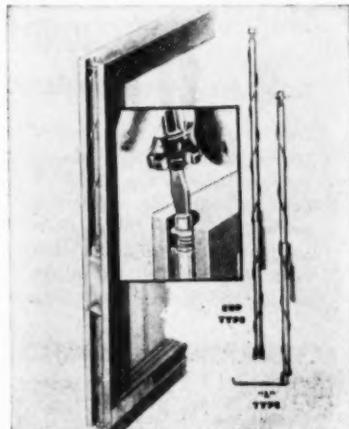
400 NORTH FIRST STREET — NASHVILLE 7, TENNESSEE

new products

CONCEALED SASH BALANCE AB105331

A concealed sash balance unit that eliminates all exposed parts and provides quiet, positive action for double-hung windows is now offered with a combination "L" and "cup" type attaching bracket, permitting the unit to be used on all types of installations.

The device can be adjusted (tensioned) with an ordinary screwdriver during or after installation. The "L" type bracket permits tensioning of the sash before it is placed in position. The use of a high

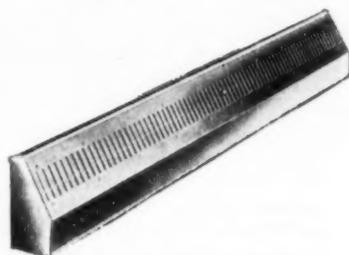


quality coiled spring contained in a dust proof, pre-lubricated tube is said to assure positive lifting power and true counter-balance. Turner & Seymour Mfg. Co., Hivalift Division, Dept. AB, Torrington, Conn.

PERIMETER REGISTER AB105332

Two new models of perimeter baseboard registers are available in four foot sections; other sizes, up to six foot sections can be supplied. Each four foot section provides 36 square inches of open area, and is equipped with its own individually operated sliding damper control which is adjustable for volume control.

Made of 20 gauge steel, register has metallic finish; special finishes are avail-



able upon request. The unit comes with end caps, butt straps and backs. It can be used with any standard perimeter heating system. Standard Stamping and Perforating Co., Dept. AB, 3131 W. 49th Place, Chicago, Ill.

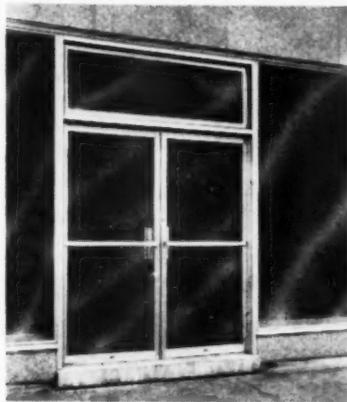
♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

AMERICAN BUILDER

new products

ALUMINUM FRAME DOORS AB105316

Packaged unit aluminum frame doors and frames have all sections of extruded or drawn architectural aluminum alloy.



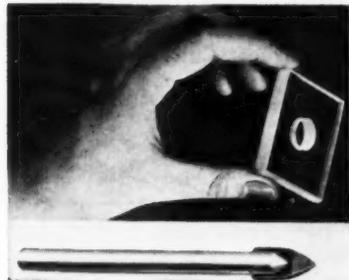
All exterior surfaces are polished and aluminized. The frames and doors are factory-assembled with concealed fastenings and factory machined joints.

The doors are tongue-and-groove pressure bolted and lock welded for maximum rigidity. Doors are provided in both single and double widths, and with side-lights. Wide stile doors are custom built to customer specifications and factory fitted to manufacturer's stock frames. Door stiles are 4½ or 5½ inches wide; aluminum or stainless steel kickplates are furnished up to 24 inches. Crane Fulview Glass Door Co., Dept. AB, 4616 N. Clifton Ave., Chicago 40, Ill.

GLASS DRILL AB105333

Improved spear-point-type carbide drill designed for producing holes in glass is available in a complete range of sizes. The drill is stated to be able to cut clean, true holes without cracking or chipping the glass at either end of the hole.

The tool is designed to provide for many regrinds and still drill its original



size. The free-cutting design and carbide tip insures cool cutting, less breakage of glass and extended tool life, according to manufacturer. Super Tool Co., Dept. AB, 21650 Hoover Road, Detroit 13, Mich.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

OCTOBER 1953



Houses move faster with floors of WRIGHT RUBBER TILE

A floor of Wright Rubber Tile instantly indicates to the prospective buyer that you have put quality in whatever you may tell him about the rest of the house . . . helps you clinch the sale.

Features that show are features that sell. You install the latest cabinets, dishwashers and electric refrigerators. Don't spoil the effect with a drab, unexciting floor. Go modern all the way with floors of

Wright Rubber Tile. The customer will be impressed very favorably.

Tell the prospect . . . about the 100-year life of a Wright Rubber Tile floor . . . that *no* floor requires *less* maintenance. Explain to him that over the years Wright Rubber Tile floors will save him money by needing no replacement.

Just try one house! Put one of these gleaming floors in the next house you build for sale. Then watch how much more quickly your prospect becomes a buyer.

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FLOORS OF DISTINCTION

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- ♦ WRIGHT-ON-TOP Compression Cove Base

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new products

CONCRETE SAW

AB105313

The "Eveready" concrete saw, according to its manufacturers, will meet with the approval of contractors, utility companies, highway departments and others concerned with breaking old concrete and asphalt or pouring new concrete.



The saw is designed with a hydraulic control for lowering the blade at a controlled rate of speed as a means of providing longer blade life. There is no danger of bouncing the blade against the material.

Savings up to 50 per cent in time and material are stated to be realized when the saw is used before breaking out concrete or asphalt for plant floor patch work, cutting utility line trenches, in sawing openings for new machinery bases. Sawing provides square shoulders against which to rebuild, and eliminates feather-edging with its resultant spalling and future maintenance. Unit is also said to be well suited for fast, economical sawing of contraction joints in new construction. Eveready BrikSaw Co., Dept. AB, 1509 S. Michigan Ave., Chicago 5, Ill.

RUBBER TILE

AB105320

The "Rubberlock" interlocking rubber tile is made in 8x8- and 24x24-inch interlocking sections in 1/4- and 1/2-inch thick-



nesses in a variety of marbled colors, also on smooth and corrugated surfaces in black. It can be placed in position on concrete or wood floors on or below grade level without the use of cement or mastic.

Tiles are made of solid rubber, making floors comfortable underfoot and easy to keep clean. Application is stated to be quick and easy, with angles, crosses or squares as simple to lay as a straight strip of the material. Damaged sections can be removed and replaced by new units with a minimum amount of effort, making them adaptable. R. L. Mitchell Rubber Co., Dept. AB, 2114 San Fernando Road, Los Angeles 65, Calif.

AWNING-PICTURE WINDOW AB105315

New window for architects and builders, called the "Panoramic Package," provides a complete variety of wood awning window sizes together with custom-sized picture windows. Units are delivered pre-assembled to the job in heavy fiber-board cartons. The new service eliminates the need for assembly on the job, thereby cutting considerably the installation time. In addition, these wood awning windows are designed similar to



double hung windows, which enables them to adapt to any type of wall.

Bronze channels provide a smooth gliding surface for the metal-on-metal hardware. Each sash is provided with individual adjustment plates for adjusting the window for degrees of closing tightness. All operating hardware is internal and out of sight. Super-Vent Co., Dept. AB, 905 W. North Ave., Chicago 22, Ill.

RELIEF VALVE

AB105312

A compact, 1 1/4-inch relief valve, about half the size of its predecessor and weighing one-third as much, has a rated capacity of 1,050,000 Btu's at 30 pounds pressure, as compared with 1,000,000 Btu's for the former model.

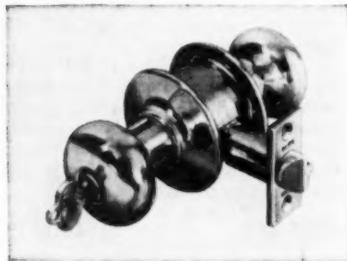
The new unit, equipped with a non-ferrous high temperature seat, obtains positive action with the most extreme water conditions to give full relieving capacity under emergency pressure increase. A slight increase in pressure over the valve setting brings a corresponding low water relief. Bell & Gossett Co., Dept. AB, Morton Grove, Ill.

CYLINDRICAL LOCK

AB105326

A new line of standard duty, cylindrical-type, residential locks and latches has been introduced under the name "Stilemanor." They are at present made of wrought brass, but will be made also of wrought bronze or aluminum. They are available in five popular functions.

Each knob has dual bearings to assure rigid knob assembly and prevent wobble. Bearings are of brass on steel, to provide long life. Knob spindle has self-aligning thrust bearing. Latch retractor glides on ball bearings for smooth knob action and longer service life. Rugged steel case construction contributes to positive alignment of parts. Cylinder entrance door lock-sets are equipped with the manu-



facturer's ball bearing five-pin tumbler cylinder. Russell & Erwin Division, The American Hardware Corp., Dept. AB, 102 Washington St., New Britain, Conn.

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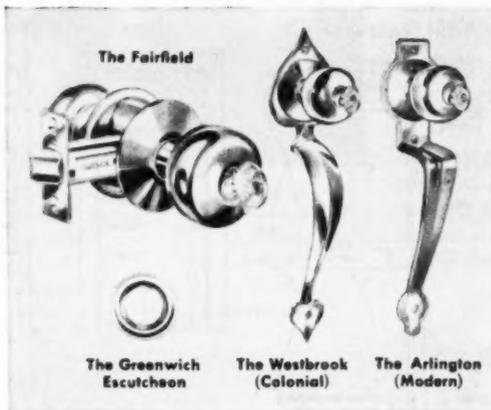


One Key Opens Many Locks. Although it has been employed for years, master-keying and keying alike is today's big news in the mass building field. Once restricted to luxury homes, single

key convenience is now available to low cost housing in the new YALE "Preassembled" FAIRFIELD lockset. With single key feature, virtually all locks about a home can be operated by one key.

NOW SINGLE KEY CONVENIENCE FOR MASS BUILDING FIELD

New Yale 5200 Fairfield Design Tubular Lockset First in its Price Class to Offer this Important Security Feature



Yale "Preassembled" Fairfield combines rugged construction with trouble-free operation. The new FAIRFIELD has decorative slip-on handles and escutcheon to accent both modern and colonial door styles.

*Registered in U. S. Patent Office

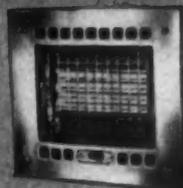
Men in the mass building field have an important new feature to offer the bargain conscious buyers of new homes. It's single key convenience, now available for the first time in low cost housing with the introduction of the new YALE* "Preassembled" FAIRFIELD (Series 5200).

This advanced residential tubular is available in polished solid cast brass and cast aluminum with a satin finish. Five basic functions of entrance, passage, patio, bedroom and bath, offer a complete line to satisfy every building requirement. In addition, it boasts a wrought steel case, rugged girder construction and comes in only three pieces...each a preassembled unit...for rapid foolproof installation. It has push button locking...decorative accessories...and, most important of all, the name "YALE"...a trademark instantly identified with security and quality.

These features combined with the beauty and simplicity of the new "Preassembled" FAIRFIELD, make it far and away the top buy in residential locksets for both builder and buyer alike. The Yale & Towne Manufacturing Company, Lock and Hardware Division, Stamford, Connecticut. In Canada, St. Catharines, Ontario.

9 REASONS

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and Builders
Prefer



**ELECTRIC WALL
INSERT HEATERS
and
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Exhaust FANS**

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how to build a multi-purpose storage unit

This built-in storage unit was designed for an area 24 inches deep, with a standard door, 34x80 inches. It consists of six shallow drawers, a ventilated clothes hamper on casters at lower right and space for a tank-type vacuum cleaner.

Sides of the closet are lined with 3/16-inch Standard Presdwood. Liners are flush with the door opening. A filler block, also Presdwood, is inserted along the door stop so that when the liner is in place, it will be flush with the stop. To support the liners, 3/4-inch boards are screwed into place in the corners and midway along the closet walls. Liners are nailed into boards at four-inch intervals.

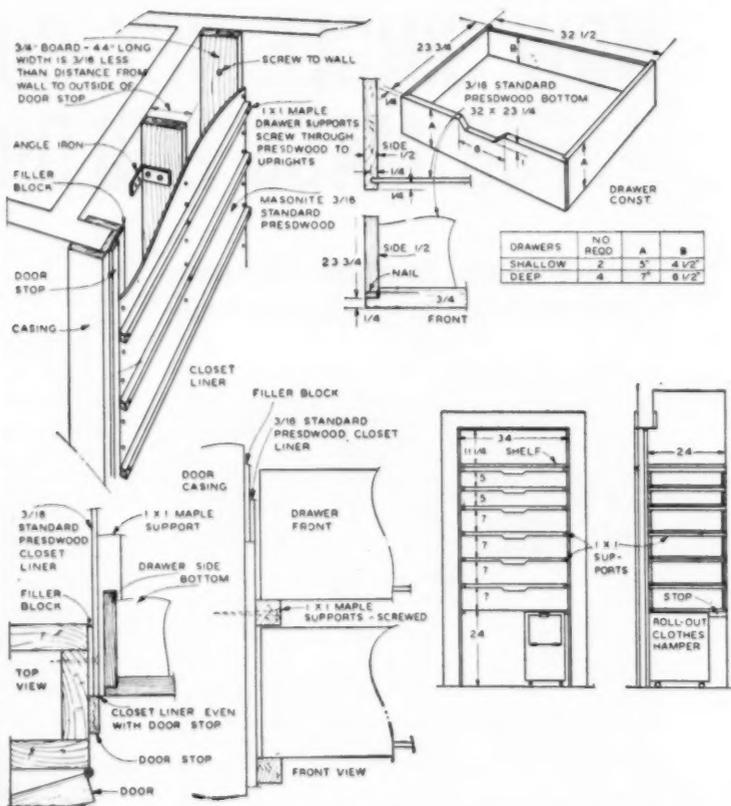
Hardwood drawer slides are secured by screws through the Presd-

wood into the wooden supports. Drawers are of standard construction with snag-proof bottoms of 3/16-inch Standard Presdwood with the smooth side up.

Front of the clothes hamper has a spring-hinged door with a latch. Back of the top is open for easier access. Bottom and front are made of Peg-Board panels for ventilation. A hardwood stop block is nailed to the bottom drawer support in order to keep the hamper from rolling back any farther than flush with the front of the closet.

The entire interior of the closet may be left unfinished. However, a coat of shellac is recommended as a sealer, plus one coat of good spar varnish to make cleaning easier.

Material courtesy Masonite Corporation



Upper left: details of closet liner, showing method of attaching 3/4-inch boards to walls, fastening drawer supports; upper right: drawer construction details; lower left: filler block and hardwood support placement; lower right: front and side views with dimensions



Architect Carl Graffunder used G-E Textolite plastics tops, with the new Ming pattern (reproduced in actual size in frame above), to add distinction and practicality to the home of Mrs. James O. Hanley in Minneapolis.

For an ideal combination of
Beauty and Durability
SPECIFY G-E TEXTOLITE*
plastics surfacing



G-E Textolite surfacing has so many uses! Here's a lovely bathroom vanity, for example, that's both practical and beautiful. Consider G-E Textolite, too, for linen closet and pantry shelves, game rooms, laundries—and wherever you want beauty plus extreme durability.

It's easy to select patterns that will add real beauty to the interiors you plan. But it's not so easy to find materials that will take hard knocks and still retain their sparkling good looks throughout the years. With G-E Textolite, you can be sure of the ideal combination . . .

Distinctive patterns that harmonize with the finest interiors.

Rugged durability, with a finish that retains its beauty even when subjected to hard usage.

Modern architects and builders have high praise for the many distinctive patterns available in G-E Textolite plastics surfacing. And, of course, they like the practical aspect of a lustrous finish that resists heat, stains, and scratches—and wipes clean easily and quickly with a damp cloth.

For new ideas, take a look at the latest G-E Textolite full-color pattern booklet. Copies are available through your G-E Textolite distributor, or from: General Electric Company, Section 321-7B Chemical Division, Pittsfield, Mass.

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GENERAL  **ELECTRIC**

*Reg. U.S. Pat. Off.

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GIVES YOU THE EDGE WITH

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Applying asbestos siding and shingles is simple with the Monarch Cutter. Can be operated by anyone — quickly, easily and accurately. Monarch's malleable casting have greater toughness, higher resistance to corrosion and will stand up under the heaviest service.

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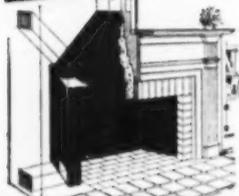
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FOR HOMES, PLAYROOMS, SUMMER COTTAGES, CABINS

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Book also describes FYRO-PLACE — the only heat circulating steel form designed to make the mason's work easier. The finished fireplace will give more abundant heat and more satisfaction through the years.

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FIREPLACE HEATER & TANK CORPORATION

195 W. Austin Street
Buffalo, 7, N. Y.

multi-colored enamel offers wide variety of wall finishes

Spraying of two or more colors simultaneously in one operation is made possible by a new interior wall enamel featuring the qualities of simple application, quick drying, extreme toughness, long life and a wide variety of color combinations.

This multi-colored paint, named Plextone, is a mixture of any number of colors in any predetermined proportion. Upon mixing, however, the colors do not blend; instead, the pigment particles repel each other and retain their own color identity.

One coat, either flat or semi-gloss, is represented as sufficient for a properly primed surface. When applied by any standard spray gun operated at fairly low pressure, the enamel is reported to emit no spray dust or fog.

The product is said to dry to the touch within two hours and become almost completely dry in four hours. After that, the hardening process continues for several days after application.

Because of its toughness, it can be applied in new homes before construction is completed, without fear that a careless workman may mar the finish. A recent demonstration for trade and consumer press at the Newark plant of the Maas & Waldstein Company, the manufacturer, disclosed:

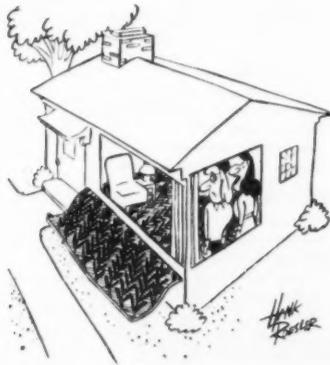
1. Ordinary scratches, such as those made with a knife, are invisible because the colors extend through the coating, which is extra thick.
2. Where scratches are so deep they actually gouge the wall, the cracks can be filled in and then given a couple of squirts of the enamel with an ordinary hand spray.
3. Dirt and grime come off by wiping with a damp rag.
4. Stubborn stains, such as the marks of an indelible crayon, are removed by washing with soap and water. Anything which still remains will come off by rubbing with fine sandpaper. The abrasion will not disturb the color integrity, since the colors run through the coating, several times thicker than usual.
5. The finish is expected to have a life of about ten years.

The variety of finishes which can be obtained is almost limitless. In addition to the many solid colors which can be mixed, the pigment particles of any color can be prepared in small, medium or large sizes. For example, an order may call for paint 60 per cent white, 30 per cent yellow and 10 per cent gray. The pigment particles can be the same size for each color; they can be small white, medium yellow and large gray, or any other combination. Each change will alter the final appearance, whether percentages of color used are altered or not.

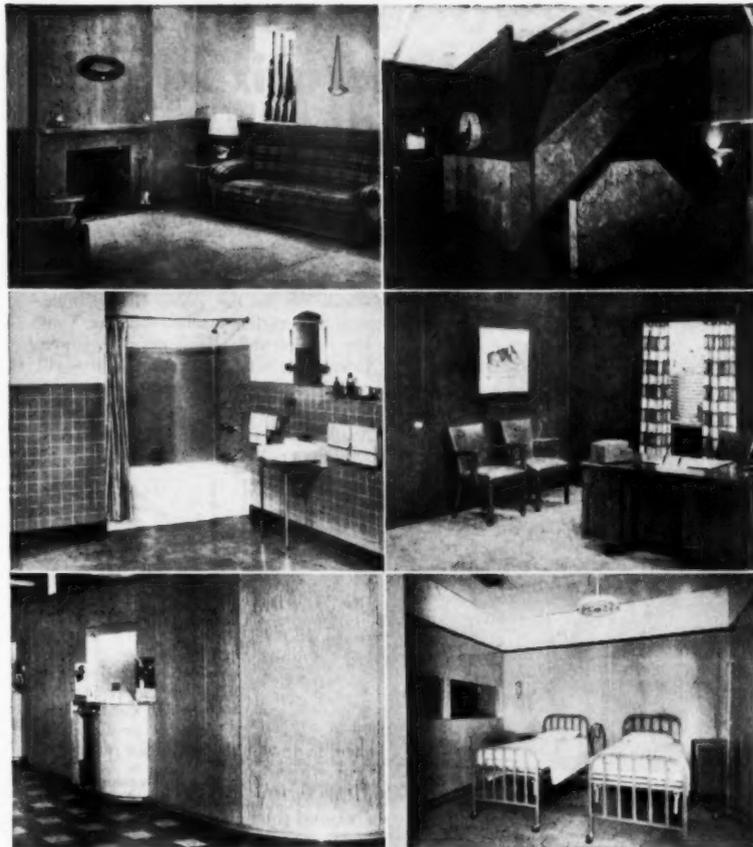
Except for the bolder color combinations, the usual effect of the finish is that of a solid color from a distance, with the pattern becoming apparent only as one moves close to a treated wall surface. Batches of this enamel have been made up to simulate marble, granite, cork and various leathers. Just as easily, it can appear as a plain, solid color.

Maas & Waldstein, one of the nation's largest lacquer manufacturers, devoted several years of research to this revolutionary product before making it available to builders. Early in 1950, Levitt & Sons, Inc., became the first big customer and have been using it ever since in their vast projects at Levittown, New York, and Levittown, Pennsylvania. Levitt, like most other users, sprays the enamel over walls, trim, doors and even switchplates.

Plextone, when sprayed on in its recommended thick coat, is estimated to cover an area of 130 to 150 square feet per gallon. It is prepared to order in lots of 50 gallons or more.



"IT DIDN'T FIT THIS NEW PLACE AND WE
COULDN'T DREAM OF CUTTING IT UP"



Marlite's ideal for remodeling any room in any building

Here are only a few of the many different types of interiors which can be remodeled faster, more economically with beautiful Marlite plastic-finished wall and ceiling panels. In the home, business, factory, and institution, Marlite is easily installed over old or new walls.

The soil-proof finish slashes dollars off maintenance costs
. . . eliminates painting.

New Wood and Marble patterns, plus a complete range of striking colors, provide a versatile selection for any interior in new construction or remodeling. See genuine Marlite at your lumber and building materials dealer, or write for full-color architect and builder catalog. Marsh Wall Products, Inc., Dept. 1003 Dover, Ohio. Subsidiary of Masonite Corporation.

**THE MARLITE NAME ON THE BACK OF EVERY PANEL
IS YOUR GUARANTEE OF SATISFACTION.**



Marlite
plastic-finished
WALL and CEILING PANELS

JAEGER'S shorter mixing cycle increases daily yardage

Jaeger's shorter mixing cycle means more batches-per-day with no increase in crew and payroll. Here's how it's done—charge and discharge have both been cut to only 5 to 7 seconds. The original Skip Shaker throws its load

into the drum in one swift slide. Extra big bucket and flight blades and specially designed "catch-all" spoon discharge it with equal speed.

What's more, Jaeger's rugged design stands up to the pace. Heavy drum with high carbon machined tracks, Timken bearing rollers, engines with power to spare, automotive transmission—all require minimum upkeep, give years of service free from breakdowns.

Available in 6, 11, and 16S sizes. Ask for Catalog M-10.



3 1/2 S Auto-Loader, with Power-Shaker Hopper, loads while mixing, produces 12 to 15 more yds. daily.

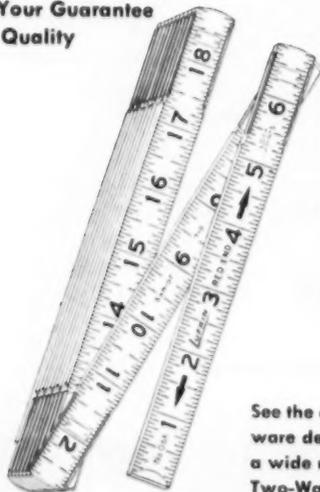
THE JAEGER MACHINE COMPANY

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5. Bold, easy-to-read figures and graduations are embedded right into the wood

See the display of "Red End" Rules at your hardware dealers. "Red End" Rules are available in a wide range of markings—regular, flat reading, Two-Way, vertical, engineers, extension, plumbers, brick-masons, metric.

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FROM YOUR HARDWARE DEALER

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THE LUFKIN RULE CO., Saginaw, Michigan • 132-138 Lafayette St., New York, N.Y.—Barrie, Ontario

234

are you working with kitchen remodeling?

Henry and George Bertch, remodeling specialists in South Pasadena, California, find this check list very useful when discussing a kitchen job with the owner. It not only reminds the builder of the various points that should be covered in planning the work, but it also often suggests to the owner additional ideas which she will want to include in the finished job.

KITCHEN PLANNING—CHECK LIST

CABINETS	COUNTER TOPS
Painted wood	Plastic laminate
Natural hardwood	Ceramic tile
Metal	Vinyl
	Wood
FLOORS	BASE
Linoleum	Cove base
Asphalt tile	Top-set base
Vinyl	Base shoe
Rubber	
EQUIPMENT	
Built-in range (gas or electric)	
Dishwasher	
Garbage disposer	Water heater
Dishmaster	Upholstered nook
Roaster	Breakfast set
Exhaust fan	Food freezer

ELECTRICAL (FACILITIES FOR)

General lighting	
Special lighting (range, sink, etc.)	
Clock	Refrigerator
Toaster	Range (220v.)
Waffle iron	Roaster
Blender	Dishwasher
Radio	Garbage disposer
Mixer	Doorbell

SINK

Double
Single
Ledgeback

ACCESSORIES

Sliding towel rack
Metal dish racks
Soap trays
Can opener

CABINET FEATURES

Spice cabinet
Draw boards
Locking meat grinder board
Shallow canned food storage cabinet
Hanging pan cabinet
Disappearing mixer cabinet
Lazy-Susan base cabinet
Tray rack
Knife drawer
Mixer attachment drawer
Lip or flush doors and drawers
Metal-lined bins
Vegetable storage
Space for kitchen ladder

MISCELLANEOUS

Kitchen office
Family bulletin board
Gas or electric heat
Breakfast bar
Small rolling serving table
Cooler
Vent for gas refrigerator
Metal range hood
Baking center
Broom closet
Laundry area
Ironing board
Bar sink

AMERICAN BUILDER

REMODELING MARKET BOOMS*

FIAT FITS RIGHT IN!



Break the Bathroom Bottleneck . . . with FIAT Shower Cabinets you have the easy, economical answer millions of homemakers are looking for. As families grow—both in members and age—they often find their bathing facilities inadequate. Show them how you can furnish FIAT for increasing present bathroom capacity; for adding another bathroom; for remodeling an old-fashioned unattractive bath.

Build a Reputation in Remodeling There's big money in remodeling—and bathroom modernization ranks high on the list! So feature FIAT and establish yourself locally as the source for bathroom ideas, plans and service. Build this reputation and you'll not only sell more showers, but more fixtures and accessories than you ever thought possible.

Here's Help on Plans and Sales Send for special FIAT remodeling file—contains helpful sheet with 12 practical bathroom arrangements, detailed catalog of available showers, and sample of envelopes stuffer available in quantity for your own promotion.

Fiat First in Showers is more than an idle claim—it is an important fact you need to

**Look to FIAT
for FEATURES
that Sell!**



Corner Cadet



Built-in



Cascade



Shower Doors



Skipper

know. Surveys prove more builders and architects by far, know and prefer FIAT Shower Cabinets to any other make! It means you make the easy sale when you feature Fiat.

*42% of families checked in a national survey have plans for home improvements within a year



FIAT METAL MANUFACTURING COMPANY
THREE COMPLETE PLANTS—ECONOMY • CONVENIENCE • SERVICE



Long Island City 1,
New York



Franklin Park, Ill.
(Chicago suburb)

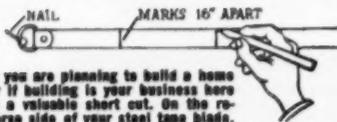


Los Angeles 63,
California

In Canada: Fiat Products are made by Porcelain and Metal Products, Ltd., Orillia, Ontario

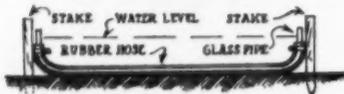
How To . . . BY MASTER

MARK STUDS FASTER



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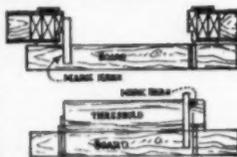
FOR ACCURATE FOUNDATION LEVELING



Insert two identical lengths of glass pipe into the ends of a length of hose. Fasten stakes in each end (as indicated). Fill the hose with water and insert plug into each end. Drive your stakes into the ground to get approximate level. Remove plugs and adjust stakes so water level is equal on both sides.

EASY WAY TO FIT A THRESHOLD

Lay a piece of scrap 1x8 across the threshold to be fitted. Lay the edge of your Guardman rule against both jams (as indicated) and scribe. Now place scrap piece under the threshold, scribe and you can make a perfect cut every time.



TUFBOY

- For an inside measurement add 2 inches for Case and Tip.
- Blade replaceable without tools.
- Blade is graduated on both edges.



To get most accurate measurements, plus a rugged blade which tests prove will outwear any steel tape blade made, try the Master Tufboy. Available in 6, 8 and 10 ft., satin or "Brite Blade" finish. See it at your dealers today.

WHEN YOU BUY YOUR NEXT STEEL TAPE: ask the dealer to show you the new Master Tufboy rule. You get a rugged die-cast case, plus the world's most accurate and durable tape . . . and the blade is replaceable too.

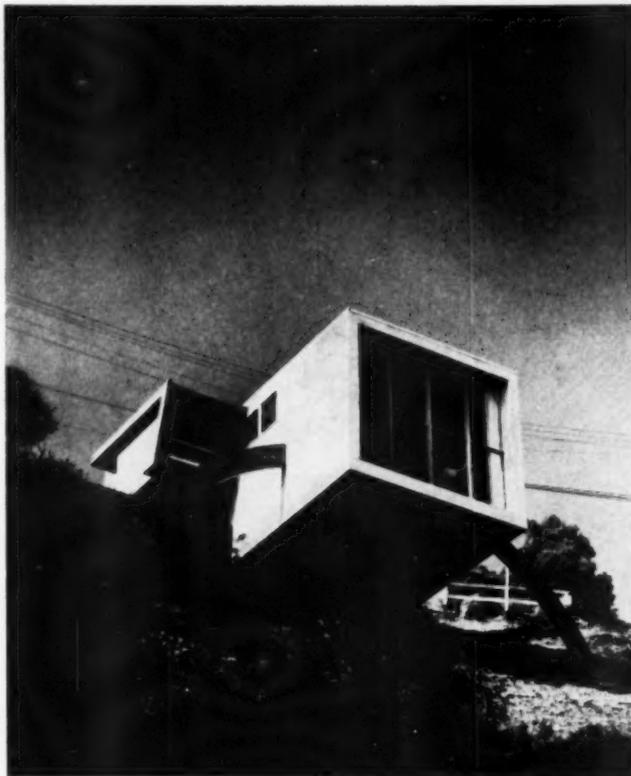
AS A SERVICE TO YOU:

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NAME _____
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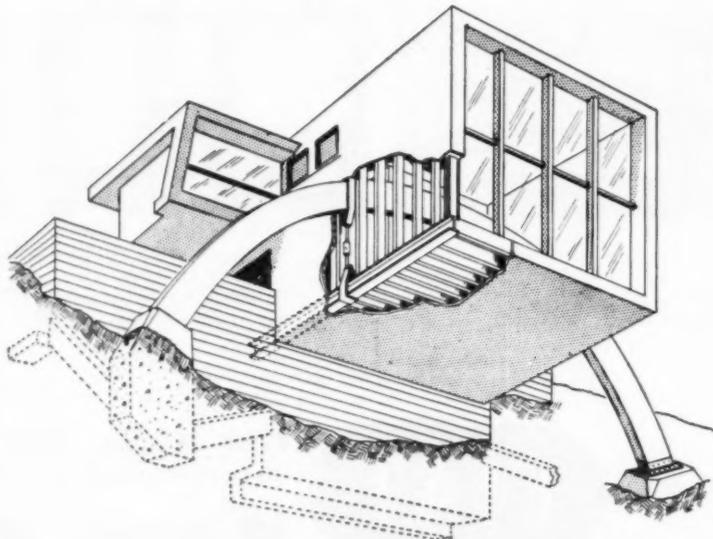


a NEW way to build on



Photos by Julius Schulman

A laminated plywood arch with a span of almost 60 feet supports this living room as it projects out over a 45-degree grade



Footings supporting the arch are eight feet deep and are tied into the foundation. Anchor plates are secured to the piers by 1 1/2-inch bolts. Metal straps with turnbuckles for leveling hang from the arch and support the steel I-beams which form girders on which the projecting portion rests

a hillside

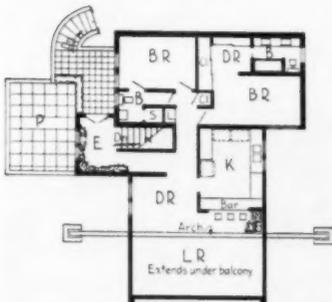


View through windows 18 feet high. Glass sections are 5x8 feet. One opens on ledge for window cleaning

This dramatic house was built in the Hollywood hills by L. C. Guthrie, a Los Angeles builder. Designer was Richard O. Spencer of Santa Monica.

Spencer's unusual design suspends a portion of the house over the hillside by means of a huge plywood arch made up of 20 laminations of 2x8-inch and 1x8-inch boards. In section this arch is $7\frac{1}{2} \times 27\frac{1}{2}$ inches. Its span is 57 feet $3\frac{1}{2}$ inches. It was made by Summerbell Roof Structures, in two pieces so that it could be hauled over a sharply curved road to the hilltop site. Erection was handled with a crane having a 75-foot boom. Cost of arch installed was \$1,400.

From a cost standpoint, Spencer
(Continued on page 238)



House is built on three levels, with living room and patio at bottom level. Second level has bedrooms and bathrooms, kitchen, dining area and entry. Approach to the house is at the highest (street) level. Outside steps lead down to second level entry

How to Offer Low Cost Housing!



See Sweet's

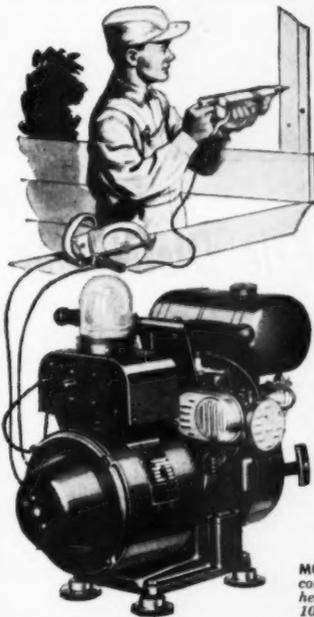
FREE! New Catalog!

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Build More Saleable Area into Homes with BESSLER Disappearing Stairways

1. The ORIGINAL disappearing stairway—made for over 40 years.
2. A real stairway—not a ladder.
3. Seven well-engineered models—for every need.
4. Safety-designed in every detail for your protection.
5. Suitable for the finest homes—old and new.
6. Operates from above and below.
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9. Treads and stringers are made of Sitka Spruce.
10. Full door width provides ample access for large objects.
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13. All metal parts are made of strong, SAFE pressed steel.
14. Repairs always available on quick notice for all models—no "orphans."
15. Doors made of White Pine and Fir in two-panel and flush types; hardwood doors in flush type only.
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17. Proved in performance—hundreds of thousands in constant daily use.
18. IMMEDIATE DELIVERY!
19. Meets all building codes.

The Bessler Disappearing Stairway Co.
1900 East Market St., Akron 5, Ohio
BESSLER—best for over 40 years!



KOHLER ELECTRIC PLANTS

Independent Source of Electricity

Take Electricity to the Job

Jobs move faster with portable electricity for saws, drills, grinders, pipe threaders and cutters, other tools. Low-cost model saves bother and expense of temporary power line hook-ups. Develops 1500 watts AC. Engineered throughout by Kohler. Two-wheel rubber-tired hand truck available. Other sizes 500 watts to 30 KW. Write for folder 21-K.

MODEL 1.5M25, 1500 watts, 115 volts AC. Manual control. Handles for carrying. Length 20", width 16", height 20", weight 130 lbs. Also 115 volt DC weighing 101 lbs.

Kohler Co., Kohler, Wisconsin. Established 1873

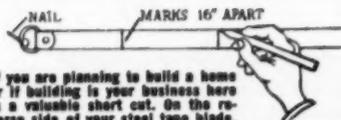
KOHLER OF KOHLER

PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS
AIR-COOLED ENGINES • PRECISION CONTROLS

How To . . .

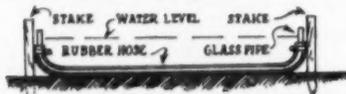
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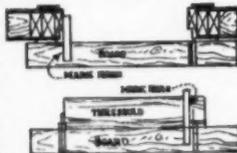
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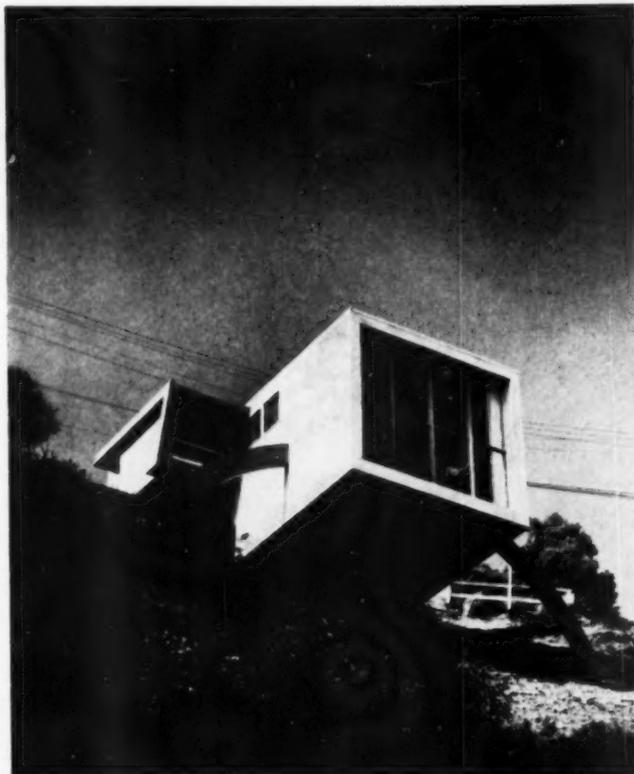
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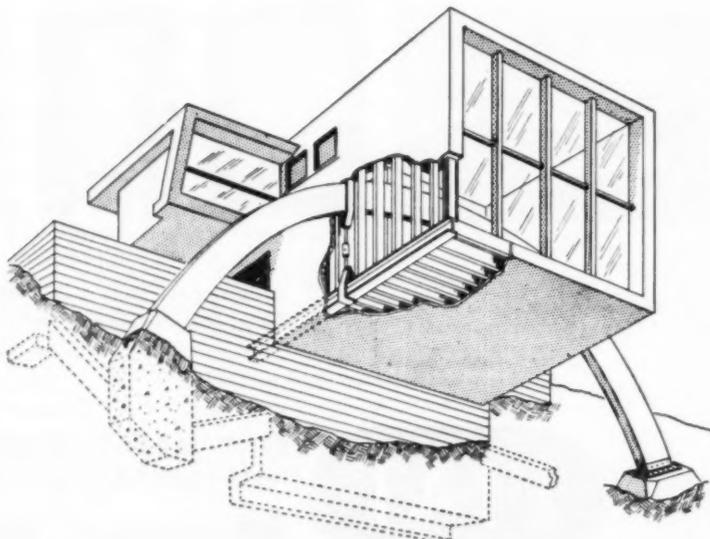


a NEW way to build on



Photos by Julius Shulman

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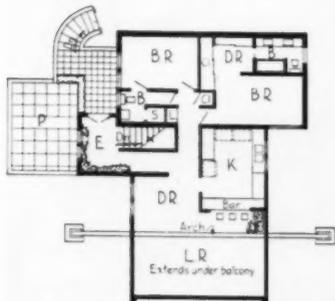


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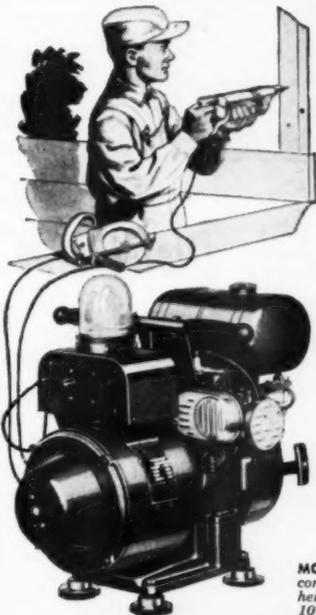
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FOR CRANES



EXCAVATORS...



...see your Bucyrus Erie Distributor

Mechanizing as many building operations as possible is one sure way to cut costs and speed projects. When you begin to figure ways to reduce costs on wrecking, erecting, material handling and lifting, digging, or other jobs, the man to see is your Bucyrus-Erie distributor.

Not only does he sell and service a complete line of cranes and excavators—a right size and type for your work—but he has gained the kind of experience that enables him to appraise your needs realistically.

Other builders have found their Bucyrus-Erie distributor a good man to know when they need equipment counseling—he can save *you* time, trouble and money, too. Why not stop in and see him soon?

56E53

**BUCYRUS
ERIE**

BUCYRUS-ERIE COMPANY
South Milwaukee, Wisconsin

a NEW way to build

(Continued from page 237)



Cantilevered steps lead from entry at second level to living room and patio at bottom level. Floor at base of steps is 2-foot square concrete panels. The arch cuts into room, becoming a feature of the design

says that the arch worked out very well as compared with vertical supports. It was designed to carry the roof loads, the interior balcony and wall loads. At the same time, it eliminated the need for additional bracing for earthquake protection, so frequently required in Southern California. The arch was weatherproofed with a synthetic glue of a type used on Navy boats.

The suspended section of the house is constructed of wood frame and stucco, with hardwood floor. This section is 22 feet long, 22 feet wide and 18 feet high. It weighs about 20,000 pounds. The rest of the house has a concrete floor and footings which consist of retaining walls of concrete and concrete blocks which rest on decomposed granite in its natural state. These foundations were designed with a key into the slope to avoid slippage.



Balcony of second level extends out into living room. Metal rails extending up from arch have glass panels fitted into them to protect children from falling. Breakfast bar, above arch, can be hidden by folding screen

AMERICAN BUILDER



better sliding door hardware thru better design

SAVES TIME AND MONEY

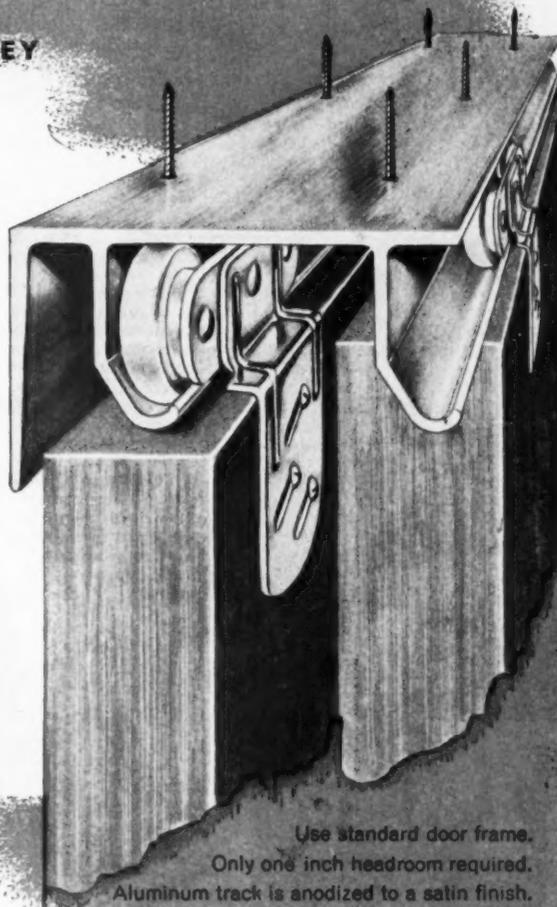
STERLING DESIGN means simple installation, easy adjustment and long life. These are the result of careful planning on the drafting board.

STERLING QUALITY means no expensive call-backs . . . no costly replacements.

STERLING PERFORMANCE means satisfaction . . . proved by years of trouble-free service.

Available in complete packaged sets for most door openings.

STERLING HARDWARE MFG. CO.
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Use standard door frame.
Only one inch headroom required.
Aluminum track is anodized to a satin finish.
Track apron serves as decorative trim.
Adjustable hangers with nylon rollers.



Sterling means Quality



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Chicago Met. Home Builders Ass'n., 130 W. Randolph

New AMERICAN Spinner

... New High PRODUCTION

to team with our famous Super 8



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Now comes the finest of edgers—the great new American "B" Spinner with powerful new motor that makes it *fastest cutting, most efficient 7" disc sander!* Saves time—*makes more money for you!*

High production results from powerful new motor that will not slow down under normal load. Develops up to 2 H.P. of sustained speed... Larger more efficient ventilating fan for cool-running motor. Easy to operate—due to reduced weight, precision balanced parts, improved handle grip, lower center of gravity, built-in headlight. Smooth work—produced by stronger larger disc shaft, 50% larger gears of a new long-life alloy, heavier bearings, and exclusive flexible sanding disc so you can produce a fine smooth "perfect match" on any floor. Less dust... Larger fans, more powerful vacuum. Longer life! See it! Write today for a FREE demonstration.



American Super 8... sands floors nearly twice as fast as standard machines!

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Send for More Facts Today! Colorful 4-page catalog sent FREE on request.



The American Floor Surfacing Machine Co.
511 So. St. Clair St., Toledo 3, Ohio

Please send latest catalog on the following, without obligation:

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- Floor Maintenance Machines
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- Portable Electric Saw
- Abrasive Paper

Name _____

Street _____

City _____ State _____

new products

(Continued from page 228)

REINFORCED GLASS FIBER MAT AB105340

"Duramat" is made from glass fiber mat reinforced with parallel strands of glass yarn, coated with waterproof asphaltic materials. It is used as a vapor barrier under basementless buildings and in refrigerated rooms; as a covering and



weather sealing for above-ground insulated pipes and exposed ducts; and as a lining for irrigation ditches, laterals, stock ponds, swimming pools, etc.

The reinforced glass fibers give the product added strength and make it more resistant to tears and punctures. It will bend around curved or irregular surfaces and conforms readily to ground contour, its manufacturers say. "Duramat" is available with a nominal weight of 51.8 pounds per 108 square feet, furnished in rolls 36 inches by 36 feet; and in a nominal weight of 23.5 pounds per 108 square feet, in rolls 36 inches by 72 feet. Glass Fibers, Inc., Dept. AB, 1810 Madison Ave., Toledo 2, Ohio.

MASONRY DRILL BIT AB105341

One man can now drill holes in green concrete by using an electric or pneumatic hammer equipped with a new carbide tipped drill bit called the Thunder-Twist. This tool is provided with two deep spiral vanes which remove dust rapidly, eliminating the hazard of packing or binding



of the bit. This feature also permits faster drilling in granite and similar hard masonry materials. The bit is capable of drilling holes of from $\frac{3}{16}$ to $1\frac{1}{4}$ inch in diameter, up to 36 inches deep. Available lengths are 3, 4, 6, 12, 18 and 24 inches, with special diameters, shanks or extra-length bits furnished on request. New England Carbide Tool Co., Inc., Dept. AB, Auburn & Brookline Sts., Cambridge 39, Mass.

♦ FOR MORE INFORMATION USE COUPON, PAGE 228



Low-cost lighted valances make rooms more livable, houses more salable

IT takes just a few dollars and minutes to install, yet a lighted valance adds a design touch that makes any room a special attraction to home buyers.

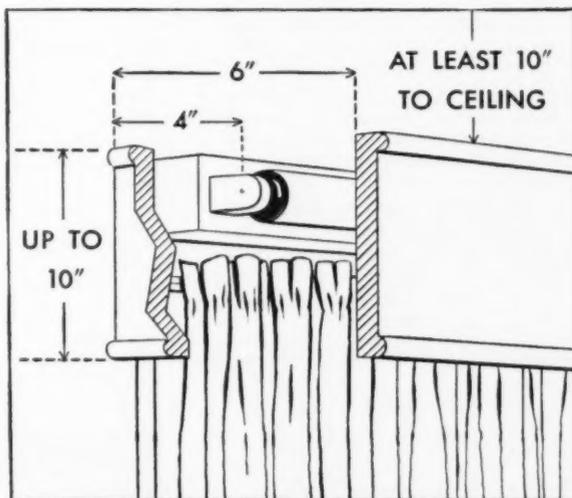
See the difference it makes in this room. Notice how it uses the ceiling as a reflector to spread light, taking away the dark corner, making the room seem bigger. How it gives more diffused, restful light.

SIMPLE, INEXPENSIVE TO BUILD-IN

Valance units can be ordered complete from a number of fixture manufacturers or built on the job using an inexpensive strip fixture to hold the fluorescent tubes (General Electric De Luxe Warm White lamps are recommended). G-E Light Conditioning with lighted valances is an easy way to add extra value to rooms at low cost, extra value that prospects can see and admire.

General Electric has a simple, inexpensive Light Conditioning plan for every room in the house. For more information, contact your electric service company.

FREE BOOKLET: For your free copy of "See Your Houses in a New Light", the new Light Conditioning booklet for builders, write General Electric, Dept. 166-AB-10, Nela Park, Cleveland 12, Ohio.



DETAILS OF VALANCE CONSTRUCTION

Place valance across windows, wall-to-wall (for best results, at least 16 feet of valance is required). Distance from top of valance to ceiling should not be materially less than 10 inches. Behind the valance, which may be as deep as 10 inches, use 20, 25 or 40-watt G-E De Luxe Warm White Fluorescent tubes, end-to-end to fit length.

GENERAL  **ELECTRIC**

PLUGMOLD 2000

Multi-Outlet System

gives your homes
a *plus*
appeal!

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



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

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

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

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

Write today for the new, free Plugmold 2000 book.



PLUGMOLD 2000

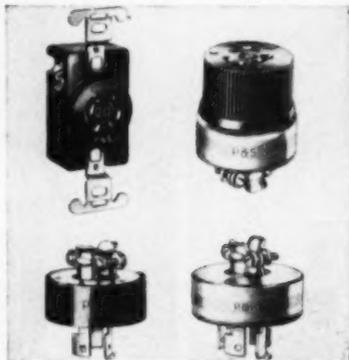
WIREMOLD'S *New*
multi-outlet system

THE WIREMOLD COMPANY
Hartford 10, Connecticut

new products

ELECTRIC WIRING DEVICES AB105342

Plastic locking wiring connectors feature sturdy, foolproof construction. Receptacles (upper left) have rugged two-piece build; extra heavy insulation is provided by plastic back cover. Mounting straps are held rigidly at ends of the body preventing distortion or bends in installation.



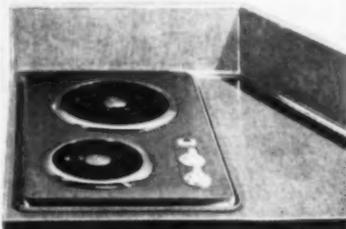
Units are designed for back or side wiring. Connectors (upper right) have plastic bodies, heavy armor and positive contacts. Binding screws have large heads to facilitate wiring.

These devices are designed with a dependable lock device. A turn of the cap locks it positively; a reverse turn unlocks it. Triple blade assembly is accurately positioned for positive alignment. Pass & Seymour, Inc., Dept. AB, Solvay Station, Syracuse 9, N.Y.

RANGE COOKING TOP AB105343

This new cooking top design is a recent addition to the manufacturer's line of "Bilt-In" ranges. It incorporates two quick-heating cooking units to provide compact space for cooking needs in a limited area. One, two or three sets of units answer small, medium or large requirements.

Each cooking top features stainless steel finish, two surface units individually controlled by five-heat reciprocal switches. Neon indicator light glows when any unit is on. Units are 13½x20¾ inches



and can be installed individually, in pairs or divided where it is desirable to have units in several locations. Thermador Electrical Mfg. Co., Dept. AB, 5119 District Blvd., Los Angeles 22, Calif.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

SINCE 1912
Protection for Masonry

STOP Leaks



IN YOUR
MASONRY
INSTANTLY



WATERPLUG

STOPS THE LEAKS

In every type usable below-grade room, tunnel, dam, water-supply system and cellar. Ask for Circular No. 14.



THOROSEAL

SEALS THE SURFACE

Against entrance of moisture into masonry, prevents mildew, which causes sour odors in interior rooms. Ask for Circular No. 16.



QUICKSEAL

FOR BEAUTIFUL FINISH

In pastel shades for finish coat over THOROSEAL base applications. Ask for Circular No. 15 and Color Card 32-B.

Write for Pictorially
described literature
"HOW TO DO IT"

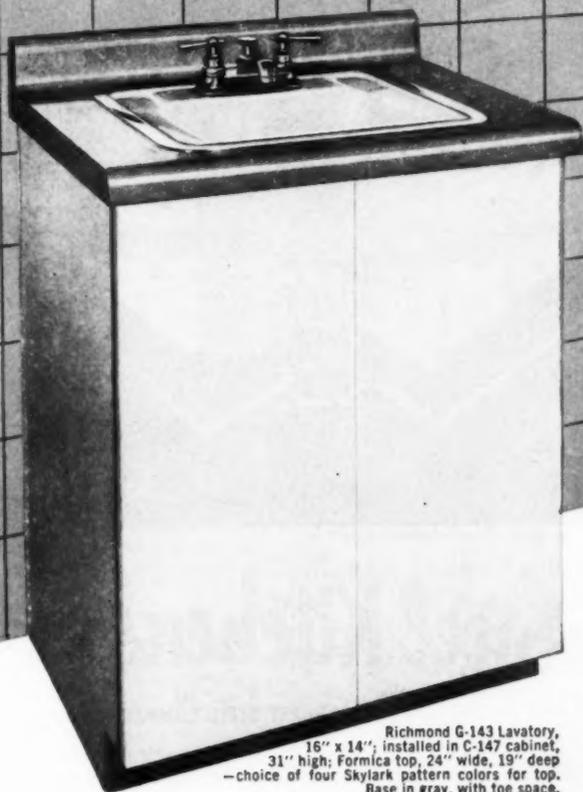


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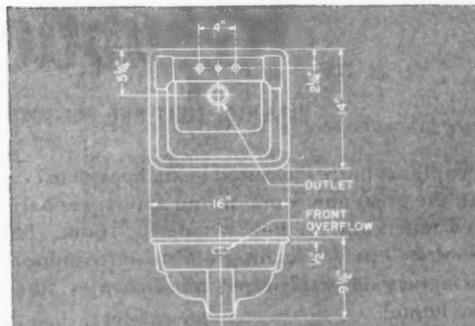
for that
 "second" bath
 or powder room
 a new, small-size
 cabinet lavatory
 by
 Richmond



Richmond G-143 Lavatory,
 16" x 14"; installed in C-147 cabinet,
 31" high; Formica top, 24" wide, 19" deep
 —choice of four Skylark pattern colors for top.
 Base in gray, with toe space,

the perfect answer
 to limited space

This new cabinet-type lavatory measures just 16" x 14" over-all—provides the perfect answer to limited space in the "second" bath or powder room. Of gleaming, lifetime vitreous china, in Richmond's famous "whiter-white" or any of five decorator colors. Front overflow, anti-splash rim, twin soap dishes. Lavatory supplied separately, or installed in handsome C-147 cabinet.



for further information,
 send off the coupon,
 or check your wholesaler.



RICHMOND

Richmond Radiator Co.
 Affiliate of Reynolds Metals Co.

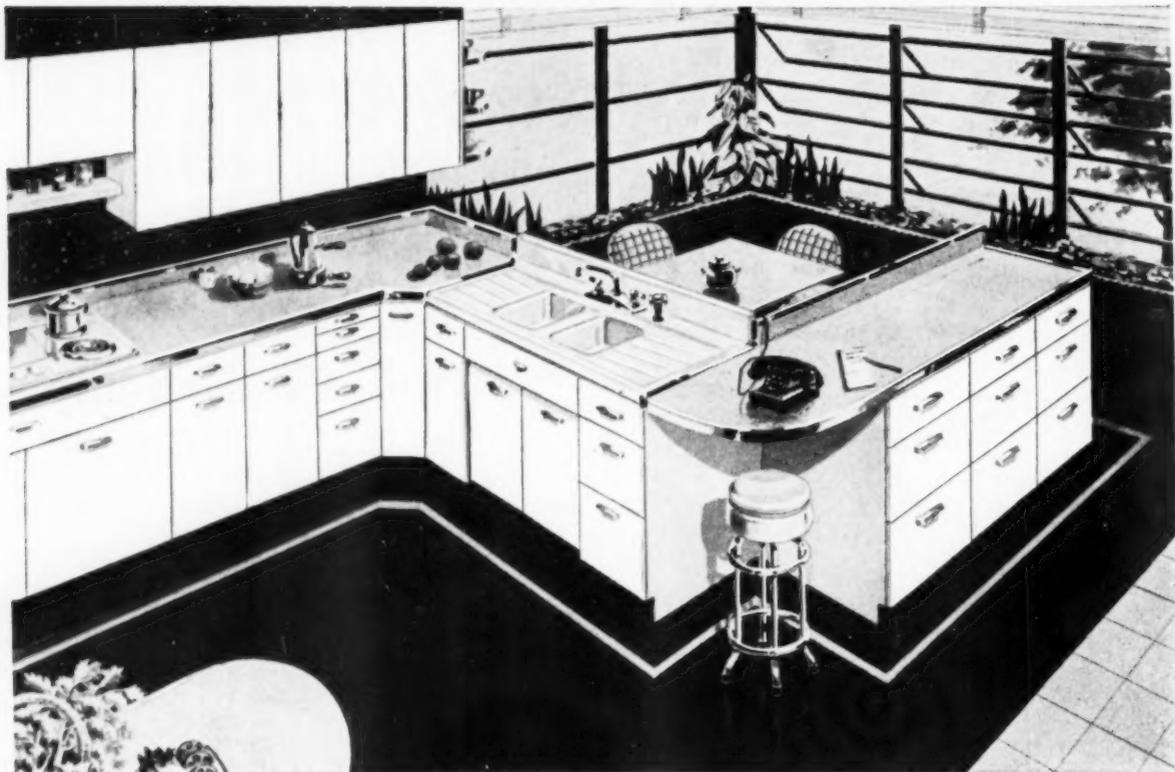
Richmond Radiator Company • Box 111, Metuchen, New Jersey
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 new, small C-143 lavatory. No obligation, of course.

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Here are kitchens that spark home-selling ideas. You plan from the industry's biggest selection of sinks, cabinets, accessories and counter tops. You use economical, mass-produced special purpose cabinets to create kitchen "originals". You build "custom" kitchens

at standard prices and lowest installed cost. With Republic Steel Kitchens, it's easy to figure your costs and to hold those costs.

Take full advantage of the new interest in kitchens. Learn more about beautiful new Republic Steel Kitchens—the quality kitchens that are competitively priced. Send coupon today. Republic Steel Corporation, Berger Manufacturing Division, Canton 5, Ohio. Export Dept.: Chrysler Bldg., New York 17, N. Y.

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1022 Belden Avenue, Canton 5, Ohio

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new products

TRAY COMBINATION AB105344

A 42 inch sink and laundry tray combination for apartments and small homes is equipped with a sliding drainboard. Made of vitreous enamel cast iron, its surface is easy to clean and withstands hard use. The laundry tray is 13 inches deep and the sink, eight inches deep.



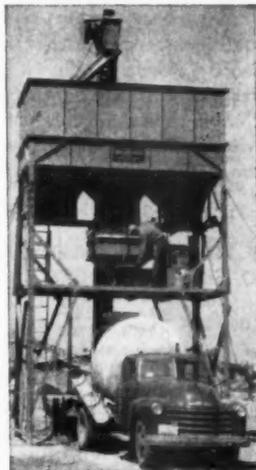
Widely separated grooves on the drainboard provide space for small objects.

The enameled steel cabinet has two roomy compartments for storage. Cabinet handles and base are recessed for comfortable working position. Unit is also available with pedestal for lower cost installation. Universal-Rundle Corp., Dept. AB, New Castle, Pa.

◆ FOR MORE INFORMATION
USE COUPON, PAGE 228

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This plant set-up results in additional profits—at a minimum investment. Used in smaller communities—where a reasonable total investment will bring satisfactory earnings.

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THE "STILEMANOR"

A precision made, standard duty, quality line of locks and latches. Available in wrought brass, bronze or aluminum for popular functions. For fine residences and light commercial work.

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A husky, attractive, economy line of locks and latches. Available in wrought brass, bronze and aluminum . . . five popular functions. All internal working parts of pressed steel, zinc-plated, dichromated. No die-cast parts.

For locks and latches, only two holes to bore . . . all alike for every door . . . but more than that . . . all locksets and latches are easy to install . . . all packaging is easy to identify, easy to handle. In addition, you have a choice of lock lines to offer plus finishing hardware that's uniform in quality, size, finish . . . a combination that can't be beaten for customer satisfaction year in and year out. See your Russwin dealer's display. Russell & Erwin Division, The American Hardware Corporation, New Britain, Connecticut.

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*proving the Economy
of quality*

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new products

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BIRCH CABINET KITCHENS AB105345

Three types of "living kitchens," fashioned in natural birch, are available in three price ranges, allowing the individual home owner to install a kitchen of beauty which will meet his financial requirements. The assembled version is ready to install, and is finished in clear, high-luster lacquer. The second type is assembled but unfinished, offering the



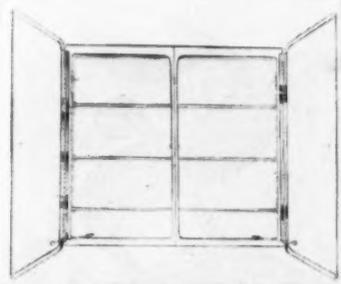
customer his choice of finish. The third, unassembled kitchen appeals to the "do-it-yourself" customer who likes to do his own work. Each cabinet is packed flat in its own carton, complete with hardware.

Among their features are continuous shelving and counter-tops, dovetail drawers, a recessed sink base unit and rotating shelves which give easy access to all stored items; they are available in both wall and base units. Over-all flexibility allows these cabinets to be installed in any type kitchen. Brammer Manufacturing Co., Dept. AB, Davenport, Iowa.

BATHROOM CABINET AB105346

The "Mr. and Mrs." bathroom cabinet with double size mirror measures 32x26 inches. Both sides can be opened at the same time. Six adjustable bulb-edge glass shelves have non-tipping brackets. Cabinet has stainless steel frame, piano hinges and positive closing bullet catches. Outside corners are square in order to facilitate tile setting.

A feature of interest to builders: the cabinet can be installed by using two standard size rough openings, left and



right, of any 16-inch center stud, saving the job of installing headers in a large rough opening which would require removal of one stud section. Jensen Industries, Dept. AB, 159 S. Anderson St., Los Angeles 33, Calif.

◆ FOR MORE INFORMATION
USE COUPON, PAGE 228

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Heating

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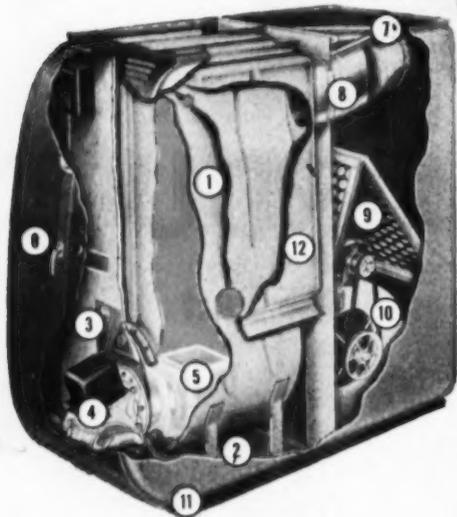
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SHOWER CABINET

AB105347

A packaged shower cabinet called the "Cadet" features rapid installation. When assembled the shower is leak-proof without the use of compound. The unit has smooth cove corners, hollow stiles and a completely enclosed threshold. The entire construction has been



designed so that there are no raw edges or hard-to-clean dirt pockets.

The shower cabinet can also be built-in through the use of an escutcheon-type adapter frame and a rigid one-piece slip-on top which is supplied with a dome light. A terrazzo receptor is included with the shower. Fiat Metal Manufacturing Co., Dept. AB, 9301 Belmont Ave., Franklin Park, Ill.

ORNAMENTAL LETTERS

AB105348

Designed for placing on chimneys, entrance doors, garage doors and indoor fireplace chimneys, these ornamental letters are made of solid cast aluminum from hand carved patterns, with hand-rubbed, black antique finish. Letters are fastened with two cap screws, and measure 18 inches high and up to 16 wide. The



Lakeside Metalcraft Co., Dept. AB, 339 W. Hovey St., Muskegon Heights, Mich.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 228

AMERICAN BUILDER



now
walls and
decoration

Just apply adhesive to back of panels; press to base layer of regular SHEETROCK in new building, or to old walls when remodeling.

in one operation

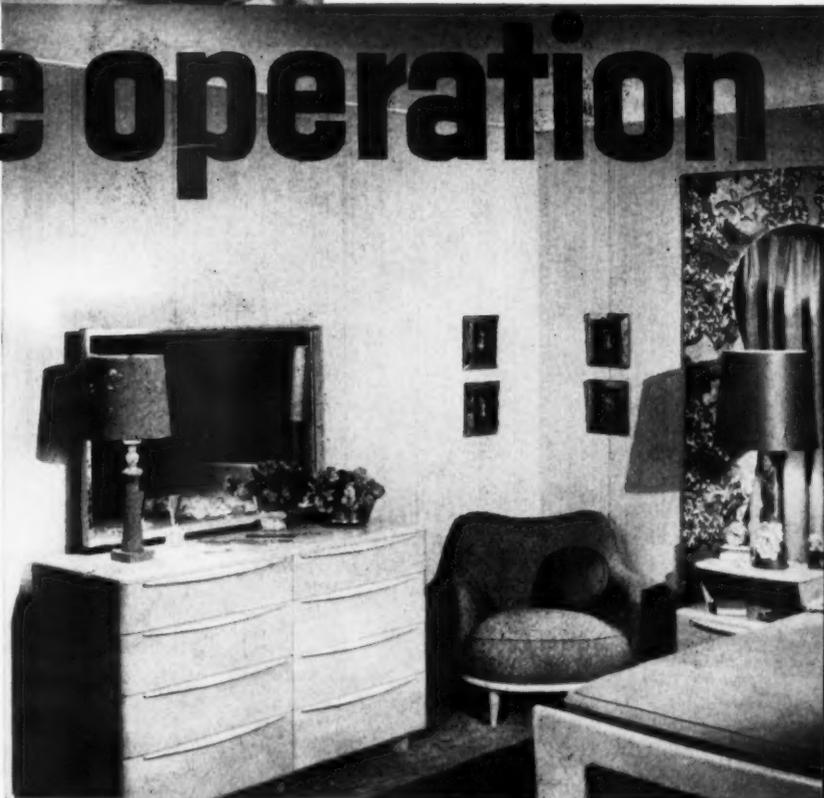
No joints to conceal
No nails to treat
It's building magic!

Here's an amazing new gypsum dry-wall method that builds and decorates in one operation . . . speeds construction, reduces costs, helps sell homes!

You can use Striated Panel SHEETROCK WALLBOARD on almost any wall. Its beautiful neutral tone harmonizes with most any decorating scheme. Available in 16" widths; 8', 9' and 10' lengths; 3/8" thick. Also in pre-decorated Knotty Pine finish; or Plain, for on-the-job decoration.

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Bill Trude, Trude Development Company,
Arlington Heights, Illinois

How Bill Trude this nationally

This house is designed to incorporate the architectural features most wanted by the readers of a national home magazine. It is expected to be the prototype of hundreds of new homes. One of the most important considerations in the selection of the materials was that of quality. When Bill Trude selected Bildrite for a quality sheathing job (greater bracing strength, weatherproofed wall and added insulation value) he also realized a saving of \$59.00 per thousand square feet as compared with wood. Pictures on this page show how.



Write! See how you can save with **Bildrite**. Free literature includes cost-comparison forms. Figure your own saving. Illustrated "case histories" and product data show how. Write Insulite, Minneapolis 2, Minnesota.

INSULITE AND BILDRITE ARE REGISTERED TRADE MARKS

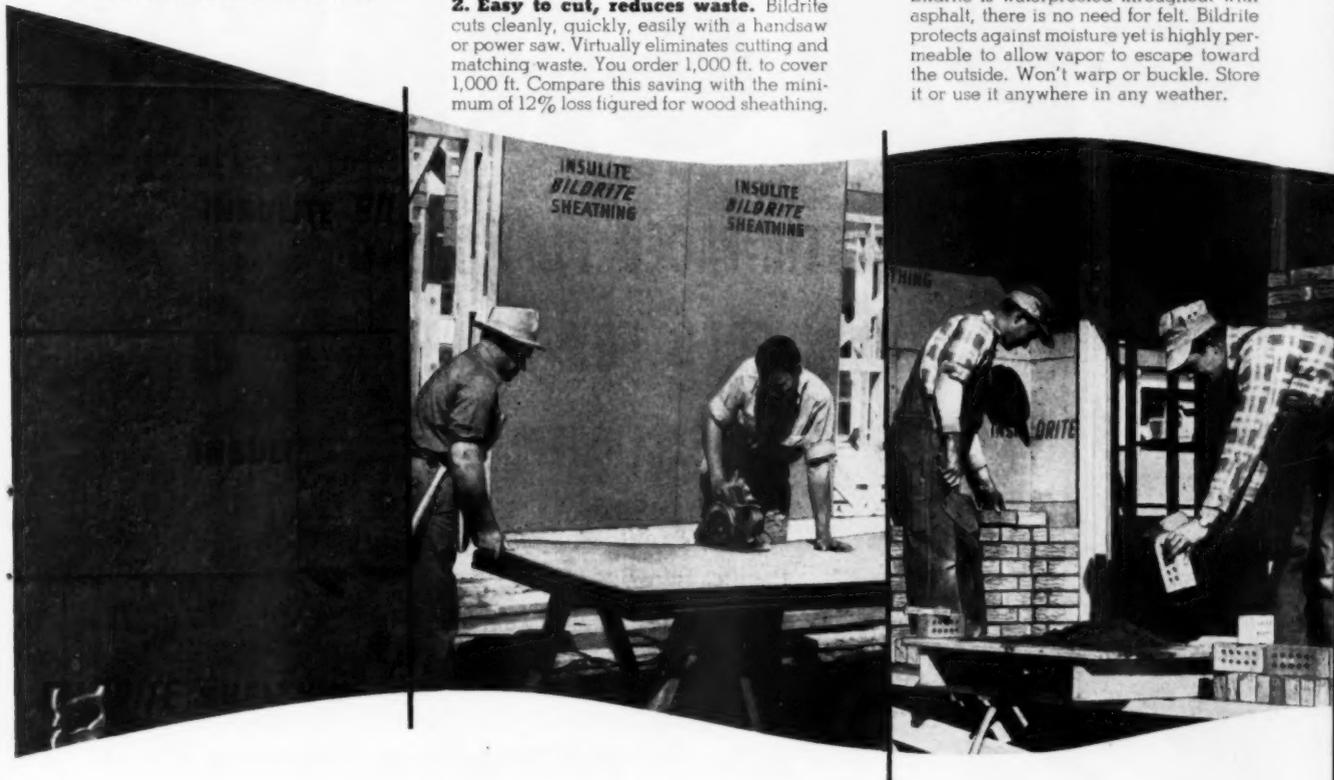
Build and insulate

added quality to known "idea house"... and saved \$59 per M!

1. Bildrite goes up faster and easier. Two carpenters can sheath 1,000 square feet in half a day or less. Cuts application time as much as 43% compared with wood. Has tremendous bracing strength. 4' Bildrite eliminates need for corner-bracing (F.H.A. accepted).

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is made by an exclusive formula of the Georgia-Pacific Plywood Company. Years of research make it the material that meets all the requirements of paint. It combines the miracle of modern plastics with the structural strength of plywood. It offers an improved interior and exterior surface in one grade. It's exclusive in color and surface. So insist on green—GPX GREEN . . . if you want the surface that's engineered for painting.



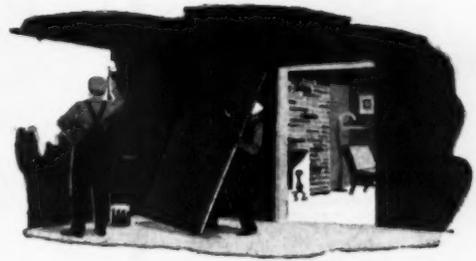
IN EXTERIOR SIDING—GPX GREEN

paint grade plywood is weatherproof and waterproof when painted. Paint lasts up to three times longer on GPX GREEN than on other materials. And it's easy to apply. No priming is needed and the smooth surface can be covered with one coat. GPX GREEN sidewalls will not check or crack and grain raise is reduced to a minimum. Use the panels in their full 4 x 8 ft. size or cut in strips and lap. Either way, you save time, paint and money and give your customers the finest paint surface obtainable.



IN INTERIOR WALLS—GPX GREEN

is made from top-grade Douglas Fir Plywood and surfaced with a plastic overlay fused to both sides of the plywood. The large panels are nailed right to the studs and produce a complete wall in minutes. Checks and cracks won't mar the smooth surface—ever! Your painters will be amazed to see how GPX GREEN can be covered with one coat without any primer. Walls of GPX GREEN seldom require repainting. For you and your customers—GPX GREEN is the best buy by far.



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is easy to work. Solid cores produce a smooth, clean edge when cut. The smooth plastic surface eliminates feathering and chipping. GPX GREEN is flexible . . . bends to the same short radius as regular plywood and is ideal for curved counter bases. This "engineered for painting" material saves you money in every application. To cut costs and speed completion time, use GPX GREEN in the next house you build.



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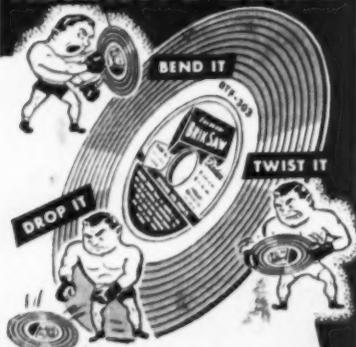
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Now **EVEREADY**
"TUFFIE"
NON-BREAK
Reinforced
ABRASIVE BLADE



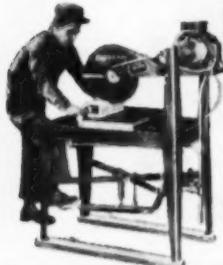
For difficult edge cuts, for grooving, for grinding cuts impossible with a standard type abrasive blade.

The reinforced Eveready "TUFFIE" is unbelievably efficient—virtually indestructible. Can't be surpassed for cutting **Concrete Block**, **Cinder Block**—most common **Brick**—most **Firebrick**—soft **Stone** and other "soft" and "medium soft" materials.

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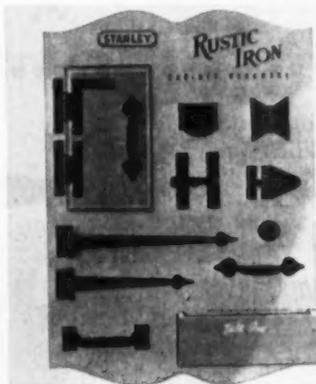
CITY _____

STATE _____

new products

ORNAMENTAL HARDWARE AB105349

New line of ornamental hardware for kitchens, game rooms, living rooms and dens is named "Rustic Iron" for its rugged appearance and hand-forged look. It features a rough-textured finish, hammered edges and authentic early American designs. Hardware is available for all cabinet applications and for full-size interior doors. Made of steel, toughened



and hardened by cold rolling, the hardware is said to complement natural wood or painted surfaces.

A sales display, illustrated, is offered as part of a cabinet hardware package. Black ornamental hardware is now offered both in a rough-textured and in a smooth, satin finish. The Stanley Works, Dept. AB, New Britain, Conn.

PACKAGED HOMES AB105350

Pre-cut, packaged homes in 17 elevations and five floor plans are now available for small and large builders. The designs include two-, three- and four-bedroom homes that sell in the \$8,500 to \$18,500 price range. The builder enjoys a conventionally built house with the advan-

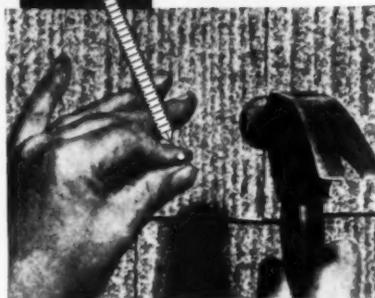


tages of fixed costs, low inventory and savings in labor and materials.

The package includes everything except masonry, electrical, plumbing and sheet metal materials. Place Homes, Inc., Dept. AB, 1212 S. Walnut St., South Bend, Ind.

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ASBESTOS SIDING NAILS



Hassall threaded asbestos siding nails are the choice of contractors throughout the country. Made of bronze and steel with plated finish. Note threaded shank which guarantees maximum holding power. Made of #14 gauge wire (.082) in 1", 1½", 1¾", 1⅝" lengths. Advise quantities. Prompt shipment.

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Our national advertising annually produces thousands of customer inquiries which are turned over to our dealers for follow-up. Here is an active market for cedar closet lining. Brown's SUPERCEDAR is a fast-moving, profitable item and is produced by the largest and oldest experts in the business. Sold only through leading jobbers and millwork distributors.



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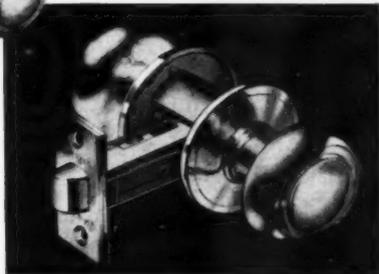
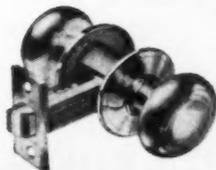
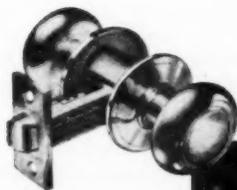
THE *Capacity* TO SERVE...

For many years, we have been producing Weslock units at a constantly increasing rate to meet the demands of our thousands of customers throughout the world. Our system of rigid quality control plus our high precision engineering standards have established the reputation of Weslock as America's greatest lock value.



WESLOCK

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- Millions in use
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- Simple, fast installation
- Budget priced
- Expert field sales assistance

For Economy, Dependability and Beauty, choose Weslock, America's greatest lock value!

WESTERN LOCK MFG. CO.

Manufacturers and Sole distributors of Weslock residential locksets

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

OCTOBER 1953

255

building a remodeling business on advertising

In five years, Builder Arnold Nathanson of Brooklyn, New York, has solidly established himself as a remodeling specialist—by consistent advertising. Nathanson's advertising policy has been carefully worked out and is followed without deviation.

His ad budget is divided as follows: 47 per cent for major newspaper; 23 per cent for a second newspaper; 13 per cent for direct

mail; and 12 per cent for classified phone books.

The Nathanson firm—Arnold Construction Co.—can be found under six separate classified headings in the Brooklyn "yellow pages" directory. The largest permissible display ad, covering a quarter-page, appears under "Contractors-General," while another display ad under "Siding Contractors" offers "complete modernization service."



DEAL DIRECT
with
ARNOLD
ONE OF
BROOKLYN'S
LARGEST
BUILDERS

**FOR A FREE ESTIMATE
CALL
GE dney 4-
1111**

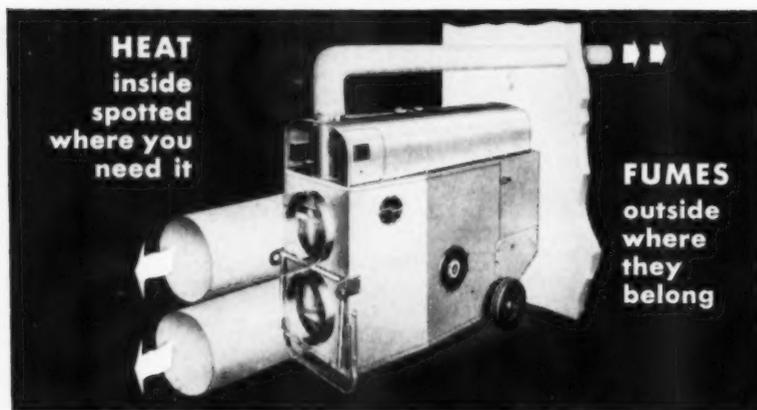
**Beautiful Interiors—Alterations
5 YEARS TO PAY!**

Arnold is not an ordinary builder!
Our service for you includes an Estimate and Interior Decorating plan—special treatment—Superior work in all jobs large or small.
As an example of our "Home Beauty Treatment" we take painting and wallpapering jobs, creating or re-creating beautiful arrangements. We remove your old chime curtain and window or take a whole room and re-arrange it to give the complete wall, ceiling space for a spacious effect. Only finest paints and wall papers used. Expert workmanship at reasonable prices.

PAINTING & REPAIRS—
Painting and Decorating your Home, your Office or Home Office, Bath, etc.
SILING—
Siding your Chimney, or Siding the Exterior. We do a Siding Job of High Quality.
ROOFING—
High Grade Roofing Work Guaranteed.
HEATING—
Sewer Pipe, Chases, etc. Installed. Siding, Siding, Siding.
CONSTRUCTION—
All Our Workmen Are Experts at Their Trade.
SINK & BATHS REPAIR—
Sinks and Bathtubs Stopping Churn Lids, Etc. Also Work in Various Kinds of Workmanship.

ARNOLD CONSTRUCTION CO
1488 FLATBUSH AVE. **GE dney 4-1111**

SAFE HERMAN NELSON PORTABLE AIR HEATERS



Portable heat can make money for you this winter—keep men on the job and materials at safe working temperatures. And Herman Nelson Heaters, with flexible ducts, put all the heat exactly where you want it with minimum waste. Heat can be "piped" under tarps, into bins and cargo spaces, direct to working areas.

Herman Nelson portable heat is absolutely safe. The heated air is completely free of combustion gases—no carbon monoxide, no smoke, no sparks. All products of combustion

are kept separate and vented off as in a modern home furnace. You get all the heat you want, where you want it, with none of the dangers of salamander-type units. Act now. Your investment will be repaid in just one winter, this winter!

Remember, Herman Nelson has the only complete line of completely safe Portable Air Heaters.

HERMAN NELSON
PORTABLE AIR HEATERS
Another Product of American Air Filter Company, Inc.
Moline, Illinois



American Air Filter Company, Inc.
Dept. 53, Moline, Illinois

Please rush my free copy of booklet "Guide to the Selection and Use of Portable Space Heaters."

NAME _____

COMPANY _____

TYPE OF BUSINESS _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

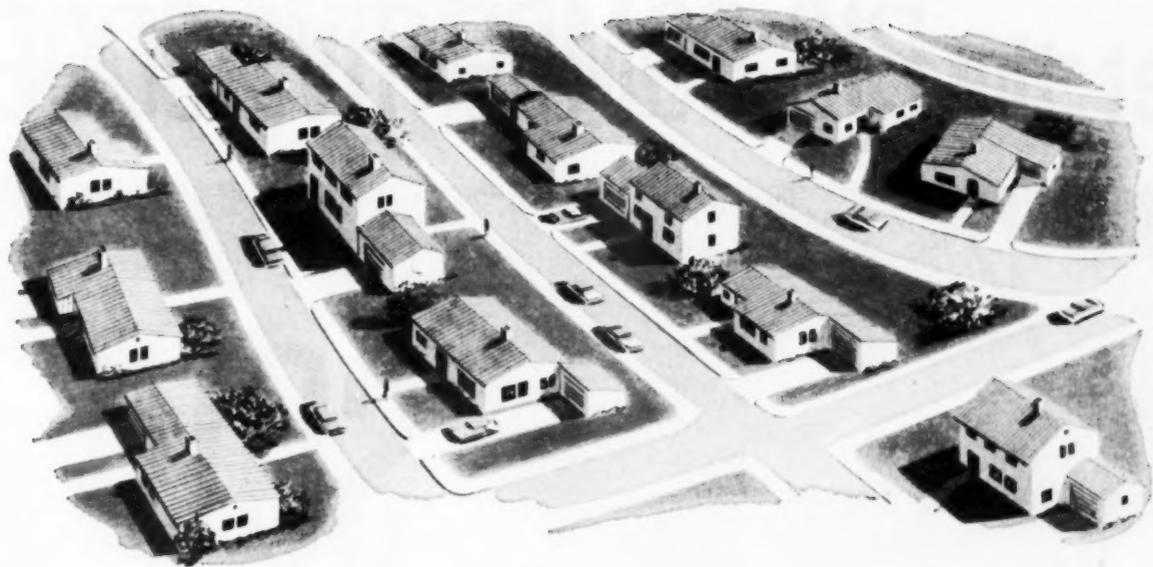
Get all the **FACTS** about **ALL** Portable Heaters

Phone book ads are the biggest business-getters. Arnold has entries under six classified headings

Other Arnold listings are maintained in the sections for "Painters," "Roofers," "Shingling Contractors," and "Fence," Nathanson says. "Even though we spend less on it than on our other advertising, the directory is our most consistent business-getter."

Nathanson always includes a photograph of himself in his ads. It's a personal touch which he considers important, because remodeling is a very personal kind of service. The content of his newspaper ads is rarely changed. The feeling is that since specials are never offered, there is little reason to vary the one-column 3- to 9-inch ad that appears each week in the two newspapers. Specials are avoided on the grounds that readers remember only the offer and forget the name of the firm making it.

Arnold's newspaper ad cites the availability of hundreds of photos and recommendation letters from home owners, banks, landlords and others. This same type of testimonial solicitation is used in direct mail. Two separate 4-page folders are used, one for industrial, the other for residential prospects. Mailings average 1,200 pieces a month. "We don't expect prompt responses," Nathanson states. "If one of these mailings brings us just one good account in six months, it will have been more than justified."



A whole town site
with FOLLANSBEE TERNE METAL ROOFS!
Colorful lifetime roofs

On a budget type contemporary, or a stately traditional . . . whether a single unit or a whole town site . . . you'll find the lifetime roofing protection, the rich color, the permanent weathersealing of a Follansbee Terne Metal Roof. Any home takes on a fresh individuality, a distinctive new look with a roof deck of versatile Terne Metal, beautifully adapted to any architectural style.

TO THE BUILDER Follansbee Terne Metal Roofing offers many advantages. It's simple and easy to install. Follansbee Terne Metal comes in continuous 50-foot rolls, which can be cut in the shop to required lengths and delivered, or cut right on the job and can be formed and installed mechanically. Terne is light, weighing only 70 pounds per square foot . . . yet it's strong and durable. The expansion-contraction factor is negligible, eliminating the need for expansion joints or allowances. And it's low in overall cost.

TO THE OWNER Follansbee Terne Metal Roofing also offers many advantages which helps to keep a house in top condition. A Terne Roof lasts a lifetime, providing trouble free protection in any weather with no maintenance other than painting. The roof can be painted any color and as often as the owner wants, giving the home a new personality just by applying a paint brush.

These are just a few of the reasons why Follansbee Terne Metal was selected for the White Pine town site . . . reasons why you, too, will find Terne Metal a good roof investment. Write us for additional information.

on budget type houses

Follansbee Terne Metal roofs protect and beautify the White Pine town site homes at Ontonagon, Michigan . . . and they proved economical to install.



FOLLANSBEE STEEL CORPORATION

GENERAL OFFICES, PITTSBURGH 30, PA.

Cold Rolled Strip

Seamless Terne Roll Roofing

Polished Blue Sheets and Coils



Sales Offices—Chicago, Cleveland, Detroit, Indianapolis, Kansas City, Los Angeles, Milwaukee, Nashville, New York, Philadelphia, Rochester, San Francisco, Seattle; Toronto and Montreal, Canada. Mills—Follansbee, W.Va.

FOLLANSBEE METAL WAREHOUSES

Pittsburgh, Pa.

Rochester, N.Y.

Fairfield, Conn.

Get the **BIG COMPETITIVE EDGE**



MURRAY has the Quality that sells!

No finer line of steel kitchen cabinets and cabinet sinks is offered. Your customers will immediately recognize and appreciate the rugged construction of heavy-gauge steel . . . the stain- and acid-resistant titanium porcelain-enameled sink tops . . . with more usable work surface. And there's more solid sales appeal in the brass drawer runners . . . the heavy sound-deadening . . . the positive closing of doors. And what woman could miss the smart contour styling? It's an instant eye-catcher that says superlative quality in every graceful line.

MURRAY gives builders a price that's right!

The Murray Builder Department is staffed by men whose job is to see that you get feature-packed kitchens that sell homes at a profit. Murray distributors are prepared to go all-out in helping you plan and promote. Operating with Murray's new construction pricing formula, they can pack terrific appeal into a limited space and a tight budget. You can count on full co-operation in the timing of delivery and in the supervision of first installations, so that you are sure of a job that goes in fast and goes in right.

MURRAY gives you in kitchens!



The Murray Kitchen line is complete!

Murray Kitchens for your houses can be planned from a wide variety of units. *Cabinet sinks* are offered in 12 different models, 42", 54" and 66" widths . . . single- and twin-bowl models. *Wall cabinets* in both 18" and 30" heights, 15" to 36" widths, with adjustable refrigerator-type shelves. Also new 54"-width wall cabinet. *Base cabinets* in 15" to 36" widths (sliding shelves) with a choice of 8 beautiful vinyl tops. *Broom cabinet, Lazy Susan corner base and wall cabinets, condiment cabinets, glass what-not shelves, maple cutting-board tops* round out equipment available.

New! *Murray Food Waste Disposer* offers you simple, bayonet-type installation. Continuous feed; extremely quiet. Especially attractive price.

MURRAY

THE MURRAY CORPORATION OF AMERICA

Contact the Murray Builder Department now for full details on the big competitive edge Murray gives you in kitchens. Just mail the coupon below.

The Murray Corporation of America
Home Appliance Division, Sales Offices
7700 Russell
Detroit 11, Michigan

Send me further details on the benefits a builder gains with Murray Kitchen equipment.

Name _____

Firm _____

Street _____

City _____

Zone _____

State _____

PG's

REG. U.S. PAT. OFF.



1. PG's weigh 10 pounds each—
are packaged four to a
carton for easy handling.

CUT COST IN

A NEW ANACONDA PRODUCT MAKES A BETTER JOB — FASTER

Now — something new in radiant panel piping. It's ANACONDA Panel Grids* (PG's). These action pictures show how easily PG's install. No more awkward "stringing up" of coiled tubing. The job is done easier and quicker with PG's. These handy and adaptable panel grids are conveniently packaged ready for installation. The machine-made prefabricated grids eliminate on-the-job bending and the expense of special panel-forming aids.

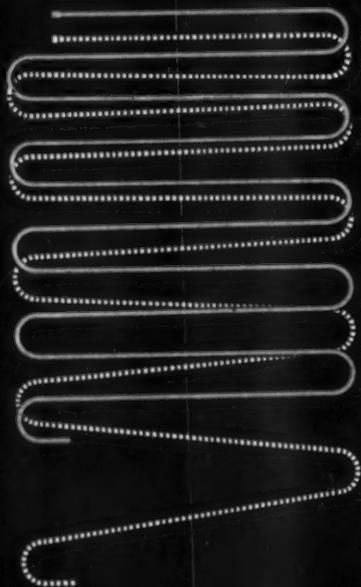
PG's are supplied in one standard size, consisting of 50 linear feet of $\frac{3}{8}$ in. Type L copper tube. At normal 6 in. spacings, PG's are rated at 1800 Btu/hr. This simplifies estimating and layout. PG's may be extended or contracted by hand to serve panel surface areas from 22½ to 60 square feet.

PG's are not yet available everywhere, but production is increasing. We are shipping to wholesalers as fast as possible. Ask your Anaconda Distributor to show you why it's easier to design and faster to install panel systems using PG's.

*Pat. applied for



For full details we'll be glad to send you an informative booklet that will answer almost any question you have about this new Anaconda product. Use coupon, or write for Anaconda Publication C-6 to The American Brass Company, Waterbury 20, Connecticut. 5373



The flexibility of PG's meets all design requirements. Center line spacing ranges from 4½ in. to 12 in. At normal 6 in. spacing the over-all dimension of a PG is 56 in. x 60 in.

ANACONDA PRE-FORMED COPPER TUBE PANEL GRIDS



2. PG's are readily laid out to the required spacing.

RADIANT HEATING

3. PG's are easily put in place. Trim, straight and true, they fasten tightly to the ceiling and require only normal plaster thickness.



4. PG's save fittings—one end of the tube is expanded so that grids can easily be connected in series by soldering or brazing.



The American Brass Company
Waterbury 20, Connecticut

AB-10-53

Please send me Anaconda Publication C-6, describing PG's:

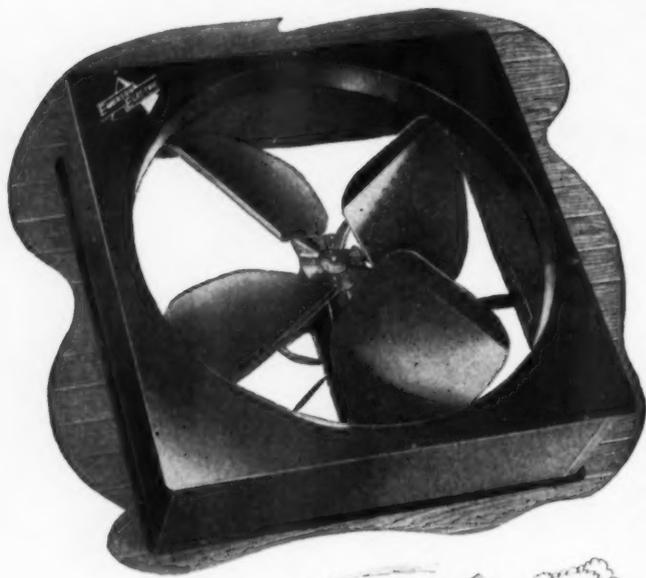
NAME

FIRM NAME.....

ADDRESS

CITYZONE.....STATE.....

For Practical, Effective Installations,
at Moderate Cost...



...Specify
**EMERSON-ELECTRIC
ATTIC FANS**

Smart home buyers look for extra values — the quality touches that mean the difference between just a house and a real home. Smart home builders specify top quality home comfort equipment . . . Emerson-Electric Attic Fans.

Here is the very best, yet a reasonably priced installation that pays large dividends in luxury living. It will help to close many sales. And, the long-life reputation of Emerson-Electric Attic Fans assures years and years of trouble-free summer comfort.

Specify efficient, economical Emerson-Electric Attic Fans. For complete data write for Bulletin No. 607.

The Emerson Electric Mfg. Co., St. Louis 21, Mo.

**SPECIFY EMERSON-ELECTRIC
KITCHEN VENTILATORS**

You put added "sales appeal" in your homes when you specify Emerson-Electric Kitchen Ventilators! Wall and Ceiling models are available for easy installation in any type construction. Don't overlook this looked-for feature in modern home planning.



EMERSON  **ELECTRIC**
FANS • MOTORS APPLIANCES

ask the *experts*

exterior wall insulation

We have in mind insulating a wall section and we would like to know the names of the best insulation materials on the market, to place in between the wall facings, made of asbestos wall board. The material can be loose, can be furnished in sheet or can be flat paper containers.

C. K. L., Jr., Philadelphia, Pa.

Almost all of the nationally advertised brands are good and do an excellent job of insulating the house. It would be a matter of individual choice as to whether that insulation would take the form of batts, which could either be two inches or four inches thick, or whether it would be of the poured type, such as loose mica which would fill the entire area of the studs or joists. If you desire thermal ratings on the various types of insulation, I would suggest that you write to the Bureau of Standards, Washington, D. C., for a booklet on insulation materials and their thermal values.

concrete floor chalking

A friend of mine has a concrete floor that continues to chalk. He says he can sweep it 20 times a day and still a dust will come up from it. It has not been down very long, about two or three years. It is a full basement and is dry. He wants to know if I can stop this chalking with a sealer of some kind or will it require a new floor. I will appreciate any help in the matter.

R. M., Urbana, Ohio

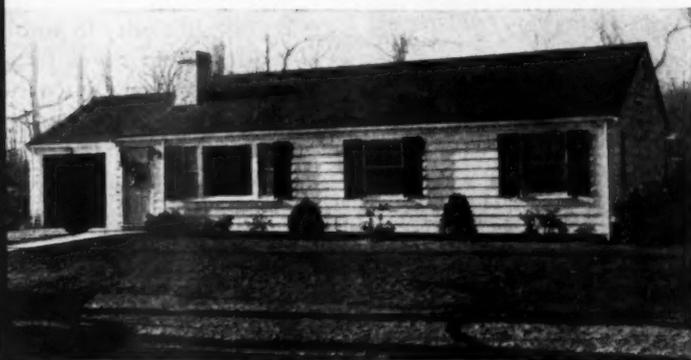
Where there is a thin layer of soft, chalky material on the surface of a concrete basement floor, the "dusting" may often be removed with pads of steel wool attached to a scrubbing machine. After removal of this material, the surface should be thoroughly cleaned, then allowed to dry and one of several hardener treatments applied. It should be pointed out that these surface treatments are not cure-alls for poor materials or careless workmanship nor will they make a perfect wearing surface of a poorly built floor. Among the more popular floor hardeners used for this purpose are magnesium, fluosilicate, zinc fluosilicate, sodium silicate, aluminum sulphate, zinc sulphate and various oils such as chinawood, linseed or soybean oil. The oils should be diluted with gasoline, naphtha or turpentine.

BRICK or CLAPBOARD . . .

you'll find electric ranges in the kitchen!



“When I build a house,” says builder Ralph D. Talbott of Baltimore, Md., “I make sure to install the kind of equipment my prospective purchasers will want. I’ve found out what they want, and the way my houses sell proves that I’m right. The equipment might vary a bit from house to house—but there’s one thing goes into every house I build. That’s a modern, automatic Electric Range. When a woman sees that range, she sort of takes it for granted that everything else is up-to-the-minute.”



“When anyone asks me why Oak Hill Village homes sell so readily, the answer is simple,” says builder Arnold Hartmann of Newton Centre, Mass. “The reason is that these homes offer utmost value to the prospective purchaser. All-electric equipment—including modern Electric Ranges—combined with good design and construction—make them a good buy—and they sell.”



The beautiful, practical kitchen of this dream home is designed for modern living. It's all-electric, has ample work surfaces. The modern appliances include an automatic range, and—of course, it's ELECTRIC!

More builders every day
are installing **ELECTRIC RANGES**



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

ADMIRAL • BENDIX • COOLERATOR • CROSLY • DEEFPREEZE
FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT • KELVINATOR
MAGIC CHEF • MONARCH • NORGE • PHILCO • WESTINGHOUSE

THE original SASH
BALANCE



NO
building dollar
goes farther



Because this unit will give you a Superior Balance . . . PLUS . . . Full Jamb Weatherstripping . . . at no greater cost than most conventional balances alone.

MASTER NO-DRAFT
(At left is actual photograph)
SASH BALANCE

The economy of quality is inherent in this equipment. It has long been established as a sales feature in new homes, as well as a low-cost and efficient means of modernizing windows in old homes. It is easy to install. It is durable and gives finger-tip control. It eliminates expensive box frames, pulleys, ropes, chains and weights. Requires no maintenance and will outlast the window.

AN "AIR CONDITIONING" MUST

Proper mechanical conditioning of temperature, in both winter and summer, requires weather protection at all openings. The weatherstrip feature of this sash balance provides an ideal seal under all atmospheric conditions against air infiltration, as well as dust and dirt.

The Master combination Sash Balance and Weatherstrip Unit has been proved and tested on over 4 Million windows for over a decade. Builders have accepted it as the "Standard of Quality."

MASTER METAL STRIP SERVICE, INC.

1720 No. Kilbourn Ave., Chicago 39, Illinois

- Please send me the description and installation data about Master No-Draft units;
 I am also interested in standard weatherstrip equipment of Master quality.

NAME _____

ADDRESS _____

ask the *experts*

seeking the impossible

Please send me information on reinforced concrete work with reference to correct sizes of steel and concrete in relation to length of beams (suspended) also slabs, data referring to initial strength of same, also some mathematical computations necessary to compute this type of structure.

A. L. D., Weedsport, N. Y.

It would be very difficult, if not impossible, to set up a few simple rules, formulas, or charts from which the design of reinforced concrete slabs, beams, etc. could be extracted without a detailed qualification for each condition encountered. We therefore suggest a book entitled "CRSI DESIGN HANDBOOK" which tabulates concrete design data for varying conditions. The price of this book is \$5.00 and can be obtained by writing to the Concrete Reinforcing Steel Institute, 38 South Dearborn St., Chicago 3, Illinois.

seeking millwork data

I am starting in the business of manufacturing millwork and cabinet work. I would like to obtain a book on estimating the cost of manufacturing millwork and cabinets, such as Walker's Building Estimator Reference Book is for the contracting business.

R. D. M., Jersey Shore, Pa.

The only book which will fill your requirements would be the Millwork Cost Bureau, Cost Book "A," which can be obtained from the Millwork Cost Bureau, 23 E. Jackson Blvd.

what finish is best over wood siding?

We are using one coat of Rez on yellow pine bevel siding and woodwork on outside of our house. Would like to have your recommendation as to best clear finish to apply over the Rez.

J. P. R., Sheridan, Mont.

You can apply varnish over the color-tone Rez, but you may then be defeating the purpose of this type of finish. Why not use conventional house paint?

National Paint, Varnish and Lacquer Assn., Inc.

AMERICAN BUILDER

because

sub-contractors use Dodge Reports . . . they know who is going to build . . . what jobs are out for bids. They get the contracts they want because they get their bids in on time on the jobs they want.

because

supply men use Dodge Reports . . . they know where to go *and when* to get business. They get the orders they want because their quotations go in on time on the jobs they want.

because

builders make sure their jobs are reported in Dodge Reports . . . they get more—and better—bids from both sub-contractors and supply men who use Dodge Reports to find the business they want.

The leading firms in the entire industry, as they have for 63 years, depend upon Dodge Reports in doing business in all the construction markets throughout the 37 Eastern States.

If you are a sub-contractor or dealer—write or call nearest Dodge office listed in Classified Telephone Directory—Write today for "Dodge Reports—How to use them effectively."



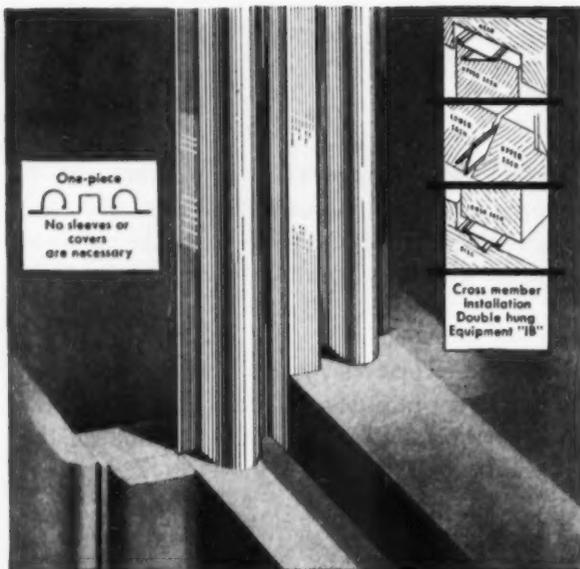
DODGE REPORTS

Dept. AB1053, 119 W. 40th St., New York 18, N. Y.

Timely, accurate, comprehensive construction news service

THE FIRST STEP IN EVERY SALE





ALLWEATHER

FULL JAMB BALANCE STRIP

Weatherstrip and Sash Balance Combination

for quick, efficient Sash Mill INSTALLATIONS

ADJUSTABILITY IS BUILT-IN—Balance tube with semi-cantilever action insures weatherstrip contact in all kinds of weather. The base of section is always in close contact with jamb insuring stability.

BEAUTY OF DESIGN . . . sets off the pleasing quality of fine wood sash and frames. Counter-balance springs are concealed by a functional part of the strip itself.

COLD AIR AND DUSTY DRAFTS CONTROLLED . . . by generous area of contact between strip and sash. Tests made by the University of Minnesota Institute of Technology Testing Laboratory in cooperation with the Weatherstrip Research Institute, show that double-hung wood windows, when weatherstripped show an infiltration ratio 6 TIMES LESS than non-weatherstripped windows.

ALLMETAL

NAME "ALLMETAL" REGISTERED U. S. PATENT OFFICE

2243 North Knox Avenue
Chicago 39, Illinois

Please send information and prices

- Allweather Balance Strip
 Thresholds and Weatherstrip for Doors
 Metal Trim for Asbestos Siding

Name _____

Address _____

City _____ Zone _____ State _____



technical guide

for builders and craftsmen

(Continued from page 188)

concrete will be poured. Excavate the base to the required depth and level the surface with a rake. With well-drained subsoils, the concrete can be poured directly on the subgrade, which should first be well tamped. When there is some doubt about the drainage, the base should be excavated deep enough to permit a four-inch layer of well-compacted, clean, coarse gravel or cinders to be placed over the subgrade.

The pavement type of driveway usually is made 8 to 10 feet wide and six inches thick. A six-inch slab is recommended in order to sustain heavy loads and delivery trucks. If trucks are not permitted to enter the drive, a five-inch slab may be adequate. However, the six-inch slab insures maximum durability. The center of the driveway should be given either a crown or a valley to insure rapid drainage.

The base is prepared so that the finished pavement will have a uniform thickness. Wood side screeds, consisting of 2x6's, are placed on both sides for the entire length of the driveway. A cord stretched from one end to the other helps to set and align the screeds at the required level.

The top edges of the 2x6 screeds opposite each other should be placed at the same elevation. The side screeds should be carefully placed and firmly supported with stakes to prevent the concrete from forcing them out of position.

The width of concrete drives should be increased at least three feet at curves. When laying out a turn, the radius of the curve should be not less than 18 feet. Where the driveway has a curved section, a length of 3/4-inch form lumber can be curf-sawed on the back face and bent around stakes or heavy stones.

The proportion of materials to be used is the same as those specified for sidewalks. Use the same method for pouring, finishing and curing driveway concrete as recommended for sidewalks.

Concrete should be well mixed and then poured directly into the forms. After pouring, the concrete should be spaded along the side forms.

The concrete is struck off with a template (or strike board) shaped to give the pavement its desired crown or valley. The strike board, consisting of a length of 2x4 or 2x6, rests on the edges of both side forms and is worked in a saw-like motion to level the concrete.

The forms can be removed about three days after the concrete has been poured.

window placement in house planning

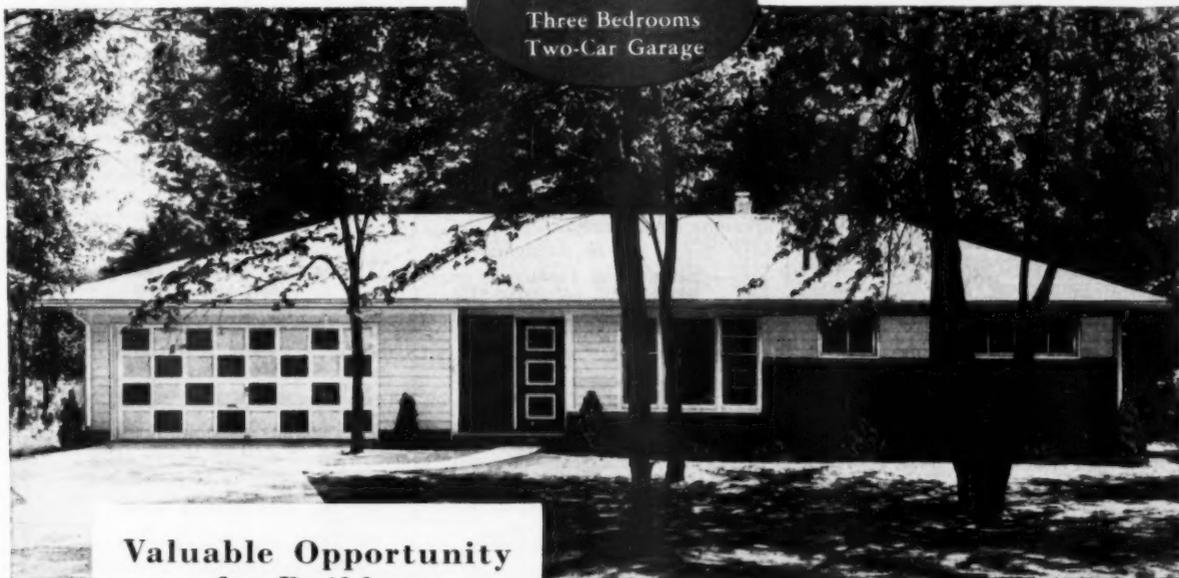
A window idea book which will stimulate the thinking of contractors, builders and those who contemplate building a permanent home is now available. It contains designs and photographs of 62 different types of picture windows in modern homes, showing their effective use in various rooms of the house, and how they can be utilized to the best advantage with outside surroundings, by skillful placement of window areas.

The booklet, "Beautiful Picture Windows," is available for 25 cents from Fleet of America, Inc., Dept. AB, 467 Dun Bldg., Buffalo 2, N.Y.

THE EASY WAY TO SELL MORE HOMES

It's EASY to sell fine MODERN HOMES because they are packed with "let's buy it" appeal from the first glance at their long, clean exterior lines to the final inspection of the extra large rooms. MODERN HOMES were designed to sell in today's market. They are well-planned, smart looking homes designed by experienced architects and they are conventional homes—factory assembled by conventional methods using the finest nationally advertised materials. And because MODERN HOMES are skillfully mass produced in an efficient manner, they are priced substantially lower, even as much as 20% lower, than comparable site-built homes.

The Windsor
62' x 26'
Three Bedrooms
Two-Car Garage



Valuable Opportunity for Builders

We have recently expanded our facilities and we have openings for qualified builder-dealers. If you have sound financial resources and an established reputation for building well-designed, high quality homes we offer you the opportunity of building fine MODERN HOMES in your community. Write today on your letterhead.

*Manufacturing Plants at
Dearborn, Mich. and Port Jervis, N.Y.*



7744 GREENFIELD ROAD • DEARBORN, MICHIGAN

The New
**CONCEALED-GUIDE
 SURFACE BOLT**
 NO. 354
 by
ADAMS-RITE



The mark of excellence

The ultimate in streamlined appearance... and made of solid brass, of course.

This is the new Adams-Rite No. 354 Surface Bolt. It is mounted completely on concealed guides—even the screws are not visible after installation.

Designed especially to blend with contemporary architecture. It is unusually strong, made of solid brass throughout and hand polished. Available in 1/2" widths and 4", 6" and 8" lengths.

WRITE FOR COMPLETE INFORMATION



SPECIALIZED LOCKS AND BUILDERS' HARDWARE
 268

ask the *experts*

leaky foundation walls

Last winter I poured a cellar wall and the first load of concrete froze. This spring the water poured through like a sponge. I thought you might be familiar with something suitable for inside application.

R. G. S., Niagara Falls, N. Y.

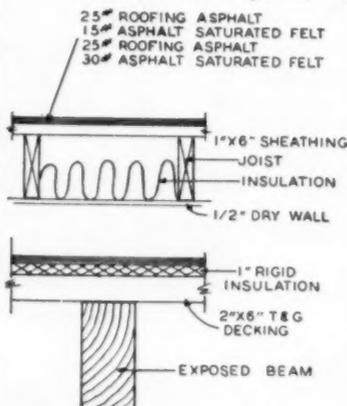
We would first suggest that the wall be coated thoroughly with portland cement paint. The first application should be a rather stiff grout coat. Both the first and second coats should be scrubbed thoroughly into the surface with a heavy brush.

If more drastic treatment is necessary, we suggest that you use one of the commercial waterproofing compounds as directed by the manufacturer. Your local building materials dealer can probably recommend several. If both of these methods fail, it probably will be necessary to excavate around the foundation and tar the outside wall.

formula for a built-up roof

I have been unable to find in your magazine, or in any of the building books I have, a detailed explanation for constructing a built-up flat or slightly pitched roof. The various local experts have divergent opinions on the subject.

D. D., Leighton, Pa.



Here is a recommended built-up roof (with a 10 year bond) for a flat or slightly inclined deck showing joist and exposed beam construction. Quantities here are for 100 square feet.

- 25# roofing asphalt
- 15# asphalt saturated felt
- 25# roofing asphalt
- 30# asphalt saturated felt

Ask the man behind the "gun"

**Coated optics
 give you
 this ↘ not this ↙**

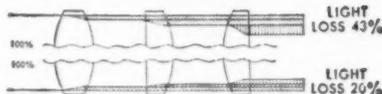


Model 3000, \$195.00*, complete with tripod.

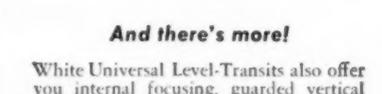
**with a White
 Universal Level-Transit**

HERE'S what coated optics do for you. You can put in a full day without eyestrain or headache. There's less chance for a mis-reading. You get a clear, sharp sight—not a fuzzy image. What's more, you get your reading in far less time. Check this diagram. See for yourself how coated optics pass through up to 40% more light, provide a clearer image contrast.

**PASSAGE OF LIGHT THROUGH
 UNCOATED LENSES**



**PASSAGE OF LIGHT THROUGH
 COATED LENSES**



And there's more!

White Universal Level-Transits also offer you internal focusing, guarded vertical arc and ball bearing race which insures smooth operation, even in sub-zero temperatures. Check one out on your next trip. You'll soon be convinced a White can make your work faster, easier, more accurate... Write for Bulletin 1053, DAVID WHITE CO., 311 W. Court Street, Milwaukee 12, Wisconsin.



Expert REPAIR SERVICE on all makes, all types of instruments

*Prices subject to change without notice.

AMERICAN BUILDER

weather-tight

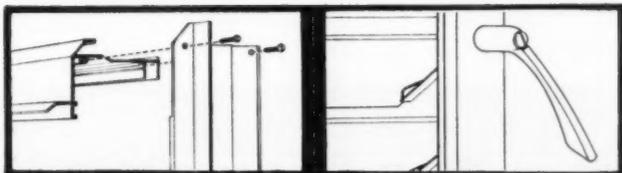
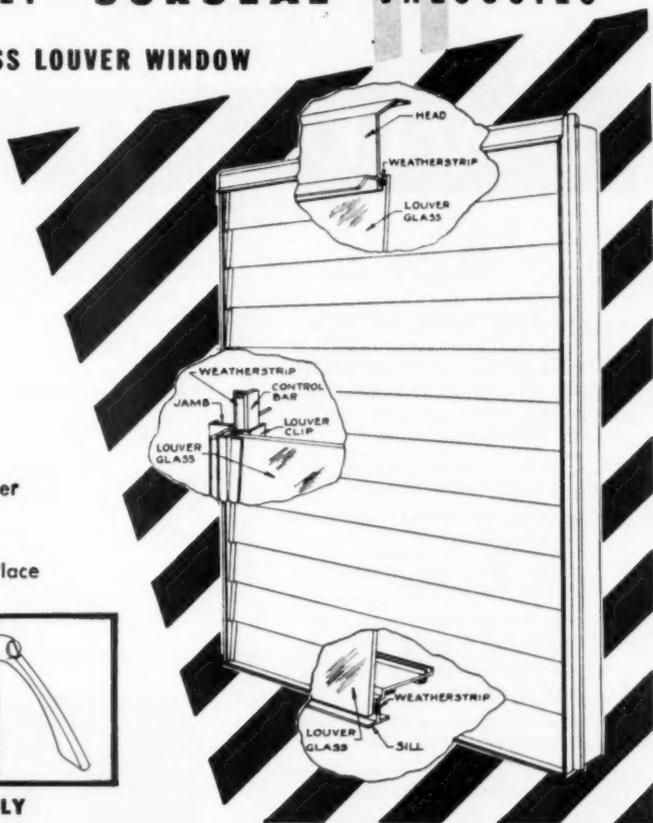
ALL-ALUMINUM CROSSLY "SURSEAL" JALOUSIES

GLASS LOUVER WINDOW

SPECIAL FEATURE: When jalousie closes, patented weatherstripped vertical operator bar locks into place and seals jalousie along both sides of jamb. Head and sill are also weatherstripped to insure complete all-weather seal.

STANDARD FEATURES:

- Heavy Extruded Aluminum Frame 63S-T5
- Frame Is Recessed And Grooved For Interchangeable Screen Or Storm Window
- Outside Frame Grooved To Hold Storm Shutter
- Full Vision (4½" wide) Glass Louvers
- Patented Louver Spring Clip Locks Glass In Place



KNOCK-DOWN UNITS...

Designed for quick assembly and installation...saves money. 8 screws mechanically lock frame sections into one unit.

SPECIAL CROSSLY OPERATOR

locks jalousie louvers in any position...opens 90° wide with a quarter turn.

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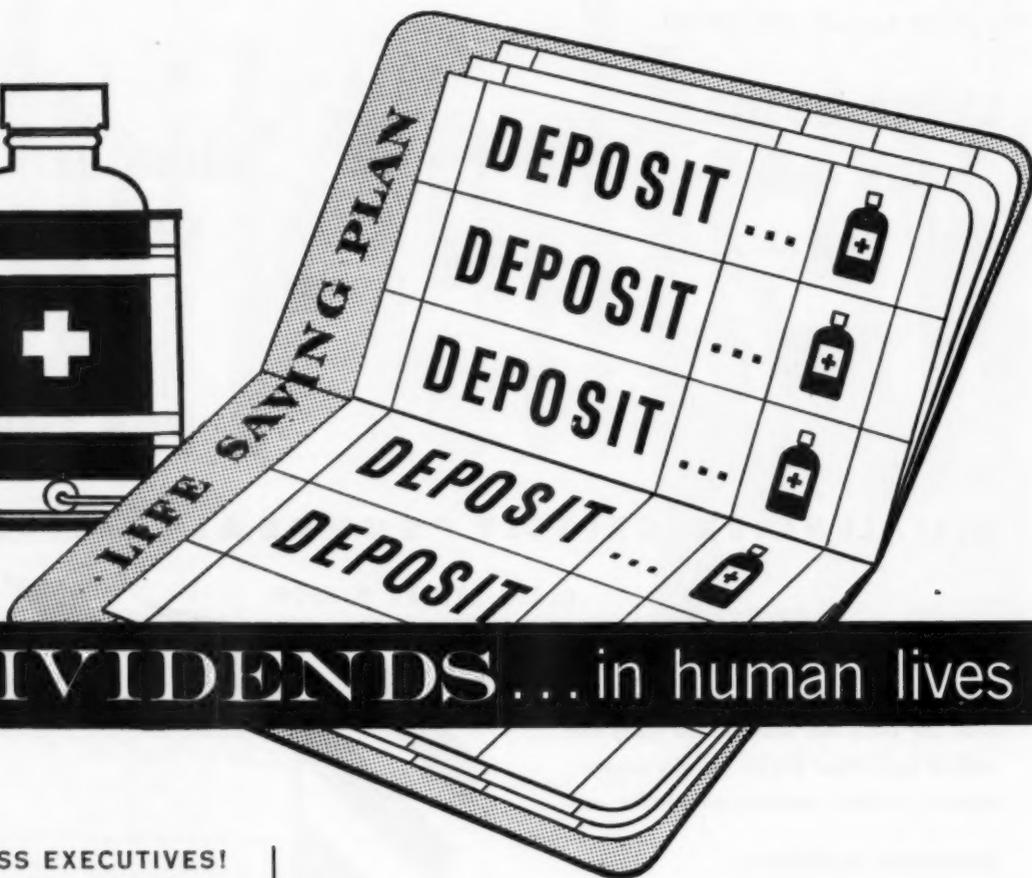
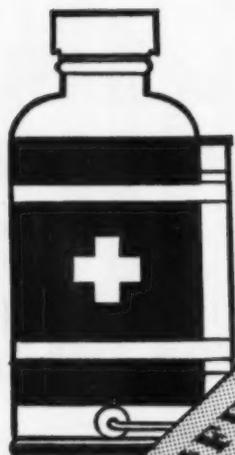
Dealer Distributor Builder

Gentlemen: Please send me information on your all-aluminum Crossly Window. Thank you.

NAME

ADDRESS

CITY.....ZONE.....STATE.....



DIVIDENDS... in human lives

BUSINESS EXECUTIVES!

CHECK THESE QUESTIONS

If you can answer "yes" to most of them, you—and your company—are doing a needed job for the National Blood Program.

- HAVE YOU GIVEN YOUR EMPLOYEES TIME OFF TO MAKE BLOOD DONATIONS?
- HAS YOUR COMPANY GIVEN ANY RECOGNITION TO DONORS?
- DO YOU HAVE A BLOOD DONOR HONOR ROLL IN YOUR COMPANY?
- HAVE YOU ARRANGED TO HAVE A BLOOD-MOBILE MAKE REGULAR VISITS?
- HAS YOUR MANAGEMENT ENDORSED THE LOCAL BLOOD DONOR PROGRAM?
- HAVE YOU INFORMED EMPLOYEES OF YOUR COMPANY'S PLAN OF CO-OPERATION?
- WAS THIS INFORMATION GIVEN THROUGH PLAN BULLETIN OR HOUSE MAGAZINE?
- HAVE YOU CONDUCTED A DONOR PLEDGE CAMPAIGN IN YOUR COMPANY?
- HAVE YOU SET UP A LIST OF VOLUNTEERS SO THAT EFFICIENT PLANS CAN BE MADE FOR SCHEDULING DONORS?

Remember, as long as a **single** pint of blood may mean the difference between life and death for **any** American . . . the need for blood is **urgent!**

NATIONAL BLOOD PROGRAM



America's blood bank needs **more** blood, **now**. Be a regular depositor and know that your dividend is saving a life of some American—somewhere.

It may be a soldier shot down in battle, suffering from **shock**. Or someone here at home, sick and in dire need of new blood to restore life. A mother in childbirth, or a child in an accident.

America must give. America is **you**. Won't you call your Red Cross, Armed Forces or Community Blood Donor Center right now, for an appointment?

GIVE BLOOD

...give it again and again

lumber industry plans big research program

The nation's lumber manufacturers have embarked on a million-dollar research program designed to cut home building costs and give consumers new and better lumber products.

One major objective of the program will be to find new uses in home building and other construction for small pieces of lumber and wood species which, up to now, have had little or no commercial value.

Leo V. Bodine, executive vice president of the National Lumber Manufacturers Association, said the program will guarantee the public "greater value for its lumber dollar through development of new and improved uses for wood."

Major emphasis will be put on lamination—the gluing of two or more pieces of lumber in layers to give them greater strength than a solid piece the same size.

End-products which the program is expected to develop include glued-up lumber panels faced with veneer, heavy-duty paper or thin fiberboard. Some panels might require no special facing.

"Indications are that builders could effect worthwhile economies by using these lumber panels for exterior wall and roof sheathing, subflooring and interior partitions," Bodine said.

Studding costs may also be reduced through lamination, Bodine continued. He explained, as an example, that there are plenty of one-by-four boards which lumbermen could laminate into two-by-four's.

The research project will be set up by NLMA's Products and Research Committee, headed by D. B. Frampton, Columbus, Ohio, lumber manufacturer. It will involve an outlay of \$1,100,000 over a ten-year period.

Construction Outlays Set Record in January-June 1953

Expenditures for new construction were at the highest level in history during the first half of 1953, according to estimates by the Departments of Commerce and Labor. Outlays for new residential construction were estimated at \$5.4 billion, up nine per cent from last year and slightly higher than the record year of 1951.

For the month of June alone, the estimates for private residential construction showed a ten per cent rise from May. The June, 1953, figure also was ten per cent higher than in June of last year.

OCTOBER 1953

... on

PREFABRICATION'S advantages to you!

Your copy of the directory issue of PF, the Magazine of Prefabrication, will be invaluable as an official guide to the opportunities the fast-growing field of prefabrication offers. A handy reference, containing complete and up-to-date information on the industry . . . available from no other source. In it you will find:

- Who are the leading manufacturers of prefabricated houses in the United States and Canada.
- What types of homes they design and manufacture, illustrations of them together with floor plans.
- Territories where they operate and through whom and to whom their houses are available.
- Why prefabrication's potential is steadily rising in all parts of the country, and already accounts for 20 per cent of new homes produced in some areas.
- How you can profit from the big swing to prefabrication's modern methods.

If you build, sell or finance homes—YOU NEED PF!

PF is the new, official journal of the industry, serving some 12,000 dealer-builders, manufacturers, realtors, mortgage lenders, suppliers, housing officials and others who need authentic information on the prefabrication industry. The annual directory issue is yours at the special price of 25¢. Why not start your subscription with it!



The Magazine of Prefabrication

Prefabricated Home Manufacturers' Institute
929 20th St. N. W., Washington, D. C.

- Enclosed is 25¢ for the Directory issue of PF. Check enclosed.
 Enter my subscription for PF (1 year, 12 issues, \$3.00). Bill me later.

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FIRM _____

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CITY _____ ZONE _____ STATE _____

KIND OF BUSINESS _____

builder's liaison man offers personal service to buyers

A liaison maintenance superintendent providing personal service to new home owners before, during and after they take occupancy is a new merchandising idea introduced by Lester Robbins in his Woodbridge Oaks communities at Woodbridge, New Jersey. The liaison man at this 800-family project supplies the following five-step service in his role as the builder's goodwill ambassador:

1. He inspects a home before the

family moves in and, in the event of any flaws in workmanship or material, arranges for prompt correction of the faults.

2. He meets the new owners prior to their taking title and "introduces" them to their home. He conducts them on a tour from basement to attic, explaining construction, heating, plumbing and electrical details on the way.

3. He offers advice on the care of the home to keep maintenance costs



New owner being "introduced" to his home by John Schappert, liaison maintenance superintendent for the Robbins Construction Co.

For Many Digging Jobs, Only the Sherman Power Digger is Practical

Get the most out of the excavating equipment you already own or rent by keeping it on your big volume jobs.

For miscellaneous excavating and trenching jobs the Sherman Power Digger is fully capable and far less expensive to operate.

You can buy Digger and Tractor complete for less than many automobiles cost.



Efficient performance of the Sherman Power Digger is assured by positive hydraulic action and patented actuated bucket.

The Sherman Power Digger is attached to a lightweight, rubber-tired tractor giving unmatched maneuverability and transportability.

The Sherman Power Digger is the answer where giant digging equipment and manual labor are both uneconomical. It reaches 8 feet below ground surface and swings in an arc of 140° with a radius of 10 feet behind the tractor.

For complete information on how the Sherman will cut your digging costs, write today for free literature T-36.



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Hubbardston, Mass.

Patent No. 2,303,825.
Other patents pending.

Sherman

PRODUCTS, INC.
ROYAL OAK, MICHIGAN



down; also points out the possibilities it offers for future expansion.

4. He obtains the family's probable move-in date, then arranges to have the home cleaned, heated and otherwise ready on moving day.

5. He invites the new arrivals to call on him for any assistance they may need. They are requested to note anything that may warrant attention during the first 30-days' occupancy and turn the list over to him. All notations are checked and, if deemed proper, work orders are issued. An effort is made to have all corrections made at one time, thus holding inconvenience to the home owner to a minimum.

John Schappert, the liaison man, has added a service. Enough families have now moved into the homes to form a civic association, so he makes it his business to attend all meetings as the builder's representative and work out any problems that may arise.



"THIS SETTLES IT! - THIS RANCH-TYPE HOME GOES UP FOR SALE!"

AMERICAN BUILDER

getting cost down for negro housing



Screened porch of 75 square feet opens from living room. The porch is included in package

New housing for Negroes is available in many parts of the country at low prices. Floyd Kimbrough of Jackson, Mississippi, delivers this 750-square-foot model for \$4,000 built on the owner's lot. Kimbrough has cut many of the luxury features yet maintains high-quality construction in a low-cost package.

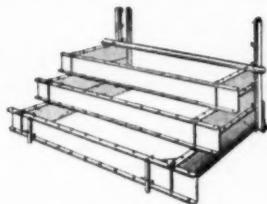
The house is built on concrete piers with a brick curtain wall on the front side. Double 2x10 sills span the piers. Joists are 2x8's spaced 16 inches on center. The exterior wall has diagonal wood sheathing and an exterior finish of asbestos siding. The roof is standard

(Continued on page 274)

CONTRACTORS! BUILDERS!

Save time, labor
and expensive lumber

"BNCO"-POLLMAN



ADJUSTABLE STEP FORMS

Easy to handle!
Speeds concrete work!
Easily removed!
Adjustable to any situation!
Scientifically engineered!
Low cost steel!
For complete information and
price lists, write today!
Dealers inquiries invited.

Biersach & Niedermeyer Co.

1939 N. Hubbard St., Milwaukee 12, Wis.

men over 45

More than six times as many men of your age will die of lung cancer this year as died in 1933. Our research scientists still don't know why.

They *do* know, however, that over half of those who will develop lung cancer *can* be saved . . . if they get proper treatment while the disease is still in the silent, symptomless stage. That's why we urge you to have a chest X-ray every six months no matter how well you may feel.

For more information call us or write to "Cancer", care of your local Post Office.

American Cancer Society



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APPROVAL

STRONG
EFFICIENT
SAFE

DISAPPEARING STAIRWAY

When drawing up plans for homes, utilize the wasted attic space which can be used as storage space, a playroom or an extra bedroom by specifying a Wel-Bilt FoldAway Disappearing Attic Stair. It can be folded up in the ceiling when not in use; thus utilizing valuable space in the house that a permanent stair would occupy. Wel-Bilt FoldAway Stairs can be installed in bedrooms, in kitchens and in small homes at a very nominal cost.

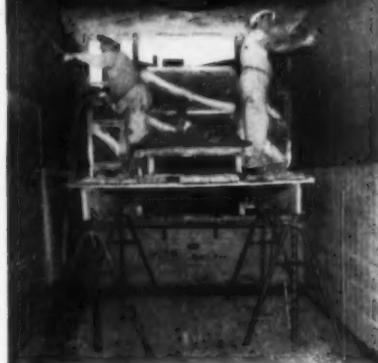
Ask your lumber
dealer or
write to:

**WEL-BILT
PRODUCTS COMPANY**

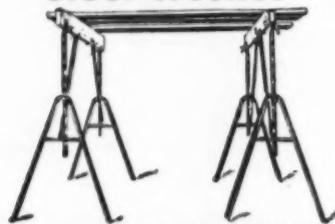
P. O. Box 95 Memphis, Tennessee

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Adjustable
Steel Trestles



SAFE! STRONG! ECONOMICAL!
Adjustable for Height and Width



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Builders, contractors, maintenance men and others save time, labor and material with "Trouble-Saver" Adjustable Steel Trestles. They're unequalled as a safe, sure, low-cost method of handling all overhead work under a wide variety of conditions.

Write for new catalog and complete information.

SIZES — SPECIFICATIONS, ETC.

Size No.	Low Point	High Point	Number of Adjustments	For Working Heights
2	16"	22"	4	7½ to 7¾'
3	2'	3'	5	8 to 9'
3½	2½'	3½'	5	8½ to 9½'
4	3'	4¼'	6	9 to 10¼'
6	4'	6'	9	10 to 12'
8	5½'	8'	11	11½ to 14'
10	6½'	10'	15	12½ to 16'
12	7'	12'	19	13 to 18'

THE STEEL SCAFFOLDING CO., INC. Dept. A

856 Humboldt St., Dept. AB Brooklyn 22, N. Y.
Telephone: Evergreen 9-2802

negro housing

(Continued from page 273)



The living room is 12x14 feet, has oak flooring and plasterboard walls

framing with 2x6 ceiling joists 16 inches on center and 2x6 rafters on 24-inch centers. The roofing material is 210-pound asphalt shingles.

The house includes two bedrooms, bath, living room, kitchen and screened porch. Rooms are of adequate size. Bedrooms are 10x14, living room is 12x14, kitchen is 10x12 and porch is 3x10.



Floor plan for the 750-square-foot house includes two bedrooms, bath, kitchen, living room, screened porch, storage area



Kitchen is 12x12 feet and has a dining area. Cabinets are job-built. Floor and counter top are linoleum

THE NEW

calder

OVERHEAD GARAGE DOOR LINE

has a style and size for every need



CALDER "STURDY" DOOR



CALDER "LEVELINE" DOOR



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CALDER COMMERCIAL DOOR

Here's a brand new line of doors that has *everything*. Made by a manufacturer with over half a century of designing and engineering experience, the new Calder doors are available in every conceivable size and style for every conceivable need. Special designs and sizes to order and for extra appeal to the customer and extra profit for you—all Calder doors can be equipped with radio controlled electric operators.

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MODERNIZE AT LESS COST IN LESS TIME WITH E-Z SHELVING

To install, simply bolt or screw Standards to wall or Standard to Standard for island displays. Place heel of bracket in groove of Standard. Insert single bolt; slide bracket to desired spot on Standard. Tighten bolt.

CLAMP BITES INTO STANDARD — LOCKS BRACKET & STANDARD LIKE A VISE



**HUNDREDS OF USES
IN STORES, FACTORIES,
GARAGES, HOMES, ETC.**

"E-Z" Brackets and Standards are strong enough to carry the heaviest merchandise for hardware, building supply stores and lumber yard display rooms; for wall shelving, counters, island, table, and other type displays.

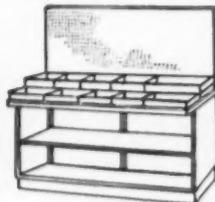
In addition to providing low cost, modern store fixtures for tools, paints and hardware, there is a quick sale and liberal profit on "E-Z" Brackets and Standards for Building Supply Stores and Hardware Stores selling to grocery, drug, and other type stores, factories, home builders, etc.

GOOD JOBBER TERRITORIES ARE STILL AVAILABLE.

**A BIG SALES PRODUCER FOR
BUILDING SUPPLY STORES**

Write for "E-Z" Catalog pages showing many additional uses, installation plan book, and dealers price list.

Standard Steel Works
Dept. AB-2 NORTH KANSAS CITY, MO.

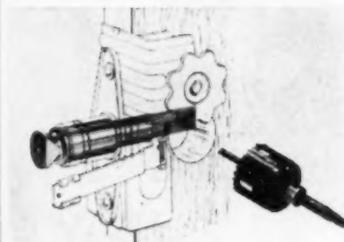


3 standards and 6 brackets make this hardware display counter.



6 standards and 12 brackets make this work bench.

boring jig speeds lock installation



Boring jig clamped in its working position, showing hole saw guide in old lock hole

This new boring jig is supplied with the necessary reborring attachments with which to replace existing locks with those of the manufacturer, or to install locks for the first time.

In putting in new locks, the installer marks the height line (center line of the latchbolt) on the door's edge at a suggested height of 38 inches. The jig is positioned on the door and the hand wheel tightened until the jig is clamped on the door, automatically centering the latch hole guide.

The backset marker is slid to its desired position, pressing the

(Continued on page 277)

NEW VULCAN TRIMLINE RADI-VECTOR*

Modern Baseboard Heating at its BEST!

NEW LOW PRICE! Cost radically reduced by ease of installation and less accessories. Fewer joints necessary. Dampers may be installed anywhere, or any time on the job.

NEW EASY INSTALLATION! Vulcan's famous rod hangers provide for planned expansion. Covers available in continuous lengths up to 15 feet.

NEW BEAUTY! Now... Vulcan's NEW streamlined cover of enduring beauty. Designed to harmonize with any decor. Shape of top reduces apparent depth. Front easily removed for cleaning.

Complete I-B-R Ratings

SNAP-ON COVER

TRIMLINE cover snaps on brackets, easy installation.

Representatives in Principal Cities



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In the "long run"
Vulcan COSTS LESS!



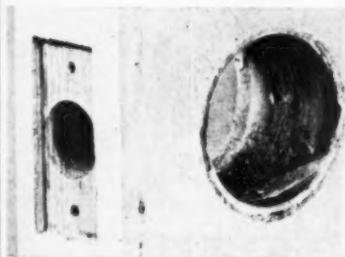
Typical TRIMLINE Radi-Vector baseboard installation.

The VULCAN RADIATOR COMPANY

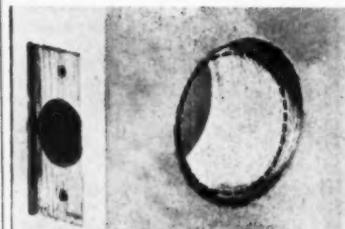
Over Twenty-Eight Years
A Leader in
Fin-Tube Radiation



21 FRANCIS AVENUE
HARTFORD 6, CONNECTICUT



Door shows latch hole and lock hole with old lock removed, ready for replacement



Dotted line indicates position of old lock hole; new hole gives accurate centering

TIMBERLOCK

Split Ring **TIMBER CONNECTORS**

Fill the Bill!



- Economical (Save One Fourth)
- Precision Manufactured—True Circle—Accurate
- High Efficiency
- Rapid Installation
- Prompt Service

Widely used in private and government construction.

Write for complete information, prices and delivery.

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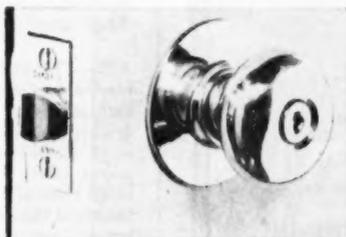
**boring jig speeds
lock installation**

(Continued from page 276)

marker point against the door to indicate the center of the lock hole; arm is then swung out of position. With the bit point on the center mark, the 2 1/8-inch diameter lock hole is then bored.

The latch hole is bored last, by inserting the proper size bit through the latch hole guide. Latch hole is drilled to intersect the lock hole.

Material courtesy of Schlage Lock Company



New lock installation complete, showing projecting cylinder, knob in final position

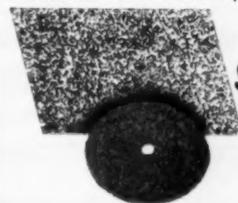


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ABRASIVE PRODUCT**

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DISCS &
SHEETS**



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papers for all standard machines.

**SHARPENING
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Your only source for famous WASHITA* and INDIA®



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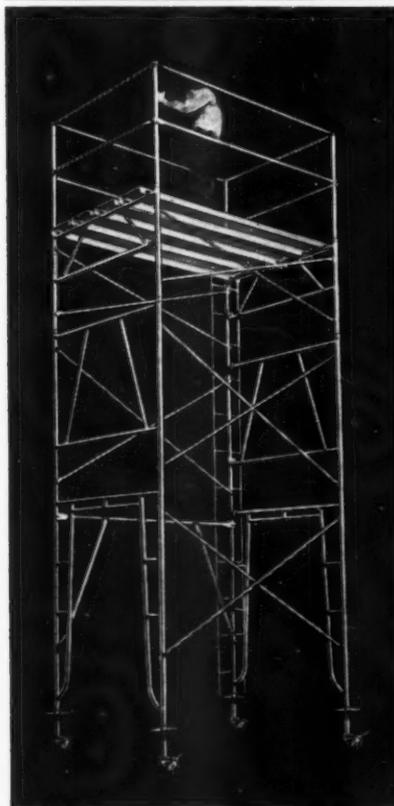


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At hardware and building supply dealers everywhere

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**ROLLING TOWERS
PUT SKILLED HANDS
TO WORK EFFECTIVELY**

CONSIDER THE TIME AND PROFIT you gain by SAFELY putting your skilled workers close to the job they're doing. The Safway rolling tower does just that. On maintenance and repair jobs, for example, it follows the work ... along building walls, down corridors. It will help you put your skilled hands to work more profitably for you.

Your Safway rolling tower fits your job requirements to a "T." Not only are platforms adjustable to convenient working heights, but parts are standard and interchangeable. And your tower locks in position firmly with brakes on both wheels and swivel. The platform provides a generous working area and is protected by a sturdy guard rail.

For more facts contact one of the 137 Safway distributors near you. Or write direct for free bulletin.



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STOP Rehanging Doors

Hang your doors ONCE. Keep building owners happy — and save all the time and money it takes to repair out-of-shape doors that eat up your profits.

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America's oldest branded wood preservative
Prevents Warping, Swelling, Shrinking, AND Rot.

ONE coat does it. Easily applied by brush, spray or dip. In pints, quarts, gallons, drums and concentrate.

BE SAFE

Choose Cuprinol. It saves trouble and money because it's non-toxic. No rubber gloves or protective clothing to buy. No worries about injuring the skin of your men.

***IDEAL Try Cuprinol on your plywood forms.**

CUPRINOL DIVISION of DARWORTH, INC.
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Catalogs — and Manufacturers Literature

430—PACKAGED CHIMNEY—Step-by-step installation instructions, dimensions and features of the "Air Jet" ready-to-install chimney are presented in a catalog sheet. The chimney, made of aluminum with a high temperature porcelain steel smoke pipe, is approved by Underwriters' Laboratories. Special anti-down draft top protects against rain, snow and down drafts. General Products Co., Dept. AB, Fredericksburg, Va.

431—ORNAMENTAL CASTING—Used on porches, railings, brackets, valances, gates and with deck and wall railings, the "Scarlet Oak" casting is a reproduction in malleable aluminum of the leaf, acorn and branches of this tree. It is designed to be appropriate both for modern or traditional architecture. Being a double-faced casting, the pattern is seen on both sides. Catalog sheet illustrates the design in three different scales as an aid to architects and draftsmen. The R. G. Coffman Co., Inc., Dept. AB, Orlando, Fla.

432—FLEXIBLE TUBING—for ventilation, fume and dust removal and materials handling is described in a new eight-page bulletin giving detailed information on two types of highly flexible lightweight tubing made from continuous helical coils of spring wire wound with overlapping plies of treated multi-coated fabric. One type is designed for ventilation, dust and fume removal and similar applications, either blowing or exhausting; the other type, with built-up extra thicknesses of rubber or Neoprene, is designed for materials handling and similar type uses. Flexible Tubing Corp., Dept. AB, Guilford, Conn.

♦ FOR MORE INFORMATION USE COUPON, PAGE 228



**BEAUTY AND STRENGTH
AT LOW COST**
RILCO LAMINATED WOOD BEAMS

CONTRACTORS: HAGSTROM CONSTRUCTION COMPANY, ST. PAUL, MINN.

The Ivy Flower Shop design called for exposed beams, 29' 4" long, that would create a comfortable, pleasing atmosphere without added expense—Hagstrom Construction Company, chose Rilco Beams.

Beams arrived at the job completely finished—not a saw cut was made nor a hole bored. A protective heavy paper wrapping prevented marring or scratching during shipping and erection. The Rilco Beams were simply set into position and secured with the furnished engineered connections. Erection was simple, fast and economical.

QUALITY ENGINEERED TO FIT YOUR SPECIFICATIONS

Rilco Products are glued laminated of selected grades of West Coast Douglas Fir. They offer strength plus adaptable, efficient, structural shapes. Rilco's engineers will be pleased to consult with you about your requirements and give "on the job" cooperation.

Send for free catalog for information.

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WITH WOOD

RILCO LAMINATED PRODUCTS, INC.

Dept. 10-P P.O. Box 826, Manhattan, Kan.

THE COACH ROOM— how to make a 2-bedroom house grow

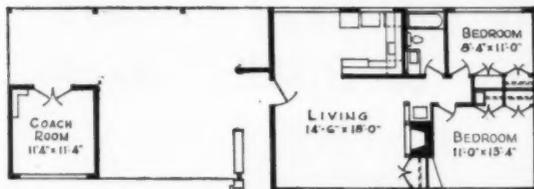


Coach room (at left end of breezeway) has double doors opening onto concrete terrace at rear

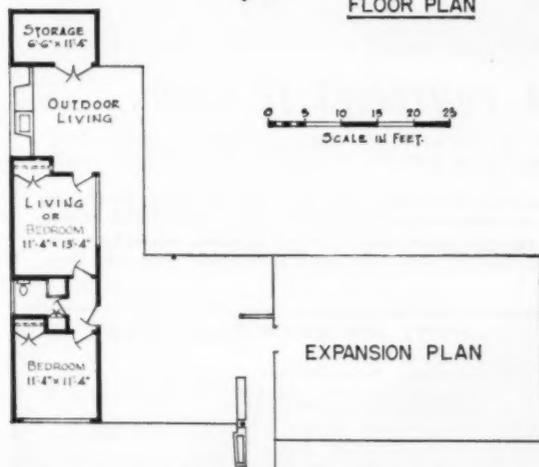
In Mountlake Terrace, 12 miles from Seattle, builders Al La Pierre and Jack Peterson are offering a \$10,500 2-bedroom house designed not only to look bigger but actually to be bigger.

The design, by George W. Heideman, revolves around an extra room which the builders call a coach room. This is a separate room located adjoining the double carport-breezeway. About 12x12 in size, its walls and ceiling are finished with insulation board, and it is heated by a Thermador wall heater. Double doors open out onto the concrete terrace at the rear of the house,

(Continued on page 280)



FLOOR PLAN



EXPANSION PLAN

The house can grow by the addition of a wing at right angles. Coach room then formally becomes a bedroom



Add

Beauty to the home!

Profit-Minded Builders Insist on

ONE-DER Metal Window Frames

THE added eye and sales appeal of homes built using One-Der Metal Window Frames means faster turnover in sales—more profit to builders.

Quick, easy installation makes One-Der Metal Frames a boon to big or small builders alike—less carpenter labor! And pre-priming means less painting! Fits any type of construction—brick, block or frame—complete assembly makes installation simple and easy.



P.S.
Don't forget One-Der Metal Door Frames — The perfect companion to One-Der Window Frames with the same outstanding features.

For further details see Sweet's File 15 h/On and 16h/On. Order TODAY from your dealer, listed in Yellow Pages of Telephone Directory, or write —

ONE-DER FRAME Corporation

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THE NEW IMPROVED WATER LEVEL FOR SIMPLEST ONE MAN OPERATION ANYTHING YOU NEED LEVEL LEVELALL DOES IT.

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THE COACH ROOM—

(Continued from page 279)



Fireplace, guest closet and bookcases are combined here

really an extension of the breezeway floor.

This extra room can be used as a den, shop, playroom or even as a third bedroom. Thus it takes the pressure off activity within the house proper, which has 346 square feet.

To get a bigger house, the coach room becomes the anchor unit in an extension at right angles to the house, as shown in the plan reproduced here.

When using this design in project building, the coach room-breezeway section can be angled to help get variation between houses. La Pierre and Peterson also sometimes add brick to the facade, use breakfront fences, shutters and other decorative items.

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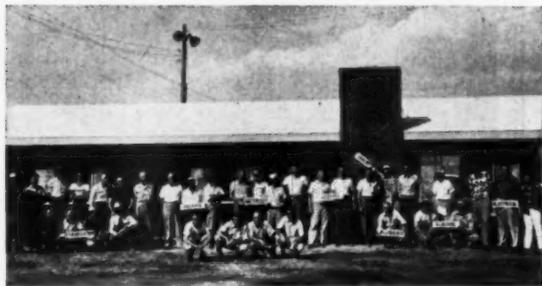
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teamwork sets 45-hour record for building a house



Builders Jack Bennington and Hal Smith have established what is probably a world's record for house building. During the days and nights of Aug. 5-6-7 they and their subcontractors built an 1,360 square-foot house in Apple Valley, California, in just 45 hours.

The house was a community-sponsored project in honor of Capt. Joseph McConnell, American flying ace, who had announced his intention of making his home in Apple Valley. The community decided to give him a house in appreciation of his war services. It was widely announced that the house would be built in five days.

The project started out calmly enough at 7 a.m. on August 5. The slab foundation was in place and the



FIRST DAY—the job begins at 7 a.m. with 18 carpenters setting up wall sections on slab foundation

fireplace was built up about five feet. Wall sections with top and bottom plates and studs 16-inch o.c., with red-wood plywood siding applied, were piled up around the slab. Eighteen carpenters and 12 laborers swiftly began setting these sections in place. Roof trusses, also prepared beforehand, quickly followed.

(Continued on page 282)

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Mouflex
IMPROVED VINYL-PLASTIC TILE FLOORING

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Name _____

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Teamwork sets 45 hour

(Continued from page 281)



FIRST DAY at noon

Things went so well that after the first few hours everybody on the job began to get the fever for record-breaking. Somebody remembered that a small house had been built in Fullerton, California, a couple of years ago in 57 hours. The Fullerton builder sent Bennington and Smith a wire egging them on. Upshot was that the Apple Valley house was completed at 4 o'clock on the morning



FIRST DAY by 2 p.m. setting of roof trusses is begun

of August 7, just 45 hours after it was started. In general, the time table of work divided up in this way:

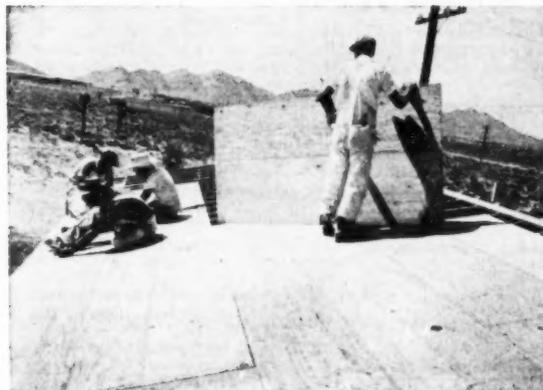
All exterior and interior framing was in place before noon the first day. Roof trusses were in place by 4 p.m. the first day. Roof sheathing (Douglas Fir plywood) was half-completed by 6 p.m. the first day. The crushed rock built-up roof was applied the first night under floodlights. Electricians and plumbers were at work all that first day, which saw some 50 workmen in or on the house. Heating ducts were installed the first day. During the first night all insulation was applied, the Celotex-finish walls and ceilings were installed (Sheet-rock was used for walls and ceilings in kitchen and bathrooms) and application of trim was begun. Cabinets were installed the second day and the painters moved in. Glaziers came in early the second night and during that night the finish plumbing and electrical work was done. Asphalt tile floors were laid after midnight and the last stretch of work was the painting of the base molding.

The local building inspectors stayed on the job throughout and no time was lost over inspections.

record for building a house



FIRST DAY two hours later, at 4 p.m., trusses are in place



FIRST DAY two hours later, at 6 p.m., roof sheathing is almost completed



25 HOURS AFTER THE START, at 8 a.m. of the second day, the house looked like this

BOOKS

PLASTERING SKILL AND PRACTICE by F. Van Den Branden and Mark Knowles; American Technical Society, Chicago, Ill., 1952; \$4.90.

The eleven chapters of the book are arranged to facilitate the reader's locating the particular subject he wants. The first three chapters approach the subject of plastering on the apprentice level, and continue through the fundamentals into actual practice. Such advanced techniques as acoustic plastering and plastering of steel structurals are covered in the final sections. Journeymen plasterers should find the book particularly useful as a guide to modern plastering techniques.

OCTOBER 1953

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bringing construction savings to the small towns



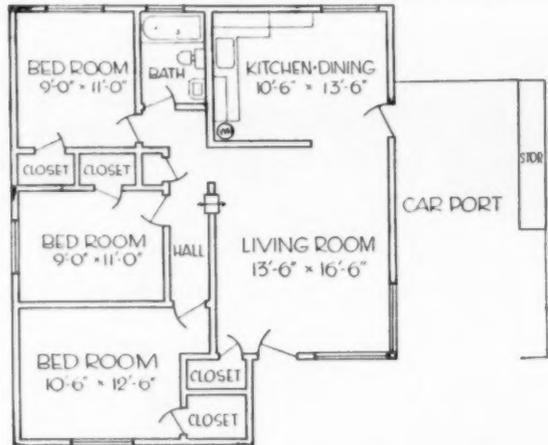
Smith's standard 3-bedroom model sells for \$8,000 under a 95 per cent FHA loan

In hundreds of small communities over the United States there is a real need for low-cost homes, because incomes are often at a lower scale there than in the larger centers, and the supply of this type of housing has been generally neglected for several years.

Purely as an experiment, the Earl W. Smith Organization, project builders of El Cerrito, California, recently built twelve 3-bedroom houses in the small town of Lincoln in the Sacramento Valley. Smith's objective was to determine whether it was possible to give modest incomes in the typical small town the benefit of cost savings made possible by mass production methods.

The experiment was successful. Smith was able to sell the twelve houses at \$8,000, the same price which he charges for the house in tracts involving hundreds of houses.

The local builder or subcontractor need not be left out of the picture, Smith says. In small towns there are



often one or more small-volume builders engaged in building fine custom houses. But without an established precutting and assembly operation, and without the buying power that comes with production building, the local builder cannot accomplish really low-cost construction by himself.

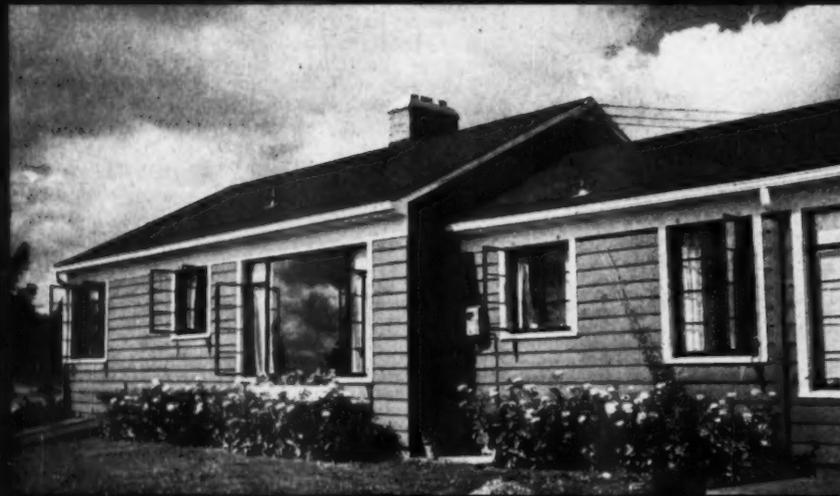
In collaboration with the volume builder, however, the local man can participate in the construction to the

(Continued on page 286)

The Name

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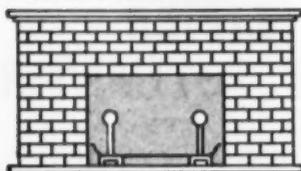


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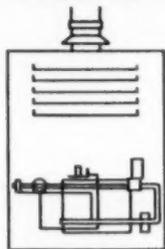
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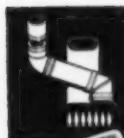
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bringing construction savings to the small towns

(Continued from page 284)

.....
extent of supervising construction or acting as a working foreman on a financial basis that may be agreed upon.

Also, Smith believes that the local materials men and subcontractors should be given the opportunity to participate as fully as may be possible.

Pick In-Between Locations

In selecting towns in which to build, the volume builder will do well to find locations which are en route to larger projects upon which he is working. This will make it possible to drop off supervising personnel and from the larger jobs. Also, this will expedite shipment of materials, which can be unloaded at the smaller jobs while on the way to the larger ones.

The small town construction will involve greater expense because of travel time and shipment costs. However, some of this cost can be absorbed where improved lots are available at a modest price, as is often the case in small towns.

Smith also advises that any volume builder undertaking a program in a cluster of small towns be sure that all the locations are within the same union jurisdiction. Otherwise there may be squabbles about shifting men from one job to the other.

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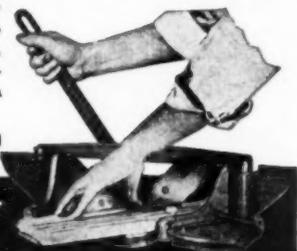
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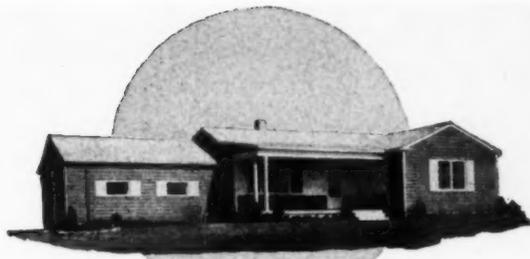
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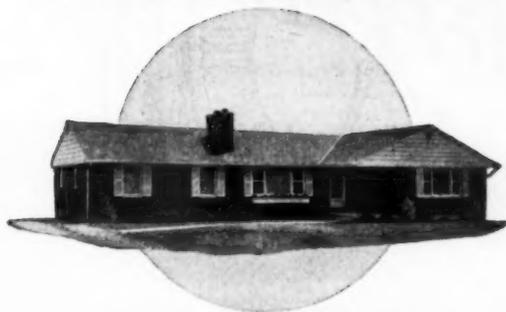




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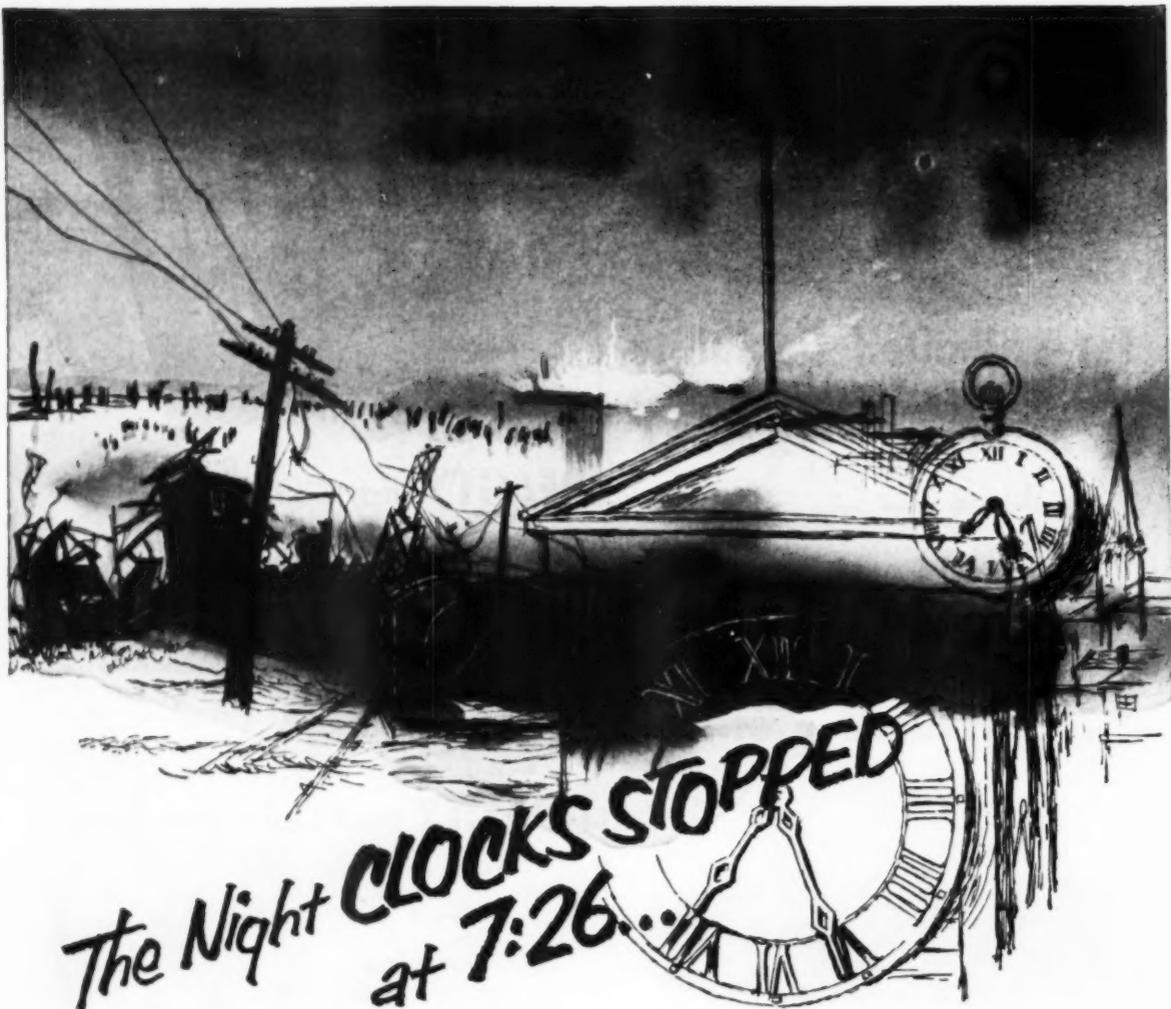
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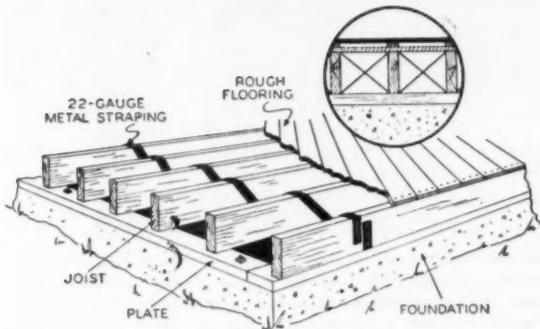
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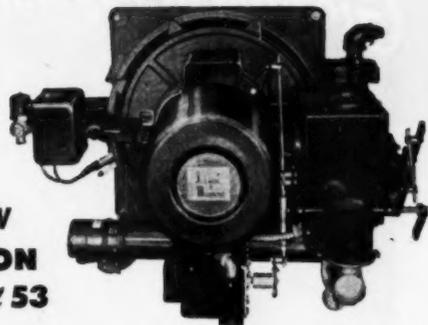
ideas for the man on the job

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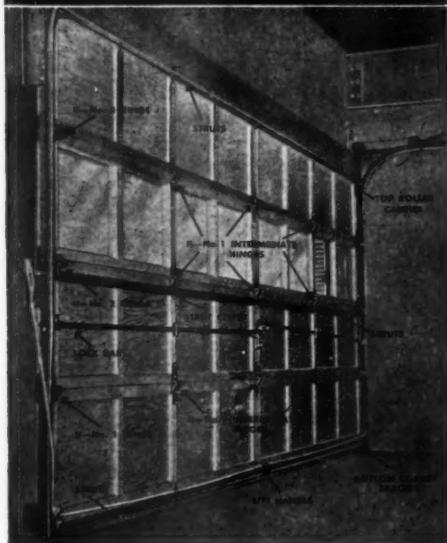
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... they're *How-ell-dors!*

Now, all How-ell-dors* are equipped with the NEW HOW-ELL-TITE TRACK, featuring hardware that is precision-engineered for weather-tite fit and extra durability. Truly, "How-ell-dor Hardware is Designed for Hard Wear." Inside or out . . . the How-ell-dor is the modern garage door . . . at its best!

Over 40 stock sizes for immediate delivery. Custom-built sizes and designs are a specialty.

*excepting the low-cost El Dorado residential model.

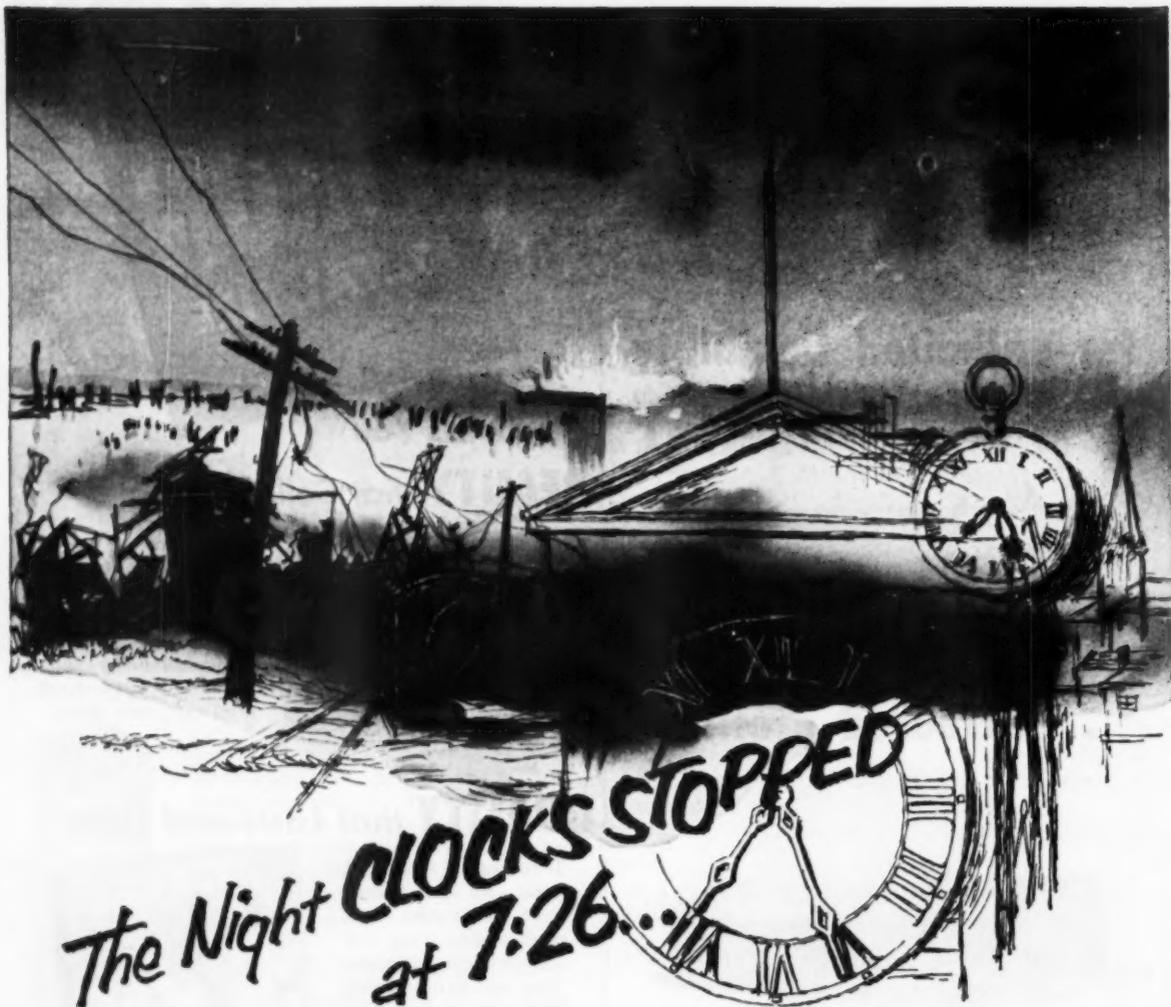
There's a How-ell-dor Electric Operator for every type of sectional garage door.



Write for FREE '53 Catalogs

THE HOWELL MANUFACTURING CO.

7201 Hasbrook Avenue
Philadelphia 11, Pa.



Some 9,500 people were in South Amboy, N. J., that drizzly evening in 1950. At the waterfront, longshoremen were transferring the last of 12 freight cars of ammunition to lighters that would carry it to a waiting vessel in Raritan Bay.

But the City Hall clock never got to 7:27—and the freighter's deadly cargo never got loaded. Explosions shattered windows over a

radius of 12 miles; and hundreds of people looked at their arms and legs and saw that flying daggers of glass had stabbed them.

At dawn, 312 of the injured had been counted.

★ ★ ★

Such disasters have happened many times before in America. They could happen again. And if they do—and when they do—there must be blood plasma on hand to take care

of the injured. For blood saves lives!

But blood cannot be mined or manufactured. It must come from the veins of healthy men and women. Men and women who feel concern for a suffering neighbor. So give blood—now!

Whether your blood goes for Civil Defense needs, to a combat area, or to a local hospital—this priceless, painless gift will some day save an American life!



**Give
Blood
Now**

**CALL YOUR
RED CROSS TODAY!**

National Blood Program

Business Executives!
✓ Check These Questions!

If you can answer "yes" to most of them, you—and your company—are doing a needed job for the National Blood Program.

Have you given your employees time off to make blood donations?

Do you have a Blood Donor Honor Roll in your company?

Have you set up a list of volunteers so that efficient plans can be made for scheduling donors?

Have you arranged to have a Bloodmobile make regular visits?

Has your management endorsed the local Blood Donor Program?

Have you informed employees of your company's plan of co-operation?

Was this information given through Plant Bulletin or House Magazine?

Has your company given any recognition to donors?

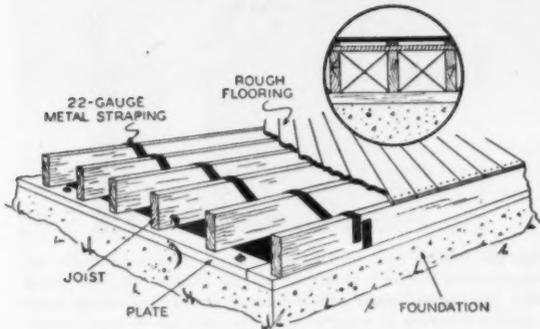
Have you conducted a Donor Pledge Campaign in your company?

Remember, as long as a single pint of blood may mean the difference between life and death for any American . . . the need for blood is *urgent!*

how would you do it ?

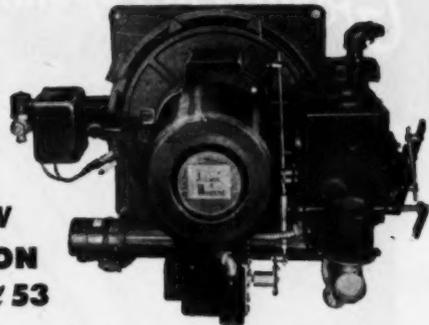
ideas for the man on the job

floor bridging with metal strapping



A simple and effective method of installing floor bridging is done with 22-gauge metal strapping about 1½ inches wide. Strapping is laced in both directions and nailed to the top and bottom of each joist. This method of bridging of floor joists is much stronger than the average kind of wood bridging. Metal strap bridging does not tend to pull apart and it eliminates excessive cutting of lumber.—Bob Capps, Lombard, Ill.

*The finest achievement of 50 years of
Oil Heating Engineering!*



The NEW JOHNSON Model 53

fully automatic Metering Pump Burner

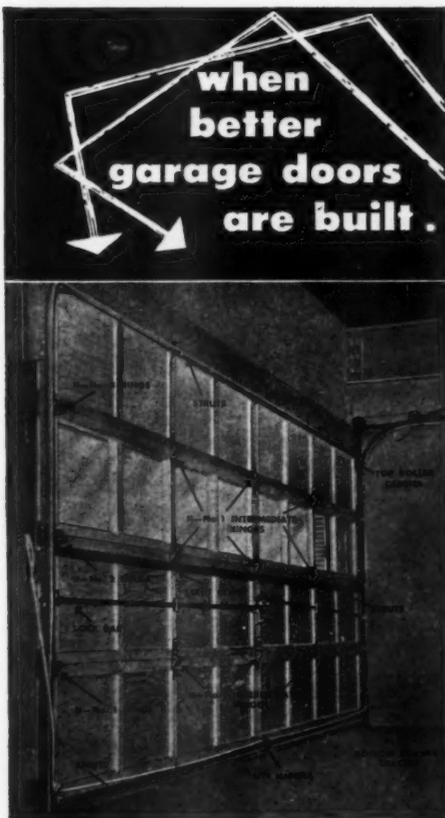
This revolutionary new Johnson Burner will automatically maintain a fixed Air-Fuel Ratio regardless of variations in oil temperature and viscosity. That's News . . . big News, to Oil Heating Engineers for it means the virtual elimination of the "Cold Starts" problem. The key to this phenomenal performance lies in a new positive-displacement metering pump developed on time-tested principles by Johnson engineers. The Model 53 is available in seven sizes, from 25HP to 400HP. It is basically simple in design, easy to service, and exceptionally efficient in heating performance.

Make it a point to investigate this newest addition to the Johnson Burner line-up that provides—"a Burner for Every Heating Need".



S. T. JOHNSON CO.

940 ARLINGTON AVE. CHURCH ROAD
OAKLAND 8, CALIF. BRIDGEPORT, PA.



Every How-ell-dor—residential, commercial and industrial—is a study in classic styling and beauty of design.

Equally important are its ease of installation and operation, its quality workmanship and materials.

. . . they're *How-ell-dors!*

Now, all How-ell-dors* are equipped with the **NEW HOW-ELL-TITE TRACK**, featuring hardware that is precision-engineered for weather-tite fit and extra durability. Truly, "How-ell-dor Hardware is Designed for Hard Wear." Inside or out . . . the How-ell-dor is the modern garage door . . . at its best!

Over 40 stock sizes for immediate delivery. Custom-built sizes and designs are a specialty.

*excepting the low-cost El Dorado residential model.

There's a How-ell-dor Electric Operator for every type of sectional garage door.



Write for FREE '53 Catalogs

THE HOWELL MANUFACTURING CO.

7201 Hasbrook Avenue
Philadelphia 11, Pa.

Growing in Popularity



a money-saving
MFMA
"gymnasium"
grade of

NORTHERN HARD MAPLE



● Approved by architects and school authorities in leading cities for gymnasium floors, this fine (and relatively new) "combination grade," officially known as Second and Better, is fast becoming a favorite school specification. It matches MFMA First Grade in every performance attribute, yet sells for less—actually consists of 50% or better of First Grade, blended in the strip with the Second Grade areas. Stock and sell Second and Better, the ideal "gymnasium" grade, with fullest confidence. It makes a splendid floor of enduring beauty—competitive on EVERY basis!



WRITE for copy of MFMA grading rules and new 1953 MFMA-approved list of floor finishes.

MAPLE FLOORING MANUFACTURERS ASSOCIATION
Suite 596, Pure Oil Building, 35 E. Wacker Drive
CHICAGO 1, ILLINOIS

FLOOR WITH **NORTHERN** HARD MAPLE
BEECH AND BIRCH

NEW METHOD—



From the inside, two inches or more of perlite concrete are sprayed onto the lath in layers by the E-Z-On plastering machine. The paper-backed lath is torn off and an additional layer of perlite concrete is sprayed onto the exterior to form a reinforced concrete slab.

The American Bildrok Company and the E-Z-On Corporation, both of Chicago, have joined forces to introduce a sprayed-in-place, load-bearing wall suitable for houses and using lightweight steel framing, aluminum siding (or other exterior finish), plaster finish inside.

American Bildrok manufactures the lightweight perlite aggregate (volcanic glass) which is mixed with Portland cement and sprayed on metal lath to form the

SIMPLEX (6 ft. 6 in.)

NEW SUPER JUMBO 78" ONLY

3 lb. MAGNESIUM LEVEL \$17⁴⁵

For setting door jambs and window frames! No other like it. 4 Plumbs, 2 LEVELS. Use either end or edge up. Weighs only 3 lbs. I-Beam type—non-warp, stronger than aluminum. Direct from factory. Patented.

NO FACTORY REPAIRS NEEDED

Spirit tube holder (50¢) replaced in a minute with ordinary screwdriver. 72" \$16.95. Express paid cash with order, or C.O.D.

SIMPLEX LEVEL CO., INC.
P.O. Box 23, Harper Ave. Sta. Detroit 13, Mich.

Gracious Living
with
BENDIX
mouldings

At small cost, builders can add great sales appeal through the use of BENDIX embossed and deeply carved moulding. Learn how BENDIX mouldings actually help clinch sales. Write for details.

BENDIX Mfg. Co.

192 LEXINGTON AVENUE, NEW YORK 16, N. Y.

AMERICAN BUILDER

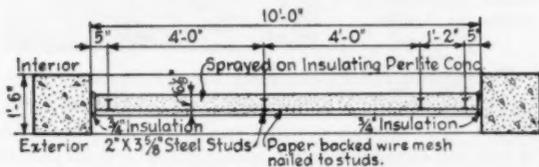
sprays walls in place



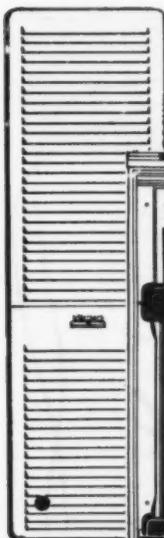
First a light steel frame of vertical wire trusses is erected. Paper-backed lath is wired on the outside of this frame. The procedure can be varied if conventional wood framing is used

2-inch core of the wall. E-Z-On makes the machine which does the spraying. This is the same machine developed by E-Z-On to speed plastering and reduce its cost. It is distributed on a rental basis by American Bildrok, 2001 W. Pershing Road, Chicago 9, Illinois.

(Continued on page 292)



Plan section through completed Bildrok wall



ENGINEERED
FOR
ALL GASES

It Telescopes
to Exact
Wall Thickness



Brilliant-Edge
Vented Recessed

**WALL
HEATER**

Uses waste wall space. Has low-level, downward heat delivery. Individual room control. Easy to install, operate, regulate. Quiet, odorless, no sweating, no overheated walls. Safe, dependable. Safety Pilot and Draft Diverter built in.

Both Single-Room and
Dual-Room models.

WRITE FOR CATALOG · PRICES · NEAREST DISTRIBUTOR

THE OHIO FOUNDRY & MANUFACTURING CO.
"Quality Heating Equipment Since 1846"
STUBENVILLE, OHIO

OCTOBER 1953

SWING-DOWN WITH

**ADJUSTO
COMBINATION
TUB AND SHOWER
FIXTURE**

for
modern
bathrooms
at
minimum
cost



MODEL
K-1442

Smart builders put plenty of selling features in their houses. One of the best is ADJUSTO—the swing-down fixture that permits standing showers without bathing cap, sitting showers and luxurious shampoos.

No special equipment necessary—only one set of valves. There is no danger of back siphonage. ADJUSTO gives a modern look to bathrooms—definitely helps sell houses.

Easily Installed
outside of Wall



TURN HEAD
FOR TUB FILLER
OR SHOWER



It's easy to modernize *EXISTING* fixtures into tub and shower with *NORMANDY ADJUSTO*. Designed to fit most standard over-rim tub fillers. Illustrated to left is Model K-1460.

See your Plumber or Jobber, or write direct

MILWAUKEE FLUSH VALVE CO.
303 E. RESERVOIR AVENUE • MILWAUKEE 12, WIS.

Please send full details on the ADJUSTO line of fixtures.

MAIL
THIS
COUPON
TODAY

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____

291

Mr. Builder

HERE'S THE
KOTA
HORIZONTAL
GLIDE



ALL
EXTRUDED
ALUMINUM



Kota "Top Hung"

Kota "Deluxe Horizontal Slide"

Kota "Double Hung"

The perfect High Quality Window for low-cost housing

KOTA
STORM-SCREEN DOORS
Manufactured by **KOTA PRODUCTS, INC.**
Route 25A - Rocky Point, N. Y.

26 different style windows for every room . . . for every home



new method

(Continued from page 291)



Truck-mounted or set up inside the building, the EZ-On machine pumps the wall material through a rubber hose from a hopper to a nozzle where compressed air creates a low-pressure spray

Testing this new construction for fire-retardant properties, Underwriters Laboratories, Inc., has found that such a wall carrying as much as six tons per lineal foot of wall will afford protection against flame and dangerous transmission of heat for at least four hours. The in-

OUTSTANDING!



Trinity White Portland Cement



As white as snow



... plain or waterproofed

Owners of buildings used for commercial purposes have much to gain by the use of Trinity white, the *whitest* white cement. The whiteness arrests the customer's eye—the trim attractiveness of the place says "here's a good place to trade!"

A Product of GENERAL PORTLAND CEMENT CO. • Chicago • Dallas • Chattanooga • Tampa • Los Angeles

sprays walls in place

ulating value of such a wall, American Bildrok states, is equal to 24 inches of an ordinary brick wall. Cost, as compared with the average \$1.85 per square foot of a common brick wall, is estimated at from \$1.25 to \$1.50 per square foot, including the plastered interior finish.

Experimenting with this new method, but using conventional wood studs instead of lightweight steel framing for a 6-room house on Chicago's Northwest side, the Lúczak Construction Company was given a one hour fire rating by city inspectors. This means that, in Chicago at least, long notorious for rigid code requirements on fire resistance, a new method is available for achieving the advantages of masonry construction at considerably lower cost.



Photo courtesy of Central Manufacturing District Magazine

For a house job, aluminum siding applied with clips to studding serves both as wall finish and backing for sprayed-in-place wall

builders!

low cost storage space with EZ-Way Folding Stairways • specify into your building plans this inexpensive storage space

EZ-Way Folding Stairways

Sturdily built, modern in appearance. EZ-Way features touch-control, balanced spring action. Stairways to fit all ceiling heights from 7' to 10'. Close study of EZ-Way Folding Stairway specifications will prove to you the way to *best please* your customers on auxiliary, low cost storage space.

Write TODAY for the illustrated brochure providing information and specifications on EZ-Way products. EZ-Way products are manufactured by EZ-Way Sales, Inc., Box 300-7, St. Paul Park, Minnesota.

EZ-WAY!

OCTOBER 1953

INSTALL THIS



AND SELL YOUR HOUSES FASTER

A proven fact! Ask any builder who installs BILCO Doors. He'll tell you it's the best selling feature he ever used. Home buyers sign up fast when basements are useful, livable and safe. Don't "date" your homes — investigate America's fastest growing building product . . . the BILCO all-metal permanent door.

Direct access to the basement eliminates tracking mud and dirt through the upstairs rooms. Countless steps are saved by repairmen, servicemen and the home owner. It's the only means of installing big equipment necessary for a work shop, recreation room or extra living room.



Check all these Bilco Benefits!

- ECONOMICAL!
- LIFE-TIME DURABILITY!
- WEATHER-TIGHT!
- FIRE-PROOF!
- BURGLAR-PROOF!

Bilco®

THE BILCO CO., 108 HALLOCK AVE., NEW HAVEN, CONN.

Please send me complete information on the BILCO DOOR, sizes, prices and dealers' names.

I build 10 or less 10-100 100-500 houses

NAME _____

ADDRESS _____

CITY _____ STATE _____

**EASY
to
SELL..**

..when Selling gets
HARDER!

ALDRICH *Gulf Stream* BOILER-BURNERS



Home building is leveling off — and competition for heating plant installations is keener. Now you will have a better chance of getting your share if you feature the new Aldrich GULF STREAM Boiler-Burner. Here's why:

The **GULF STREAM** was developed for small home owners to furnish economical hot water heat and instant domestic hot water supply with either oil or gas. Five sizes cover every need and budget. SBI net ratings from 440 to 1120 sq. ft. of water radiation. All meet ASME code.

COMPACT and RUGGEDLY BUILT GULF STREAM is easy to install, efficient and dependable. The Aldrich GULF STREAM will close more sales when people demand MORE for every heating dollar invested. Write for money-making details.



GULF STREAM STANDARD

Shipped fully erected with complete automatic controls; stock switch, thermostat and limit control.



HOT WATER HEATER

Internally galvanized in five sizes with 100-255 GPH at 100° rise. Instant, directly heated, hot water supply.

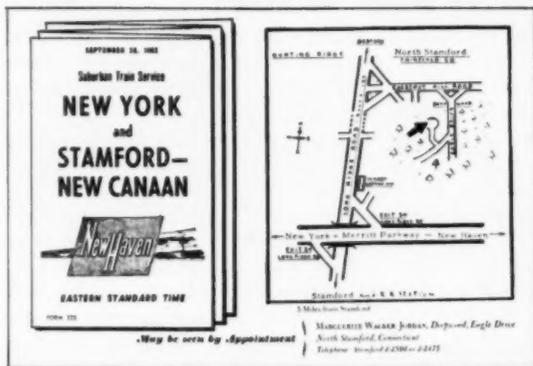
A subsidiary of Breeze Corporations, Inc.

ALDRICH
COMPANY

111 Williams St., Wyoming, Illinois



brochure timetable, map help sales



The problem of helping prospective buyers find their way to a new home built somewhat off the beaten path has been solved in a novel way by Marguerite Walker Jordan, developer of a luxury-home section in North Stamford, Connecticut.

Upon completion of a nine-room, four-bath house, Miss Jordan distributed an illustrated brochure to interested parties. A Stamford railroad timetable is attached to the back cover alongside of a detailed road map directing the way to the home from nearby highways as well as the station.

In selecting his train from the timetable, prospect notes frequency and speed of train service. When he arrives, the map takes over as a silent salesman.



- 10 ft. Crackproof White Blade
- 10 second blade change
- Easy-action Swing Tip

Numerals are rightside up for right-hand marking

The Carlsson 3210 RH White Chief is designed with numerals reading from right to left (conventional rules read left to right). Hold the 3210 RH rule in your left hand and pencil in your right... numerals are rightside up for right-handed marking. This new rule offers new right-hand convenience plus all the famous Carlsson features:

SEE IT TODAY—AT YOUR HARDWARE DEALER
Produced under Patents 2089209, 2510939, 2629180

CARLSSON & SULLIVAN, INC. MONROVIA, CALIFORNIA

ARROW

one-hand operated
GUN TACKER

USES STAPLES UP TO 9/16"

Automatically Replaces Hammer & Nails at Trigger-Rate Speed!

MODEL T-50

Sold only through dealers. Write for literature

ARROW FASTENER CO., INC.
1 Junius Street, Brooklyn 12, N. Y.

HOE-TYPE MIXERS

HOE-BOY 3½ to 4½ cubic foot PLASTER-MORTAR MIXER

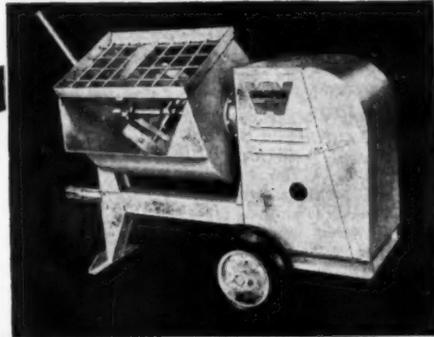
The Mixer with the PLUS VALUES

- ... Adjustable Triple Action Mixing Hoës ... Safety
- Grating and Bag Splitter ... Anti-Friction-Tapered
- Roller Shaft Bearings ... Heavy-Duty Electric Welded
- Frame ... Machine-Cut Sprockets-Roller Chain
- Drive ... Only 29" wide—To Go Through Narrow
- Doorways ... Gas or Electric Power.



Also

6-8-12 CU. FT. MACHINES



CONSTRUCTION MACHINERY COMPANY
WATERLOO, IOWA

fireplace opens into two rooms



Living room side



Bedroom side

This unusual use of a 2-way fireplace was worked out in a house built by Thomas B. Jordan near Los Angeles. The living room and master

bedroom share the same inner hearth and so are open to one another through the fireplace. Both
(Continued on page 296)



PROTRACTOR LEVELS

Eliminates "guessing" at difficult angles. Makes Work Easier for all tradesmen! Just one simple turn of the dial and you have the angle or drop per foot you want — quickly, easily, accurately!

Pat. APPLIED FOR

Scharf LEVELS

If your dealer can't supply you Write Dept. 5

J. H. SCHARF MFG. CO.
Omaha, Nebraska



MAGNELITE LEVELS

Unbreakable frame of extruded magnesium—1/3 lighter than aluminum. Replaceable Vial Units. Available in 9 sizes — 12, 18, 24, 28, 30, 42, 48, 60 and 72 inches.

For faster . . .
easier . . . better
tacking . . .



DUO-FAST One Hand Automatic Tackers



Hammer Tackers and Gun Tackers for all your Tacking Jobs

DUO-FAST AUTOMATIC TACKERS are widely used in home construction work, for tacking insulation, building papers, ceiling tile, metal lath. They provide the fastest, easiest, and best way to do the work.

FREE SERVICE—Duo-Fast Tackers are serviced without charge. An important money-saving feature.

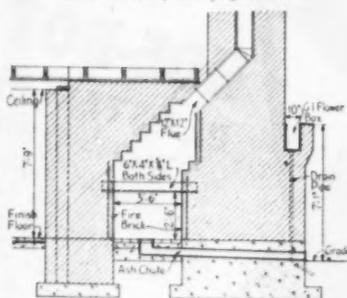
Write today for complete information.

FASTENER CORP.
860 FLETCHER ST., CHICAGO 14, ILL.

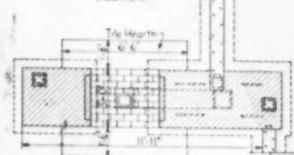


fireplace for two rooms

(Continued from page 295)



SECTION



PLAN

Section showing fireplace construction

sides have copper hoods, ceiling-height mirror panels set in copper moldings and walls faced with ceramic tile.

The tile used is an unglazed type known as bullnose, set broken joint to give a 3-dimensional effect. The

(Continued on page 297)

SOIL COMPACTION

Speeds Up FILL JOBS!



Use BARCO RAMMERS

SAVE labor, cut costs, and do a better job when you place earth fill. End the expense and nuisance of going back to add more dirt and repair unsightly sunken holes. Use Barco Rammers to tamp loose earth to original degree of compaction IMMEDIATELY!

Experienced home builders and construction superintendents report that a Barco Rammer easily pays for itself by getting work done quickly.

ASK FOR DEMONSTRATION

The Barco Rammer is a new tool with many uses! Anyone can operate it. Easy to start; no adjusting—just "lift the handle!" It tamps backfill to high degree of compaction at amazingly low cost—Let us show you actual figures. Ask for our nearest distributor to give you a demonstration.

Send for CATALOG No. 621

BARCO MANUFACTURING COMPANY

523L Hough St.
Barrington, Ill.

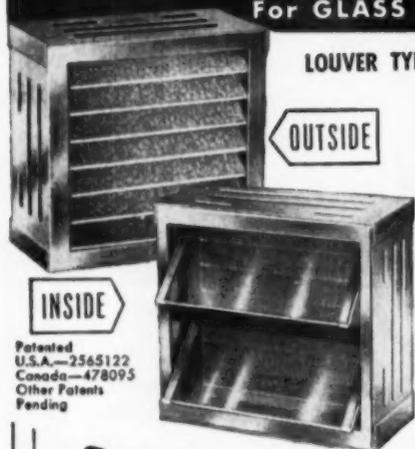
Builders of Portable Gasoline HAMMERS and RAMMERS



WEATHER-BLOC

Trade Mark

Single Unit VENTILATOR For GLASS BLOCK SMALL PANELS



LOUVER TYPE ALL WEATHER VENTILATION

- No Sacrifice of Beauty or Privacy
- Controlled Ventilation
- Vandal-Proof From Outside
- Stainless Steel Body

WEATHER-BLOC on the outside presents a series of horizontally louvers which blend with glass block and permit ventilation regardless of outside weather and assures absolute privacy no matter where the Weather-Bloc is located. The inside offers finger tip control of ventilation with adjustable louvers. Aluminum screen.

3 WEATHER-BLOC MODELS IN STANDARD GLASS BLOCK SIZES

STANDARD—glass louvers outside and inside stainless steel louvers outside, glass louvers inside

ECONOMY—stainless steel louvers outside and inside. 6 and 8 inch sizes only

Purchase through

Your Glass Block Dealer or Distributor
Also Nationally Distributed By
WINCO MFG. CO., INC.

533 Bittner Street, St. Louis 15, Missouri

Patented
U.S.A.—2565122
Canada—478095
Other Patents
Pending



GLASS BLOCK DISTRIBUTORS
Write and ask about your attractive discounts.

WEATHER-BLOC can be used in existing glass block panels, or can be built into new panel construction as easily as a single glass block.

A Product of AIR RECTIFIERS, Inc.

3734 NORTH SOUTHPORT AVENUE

WEATHER-BLOC

CHICAGO 13, ILLINOIS

Here's why
HAR-VEY ROLLING DOOR
HARDWARE
SAVES GRIEF

for you and your
 clients

No Maintenance Worries

with self-lubricating
 Oilite Bearings



No Rusting

with Har-Vey's sturdy,
 extruded ALUMINUM track



No Installation Problems

Har-Vey hangers are
 mounted on the door first—then
 easily slipped onto the track and
 quickly adjusted!



You'll save *time* and
money as well as *grief*
 when you use Har-Vey.
 Get all the facts on this
complete line which
 offers you champion
 quality at surprisingly
 low cost.

See your supplier or write Dept. O
METAL PRODUCTS CORPORATION

807 N. W. 20th St., Miami, Fla.
 Western Div. (Calmetco, Inc.)
 609 S. Anderson, Los Angeles
 Mid-West Div. (Plymouth Metal Products)
 505 W. Harrison, Plymouth, Indiana

fireplace for two rooms

(Continued from page 296)



Making the ceramic tile facings for fireplace walls. (l. to r.) Each small tile is set by hand in small forms. Small sections are made into larger panels. Large panel is cemented to brick fireplace wall

tile pieces are $\frac{3}{4}$ inch by $1\frac{1}{8}$ inches in size. Each piece had to be set by hand in wet mortar to get the pattern desired.

The tile setter worked on small forms so that his mortar wouldn't dry out before he had finished a course. Several of these small sections were joined to make a panel, which was then cemented to the fireplace wall. Reinforcing wire was used in the cement to make possible secure joining of the sections.

The tile pattern for the living room side was carried out in tones of brown and beige, while the bedroom side used soft tones of green. Hearth on both sides is an elongated strip of 6x6-inch quarry tile.

Photos Courtesy The Mosaic Tile Co.



**"color-styled
 by beatrice west"**



... a feature that is helping
 to sell more and more

NATIONAL HOMES

Over a year ago, National Homes Corporation retained the Beatrice West organization to color-style their new models for greater individuality and feminine appeal. Results of the first showing last October were so gratifying that this service has been continued.

In the words of President James R. Price:

"Our sales record for 1953 showed an increase of 27% over last year, our best previous sales year in history. While everyone associated with these homes shares the credit for this fine record, it is significant that this sales increase coincided with our first year's use of your valuable services."

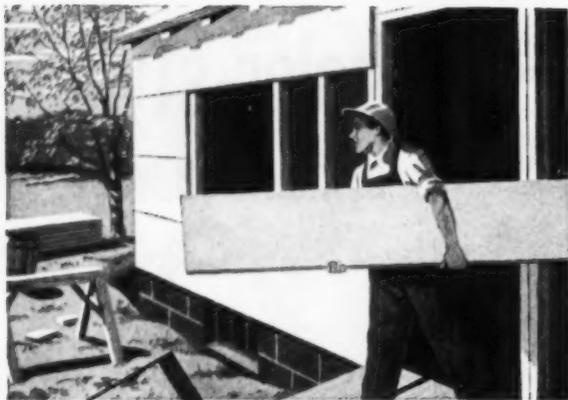
Proper color styling can sell more houses for you, too . . . whether you build a dozen homes a year or many thousands. But color styling is no job for an amateur. It requires sound knowledge, careful study of your problems, wide experience. For proof of our performance, write or telephone today—no obligation, of course.

beatrice west

COLOR CONSULTANT
 147 E. 50th • New York 22
 Plaza 5-1507

National's all-new 1954 "Pacemaker" now being shown nationwide . . . each model home identically color-styled and decorated by Beatrice West





Thermasote

THE ONE-MAN

sheathing

• The 2' x 8' size of this 25/32" asphalt-free sheathing is easily handled by one man. The V-groove feature cuts air leakage to minimum, assures the same high insulating value and sound-dendening qualities as in the larger sizes up to 8' x 12'. Completely weatherproof. Send coupon for full details.



Novaproofing

— whenever you want
to keep water in
or out

•...a coordinated science of weatherproofing buildings. 20 years of experience have produced 5 top products and the know-how of their use. All tried and tested for specific jobs — virtually unbeatable as a team. On any water problem — pools, cellars, sidewalls, slabs or any porous masonry surface — you will want to check Novaproofing first. Full details at your request.

HOMASOTE COMPANY

NOVA SALES

Co. Trenton 3, N. J.



HOMASOTE COMPANY, Trenton 3, N. J., Dept. 39D

Send detailed, illustrated literature on

Thermasote Novaproofing All Homasote-Nova Products

NAME _____

ADDRESS _____

CITY & ZONE _____ STATE _____

My lumber dealer is _____



SPECIFICATIONS

Windows:
MALT-A-MATIC
or
MALT-A-MASTER
8 2-0 x 2-10
& Lt. Horizontal
8 1-8 x 1-6
& Lt. Horizontal

Bill of Materials

8 MALT-A-MASTER
2-0 x 2-10
4 Lt. Horizontal

Why architects specify—
Why builders and
contractors buy—

Malt-a-Master
and
MALT-A-MATIC
wood window units

Both of these precision milled wood window units are fully weather-stripped. Both have removable sash that are easily removed for cleaning, painting. The MALT-A-MATIC is a friction type balanced unit. The MALT-A-MASTER is a fully, invisibly balanced unit. Both units are WOODLIFE treated. They arrive on the job completely assembled with sash and can be installed in the rough opening in a few minutes. They are available in a wide range of modular sizes and window styles for unlimited design opportunities.

Write for illustrated literature, specification sheets and name of nearest dealer.



Supreme
Quality
Since
1901

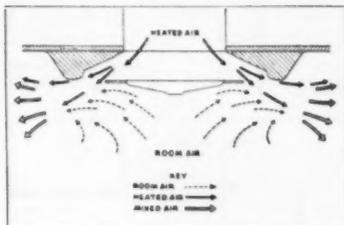
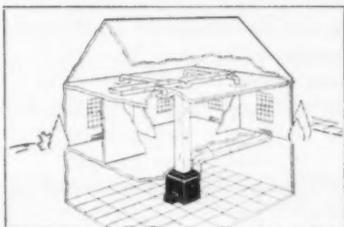
THE
Malta
MANUFACTURING
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MALTA, OHIO

Member Ponderosa Pine Woodwork
Assn., and the N.W.M.A.

AMERICAN BUILDER

using ceiling air diffusers in houses



Recent developments in ceiling fixtures have opened a new field to overhead diffusion: the home building industry.

For years the air diffuser has been recognized as a standard method of heat distribution in commercial and industrial buildings. However, it was designed to move a high volume of air over large areas and, accordingly, was considered too inefficient, noisy and costly for housing. Another objection was the idea that warm air must inevitably rise.

The residential diffuser bears a close resemblance to commercial types but is somewhat smaller and costs only about one-fourth as much. Ordinarily, it comes in six different sizes from four to nine inches, based upon the diameter of its neck, which will handle a range of 3,000 to 23,000 Btu's per hour.

Installation is the same as in any forced warm-air system except that the furnace bonnet rises vertically and ductwork is laid across the attic, rather than below the floor or between walls. Using the customary "inches of heat" method, a duct size which will supply the required amount of Btu's is determined for each room. Prefabricated round ducts and elbows are used, and should be insulated. The proper size of diffuser is that having the same neck diameter as the duct.

One style of diffuser requires a ceiling opening about two inches
(Continued on page 300)

OCTOBER 1953

LESS DELAY on the Job! MORE PROFIT in the Job!

WITH Gate City AWNING WINDOWS

DELIVERED TO THE JOB
COMPLETELY ASSEMBLED
FOR FAST, EASY
INSTALLATION

STOCK SIZES AND
STYLES TO FIT
EVERY NEED

FULLY WEATHERSTRIPPED

INSIDE SCREENS
STORM SASH

QUALITY PROVEN

PROFIT PROVEN



FOR QUICK, LABOR-SAVING, EASY INSTALLATION

Time saved is money saved and these windows save installation time by coming to the job factory-assembled, including all hardware and glazing. Easily mullioned for window wall construction. Proven, long lasting performance and convenience features add sales appeal to any type of building.

Refer to Sweet's Builders' File 4-d CA

GATE CITY SASH & DOOR CO. "Wood Window Craftsmen Since 1910"

P. O. Box 901, Fort Lauderdale, Florida

AB-10

Gentlemen: Please send complete information on GATE CITY Awning Windows.

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city _____ state _____

men over 45

More than six times as many men of your age will die of lung cancer this year as died in 1933. Our research scientists still don't know why.

They do know, however, that over half of those who will develop lung cancer can be saved... if they get proper treatment while the disease is still in the silent, symptomless stage. That's why we urge you to have a chest X-ray every six months no matter how well you may feel.

For more information call us or write to "Cancer", care of your local Post Office.

American Cancer Society

using ceiling air diffusers in houses

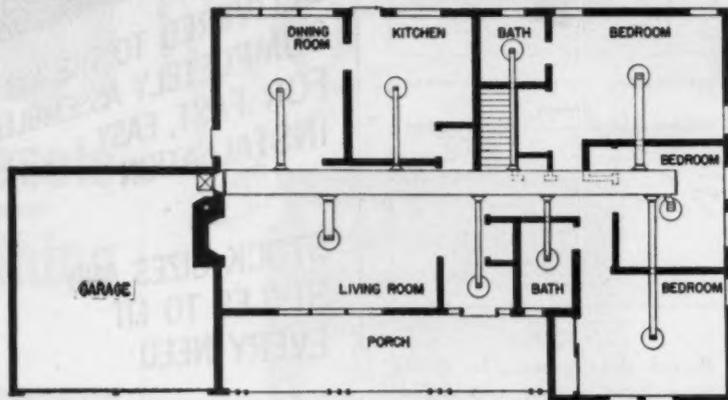
(Continued from page 299)

wider than its neck. Its outer cone, with a diameter twice this opening, fits snugly against the ceiling. Inner cone's lowest point from the ceiling varies from two to four inches. In some models, it is flush with the outer cone.

Forced air passes between the dif-

fuser cones, shaped to direct the flow outward and downward so that it will not smudge or streak the adjacent ceiling area. The movement also is said to deflect incoming air to counteract ceiling stratification or "layering"—the tendency of air

(Continued on page 301)



· FLOOR PLAN ·

SCALE 0 5 10

Floor plan showing position of ductwork in attic. Dimensions at diffusers refer to neck size as well as diameter of round duct. Sizes of all return ducts are noted under windows along exterior wall



"Yeah! I always used to be the low bidder!"

THE TRAMP—A MAN OF EXPERIENCE SAYS;

A Job Worth Doing Is Worth The Best Figuring.

A Job Worth Figuring Is Worth Getting.

A MUST FOR BUILDERS—CONTRACTORS—ARCHITECTS

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A road map to secured profits—Put your plans and specifications on our revised and simplified break-down forms and carry them "under your hat."

A complete estimating, accounting, progress recording and control system to process your project to assured profits. Remember that you must make money from the first shovel of dirt removed, because you cannot do your job over again. More estimates—more jobs—saves time—saves money.

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"UNDER YOUR HAT"
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Room 14—141 N.E. 2nd St., Miami 32, Fla.

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Due to a recent redistribution of areas, a few positions are open for reliable agents. Steady income selling product popular for 31 years. Contact . . .



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I'll look it up in my
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I know I'll find it there

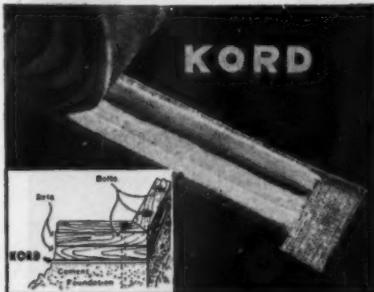


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THE MODERN SOLUTION TO AN OLD PROBLEM

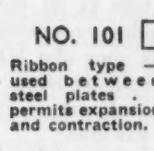
KORD Extruded Prefabricated Caulking Compound.



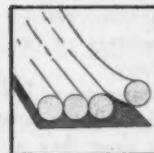
A modern technical development reducing wastes and labor costs.



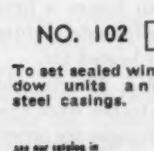
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Channel type KORD . . . used as sketched on all gaskets . . . between concrete and wood.



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Ribbon type — used between steel plates . . . permits expansion and contraction.



NO. 5
Four strip KORD — for stone setting . . . weather-proofing joints. Also eight strip No. 501.



NO. 102
To set sealed window units and steel casings.

See our catalog in ARCHITECTURAL FILE or write for copy

See Sweet's File 66 or send for full information today.

STERLING PAINT & VARNISH CO.

184 Commercial St. Malden, Mass.

ceiling air diffusers

(Continued from page 300)



Flower Hill, N. Y., house equipped with ceiling air diffusers was built by the Greenway Construction Corporation, Sterling M. Palm, architect

to rise and hug the ceiling.

Supply air has sufficient mass and velocity (600-800 feet per minute) to mix in a ratio of one part to 4.5 parts of room air. The blending, which takes place one to two feet diagonally outward from the diffuser and over the heads of occupants, slows down velocity to as little as 50 feet per minute. Kinetic energy or "throw" of this mixture is declared to be sufficient to set in motion, imperceptibly, all air in the room to maintain a uniform temperature.

Grilles for return ducts draw out cooler air from under the warm air,

(Continued on page 302)



For installing asbestos cement-type wallboard use Hassall wallboard drive screws. Specifically designed with spiral threading for better holding power. Supplied with nickel-plated finish with either casing or button heads. Advise quantities. Prompt delivery.



JOHN HASSALL, INC.

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Westbury, N. Y.
Established 1850

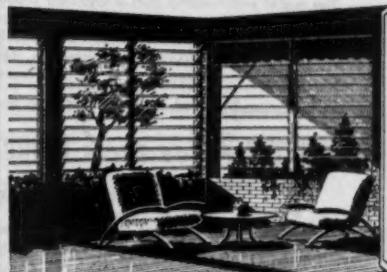
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air-controlled louvred windows



America's Largest Selling Lowest Cost Louvred Window

SUN-SASH . . . a louvred window that is designed specifically to meet your building needs. Sun-Sash is perfect for new construction or remodeling . . . for kitchen windows . . . porches . . . breezeways . . . interior partitions . . . bathrooms . . . attic ventilators and cellars. Specify Sun-Sash air-controlled louvred windows — America's largest selling louvred window.



PORCH ENCLOSURE

INSTALLATION IS EASY AND INEXPENSIVE



Screw on Sash fittings to side of window frame. Slide glass louvres in to tie-proof spring clip holders. Close end of clips over glass to hold blades firmly in position.

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38 Park Row, N. Y. 38, N. Y.

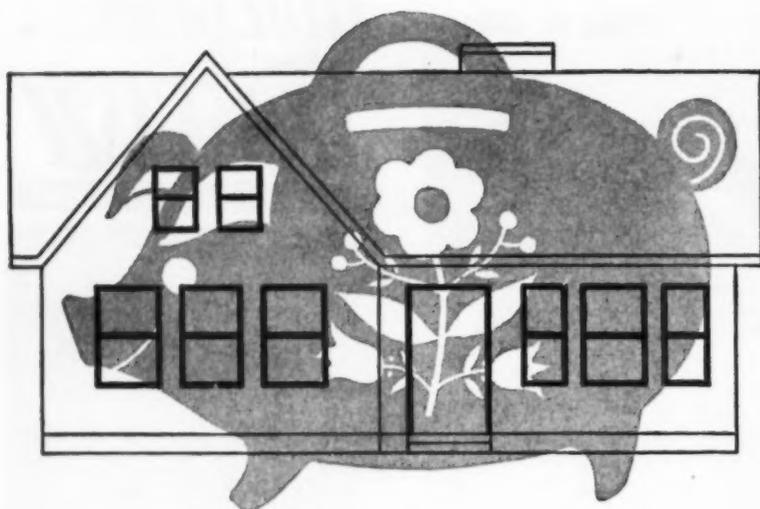
AB-3

Please send me free literature on Sun-Sash

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CITY..... STATE.....

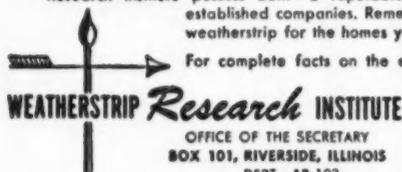


METAL WEATHERSTRIP an Essential Home Economy

- for Fuel Saving
- for Protecting Home Furnishings
- for Healthful Comfort
- for All Around Efficiency

Prospective home buyers will sell themselves on the quality of the homes you build when they see they have been completely weatherstripped, and when you tell them of the needless heat loss and discomfort it prevents. Actual tests show (University of Minnesota Institute of Technology) the air infiltration is 6 TIMES LESS through weatherstripped windows than non-weatherstripped windows; which means an average savings of approximately 24% in fuel costs. Also that a weatherstripped home means clean, comfortable living in every room—that's vitally important to their families' health and well-being.

The metal weatherstrip that is installed should depend mainly on two factors: reputation of the product and reputation of the manufacturer. Members of the Weatherstrip Research Institute possess both—a reputable product, and all are reputable, long established companies. Remember these facts when considering metal weatherstrip for the homes you build.



For complete facts on the economic value of weatherstrip, send for Bulletin No. 35—"Air Infiltration Through Weatherstripped and Non-Weatherstripped Windows," published by the University of Minnesota Institute of Technology—no charge or obligation.

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ceiling air diffusers

(Continued from page 301)



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Builder centered kitchen diffuser between two fluorescent light panels

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3. Air conditioning. Merely add the air conditioner to the duct system. No structural changes are necessary.
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Courtesy of W. B. Connor Engineering Corp.

**New Books
And Bulletins—
Briefly Noted**

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**Cost No More
than standard
wood windows**

**BEST-VENT
(DOUBLE HUNG)
ALUMINUM
WINDOWS**

**These BEST-VENT features
help sell houses easier—faster:**

- Enduring beauty—yet no upkeep effort—no painting
- Finger-tip opening—yet weather, water and insect-tight
- All corners smooth mitred—precision machined—no bumps, snags, holes or overlaps
- Smooth-sheen finish—wipes clean with dry cloth
- Never rot, rust, warp, or swell
- Lifetime "Ventiseal" glazed—no putty problems—yet easy to replace glass
- Storm sash and screens easily hung, removed and stored

Check the yellow pages of your telephone book for your nearest BEST-VENT and PER-FIT dealer—or contact the factory.



* Generally this is true—prices of our windows and wood double hungs vary in different sections of the country—often BEST-VENT cost less! Have you compared prices in your locality lately?

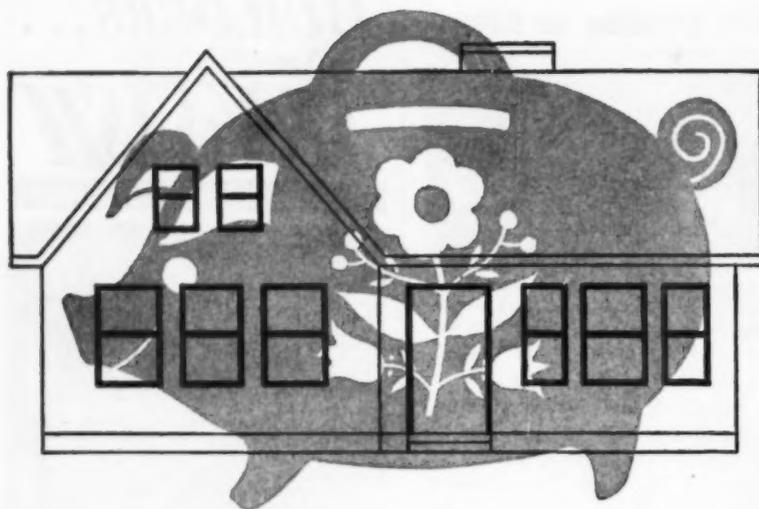
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BEST-VENT Windows are what builders have been waiting for—the quality aluminum window that adds buyer appeal at no extra cost.

COMPARE the cost and value of BEST-VENT Windows with that of other windows you are now using—whether metal or wood—and you too will switch to BEST-VENT.

PER-FIT PRODUCTS CORPORATION

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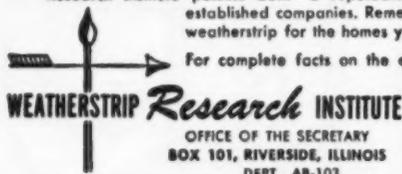


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OCTOBER 1953

Cost No More than standard wood windows

BEST-VENT (DOUBLE HUNG) ALUMINUM WINDOWS

**These BEST-VENT features
help sell houses easier—faster:**

- Enduring beauty—yet no upkeep effort—no painting
- Finger-tip opening—yet weather, water and insect-tight
- All corners smooth mitred—precision machined—no bumps, snags, holes or overlaps
- Smooth-sheen finish—wipes clean with dry cloth
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SECTION
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Lends itself warmly to modern architecture.



SQUARE
PLYWOOD
PANEL

A long-standing favorite with home owners.



LONG
NARROW
PLYWOOD
PANEL

For customers who desire predominant horizontal lines.



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CARVED
PANEL

Added beauty with carved design built in at the factory.



SQUARE
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Carved panels available in two shapes to match the architecture of the home.

To assure lasting finger-tip control and complete weather tite seal, all Raynor doors are equipped with patented graduated seal. Write for details on Raynor complete line of Wood Sectional Overhead Doors.

Dealers Listed in Your Telephone Directory

Builders of a complete line of residential, commercial and Wood Sectional Overhead Doors.

RAYNOR MANUFACTURING CO.
HOME OFFICE AND PLANT: Dixon, Illinois

here's a fire station for a residential area



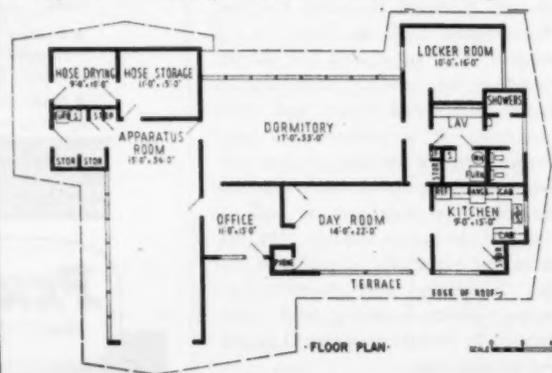
What appears to be an expensive home is really Enginehouse No. 9 in Fresno, California. Fresno architect Robert W. Stevens designed this one to blend unobtrusively with the surrounding residential neighborhood. Contractor Victor G. Taylor of Fresno constructed it on a corner lot for the city at a cost of \$43,000 and with a hose-drying room unique for fire stations.

One reason why Architect Stevens was able to make this fire station appear to be a contemporary ranch house that would fit the residential character of the area was his use of an unusual method for drying and storing fire hoses.

The usual construction for storing fire hoses calls for a drying tower in which the hoses are hung vertically. A drying tower of this sort usually requires at least a two-story building.

In Enginehouse No. 9, the hose-drying room and the room for storage have a normal ceiling height. Plaster finished, the hose-drying room is equipped with steel stanchions that are attached along one side of the room. They accommodate iron pipe trays of sufficient size to hold one length of hose each. Fire hoses are placed in the stanchions horizontally in a way similar to the placing of trays in an ordinary kitchen gas range.

The heat needed to dry the hose properly is provided by a gas unit thermostatically controlled and located in a room adjacent to the drying room. Ducts channel heated air from the furnace to vents near the ceiling of the drying room. Vents near the floor of the outside wall provide for adequate circulation of air. Temperatures are kept low, not to exceed 105 degrees.





try a fireplace in the kitchen

Thermador oven and fireplace, side by side, are a novel touch in this kitchen in a house built speculatively by Henry C. Cox in Garden Grove, California. The fireplace shares flue and chimney with the fireplace in the living room. It not only lends real charm to the kitchen but also is a practical piece of equipment, making possible barbecue suppers and other variations on informal entertaining.

SOMETHING NEW

The Gohm Butt Mortising Tool and Butt Marker



Mortise doors and jambs for a 5 room house in less than one hour—only \$28.95

A clean and perfect job everytime—Precision made—Folds to fit tool box. No mistakes; any handyman can use these tools.

Guaranteed to satisfy or your money refunded.

(Fits any 1/4 inch electric drill)

Mortiser for 3", 3 1/2" and 4" butts. Round or square corner butts may be used.



The Butt Marker marks the positions for all door butts and clearances in one operation—only \$8.95.

No C.O.D.—Please send check or money order

Knight Manufacturing Co.
914 Citizens Bank Bldg.
Flint 3, Mich.



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with Standard Cement
plus
Solvay Calcium Chloride

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- Provides Additional Cold Weather Protection
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- Avoids the Need for Special Cement
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